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UNITED STATES DEPARTMENT OF COMMERCE

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land J. Kappas

Patent and Trademark Office

PATENT APPLICATION FEE DETERMINATION RECORD

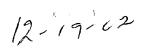
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Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE







IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:

Dayton T. Reardan et al.

Title:

SENSITIVE DRUG DISTRIBUTION SYSTEM AND METHOD

Attorney Docket No.: 101.031US1

PATENT APPLICATION TRANSMITTAL

BOX PATENT APPLICATION

Commissioner for Patents Washington, D.C. 20231

We are transmitting herewith the following attached items and information (as indicated with an "X"):

 $\frac{X}{X}$ Return postcard.

- Utility Patent Application under 37 CFR § 1.53(b) comprising:
 - Specification (18 pgs, including claims numbered 1 through 25 and a 1 page Abstract).
 - Formal Drawing(s) (16 sheets).
 - Unsigned Combined Declaration and Power of Attorney (4 pgs).

Applicant claims small entity status under 37 C.F.R 1.27. X

The filing fee (NOT ENCLOSED) will be calculated as follows:

| | No. Filed | No. Extra | Rate | Fee |
|----------------------------------|-----------|-----------|--------|----------|
| TOTAL CLAIMS | 25 - 20 = | 5 | x 9 = | \$45.00 |
| INDEPENDENT CLAIMS | 4 - 3 = | 1 | x 42 = | \$42.00 |
| [] MULTIPLE DEPENDENT CLAIMS PR | ESENTED | _ | | \$0.00 |
| BASIC FEE | | | | \$370.00 |
| | TOTAL | | | \$457.00 |

THE FILING FEE WILL BE PAID UPON RECEIPT OF THE NOTICE TO FILE MISSING PARTS.

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Date of Deposit: December 17, 2002

This paper or fee is being deposited on the date indicated above with the United States Postal Service pursuant to 37 CFR 1.10, and is addressed to The Commissioner for Patents, Box Patent Application, Washington, D.C. 20231.

Sensitive Drug Distribution System and Method

Field of the Invention

The present invention relates to distribution of drugs, and in particular to the distribution of sensitive drugs.

Background of the Invention

Sensitive drugs are controlled to minimize risk and ensure that they are not abused, or cause adverse reactions. Such sensitive drugs are approved for specific uses by the Food and Drug Administration, and must be prescribed by a licensed physician in order to be purchased by consumers. Some drugs, such as cocaine and other common street drugs are the object of abuse and illegal schemes to distribute for profit. Some schemes include Dr. shopping, diversion, and pharmacy thefts. A locked cabinet or safe is a requirement for distribution of some drugs.

Certain agents, such as gamma hydroxy buterate (GHB) are also abused, yet also are effective for therapeutic purposes such as treatment of daytime cataplexy in patients with narcolepsy. Some patients however, will obtain prescriptions from multiple doctors, and have them filled at different pharmacies. Still further, an unscrupulous physician may actually write multiple prescriptions for a patient, or multiple patients, who use cash to pay for the drugs. These patients will then sell the drug to dealers or others for profit.

There is a need for a distribution system and method that directly addresses these abuses. There is a further need for such a system and method that provides education and limits the potential for such abuse.

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Summary of the Invention

A drug distribution system and method utilizes a central pharmacy and database to track all prescriptions for a sensitive drug. Information is kept in a central database regarding all physicians allowed to prescribe the sensitive drug, and all patients receiving the drug. Abuses are identified by monitoring data in the database for prescription patterns by physicians and prescriptions obtained by patients. Further verification is

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made that the physician is eligible to prescribe the drug by consulting a separate database for a valid DEA license, and optionally state medical boards to determine whether any corrective or approved disciplinary actions relating to controlled substances have been brought against the physician. Multiple controls beyond those for traditional drugs are imposed on the distribution depending on the sensitivity of the drug.

Education is provided to both physician and patient. Prior to shipping the drug for the first time, the patient is contacted to ensure that product and abuse related educational materials have been received and/or read. The patient may provide the name of a designee to the central pharmacy who is authorized to accept shipment of the drug. Receipt of the initial drug shipment is confirmed by contacting the patient. Either a phone call or other communication to the patient within a set time after delivery may be made to ensure receipt. Further, a courier service's tracking system is used to confirm delivery in further embodiments. If a shipment is lost, an investigation is launched to find it.

In one embodiment, the drug may be shipped by the central pharmacy to another pharmacy for patient pick-up. The second pharmacy's ability to protect against diversion before shipping the drug must be confirmed. This ability may be checked through NTIS and State Boards of Pharmacy.

Prescription refills are permitted in the number specified in the original prescription. In addition, if a prescription refill is requested by the patient prior to the anticipated due date, such refills will be questioned. A lost, stolen, destroyed or spilled prescription/supply is documented and replaced to the extent necessary to honor the prescription, and will also cause a review or full investigation.

The exclusive central database contains all relevant data related to distribution of the drug and process of distributing it, including patient, physician and prescription information. Several queries and reports are run against the database to provide information which might reveal potential abuse of the sensitive drug, such as early refills.

Brief Description of the Drawings

30 FIG. 1 is a block diagram of a computer system for use in implementing the system and method of the present invention.

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| FIG.s 2A, 2B and 2C are a flowchart describing a method for sensitive drug distribution |
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at least partially utilizing a computer system such as that shown in FIG. 1.

- FIG. 3 is a flowchart of a physician success program at least partially implemented on a computer system such as that shown in FIG. 1.
- 5 FIG.s 4A and 4B are a flowchart describing a method for handling refill requests at least partially utilizing a computer system such as that shown in FIG. 1.
 - FIG. 5 is a flowchart of a process for requesting special reimbursement when a patient is uninsured or underinsured at least partially utilizing a computer system as that shown in FIG. 1.
- 10 FIG. 6 is a flowchart of a process for inventory control at least partially utilizing a computer system such as that shown in FIG. 1.
 - FIG. 7 is a block diagram of database fields.
 - FIG. 8 is a block diagram showing a list of queries against the database fields.
 - FIG. 9 is a copy of one example prescription and enrollment form.
- 15 FIG. 10 is a copy of one example of a NORD application request form for patient financial assistance.
 - FIG. 11 is a copy of one example voucher request for medication for use with the NORD application request form of FIG. 10.
 - FIG. 12 is a copy of certificate of medical need.
- FIG.s 13A, 13B and 13C are descriptions of sample reports obtained by querying a central database having fields represented in FIG. 7.

Detailed Description of the Invention

In the following description, reference is made to the accompanying drawings that

form a part hereof, and in which is shown by way of illustration specific embodiments in
which the invention may be practiced. These embodiments are described in sufficient
detail to enable those skilled in the art to practice the invention, and it is to be understood
that other embodiments may be utilized and that structural, logical and electrical changes
may be made without departing from the scope of the present invention. The following

description is, therefore, not to be taken in a limited sense, and the scope of the present
invention is defined by the appended claims.

The functions or algorithms described herein are implemented in software or a combination of software and human implemented procedures in one embodiment. The software comprises computer executable instructions stored on computer readable media such as memory or other type of storage devices. The term "computer readable media" is also used to represent carrier waves on which the software is transmitted. Further, such functions correspond to modules, which are software, hardware, firmware of any combination thereof. Multiple functions are performed in one or more modules as desired, and the embodiments described are merely examples. The software is executed on a digital signal processor, ASIC, microprocessor, or other type of processor operating on a computer system, such as a personal computer, server or other computer system.

A sensitive drug is one which can be abused, or has addiction properties or other properties that render the drug sensitive. One example of such a drug is sodium oxybate, also known as gamma hydroxy butyrate (GHB C₄H₇NaO₃) which is useful for treatment of cataplexy in patients with narcolepsy. GHB is marketed under the trademark of Xyrem® (sodium oxybate oral solution), which trademark can be used interchangeably with GHB herein. Sensitive drugs also include narcotics or other drugs which require controls on their distribution and use to monitor behaviors to prevent abuse and adverse side effects.

In one embodiment, Xyrem® is subject to a restricted distribution program. One aspect of the program is to educate physicians and patients about the risks and benefits of Xyrem, including support via ongoing contact with patients and a toll free helpline. Initial prescriptions are filled only after a prescriber and patient have received and read the educational materials. Further, patient and prescribing physician registries are maintained and monitored to ensure proper distribution.

In a further embodiment, bulk sodium oxybate is manufactured at a single site, as is the finished drug product. Following manufacture of the drug product, it is stored at a facility compliant with FDA Schedule III regulations, where a consignment inventory is maintained. The inventory is owned by a company, and is managed by a central pharmacy, which maintains the consignment inventory. Xyrem® is distributed and dispensed through a primary and exclusive central pharmacy, and is not stocked in retail

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pharmacy outlets. It is distributed by overnight carriers, or by US mail in one embodiment to potentially invoke mail fraud laws if attempts of abuse occur.

FIG. 1 is a simplified block diagram of a computer system 100, such as a personal computer for implementing at least a portion of the methods described herein. A central processing unit (CPU) 110 executes computer programs stored on a memory 120. Memory 120 in one embodiment comprises one or more levels of cache as desired to speed execution of the program and access to data on which the programs operate. The CPU is directly coupled to memory 120 in one embodiment. Both CPU 110 and memory 120 are coupled to a bus 130. A storage 140, I/O 150 and communications 160 are also coupled to the bus 130. Storage 140 is usually a long term storage device, such as a disk drive, tape drive, DVD, CD or other type of storage device. In one embodiment, storage 140 is used to house a database for use with the present invention. I/O 150 comprises keyboards, sound devices, displays and other mechanisms by which a user interacts with the computer system 100. Communications 160 comprises a network, phone connection, local area network, wide area network or other mechanism for communicating with external devices. Such external devices comprise servers, other peer computers and other devices. In one embodiment, such external device comprises a database server that is used in place of the database on storage 140. Other computer system architectures capable of executing software and interacting with a database and users may also be used. Appropriate security measures such as encryption are used to ensure confidentiality. Further, data integrity and backup measures are also used to prevent data loss.

FIG.s 2A, 2B and 2C represent an initial prescription order entry process for a sensitive drug, such as Xyrem. At 202, a medical doctor (MD) sends a Rx/enrollment form via mail, fax, email or other means to an intake/reimbursement specialist at 204, who makes a copy of the RX/enrollment form that is stamped "copy". The original fax is forwarded to a pharmacy team. The enrollment form contains prescriber information, prescription information, checkboxes for the prescriber indicating they have read materials, educated the patient, understand the use in treatment, and understand certain safety information, and also contains patient information.

The prescriber information contains standard contact information as well as license number, DEA number and physician specialty. Patient and prescription

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information includes name, social security number, date of birth, gender, contact information, drug identification, patient's appropriate dosage, and number of refills allowed, along with a line for the prescriber's signature. Patient insurance information is also provided.

There are two workflows involved at the pharmacy team, intake reimbursement 206 and pharmacy workflow 208, which may proceed in parallel or serially. The intake work flow 206 starts with an intake reimbursement specialist entering the patient and physician information into an application/database referred to as CHIPS, which is used to maintain a record of a client home infusion program (CHIP) for Xyrem®. A check is made to ensure the information is complete at 212. If not, at 214, an intake representative attempts to reach the MD or prescriber to obtain the missing information. If the missing information has not been obtained within a predetermined period of time, such as 24 hours at 216, the Rx/Enrollment form is sent back to the MD with a rejection explanation. A note is entered in CHIPS that the application was rejected.

If the information is complete at 212, the MD is contacted at 220 to verify receipt and accuracy of the patient's Rx. This contact is recorded in CHIPS. The intake and reimbursement specialist then sends a consent form and a cover letter to the patient at 224. The insurance provider is contacted at 226 to verify coverage and benefits. At 228, a determination is made regarding coverage for the drug. If it is not available, it is determined at 230 whether the patient is willing and able to pay. If not, a process is performed for handling patients who are uninsured or underinsured. In one embodiment, the process is referred to as a NORD process.

If the patient is willing and able to pay at 230, the patient is informed of the cost of the product and is given payment options at 234. At 236, once payment is received, the intake reimbursement specialist submits a coverage approval form with the enrollment form to the pharmacy team as notification to process the patient's prescription. If coverage is approved at 228, the intake reimbursement specialist also submits the coverage approval form with the enrollment form to the pharmacy team as notification to process the patient's prescription. Processing of the prescription is described below.

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Upon receipt and initial processing of the prescription enrollment form and sending an original to the pharmacy work flow block 208, the patient is shipped a Xyrem® success packet via mail. In one embodiment, the Xyrem® success packet contains educational material for a patient that advises of the proper use, care and handling of the drug and consequences of diversion at 268. The medical doctor's credentials are checked to determine if the physician has a current DEA license to prescribe controlled substances and if he or she has had any actions related to misuse/misprescribing of controlled drugs against him or her, within a predetermined time, such as three months at 270. If they have, a pharmacist holds the prescription until receiving a coverage approval form from the intake reimbursement specialist at 272.

If the credentials have not been recently checked, the pharmacist verifies the credentials and enters all findings in the database at 274. If the credentials are approved at 276, the physician is indicated as approved in a physician screen populated by information from the database at 280. The prescription is then held pending coverage approval at 282.

If any disciplinary actions are identified, as referenced at block 278, management of the pharmacy is notified and either approves processing of the prescription with continued monitoring of the physician, or processing of the prescription is not performed, and the physician is noted in the database as unapproved at 284. The enrollment form is then mailed back to the physician with a cover letter reiterating that the prescription cannot be processed at 288. The patient is also sent a letter at 290 indicating that the prescription cannot be processed and the patient is instructed to contact their physician.

Actual filling of the approved prescription begins with receipt of the coverage approval form as indicated at 240. The patient is contacted by the pharmacy, such as by a technician to complete a technician section of a patient counseling checklist. If a pharmacist verifies that the program materials were not read at 242, the receipt of the material is confirmed at 244 and another call is scheduled to counsel the patient before the drug is shipped.

If the program materials were read at 242, the checklist is completed at 246 and the technician transfers the patient to the pharmacist who reviews the entire checklist and completes remaining pharmacist specified sections. At 248, the pharmacist indicates in

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the database that the patient counseling and checklist was successfully completed, indicating the date completed.

At 250, the pharmacist schedules the patient's shipment for the next business day or the next business day that the patient or designee is able to sign for the package. Further, as indicated at 252, the shipment must be sent to the patient's home address unless the patient is traveling or has moved. In that event, the pharmacist may determine that an exception may be made. The patient or the patient's designee who is at least 18 years old, must sign for the package upon delivery.

At 254, the pharmacist enters the prescription order in the database, creating an order number. The pharmacist then verifies at 256 the prescription and attaches a verification label to the hard copy prescription. At 258, a pick ticket is generated for the order and the order is forwarded to the pharmacy for fulfillment. The shipment is confirmed in the database at 260, and the order is shipped by USPS Express Mail. Use of the US mail invokes certain criminal penalties for unauthorized diversion. Optionally, other mail services may be used. Potential changes in the law may also bring criminal penalties into play. Following shipment, the patient is called by the central pharmacy to confirm that the prescription was received.

As noted at 266, for the sensitive drug, Xyrem, all inventory is cycle counted and reconciled with the database system quantities before shipments for the day are sent. This provides a very precise control of the inventor.

A physician success program materials request process begins at 310 in FIG. 3. At 320, the MD calls to the central pharmacy to request program materials. A special phone number is provided. MD demographics, DEA number, and data or request are entered into the database at 330. At 340, a request is made to ship the materials to the MD via a fulfillment website, or other mechanism. The request process ends at 350.

A refill request process begins at 302 in FIG.s 4A and 4B. There are two different paths for refills. A first path beginning at 404 involves generating a report from the central database of patients with a predetermined number of days or product remaining. A second path beginning at 406 is followed when a patient calls to request an early refill.

In the first path, a copy of the report is provided to an intake reimbursement specialist at 408. No sooner than 8 days before the medication depletion, a pharmacy

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technician contacts the patient at 410 to complete the pre-delivery checklist. At 412, if the patient is not reached, a message is left mentioning the depletion, and a return number at 414. A note is also entered into the database indicating the date the message was left at 416.

If the patient is reached at 412, the next shipment is scheduled at 418, the prescription is entered into the database creating an order at 420, the pharmacist verifies the prescription and attaches a verification label at 422 and the shipment is confirmed in the database at 424. Note at 426 that the inventory is cycle counted and reconciled with the database quantities before the shipments for a day or other time period are sent. A pick ticket is generated for the order and the order is forwarded for fulfillment at 428, with the first path ending at 430.

The second path, beginning at 406 results in a note code being entered into the database on a patient screen indicating an early refill request at 432. The pharmacist evaluates the patient's compliance with therapy or possible product diversion, misuse or over-use at 436. In one embodiment, cash payers are also identified. The pharmacist then contacts the prescribing physician to alert them of the situation and confirm if the physician approves of the early refill at 438. If the physician does not approve as indicated at 440, the patient must wait until the next scheduled refill date to receive additional product as indicated at 442, and the process ends at 444.

If the physician approves at 440, the pharmacist enters a note in the database on a patient screen that the physician approves the request at 446. The pharmacist notifies an intake reimbursement specialist to contact the patient's insurance provider to verify coverage for the early refill at 448. If the insurance provider will pay as determined at 450, the specialist submits the coverage approval form as notification that the refill may be processed at 452. At 454, the pharmacy technician contacts the patient to schedule shipment of the product for the next business day, and the process of filling the order is continued at 456 by following the process beginning at 240.

If the insurance provider will not pay at 450, it is determined whether the patient is willing and/or able to pay at 458. If not, the patient must wait until the next scheduled refill date to receive additional product at 460. If it was determined at 458 that the patient was willing and able to pay, the patient is informed of the cost of the product and is given

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payment options at 462. Once payment is received as indicated at 464, the specialist submits a coverage approval form to the pharmacy team as notification that the refill request can be processed at 466. At 468, the pharmacy technician contacts the patient to schedule shipment. The process of filling the order is continued at 470 by following the process beginning at 240.

A process, referred to as a NORD process in one embodiment is used to determine whether donated, third party funds are available for paying for prescriptions where neither insurance will, nor the patient can pay. The process begins at 510 upon determining that a patient is uninsured or underinsured. A reimbursement specialist explains the NORD program to the patient and faxes an application request form to NORD for the patient. At 515, the intake reimbursement specialist documents in the database that an application has been received through NORD. At 520, NORD mails an application to the patient within one business day.

A determination is made at 525 by NORD whether the patient is approved. If not, at 530, NORD sends a denial letter to the patient, and it is documented in the database at 540 that the patient was denied by NORD. If the patient is approved, NORD sends an acceptance letter to the patient and faxes a voucher to the central pharmacy (SDS in one embodiment) to indicate the approval at 545. At 550, an intake reimbursement specialist submits a coverage approval form to the pharmacy team as notification that the patient has been approved for coverage. The process of filling the order is continued at 555 by following the process beginning at 240.

An inventory control process is illustrated in FIG. 6 beginning at 610. Each week, a responsible person at the central pharmacy, such as the director of the pharmacy transfers inventory for the week's shipments to a segregated warehouse location for production inventory. At 620, a purchase order is generated for the inventory transferred to the production location and is sent, such as by fax, to a controller, such as the controller of the company that obtained approval for distribution and use of the sensitive drug. At 630, the controller invoices the central pharmacy for the product moved to production. The process ends at 640.

The central database described above is a relational database running on the system of FIG. 1, or a server based system having a similar architecture coupled to

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workstations via a network, as represented by communications 160. The database is likely stored in storage 140, and contains multiple fields of information as indicated at 700 in FIG. 7. The organization and groupings of the fields are shown in one format for convenience. It is recognized that many different organizations or schemas may be utilized. In one embodiment, the groups of fields comprise prescriber fields 710, patient fields 720, prescription fields 730 and insurance fields 740. For purposes of illustration, all the entries described with respect to the above processes are included in the fields. In further embodiments, no such groupings are made, and the data is organized in a different manner.

Several queries are illustrated at 800 in FIG. 8. There may be many other queries as required by individual state reporting requirements. A first query at 810 is used to identify prescriptions written by physician. The queries may be written in structured query language, natural query languages or in any other manner compatible with the database. A second query 820 is used to pull information from the database related to prescriptions by patient name. A third query 830 is used to determine prescriptions by frequency, and a nth query finds prescriptions by dose at 840. Using query languages combined with the depth of data in the central database allows many other methods of investigating for potential abuse of the drugs. The central database ensures that all prescriptions, prescribers and patients are tracked and subject to such investigations. In further embodiments, the central database may be distributed among multiple computers provided a query operates over all data relating to such prescriptions, prescribers and patients for the drug.

An example of one prescription and enrollment form is shown at 900 in FIG. 9. As previously indicated, several fields are included for prescriber information, prescription information and patient information.

FIG. 10 is a copy of one example NORD application request form 1000 used to request that an application be sent to a patient for financial assistance.

FIG. 11 is a copy of one example application 1100 for financial assistance as requested by form 1000. The form requires both patient and physician information. Social security number information is also requested. The form provides information for approving the financial assistance and for tracking assistance provided.

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FIG. 12 is a copy of one example voucher request for medication for use with the NORD application request form of FIG. 10. In addition to patient and physician information, prescription information and diagnosis information is also provided.

FIG.s 13A, 13B and 13C are descriptions of sample reports obtained by querying a central database having fields represented in FIG. 7. The activities grouped by sales, regulatory, quality assurance, call center, pharmacy, inventory, reimbursement, patient care and drug information. Each report has an associated frequency or frequencies. The reports are obtained by running queries against the database, with the queries written in one of many query languages.

While the invention has been described with respect to a Schedule III drug, it is useful for other sensitive drugs that are DEA or Federally scheduled drugs in Schedule II-V, as well as still other sensitive drugs where multiple controls are desired for distribution and use.

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Claims

A method of distributing a sensitive drug, the method comprising:
 receiving prescription requests from a medical doctor containing information
 identifying the patient, the sensitive drug, and various credentials of the doctor;

entering the information into a central database for analysis of potential abuse situations;

checking the credentials of the doctor;

confirming with the patient that educational material has been read prior to shipping the sensitive drug;

confirming receipt of the sensitive drug; and generating periodic reports via the central database to evaluate potential abuse patterns.

- 2. The method of claim 1 wherein receipt of the sensitive drug is confirmed by telephone call from the central pharmacy to the patient.
- 3. The method of claim 1 and further comprising launching an investigation of lost shipments.
- 4. The method of claim 1 and further comprising recording the confirmation with the patient that the educational material has been read in the central database.
- 5. The method of claim 1 and further comprising verifying the patient's home address.
- 6. The method of claim 1 and further comprising recording a designee identified by the patient to receive the sensitive drug.
- 7. The method of claim 1 and further comprising establishing a delivery date.

- 8. The method of claim 1 wherein prescription refills requested prior to an anticipated date are questioned by the pharmacist.
- 9. The method of claim 1 and further comprising shipping comprehensive printed materials to the physician if the physician is a first time prescriber of the sensitive drug.
- 10. The method of claim 1 wherein the credentials of the doctor comprise DEA (Drug Enforcement Agency) and state license numbers.
- 11. A method of monitoring potential abuse of a sensitive drug by use of an exclusive central database, the method comprising:

generating queries of prescription information from a database containing selected information for all prescriptions of the sensitive drug, wherein the queries comprise prescriptions by physician specialty, prescriptions by patient name, prescriptions by frequency and prescriptions by dose.

- 12. The method of claim 11 and further comprising running multiple predetermined reports based on data in the exclusive central database.
- 13. The method of claim 12 wherein such reports are selected from groups of reports consisting of sales, regulatory, quality assurance, pharmacy, inventory, reimbursement, patient care, and drug information.
- 14. The method of claim 13 wherein sales reports are selected from the group consisting of prescriptions by zip code, prescriptions by physician by zip code and total dollars by zip code.
- 15. The method of claim 13 wherein regulatory reports are selected from the group consisting of number of physician registries, number of denied physician registries and reasons, number of completed patient registries, number of problem identification, number of cycle counts performed.

- 16. The method of claim 13 wherein inventory reports are selected from the group consisting of number of returned products and reasons, number of outdated bottles of product, inventory counts of consignment and production inventory, number of units received, and lots received.
- 17. The method of claim 13 wherein patient care reports are selected from the group consisting of number of adverse events, number of dosing problems and type, number of noncompliance episodes and reason, number of patients counseled and reason, number of discontinued and reason, number of patients referred to physician and reason, number of active patients, number of new patents, number of restart patients, and number of discontinued patients and reason.
- 18. The method of claim 13 wherein selected reports are run weekly, monthly or quarterly.
- 19. A method of obtaining FDA (Food and Drug Administration) approval for a sensitive drug, the method comprising:

determining current and anticipated patterns of potential abuse of the sensitive drug;

selecting multiple controls for distribution by an exclusive central pharmacy maintaining a central database, the controls selected from the group consisting of communicating prescriptions from a physician to the central pharmacy, identifying the physicians name, license and DEA (Drug Enforcement Agency) registration information, verifying the prescription; obtaining patient information, verifying the physician is eligible to prescribe the sensitive drug by consulting the National Technical Information Services to determine whether the physician has an active DEA number and check on whether any actions are pending against the physician, provide comprehensive printed materials to the physician, contacting the patient's insurance company if any, verifying patient registry information, providing comprehensive education information to the patient, verifying the patient has reviewed the educational materials, verifying the home

address of the patient, shipping via US postal service or similar shipping service, receiving the name of an at least 18 year old designee to receive the drug, confirming receipt of an initial shipment of the drug to the patient, returning the drug to the pharmacy after two attempts to deliver, launching an investigation when a shipment is lost, shipping to another pharmacy for delivery, requiring manufacture at a single location, releasing inventory in a controlled manner to the central pharmacy, questioning early refills, flagging repeat instances of lost, stolen, destroyed or spilled prescriptions, limiting the prescription to a one month supply, requiring rewriting of the prescription periodically, making the database available to the DEA for checking for abuse patterns in the data, cash payments, inappropriate questions; and

negotiating with the FDA by adding further controls from the group until approval is obtained.

- 20. The method of claim 19 wherein initially selected controls comprise communicating prescriptions from a physician to the central pharmacy, identifying the physicians name, license and DEA registration information, verifying the prescription; obtaining patient information, verifying the physician is eligible to prescribe the sensitive drug by consulting the National Technical Information Services to determine whether the physician has an active DEA number and check on whether any actions are pending against the physician, verifying patient registry information, providing comprehensive education information to the patient, verifying the patient has reviewed the educational materials, verifying the home address of the patient, shipping via US postal service, confirming receipt of an initial shipment of the drug to the patient releasing inventory in a controlled manner to the central pharmacy, flagging repeat instances of lost, stolen, destroyed or spilled prescriptions, and making the database available to the DEA for checking for abuse patterns in the data
- 21. The method of claim 19 wherein the sensitive drug is a scheduled drug in Schedule II-V.
- 22. A method of distributing a sensitive drug, the method comprising:

determining current and anticipated patterns of potential abuse of the sensitive drug;

selecting multiple controls for distribution of the sensitive drug; and adding additional controls to provide sufficient reassurance to a governmental regulatory body that the sensitive drug distribution can be adequately controlled in order to obtain marketing approval by the governmental regulatory body.

- 23. The method of claim 22 wherein the system allows marketing of a drug product pursuant to FDA subpart 4 regulation embodied in Title 21, CFR Part 314.
- 24. The method of claim 22 wherein distribution of the sensitive drug is controlled by a central distribution center sufficient to allow the DEA (Drug Enforcement Agency) to approve the central distribution center.
- 25. The method of claim 22 wherein the governmental regulatory body comprises a state regulatory agency that approves distribution of the sensitive drug in a state.

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Abstract of the Disclosure

A drug distribution system and method utilizes a central pharmacy and database to track all prescriptions for a sensitive drug. Information is kept in the database regarding all physicians allowed to prescribe the sensitive drug, and all patients receiving the drug. Abuses are identified by monitoring data in the database for prescription patterns by physicians and prescriptions obtained by patients. Further verification is made that the physician is eligible to prescribe the drug by consulting a separate database, and optionally whether any actions are taken against the physician. Multiple controls beyond those for normal drugs are imposed on the distribution depending on the sensitivity of the drug.

TITLE: METHOD OF DISTRIBUTION OF CONTROLLED DRUG INVENTORS NAME: Dayton T. Reardan et al. DOCKET NO.: 101.031US1

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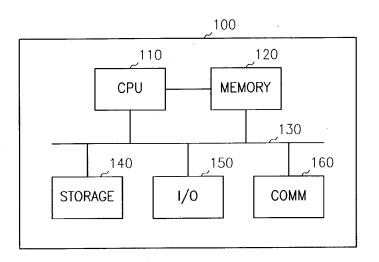
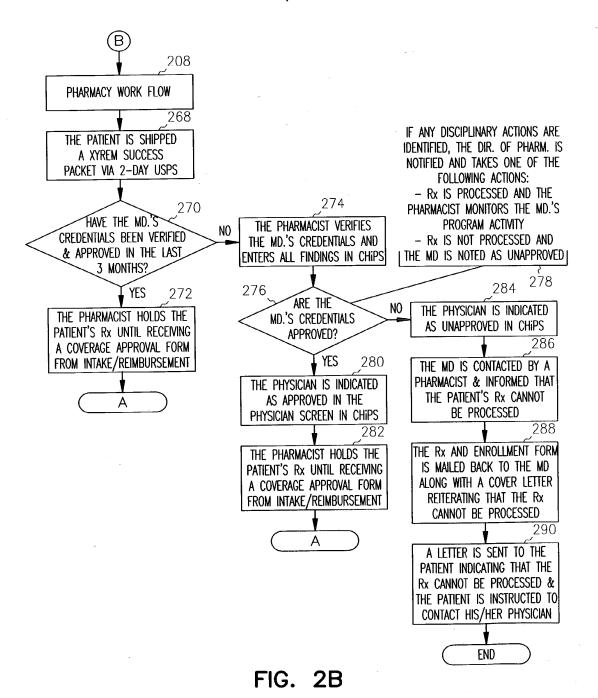


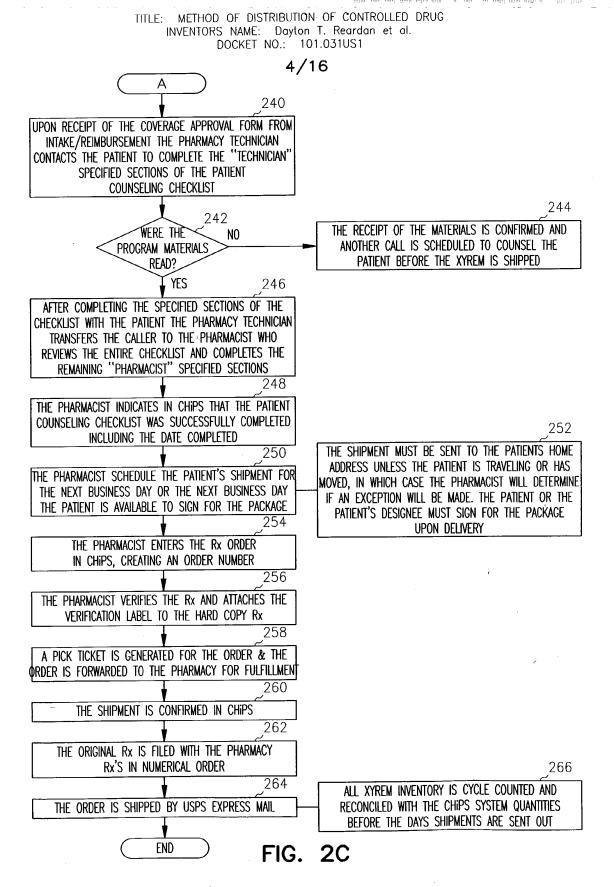
FIG. 1

DOCKET NO.: 101.031US1 2/16 202 MD MAILS/FAXES IN Rx/ENROLLMENT FORM 204 AN INTAKE/REIMBURSEMENT SPECIALIST MAKE A COPY OF THE RX/ENROLLMENT FORM (THE COPY IS STAMPED "COPY") AND THE ORIGINAL FAX IS THEN FORWARDED TO THE PHARMACY TEAM 206 MD MAILS/FAXES IN Rx/ENROLLMENT FORM 210 THE INTAKE/REIMBURSEMENT SPECIALIST ENTERS THE PATIENT AND PHYSICIAN INFO INTO CHIPS 214 212 AN INTAKE REPRESENTATIVE WILL MAKE 1 ATTEMPT TO NO THE INFO REACH THE MD TO OBTAIN THE MISSING INFORMATION COMPLETE? 216 YES 220 THE MISSING INFORMATION HAS NOT BEEN OBTAINED THE INTAKE/REIMBURSEMENT SPECIALIST CONTACTS MD WITHIN 24 HOURS, THE RX/ENROLLMENT FORM IS FAXED BACK TO THE MD WITH A REJECTION EXPLANATION LETTER TO VERIFY RECEIPT & ACCURACY OF THE PATIENT'S Rx & THIS CONTACT IS RECORDED IN CHIPS 218 222 A NOTE IS ENTERED IN CHIPS THAT THE THE INTAKE/REIMBURSEMENT SPECIALIST SENDS CONSENT APPLICATION WAS REJECTED FORM AND A COVER LETTER TO THE PATIENT 224 232 THE INTAKE/REIMBURSEMENT SPECIALIST FAXES A SEE NORD PROCESS FOR PATIENTS STATEMENT OF MEDICAL NECESSITY TO THE WHO ARE UNINSURED OR UNDERINSURED MD TO COMPLETE 226 NO 230 THE INTAKE/REIMBURSEMENT SPECIALIST CONTACTS IS THE THE PATIENT'S INSURANCE PROVIDER TO VERIFY PATIENT WILLING/ABLE COVERAGE & BENEFITS TO PAY? YES 234 228 THE PATIENT IS INFORMED OF THE COST OF THE COVERAGE FOR XYREM PRODUCT AND IS GIVEN PAYMENT OPTIONS APPROVED? 236 YES 238 ONCE PAYMENT IS RECEIVED, INTAKE/REIMBURSEMENT INTAKE/REIMBURSEMENT SUBMITS A COVERAGE SUBMITS A COVERAGE APPROVAL FORM (STAPLED TO THE "COPY" OF THE RX/ENROLLMENT FORM) TO THE APPROVAL FORM (STAPLED TO THE "COPY" OF THE RX ENROLLMENT FORM) TO THE PHARMACY TEAM AS PHARMACY TEAM AS NOTIFICATION TO PROCESS THE PATIENT'S Rx NOTIFICATION TO PROCESS THE PATIENT'S Rx FIG. 2A

TITLE: METHOD OF DISTRIBUTION OF CONTROLLED DRUG INVENTORS NAME: Dayton T. Reardan et al. TITLE: METHOD OF DISTRIBUTION OF CONTROLLED DRUG INVENTORS NAME: Dayton T. Reardan et al. DOCKET NO.: 101.031US1

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TITLE: METHOD OF DISTRIBUTION OF CONTROLLED DRUG INVENTORS NAME: Dayton T. Reardon et al. DOCKET NO.: 101.031US1

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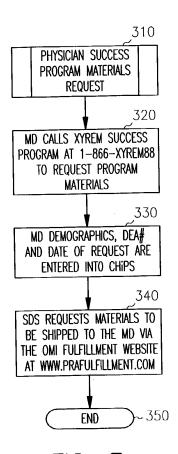


FIG. 3

TITLE: METHOD OF DISTRIBUTION OF CONTROLLED DRUG INVENTORS NAME: Dayton T. Reardan et al. DOCKET NO.: 101.031US1



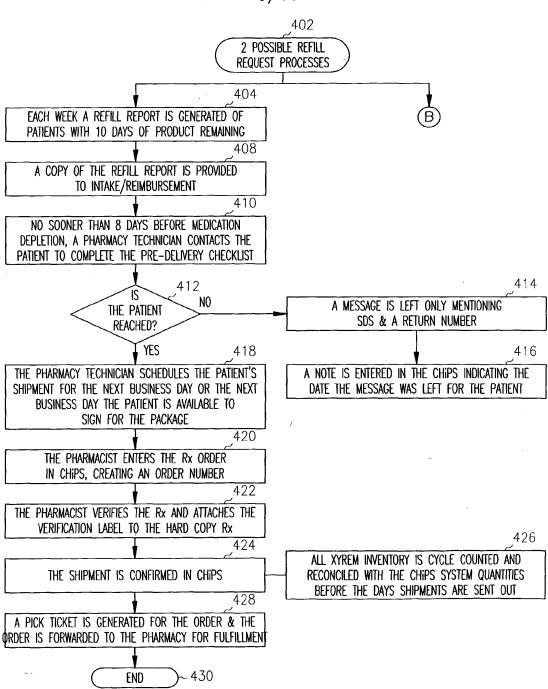
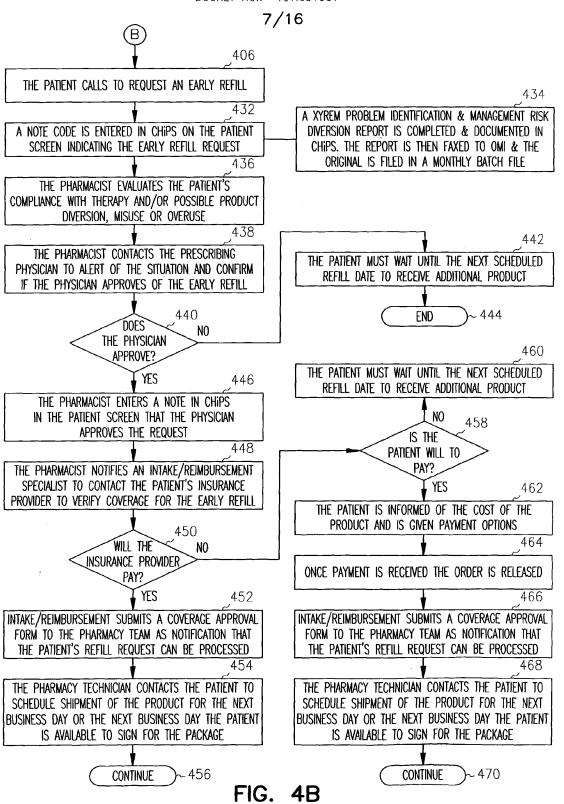


FIG. 4A

TITLE: METHOD OF DISTRIBUTION OF CONTROLLED DRUG INVENTORS NAME: Dayton T. Reardan et al. DOCKET NO.: 101.031US1



TITLE: METHOD OF DISTRIBUTION OF CONTROLLED DRUG INVENTORS NAME: Dayton T. Reardan et al. DOCKET NO.: 101.031US1

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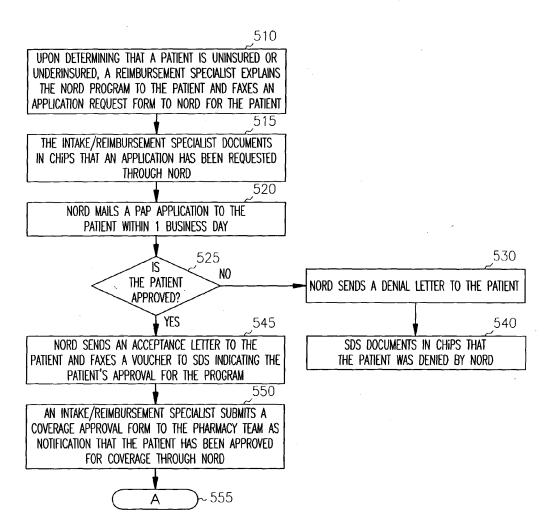
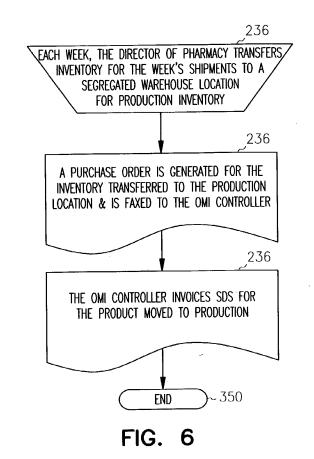
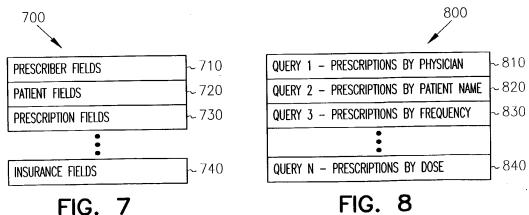


FIG. 5

TITLE: METHOD OF DISTRIBUTION OF CONTROLLED DRUG INVENTORS NAME: Dayton T. Reardon et al. DOCKET NO.: 101.031US1

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TITLE: METHOD OF DISTRIBUTION OF CONTROLLED DRUG INVENTORS NAME: Dayton T. Reardan et al. DOCKET NO.: 101.031US1

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| | PRESCRIPTION | AND ENRO | LLMENT | FORM | |
|-----------------|--------------|----------------|--------|------|-----------|
| | PRES | CRIBER INFORMA | ATION | | |
| | | | | | |
| CITY: | | STATE: | | ZIP | |
| PHONE: | | FAX: | | | |
| LICENSE NUMBER: | | DEA NUMBER: _ | | | |
| MD SPECIALTY: | | | | | |
| | | | | | |
| | PR | ESCRIPTION FOR | RM | | |
| PATIENT NAME: | | SS#: | D0 | B: | SEX M / F |
| | | | , | | |

| PR | RESCRIPTION FORM | | |
|---|---------------------|-------------------------------|-----------------|
| PATIENT NAME: | SS#: | DOB: | SEX M / F |
| PATIENT NAME: | | | · |
| CITY: | | | |
| Rx: XYREM ORAL SOLUTION (500 mg/mL) 180 MI. I | | | |
| SIG: TAKE GMS P.O. DILUTED IN 60 mL WATE | | again 2 1/2 to 4 hours lat | ER |
| REFILLS (CIRCLE ONE): 0 1 2 (MAXIMUM OF 3 | | | |
| | DATE: | -// | |
| PRESCRIBER'S SIGNATURE | | | |
| PHYSICIAN DECLARATION—PLEASE CHECK EACH BOX | TO BE COMPLE | TED AT INITIAL PRESCRIPTION O | NLY |
| I HAVE READ THE MATERIALS IN THE XYREM | PHYSICIAN SUCCESS F | ROGRAM | |
| 1 VERIFY THAT THE PATIENT HAS BEEN EDUC | ATED WITH RESPECT T | D XYREM PREPARATION, DOSING | and scheduling. |
| I UNDERSTAND THAT XYREM IS APPROVED FO | or the treatment of | CATAPLEXY IN PATIENTS WITH | NARCOLEPSY, |
| and that safety or efficacy has not be | | | |
| I UNDERSTAND THAT THE SAFETY OF DOSES | GREATER THAN 9gm/[| DAY HAS NOT BEEN ESTABLISHE | D |
| | | | |
| PAT | TIENT INFORMATION | I | |
| BEST TIME TO CONTACT PATIENT: 🗀 DAY 🗀 NIG | | | |
| DAY #: | Evening #: | | |
| INSURANCE COMPANY NAME: | PHONE #: | | |
| INSURED'S NAME: | RELATIONSHIP | to patient: | |

FAX COMPLETED FORM TO XYREM SUCCESS PROGRAM (TOLL-FREE) 1-866-470-1744
FOR INFORMATION, CALL THE XYREM TEAM (TOLL FREE) AT 1-866-XYREM88 (1-866-997-3688)

PLEASE ATTACH COPIES OF PATIENT'S INSURANCE CARDS

PRESCRIPTION CARD: NO YES IF YES, CARRIER: POLICY #: _

IDENTIFICATION NUMBER: _____

____ POLICY/GROUP NUMBER: _

FIG. 9

TITLE: METHOD OF DISTRIBUTION OF CONTROLLED DRUG INVENTORS NAME: Dayton T. Reardon et al. DOCKET NO.: 101.031US1

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PATIENT ASSISTANCE APPLICATION REQUEST FORM

| DATE: | · · |
|--------------|--|
| TO: FROM: | PATIENT ASSISTANCE ORGANIZATION SDS |
| FAX #: | 203-798-2291 |
| PLEASE S | SEND A XYREM PATIENT ASSISTANCE PROGRAM APPLICATION TO: |
| ADDRESS | NAME |
| TELEPHON | iE: () |
| | DOSAGE: (GRAMS) TWICE NIGHTLY FOR A TOTAL DOSAGE OF (GRAMS) _ BOTTLES (THREE MONTHS SUPPLY) UND INFORMATION: |
| | |
| | |
| | |
| | |

FIG. 10

TITLE: METHOD OF DISTRIBUTION OF CONTROLLED DRUG INVENTORS NAME: Dayton T. Reardan et al. DOCKET NO.: 101.031US1

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SENSITIVE DRUG PATIENT ASSISTANCE PROGRAM VOUCHER REQUEST FOR MEDICATION

PATIENT INFORMATION PHYSICIAN INFORMATION <FIRST NAME><LAST NAME> <PHYSICIAN NAME> <ADDRESS 1> <ADDRESS 1> <ADDRESS 2> <ADDRESS 2> <CITY, STATE ZIP CODE> <CITY, STATE ZIP CODE> PHONE: <123-456-7890 PHONE: <123-456-7890 DOB: 01/01/1900 SSN: 123-45-6789 CASE CODE: ******* DRUG ALLOTMENT: 100% LRD: 03/01/2001 FIRST SHIPMENT THIS YEAR QUANTITY DRUG XYREEM 180ml btl 1 VALIDATION DATE: 03/01/2001 ***PHARMACY USE*** **EXPIRATION DATE:** 05/31/2001 ISSUE DATE: 03/15/2001 APPROVED NORD COPY (DETACH HERE) PHYSICIAN INFORMATION PATIENT INFORMATION <PHYSICIAN NAME> <FIRST NAME><LAST NAME> <ADDRESS 1> <ADDRESS 1> <ADDRESS 2> <ADDRESS 2> <CITY, STATE ZIP CODE> <CITY, STATE ZIP CODE> PHONE: <123-456-7890 PHONE: <123-456-7890 DOB: 01/01/1900 CASE CODE: ******* SSN: 123-45-6789 DRUG ALLOTMENT: 100% FIRST SHIPMENT THIS YEAR LRD: 03/01/2001 QUANTITY DRUG XYREM 180ml btl 1 03/01/2001 ***PHARMACY USE*** VALIDATION DATE: 05/31/2001 **EXPIRATION DATE:** 03/15/2001 ISSUE DATE:

FIG. 11

APPROVED

TITLE: METHOD OF DISTRIBUTION OF CONTROLLED DRUG INVENTORS NAME: Dayton T. Reardan et al. DOCKET NO.: 101.031US1

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SENSITIVE DRUG PHYSICIAN'S CERTIFICATE OF MEDICAL NEED

| PATIENT INFORMATION | | | |
|---|-------------------|-------|---|
| DATE: | | | |
| VAME: LAST DATE OF BIRTH: | FIRST | | M |
| DRUG BEING PRESCRIBED: XYREM DIAGNOSIS/CONDITION FOR WHICH DRUG IS E | Being Prescribed: | | |
| CD-9: | | | |
| PHYSICIAN INFORMATION | | | |
| PHYSICIAN'S NAME (PLEASE PRINT): | | | |
| PHYSICIAN'S SIGNATURE: | | DATE: | |
| | | | |

FIG. 12

PLEASE FAX BACK TO SENSITIVE DRUG SUCCESS PROGRAM: (1-800-TOLL FREE NUMBER)

TITLE: METHOD OF DISTRIBUTION OF CONTROLLED DRUG INVENTORS NAME: Dayton T. Reardan et al. DOCKET NO.: 101.031US1

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| ACTIVITY REPORTS | | | |
|--|--------|------------------|-----------|
| | 二 品 | REPORT FREQUENCY | \C\ |
| | WEEKLY | MONTHLY | QUARTERLY |
| SALES | | | |
| Rx BY ZIP (NEW AND TOTAL) | × | × | × |
| Rx BY PHYSICIAN BY ZIP | × | × | |
| \$BYZIP | × | × | × |
| REGULATORY | | | |
| # OF PHYSICIAN REGISTRIES | | × | |
| # OF DENIED PHYSICIAN REGISTRIES AND REASON | | × | |
| # OF COMPLETED PATIENT REGISTRIES | | × | |
| # OF PROBLEM IDENTIFICATION & MANAGEMENT RISK DIVERSION REPORTS COMPLETED | × | | |
| # OF CYCLE COUNTS PERFORMED & ACCURACY OF EACH | | × | |
| QUALITY ASSURANCE | | | |
| # OF PRODUCT DEFECTS/COMPLAINTS REPORTED, TYPE AND LOT # | | × | |
| CALL CENTER | | | |
| # OF CALLS RECEIVED | | × | |
| # OF CALLS INITIATED | | × | |
| # OF CALLS ANSWERED IN 30 SECONDS, ETC. | | × | |
| PERCENTAGE OF CALLS ANSWERED IN 30 SECONDS | | × | |
| # OF ABANDONED CALLS | | × | |
| % OF ABANDONED CALLS | | × | |
| AVERAGE CALL LENGTH | | × | |
| PHARMACY | | | |
| # OF FAXED RVENROLLMENT FORMS | | × | |
| # OF MAILED RAENROLLEMENT FORMS | | × | |
| # OF RXS SHIPPED W/IN 1, 2, 3, 4 ETC. DAYS (FROM THE TIME INITIAL RECEIPT TO SHIPMENT OF Rx) | | × | |
| # OF PATIENT SUCCESS PACKETS SHIPPED | | × | |

FIG. 13A

TITLE: METHOD OF DISTRIBUTION OF CONTROLLED DRUG INVENTORS NAME: Dayton T. Reardan et al. DOCKET NO.: 101.031US1

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| ACTIVITY REPORTS | | |
|--|---|---|
| PHARMACY | × | |
| # OF PHYSICIAN SUCCESS PACKETS SHIPPED | × | } |
| # OF COMPLETED SHIPMENTS | × | |
| # OF INCOMPLETE SHIPMENTS AND REASON | × | |
| # OF SHIPPING ERRORS | × | |
| #OF PAP SHIPMENTS | × | |
| # OF PAP APPLICATIONS | × | |
| # OF PAP APPROVALS | × | |
| # OF CANCELED ORDERS | × | |
| # OF USPS ERRORS | × | |
| INVENTORY | × | |
| # OF RETURNED PRODUCTS AND REASON | × | |
| # OF OUTDATED BOTTLES OF PRODUCT | × | |
| INVENTORY COUNTS OF CONSIGNMENT & PRODUCTION INVENTORY | × | |
| # OF UNITS RECEIVED | × | |
| LOTS RECEIVED | × | |
| REIMBURSEMENT | × | |
| # OF PENDED AND WHY | × | |
| # OF APPROVALS | × | |
| # OF DENIALS | X | |
| # OF REJECTIONS | Χ | |
| PAYOR TYPES | × | |

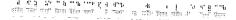
FIG. 13B

TITLE: METHOD OF DISTRIBUTION OF CONTROLLED DRUG INVENTORS NAME: Dayton T. Reardan et al. DOCKET NO.: 101.031US1

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| ACTIVITY REPORTS | | |
|--|---|--|
| PATIENT CARE | × | |
| # OF ADVERSE EVENTS REPORTED AND TYPE | × | |
| # OF ADVERSE EVENTS SENT TO OM | × | |
| # OF DOSING PROBLEMS AND TYPE | × | |
| # OF NONCOMPLIANCE EPISODES AND REASON | × | |
| # OF PATIENT COUNSELED AND REASON | × | |
| # OF PATIENTS DISCONTINUED AND REASON | × | |
| PATIENT CARE | × | |
| # OF PATIENTS REFERRED TO PHYSICIAN AND REASON | × | |
| # OF ACTIVE PATIENTS | × | |
| # OF NEW PATIENTS | × | |
| # OF RESTART PATIENTS | × | |
| # OF DISCONTINUED PATIENTS AND REASON | × | |
| DRUG INFORMATION | × | |
| # OF DRUG INFORMATION REQUESTS AND TYPE | × | |
| # OF CALLS TRIAGED TO OMI | × | |
| | | |

16. 13C



Attorney Docket No.101.031US1

Schwegman ■ Lundberg ■ Woessner ■ Kluth

United States Patent Application

COMBINED DECLARATION AND POWER OF ATTORNEY

As a below named inventor I hereby declare that: my residence, post office address and citizenship are as stated below next to my name; that

I verily believe I am the original, first and joint inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled: **SENSITIVE DRUG DISTRIBUTION SYSTEM AND METHOD.**

The specification of which is attached hereto.

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the patentability of this application in accordance with 37 C.F.R. § 1.56 (attached hereto). I also acknowledge my duty to disclose all information known to be material to patentability which became available between a filing date of a prior application and the national or PCT international filing date in the event this is a Continuation-In-Part application in accordance with 37 C.F.R. §1.63(e).

I hereby claim foreign priority benefits under 35 U.S.C. §119(a)-(d) or 365(b) of any foreign application(s) for patent or inventor's certificate, or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on the basis of which priority is claimed:

No such claim for priority is being made at this time.

I hereby claim the benefit under 35 U.S.C. § 119(e) of any United States provisional application(s) listed below:

No such claim for priority is being made at this time.

I hereby claim the benefit under 35 U.S.C. § 120 or 365(c) of any United States and PCT international application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT international application in the manner provided by the first paragraph of 35 U.S.C. § 112, I acknowledge the duty to disclose material information as defined in 37 C.F.R. § 1.56(a) which became available between the filing date of the prior application and the national or PCT international filing date of this application:

No such claim for priority is being made at this time.

Attorney Docket No.: 101.031US1 Serial No. not assigned Filing Date: not assigned Page 2 of 4

I hereby appoint the following attorney(s) and/or patent agent(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected herewith:

| Anglin, J. Michael | Reg. No. 24,916 | Haack, John L. | Reg. No. 36,154 | Nama, Kash | Reg. No. 44,255 |
|---------------------|-----------------|-------------------------------|-----------------|-----------------------|-----------------|
| Arora, Suneel | Reg. No. 42,267 | Harris, Robert J. | Reg. No. 37,346 | Nelson, Albin J. | Reg. No. 28,650 |
| Beekman, Marvin L. | Reg. No. 38,377 | Jackson Hucbsch, Katharine A. | Reg. No. 47,670 | Nielsen, Walter W. | Reg. No. 25,539 |
| Bianchi, Timothy E. | Reg. No. 39,610 | Jurkovich, Patti J. | Reg. No. 44,813 | Padys, Danny J. | Reg. No. 35,635 |
| Billion, Richard E. | Reg. No. 32,836 | Kalis, Janal M. | Reg. No. 37,650 | Parker, J. Kevin | Reg. No. 33,024 |
| Black, David W. | Reg. No. 42,331 | Klima-Silberg, Catherine I. | Reg. No. 40,052 | Perdok, Monique M. | Reg. No. 42,989 |
| Brennan, Thomas F. | Reg. No. 35,075 | Kluth, Daniel J. | Reg. No. 32,146 | Peret, Andrew R. | Reg. No. 41,246 |
| Chadwick, Robin A. | Reg. No. 36,477 | Lacy, Rodney L. | Reg. No. 41,136 | Peterson, David C. | Reg. No. 47,857 |
| Clark, Barbara J. | Reg. No. 38,107 | Lemaire, Charles A | Reg. No. 36,198 | Prout, William F. | Reg. No. 33,995 |
| Clise, Timothy B. | Reg. No. 40,957 | LeMoine, Dana B. | Reg. No. 40,062 | Schumm, Sherry W. | Reg. No. 39,422 |
| Cochran, David R. | Reg. No. 46,632 | Lundberg, Steven W. | Reg. No. 30,568 | Schwegman, Micheal L. | Reg. No. 25,816 |
| Dahl, John M. | Reg. No. 44,639 | Maki, Peter C. | Reg. No. 42,832 | Speier, Gary J. | Reg. No. 45,458 |
| Drake, Eduardo E. | Reg. No. 40,594 | Malen, Peter L. | Reg. No. 44,894 | Steffey, Charles E. | Reg. No. 25,179 |
| Embretson, Janet E. | Reg. No. 39,665 | Mates, Robert E. | Reg. No. 35,271 | Stordal, Leif T. | Reg. No. 46,251 |
| Forrest, Bradley A. | Reg. No. 30,837 | McCrackin, Ann M. | Reg. No. 42,858 | Terry, Kathleen R. | Reg. No. 31,884 |
| Gamon, Owen J. | Reg. No. 36,143 | McGough, Kevin J. | Reg. No. 31,279 | Tong, Viet V. | Reg. No. 45,416 |
| Gorrie, Gregory J. | Reg. No. 36,530 | McTavish, Hugh E. | Reg. No. 48,341 | Viksnins, Ann S. | Reg. No. 37,748 |
| Gortych, Joseph E. | Reg. No. 41,791 | Mehrle, Joseph P. | Reg. No. 45,535 | Woessner, Warren D. | Reg. No. 30,440 |
| Greaves, John N. | Reg. No. 40,362 | Muller, Mark V. | Reg. No. 37,509 | | |

I hereby authorize them to act and rely on instructions from and communicate directly with the person/assignee/attorney/firm/organization/who/which first sends/sent this case to them and by whom/which I hereby declare that I have consented after full disclosure to be represented unless/until I instruct Schwegman, Lundberg, Woessner & Kluth, P.A. to the contrary.

Please direct all correspondence in this case to Schwegman, Lundberg, Woessner & Kluth, P.A. at the address indicated below:
P.O. Box 2938, Minneapolis, MN 55402
Telephone No. (612)373-6900

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

| Full Name of joint inventor of Citizenship: Post Office Address: | Dayton T. Reardan United States of America 22345 Bracketts Road Excelsior, MN 55331 | Residence: Excelsior, MN | |
|---|---|--------------------------|-----|
| Signature: | | Date: | |
| • | Payton T. Reardan | | |
| Full Name of joint inventor r Citizenship: Post Office Address: | number 2: Patti Engel United States of America 852 Basswood Lanc Eagen, MN 55123 | Residence: Eagen, MN | - , |
| Signature: | | Date: | |
| P | atti Engel | | |
| | | | |

 \underline{X} Additional inventors are being named on separately numbered sheets, attached hereto.

Attorney Docket No.: 101.031US1 Serial No. not assigned Filing Date: not assigned

Full Name of joint inventor number 3:

Page 3 of 4

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Bob Gagne

| Signature: Bob Gagne Bob Gagne Full Name of inventor: Citizenship: Post Office Address: Signature: Date: Full Name of inventor: Citizenship: Post Office Address: Signature: Date: Full Name of inventor: Citizenship: Post Office Address: Signature: Date: Full Name of inventor: Citizenship: Post Office Address: Signature: Date: Full Name of inventor: Citizenship: Post Office Address: Signature: Date: | Citizenship: Post Office Address: | United States of America 202 So. Wheeler Street St. Paul, MN 55015 | Residence: St. Paul, MN | |
|--|-----------------------------------|--|-------------------------|---|
| Citizenship: Residence: Signature: Date: Full Name of inventor: Citizenship: Residence: Signature: Date: Full Name of inventor: Residence: Signature: Date: Full Name of inventor: Residence: Signature: Residence: Post Office Address: | Signature: | Bob Gagne | Date: | |
| Full Name of inventor: Citizenship: Residence: Post Office Address: Signature: Date: Full Name of inventor: Citizenship: Residence: Post Office Address: | Citizenship: | | Residence: | |
| Citizenship: Residence: Post Office Address: Signature: Date: Full Name of inventor: Citizenship: Residence: Post Office Address: | Signature: | | Date: | |
| Full Name of inventor: Citizenship: Residence: Post Office Address: | Citizenship: | | Residence: | |
| Citizenship: Residence: Post Office Address: | Signature: | | Date: | |
| Signature: Date: | Citizenship: | | Residence: | • |
| | Signature: | | Date: | |

Attorney Docket No.: 101.031US1 Serial No. not assigned Filing Date: not assigned

Page 4 of 4

§ 1.56 Duty to disclose information material to patentability.

- (a) A patent by its very nature is affected with a public interest. The public interest is best served, and the most effective patent examination occurs when, at the time an application is being examined, the Office is aware of and evaluates the teachings of all information material to patentability. Each individual associated with the filing and prosecution of a patent application has a duty of candor and good faith in dealing with the Office, which includes a duty to disclose to the Office all information known to that individual to be material to patentability as defined in this section. The duty to disclose information exists with respect to each pending claim until the claim is canceled or withdrawn from consideration, or the application becomes abandoned. Information material to the patentability of a claim that is canceled or withdrawn from consideration need not be submitted if the information is not material to the patentability of any claim remaining under consideration in the application. There is no duty to submit information which is not material to the patentability of any existing claim. The duty to disclose all information known to be material to patentability of any claim issued in a patent was cited by the Office or submitted to the Office in the manner prescribed by §§ 1.97(b)-(d) and 1.98. However, no patent will be granted on an application in connection with which fraud on the Office was practiced or attempted or the duty of disclosure was violated through bad faith or intentional misconduct. The Office encourages applicants to carefully examine:
 - (1) prior art cited in search reports of a foreign patent office in a counterpart application, and
 - (2) the closest information over which individuals associated with the filing or prosecution of a patent application believe any pending claim patentably defines, to make sure that any material information contained therein is disclosed to the Office.
- (b) Under this section, information is material to patentability when it is not cumulative to information already of record or being made of record in the application, and
 - (1) It establishes, by itself or in combination with other information, a prima facie case of unpatentability of a claim; or
 - (2) It refutes, or is inconsistent with, a position the applicant takes in:
 - (i) Opposing an argument of unpatentability relied on by the Office, or
 - (ii) Asserting an argument of patentability.

A prima facie case of unpatentability is established when the information compels a conclusion that a claim is unpatentable under the preponderance of evidence, burden-of-proof standard, giving each term in the claim its broadest reasonable construction consistent with the specification, and before any consideration is given to evidence which may be submitted in an attempt to establish a contrary conclusion of patentability.

- (c) Individuals associated with the filing or prosecution of a patent application within the meaning of this section are:
 - (1) Each inventor named in the application:
 - (2) Each attorney or agent who prepares or prosecutes the application; and
 - (3) Every other person who is substantively involved in the preparation or prosecution of the application and who is associated with the inventor, with the assignee or with anyone to whom there is an obligation to assign the application.
- (d) Individuals other than the attorney, agent or inventor may comply with this section by disclosing information to the attorney, agent, or inventor.



FILING/RECEIPT DATE FIRST NAMED APPLICANT ATTORNEY DOCKET NUMBER APPLICATION NUMBER

10/322.348

MINNEAPOLIS, MN 55402

21186

P.O. BOX 2938

12/17/2002

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.

Dayton T. Reardan

101.031US1

CONFIRMATION NO. 5446

FORMALITIES LETTER

OC000000009686927

Date Mailed: 03/24/2003

NOTICE TO FILE MISSING PARTS OF NONPROVISIONAL APPLICATION

FILED UNDER 37 CFR 1.53(b)

Filing Date Granted

Items Required To Avoid Abandonment:

An application number and filing date have been accorded to this application. The item(s) indicated below, however, are missing. Applicant is given TWO MONTHS from the date of this Notice within which to file all required items and pay any fees required below to avoid abandonment. Extensions of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 CFR 1.136(a).

- · The statutory basic filing fee is missing. Applicant must submit \$ 375 to complete the basic filing fee for a small entity.
- The oath or declaration is unsigned.
- To avoid abandonment, a late filing fee or oath or declaration surcharge as set forth in 37 CFR 1.16(e) of \$65 for a small entity in compliance with 37 CFR 1.27, must be submitted with the missing items identified in this letter.

Items Required To Avoid Processing Delays:

The item(s) indicated below are also required and should be submitted with any reply to this notice to avoid further processing delays.

 Additional claim fees of \$87 as a small entity, including any required multiple dependent claim fee, are required. Applicant must submit the additional claim fees or cancel the additional claims for which fees are due.

SUMMARY OF FEES DUE:

Total additional fee(s) required for this application is \$527 for a Small Entity

- \$375 Statutory basic filing fee.
- \$65 Late oath or declaration Surcharge.
- Total additional claim fee(s) for this application is \$87
 - \$45 for 5 total claims over 20.

A copy of this notice <u>MUST</u> be returned with the reply.

Customer Service Center

Initial Patent Examination Division (703) 308-1202

■ \$42 for 1 independent claims over 3.

PART 3 - OFFICE COPY



APR 16 2003 TC 1700

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

Dayton T. Reardan et al.

Title:

SENSITIVE DRUG DISTRIBUTION SYSTEM AND METHOD

Docket No.:

101.031US1

December 17, 2002

Filed: Examiner:

Unknown

Serial No.: 10/322,348

Due Date: N/A

Group Art Unit: 1743

Commissioner for Patents Washington, D.C. 20231

We are transmitting herewith the following attached items (as indicated with an "X"):

 $\frac{X}{X}$ A return postcard.

An Information Disclosure Statement (1 pg.), Form 1449 (1 pg.), and copies of 7 cited documents.

Please consider this a PETITION FOR EXTENSION OF TIME for sufficient number of months to enter these papers and please charge any additional required fees or credit overpayment to Deposit Account No. 19-0743.

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.

P.O. Box 2938, Minneapolis, MN 55402 (612-373-6900)

Reg. No. 30,837

<u>CERTIFICATE UNDER 37 CFR 1.8:</u> The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Commissioner for Patents, Washington, D.C. 20231, on this day of April, 2003.

Customer Number 21186

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.

P.O. Box 2938, Minneapolis, MN 55402 (612-373-6900)

(GENERAL)

S/N 10/322348 **PATENT**

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Dayton T. Reardan Ph.D. et al. Examiner:

Unknown

Serial No.:

10/322,348

Group Art Unit:

Filed:

December 17, 2002

Docket:

SENSITIVE DRUG DISTRIBUTION SYSTEM AND METHOD

INFORMATION DISCLOSURE STATEMENT

1743 101.031URECEIVED APR 16 2003 TC 1700

Assistant Commissioner for Patents

Washington, D.C. 20231

In compliance with the duty imposed by 37 C.F.R. § 1.56, and in accordance with 37 C.F.R. §§ 1.97 et. seq., the enclosed materials are brought to the attention of the Examiner for consideration in connection with the above-identified patent application. Applicants respectfully request that this Information Disclosure Statement be entered and the documents listed on the attached Form 1449 be considered by the Examiner and made of record. Pursuant to the provisions of MPEP 609, Applicants request that a copy of the 1449 form, initialed as being considered by the Examiner, be returned to the Applicants with the next official communication.

Pursuant to 37 C.F.R. §1.97(b), it is believed that no fee or statement is required with the Information Disclosure Statement. However, if an Office Action on the merits has been mailed, the Commissioner is hereby authorized to charge the required fees to Deposit Account No. 19-0743 in order to have this Information Disclosure Statement considered.

The Examiner is invited to contact the Applicants' Representative at the below-listed telephone number if there are any questions regarding this communication.

Respectfully submitted,

DAYTON T. REARDAN PH.D. ET AL.

By their Representatives,

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.

P.O. Box 2938

Minneapolis, MN 55402

612-373-6972

4-8-2003

Bradley A. Forrest

Reg. No. 30,837

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Commissioner of Patents, Washington, D.C. 20231, on this day of April, 2003

MEREDITH MESCHER

Meredi Signature

Substitute for form 1449A/PTO
INFORMATION DISCLOSURE
STATEMENS BY APPLICANT
(Use or minn) sheets as incressary)

Complete if Known

Applicati in Number 10/322,348

Filing Date December 17, 2002

First Nam d Invent r Reardan Ph.D., Dayton Group Art Unit 1743

Examiner Name Unknown

Attorney Docket No: 101.031US1

| | US PATENT DOCUMENTS | | | | | | |
|-----------------------|------------------------|------------------|--|-------|----------|----------------------------|--|
| Examiner Initial * | USP Document Number | Publication Date | Name of Patentee or Applicant of cited Document | Class | Subclass | Filing Date If Appropriate | |
| | US-6,045,501 | 04/04/2000 | Elsayed, Marc, et al | | | 08/28/1998 | |
| | US-6,315,720 | 11/13/2001 | Williams, Bruce A., et al | | | 10/23/2000 | |

| FOREIGN PATENT DOCUMENTS | | | | | | |
|--------------------------|---------------------|------------------|--|-------|----------|----------------|
| Examiner Initials* | Foreign Document No | Publication Date | Name of Patentee or Applicant of cited Document | Class | Subclass | T ² |

| | OTHE | R DOCUMENTS NON PATENT LITERATURE DOCUMENTS | |
|-----------------------|--------------|---|----|
| Examiner Initials* | Cite No 1 | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T² |
| | | NASCSA National Conference, (November 2000),8 pages | |
| | | "Diversion Prevention Through Responsible Distribution", NADDI Regional | |
| | | Training, (May 2001),12 pages | |
| | | "Diversion Prevention Through Responsible Distribution", NADDI Regional | |
| | | Training Tennessee, (June 2001),14 Pages | 1 |
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| | | Conference, (November 2001),15 pages | } |
| | | "Peripheral and Central Nervous System Drugs Advisory Committee", | |
| | | Department of Health and Human Services Food and Drug Administration | |
| | | Center for Drug Evaluation and Research, Holiday Inn, Bethesda, | |
| | | Maryland,(06/06/2001),7 pages | 1 |

EXAMINER DATE CONSIDERED

NASCSA Nat'l Conference Hovember 2000

Orphan Medical, Inc.

Dedicated to patients with uncommon diseases

Xyrem®
(sodium oxybate) oral solution

Developmental History

- 1994: Orphan Medical begins development at request of NORD and FDA's Office of Orphan Product Development
- 1995-1996: Program design with FDA; formulation and toxicology
- 1997: Controlled trials begin
- 1998: Blind broken, efficacy and safety data confirm Xyrem's use in narcolepsy

GHB

GHB "Illicit Use" History

- 1990: FDA initiates voluntary removal from health food stores due to abuse by body builders/weight lifters
- 1996: reports of street use utilizing GHB-making kits obtained via Internet
- 1998: reports of GBL being utilized for "similar physical effect"
- 1999: reports of 1,480 being utilized for "similar physical effect"
- 2000: PL 106-172 enacted "bifurcated" schedule of GHB
 CI for illicit use
 - CIII for FDA approved NDA
- Orphan Medical responsibilities: Xyrem



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| | · |
| Orphan Medical's Position | |
| Xyrem should be available for patients who could benefit from its medical | |
| properties | |
| Distribution and registries should be utilized to minimize/prevent/identify diversion | |
| Illicit use of GHB and its "chemical cousins" should be harshly penalized | |
| cousins should be harsing penalized | |
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| Xyrem: Patient Success Program | |
| | |
| A comprehensive program designed to ensure the responsible distribution of | |
| Xyrem Provides | |
| Appropriate physician and patient education | · |
| Minimization/prevention of diversion Prosecution assistance | |
| 7.6 | <u> </u> |
| | • |
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| | |
| Xyrem: Patient Success Program | |

Developed after extensive consultation with

pharmaceutical distribution experts
 Draft program has been circulated and reviewed by key regulatory and enforcement officials for feedback

•forensics experts
•consultants with DEA

122 121

•drug diversion

•law enforcement

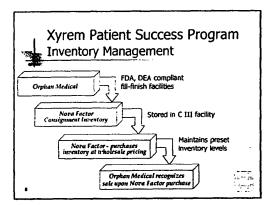
 prosecutors
 field law enforcement personnel



Xyrem Patient Success Program Closed Loop Distribution

Bulk drug manufactured in PA (Lonza) Drug product produced in NC (Catalytica) Single pharmacy, Nova Factor, in $\ensuremath{\mathsf{TN}}$

- . Central location: all records and controls in one place
- Despite financial implications, Orphan will not place Xyrem in 63,000 retail pharmacy outlets nationally



Xyrem Patient Success Program Prescription Process

- Potential physician targets identified through Provigil® IMS data
 - MS data

 While 12,000 physicians have prescribed Provigil to date, only
 4,000 have prescribed > X4, these become our "customer
 targets"

 At launch, the Xyrem Physician Success Program is mailed to
 these 4,000 physicians (documentation of mailing)

 Approx. 35 sales representatives "detail" target physicians,
 leaving behind the Xyrem Physician Success Program (signed
 documentation of receipt)

 - No Physician Sampling
 Upon first Rx, "new prescriber" receives Xyrem Physician
 Success Program (documentation of mailing and follow up
 telephone call)

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Xyrem Patient Success Program Prescription Process

- Physician Success Program DOES NOT speak to efficacy and safety of Xyrem, but rather the prescription process, handling, reimbursement program, etc.
- . Physician faxes Rx to Nova Factor
- Nova Factor verifies physician is "eligible"
 - Active DEA number
 - . State on-line verification of pending actions
- Nova Factor calls physician, verifying Rx for given patient and obtains insurance information etc.

10

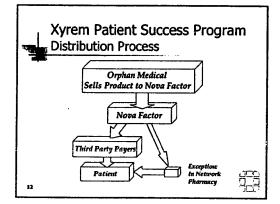


Xyrem Patient Success Program Prescription Process

- Nova Factor contacts third party payor (insurance company) to obtain coverage
 - If necessary, obtains letter of medical necessity from physician
 - Obtains assignment of benefits from third party payor
 - Only if third party payor insists "in network" pharmacy be used will Nova Factor drop ship to "in network pharmacy", requiring patient information and all appropriate data for registry

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Xyrem Patient Success Program Distribution Process

- Nova Factor contacts patient to inform them of insurance coverage and to determine patient availability for shipping
 - Xyrem shipped by overnight courier (FedX RapidTrac*) with real-time tracking
 - Xyrem delivered ONLY by authorized signature
 - If patient unavailable, Xyrem returned to Nova Factor
 - If product is lost, investigation begins regarding shipment's whereabouts

3





Xyrem Patient Success Program Distribution Process

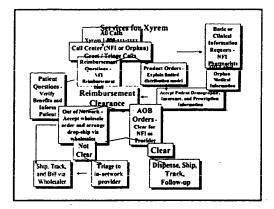
- If RapidTrac* shows Xyrem received, Nova Factor contacts patient within 24 hours to
 - Confirm receipt of prescription
 - Confirm receipt of Xyrem Patient Success Program
 - Offer counsel regarding Xyrem dosing and compliance
 - Confirm patient's understanding of contents of Xyrem Patient Success Program



Xyrem Patient Success Program Distribution Process

- If patient has not reviewed Xyrem Patient Success Program
 - Patient is instructed to review materials, and Nova Factor pharmacist will call again in 24 hours
 - After 2nd attempt, doctor will be contacted if pharmacist still uncomfortable
 - If pharmacist is still uncomfortable with patient's understanding, refill will be withheld until such time pharmacist is comfortable

got. Tot





Nova Factor Data Collection

- Physician/Patient Information
 - Prescriptions by physician specialty
 - Prescriptions by patient name
 - Prescriptions by volume (frequency)
 - Prescriptions by dose
- As a registered pharmacy and wholesaler, Nova Factor can and will share this information with appropriate state and federal authorities for investigation and prosecution



Xyrem Patient Success Program Closed Loop Distribution: Benefits

- All data in one location
- "Real time" data allows for verification prior to filling Rx
- Single location of data allows for rapid identification and prosecution
- Product ownership by Nova Factor allows for patient level data based on RPh/MD/Patient relationship

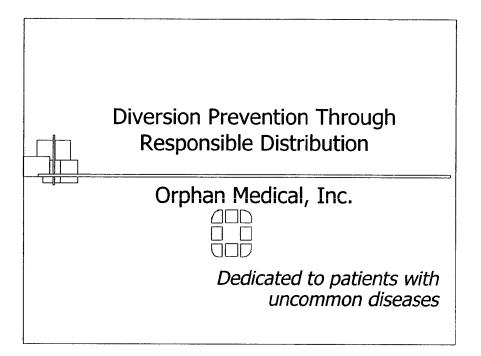
18

| Data regarding educational materials gives law enforcement strong support in prosecution Xyrem Physician Success Program Educational Materials Video Success Program contact information Patient Education presentation Template medical record Template patient contract Patient reimbursement information Xyrem Patient Success Program Educational Materials Video Xyrem overview Patient Success Program contact information Tips for safe in-home storage & disposal Traveling tips Reimbursement information | Xyrem Patient Success Program Closed Loop Distribution: Benefits | |
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| 31 (2014) 31 (2014) | Reimbursement information | |
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Xyrem: Patient Success Program

- A comprehensive program which ensures the responsible distribution of Xyrem resulting in
 - Appropriate physician and patient education
 - Diversion minimization/prevention
 - Prosecution assistance





Who is Orphan Medical?

- Pharmaceutical company that specializes in development, marketing and distribution of medications to patients with rare diseases
 - Sucraid; congenital sucrase-isomaltase deficiency (n=1000 patients)
 - Cystadane; homocystinuria (n=100 patients)
 - Antizol; ethylene glycol poisoning (n<1000 patients)
- www.orphan.com



Xyrem®

(sodium oxybate) oral solution Developmental History

- 1994: Orphan Medical begins development of "medical GHB" at request of NORD and FDA's Office of Orphan Product Development
- 1995-1996: Program design with FDA; formulation and toxicology
- 1997: Controlled trials begin
- 1998: Blind broken, efficacy and safety data confirm Xyrem's use in narcolepsy
- Oct. 2000: New drug application filed, FDA commits to "priority review"
- Mid 2001: Expect commercialization of Xyrem!

3



GHB "Illicit Use" History

- 1990: FDA initiates voluntary removal of GHB from health food stores due to abuse by body builders/weight lifters
- 1996: reports of street use utilizing GHB-making kits obtained via Internet (home-made GHB)
- 1998: reports of GBL being utilized for "similar physical effect" ("chemical cousins")
- 1999: reports of 1,4-BD being utilized for "similar physical effect"
- No "medical GHB" ever been diverted from clinical trials for illicit use

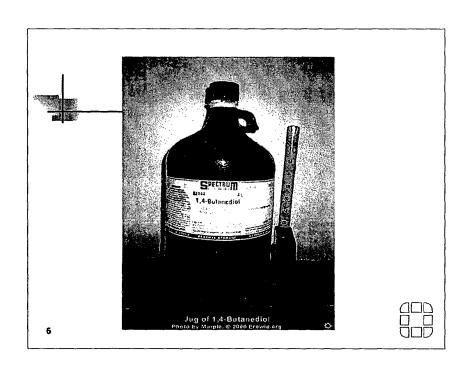


The GHB Substitutes

- Convert to GHB in the body
- Identified as GHB by drug screens
- 725 million pounds of 1,4 BD produced
- = 150 million pounds of GBL produced
 - Approx. \$3,000 for 55 gallon drum (\$250,000 profit?)
 - Easily obtainable with mailing address and credit card
- Few states have legislation which allows prosecution



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Orphan Medical's Position

- Xyrem should be available for patients who could benefit from its medical properties
- Distribution and registries should be utilized to minimize/prevent/identify diversion
- Illicit use of GHB and its "chemical cousins" should be harshly penalized



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Legislative Success

- February, 2000: PL 106-172 enacted
 - · CI for GHB
 - CIII for FDA approved GHB (Xyrem); CI penalties for illicit use
 - List I chemical status for GBL
 - · Arcos-like reporting for Xyrem
 - · Criminalize use of analogues in violent crime
 - · Create model protocols for drug rape investigations
 - Create DEA unit to study drug rape
 - · Underwrite development of GHB field test kit
 - · Underwrite public education campaign

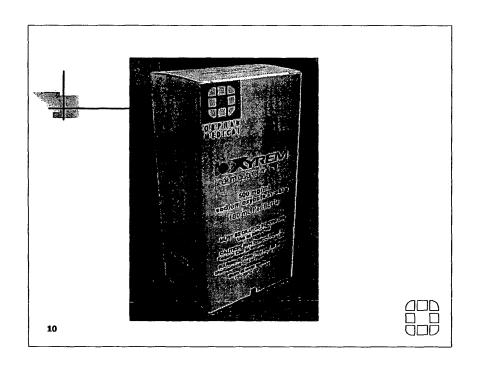




Narcolepsy

- A chronic neurological disorder
- Affects approximately 135,000 Americans, only 75,000 who are identified/treated
- Symptoms
 - · Excessive daytime sleepiness
 - Cataplexy attacks (loss of muscle control)
 - Hallucinations
 - · Sleep paralysis
 - · Fragmented nighttime sleep
- No viable alternatives which control cataplexy well
- Cost to society and to the patient
- Extreme day-to-day performance impairment
- Difficult to impossible to remain employed
- Substantially reduced quality of life







Xyrem: Patient Success Program

- A comprehensive program designed to ensure the responsible distribution of Xyrem to patients who need it
- Provides
 - Appropriate physician and patient education
 - Minimization/prevention of diversion
 - Prosecution assistance



11



Xyrem: Patient Success Program

- Developed after extensive consultation with
 - law enforcement
- · forensics experts
- prosecutors
- Ex-DEA officials
- field law enforcement
 drug diversion personnel

investigators

- pharmaceutical distribution experts
- Draft program has been circulated and reviewed by key regulatory and enforcement officials for feedback
- Copies will be available once finalized; call 1-888-8ORPHAN to obtain materials!





Xyrem Patient Success Program Closed Loop Distribution

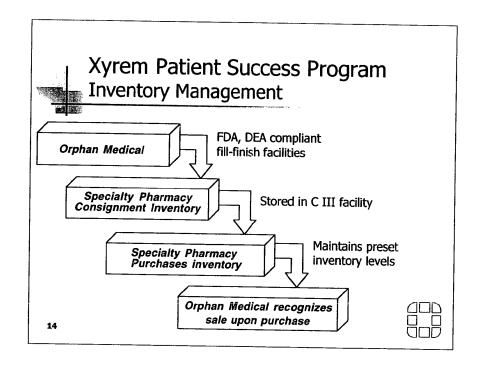
Bulk drug manufactured in PA (CI)

Drug product produced in NC (CIII)

Single pharmacy in TN

- Central location: all records and controls in one place
- Despite financial implications, Orphan Medical will not place Xyrem in all retail pharmacy outlets nationally







Xyrem Patient Success Program Prescription Process

- Potential physician prescribers identified and sent physician education materials
- Sales representatives call on physicians to educate regarding the benefits of Xyrem for narcolepsy patients
- If appropriate, physician prescribes Xyrem for patient, faxing prescription to Specialty Pharmacy

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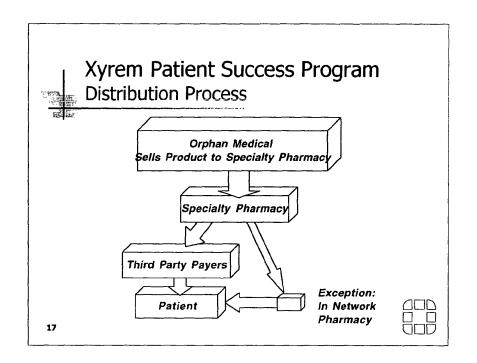




Xyrem Patient Success Program Prescription Process, Cont.

- Pharmacist verifies physician is "eligible"
 - Active licensed physician
 - Authorized to prescribe controlled substances
- Specialty Pharmacy calls physician, verifying Rx for given patient and obtains insurance information
- Specialty Pharmacy contacts third party payor (insurance company) to obtain coverage







Xyrem Patient Success Program Distribution Process

- Pharmacist contacts patient to inform them of insurance coverage and to determine patient availability for shipping
 - Xyrem shipped by overnight courier with real-time tracking
 - First-time prescription for each patient is accompanied by the Xyrem Patient Success Program
 - Xyrem delivered ONLY by authorized signature
 - If patient unavailable, Xyrem returned to Specialty Pharmacy
 - If product is lost, investigation begins regarding shipment's whereabouts





Xyrem Patient Success Program Distribution Process

- If on-line tracking system shows Xyrem received, Pharmacist contacts patient within 24 hours to:
 - · Confirm receipt of prescription
 - Confirm receipt of Xyrem Patient Success Program
 - Offer counsel regarding Xyrem dosing and compliance
 - Confirm patient's understanding of contents of Xyrem Patient Success Program

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Data Collection

- Physician/Patient Information which will be collected:
 - · Prescriptions by physician specialty
 - · Prescriptions by patient name
 - Prescriptions by volume (frequency)
 - Prescriptions by dose





Data Collection

- As a registered pharmacy and wholesaler, Specialty Pharmacy can and will share this information with appropriate state and federal authorities for investigation and prosecution
- Orphan Medical is working with NADDI to develop a central reporting mechanism for diversion investigators across the country to obtain the collected data

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Xyrem Patient Success Program Closed Loop Distribution: Benefits

- All data in one location, possibility of centralization of reporting to diversion investigators through NADDI
- "Real time" data allows for verification prior to filling Rx
- Single location of data allows for rapid identification and prosecution
- Product ownership by Specialty Pharmacy allows for patient level data based on RPh/MD/Patient relationship





Xyrem Patient Success Program

- A comprehensive program which ensures the responsible distribution of Xyrem resulting in
 - Appropriate physician and patient education
 - Diversion minimization/prevention
 - Prosecution assistance





Diversion Prevention Through Responsible Distribution

Orphan Medical, Inc.



Dedicated to patients with uncommon diseases



Who is Orphan Medical?

- Pharmaceutical company who specializes in development, marketing and distribution of medications to patients with rare diseases
 - Sucraid; congenital sucrase-isomaltase deficiency (n=1000 patients)
 - Cystadane; homocystinuria (n=100 patients)
 - Antizol; ethylene glycol poisoning (n<1000 patients)
- www.orphan.com





Narcolepsy

A chronic neurological disorder

- Affects approximately 135,000 Americans, only 85,000 who are identified/treated
- Symptoms
 - · Excessive daytime sleepiness
 - · Cataplexy attacks (loss of muscle control)
 - Hallucinations
 - Sleep paralysis
 - · Fragmented nighttime sleep
- No viable alternatives which control cataplexy well
- Cost to society and to the patient
- Extreme day-to-day performance impairment
- Difficult to impossible to remain employed
- Substantially reduced quality of life



3

Xyrem®

(sodium oxybate) oral solution Developmental History

1994: Orphan Medical begins development of "medical GHB" at request of NORD and FDA's Office of Orphan Product Development

- 1995-1996: Program design with FDA; formulation and toxicology
- 1997: Controlled trials begin
- 1998: Blind broken, efficacy and safety data confirm Xyrem's use in narcolepsy
- Oct. 2000: New drug application filed, FDA commits to "priority review"
- Mid 2001: Expect commercialization of Xyrem!





GHB "Illicit Use" History

- 1990: FDA initiates voluntary removal of GHB from health food stores due to abuse by body builders/weight lifters
- 1996: reports of street use utilizing GHB-making kits obtained via Internet (home-made GHB)
- 1998: reports of GBL being utilized for "similar physical effect" ("chemical cousins")
- 1999: reports of 1,4 BD being utilized for "similar physical effect"
- No "medical GHB" ever been diverted from clinical trials for illicit use



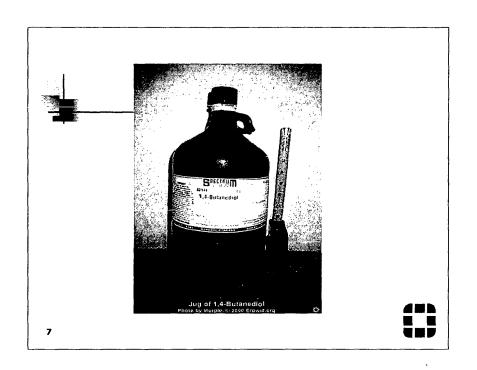
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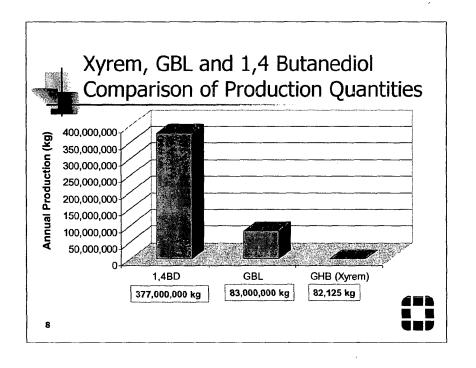


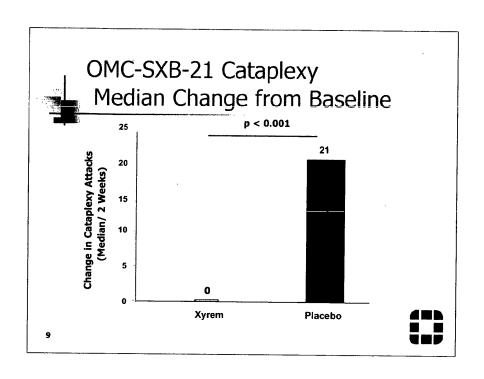
The GHB Substitutes

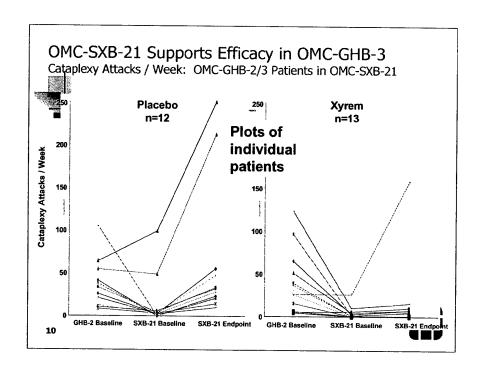
- Convert to GHB in the body
- Identified as GHB by drug screens
- 700 million pounds of 1,4 BD produced
 - Approx. \$700 for 55 gallon drum (\$250,000 profit?)
- 150 million pounds of GBL produced
 - Approx. \$3,000 for 55 gallon drum
 - Easily obtainable with mailing address and credit card
- Few states have legislation which allows prosecution











OMC-SXB-21 Possible Withdrawal Associated AEs

| COSTART Term | Placebo (n=29) | Xyrem (n=26) |
|--------------|----------------|-----------------|
| Anxiety | 2 (7%) | 0 |
| Dizziness | 1 (3%) | 0 |
| Insomnia | 1 (3%) | 0 |
| Sleep | 1 (3%) | 0 |
| Somnolence* | 1 (3%) | 0 |

^{*} Verbatim Term: Increased awakenings

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Orphan Medical's Position

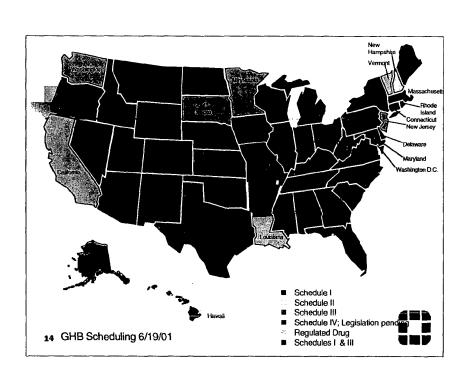
- Xyrem should be available for patients who could benefit from its medical properties
- Distribution and registries should be utilized to minimize/prevent/identify diversion
- Illicit use of GHB and its "chemical cousins" should be harshly penalized

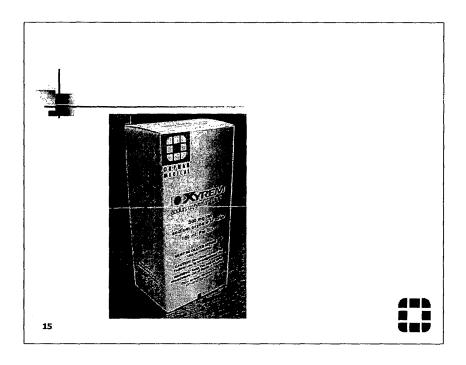


Legislative Success

- February, 2000: PL 106-172 enacted
 - CI for GHB
 - CIII for FDA approved GHB (Xyrem); CI penalties for illicit use
 - List I chemical status for GBL
 - · Arcos-like reporting for Xyrem
 - Criminalize use of analogues in violent crime
 - · Create model protocols for drug rape investigations
 - Create DEA unit to study drug rape
 - Underwrite development of GHB field test kit
 - Underwrite public education campaign









Xyrem: Patient Success Program

- A comprehensive program designed to ensure the responsible distribution of Xyrem to patients who need it
- Provides
 - Appropriate physician and patient education
 - Minimization/prevention of diversion
 - Prosecution assistance





Xyrem: Patient Success Program

- Developed after extensive consultation with
 - law enforcement
- forensics experts
- prosecutors
- former DEA officials
- field law enforcement
- · drug diversion investigators
- · pharmaceutical distribution experts
- Draft program has been circulated and reviewed by key regulatory and enforcement officials for feedback
- Copies will be available once finalized;
 call 1-888-8ORPHAN to obtain materials!

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Xyrem Patient Success Program Closed Loop Distribution

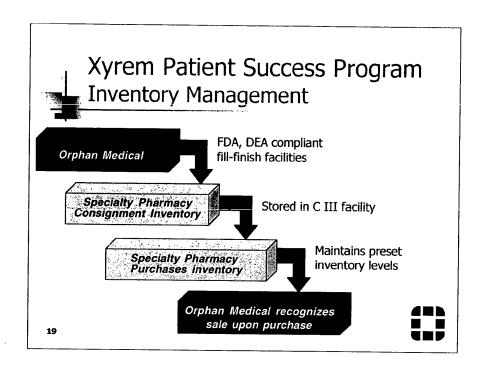
Bulk drug manufactured in PA (CI)

Drug product produced in NC (CIII)

Single pharmacy in TN

- Central location: all records and controls in one place
- Despite financial implications, Orphan Medical will not place Xyrem in all retail pharmacy outlets nationally







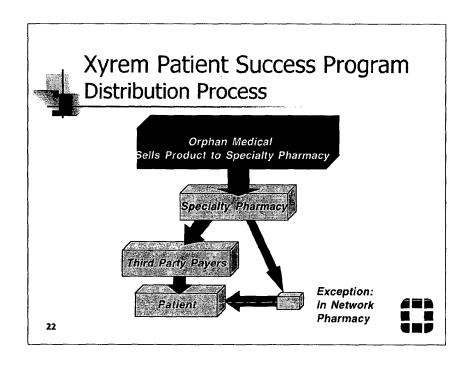
Xyrem Patient Success Program Prescription Process

- Potential physician prescribers identified and sent physician education materials
- Sales representatives call on physicians to educate regarding the benefits of Xyrem for narcolepsy patients
- If appropriate, physician prescribes Xyrem for patient, faxing prescription to Specialty Pharmacy



Xyrem Patient Success Program Prescription Process, Cont.

- Pharmacist verifies physician is "eligible"
 - Active licensed physician
 - Authorized to prescribe controlled substances
- Specialty Pharmacy calls physician, verifying Rx for given patient and obtains insurance information
- Specialty Pharmacy contacts third party payor (insurance company) to obtain coverage





Xyrem Patient Success Program Distribution Process

- Pharmacist contacts patient to inform them of insurance coverage and to determine patient availability for shipping
 - Xyrem shipped by overnight courier with real-time tracking
 - First-time prescription for each patient is accompanied by the Xyrem Patient Success Program
 - Xyrem delivered ONLY by authorized signature
 - If patient unavailable, Xyrem returned to Specialty Pharmacy
 - If product is lost, investigation begins regarding shipment's whereabouts



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Xyrem Patient Success Program Distribution Process

- If on-line tracking system shows Xyrem received, Pharmacist contacts patient within 24 hours to:
 - Confirm receipt of prescription
 - Confirm receipt of Xyrem Patient Success Program
 - Offer counsel regarding Xyrem dosing and compliance
 - Confirm patient's understanding of contents of Xyrem Patient Success Program





Data Collection

- Physician/Patient Information which will be collected:
 - · Prescriptions by physician specialty
 - · Prescriptions by patient name
 - Prescriptions by volume (frequency)
 - · Prescriptions by dose
- As a registered pharmacy and wholesaler, Specialty Pharmacy can and will share this information with appropriate state and federal authorities for investigation and prosecution

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Data Collection

 Orphan Medical is working with NADDI to develop a central reporting mechanism for diversion investigators across the country to obtain the collected data





Xyrem Patient Success Program Closed Loop Distribution: Benefits

- All data in one location, possibility of centralization of reporting to diversion investigators through NADDI
- "Real time" data allows for verification prior to filling Rx
- Single location of data allows for rapid identification and prosecution
- Product ownership by Specialty Pharmacy allows for patient level data based on RPh/MD/Patient relationship



2



Xyrem: Patient Success Program

- A comprehensive program which ensures the responsible distribution of Xyrem resulting in
 - Appropriate physician and patient education
 - Diversion minimization/prevention
 - Prosecution assistance





Diversion Prevention Through Responsible Distribution

Pam Stahl Vice President of Commercial Operations Orphan Medical, Inc.



Company Profile

- Established as a public company in 1994
- Based in Minnetonka, MN
- 60 employees
- Pharmaceutical company that specializes in development, marketing and distribution of medications to patients with rare diseases





Strategy

- Strategic Therapeutic Market Segments
 - Congenital Diseases
 - Antidotes
 - Oncology Support
 - Sleep Disorders

3





Xyrem®

- A new treatment for narcolepsy
- Endogenous substance
 - Sodium oxybate or gamma hydroxybutyrate
- Developed at suggestion of FDA's Office of Orphan Products and National Organization for Rare Diseases (NORD) in 1994





- 1995-1996: Program design with FDA; formulation and toxicology
- 1997: Controlled trials begin
- 1998: Efficacy and safety data confirm Xyrem's use in narcolepsy
- Oct 2000: New drug application filed, FDA commits to "priority review"
- July 2001: Received Approvable letter
- Oct 9,2001: Submitted Response





- A chronic neurological disorder
- Affects approximately 180,000 Americans, only 75,000 who are identified/treated
- Symptoms
 - Excessive daytime sleepiness
 - Cataplexy attacks (loss of muscle control)
 - Hallucinations
 - Sleep paralysis
 - Fragmented nighttime sleep
- No viable alternatives which control cataplexy well
- Cost to society and to the patient
- Extreme day-to-day performance impairment
- Difficult to impossible to remain employed
- Substantially reduced quality of life





Orphan Medical's Commitments

- Patients with unmet medical needs
- Responsible distribution

7



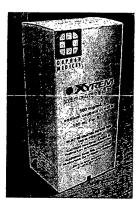




Judy S. Kelloway, Pharm.D. Director of Patient and Professional Affairs



Xyrem: Medical Form of GHB



- For treatment of cataplexy
- About 90,000 potential patients
- Nightly 6 to 9 gm liquid dose
- Expect decision no later than April 9, 2002



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Xyrem Restricted Distribution Program

- A comprehensive program designed to ensure the responsible distribution and safe use of Xyrem to patients who need it
- Developed after extensive consultation with
 - √ law enforcement
- √ forensics experts
- √ prosecutors
- √ ex-DEA officials
- √ field law enforcement personnel
- √ drug diversion investigators
- √ pharmaceutical distribution experts



Xyrem Restricted Distribution Program



- Central pharmacy for dispensing Xyrem via overnight delivery
- System to proactively prevent diversion and to facilitate law enforcement investigations
- Physician and patient education and monitoring
- Draft education materials are awaiting FDA review
- Final education materials will be accessible to NADDI members

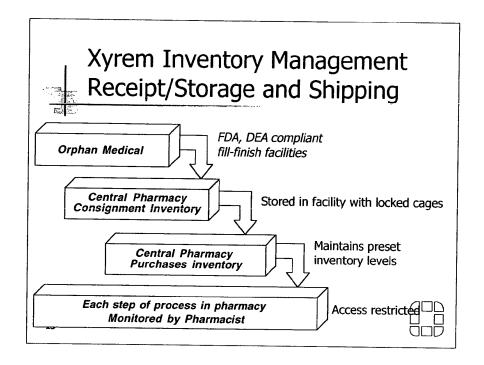
11



Closed Loop Distribution

- Xyrem dispensed from single-dedicated pharmacy in North Carolina
- Central pharmacy:
 - Is a secure, customized facility security exceeds C-II requirements
 - Collects and maintains MD and patient registry
 - Reports prescription information to state authorities
- Xyrem will not be stocked in retail pharmacies







Facility Security Measures

- There will be no signs on the building related to Xyrem
- Closed circuit TV monitoring maintained 24/7 for all areas
- Entire facility will be secured with motion detectors
- Consignment area inventory cage has unique construction (4" thick walls, internal wire cage on walls and ceilings all with 10 gauge steel)
- Consignment inventory area is padlocked
- 14 Inventory checked daily



Pharmacy Personnel

- Selected, screened and trained according to set regulatory criteria.
- Access of Xyrem[®] holding, dispensing and shipping areas is secured by restricted access and is monitored.
- Use team concept with pharmacists trained in the disease and therapeutic
 aspects of Xyrem.





Xyrem Prescription Process

- Physician decides to prescribe Xyrem
- Physician receives Physician Success Program materials and verifies receipt
- Physician faxes a unique Rx form to central pharmacy
- Central pharmacy verifies physician is "eligible"



Physician Success Program

- Description of the prescription distribution process/video
- Special prescription requirements and unique Rx form
- Success Program contact information
- Patient reimbursement information
- Responsibilities of distribution



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Physician Education and Verification

- Central pharmacy
 - At first Rx, verifies physician has read educational materials
 - With each new prescription (q 3 mo), verifies
 - Active DEA license
 - Active AMA number
 - No disciplinary actions via state medical board web site checked every six months





Patient Education and Verification at Central Pharmacy

- Sends educational materials to patient before dispensing Xyrem
- Verifies patient has read educational materials and provides additional information about
 - Xyrem therapy (dose preparation)
 - Safe storage and use
- Sets up time for Xyrem to be shipped via FedEx
- Rapid Trac® system will be used to track eath



Rapid Trac® System

- Detailed, real-time tracking
- Delivered ONLY by authorized signature
- If patient/designee unavailable, package returned to Specialty Pharmacy
- If not accounted, investigation begins regarding shipment's whereabouts
- If lost, law enforcement notified





Patient Success Program

- Video/Xyrem overview
- Patient Success Program contact information
- Medication guide
- Reimbursement information
- Tips for safe in-home storage and disposal
- Traveling tips
- Responsible use and consequences

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"Xyrem is classified as a schedule III medication which means that it is legal for you to use as prescribed. It is illegal for you to sell, distribute or give your Xyrem to anyone else, or to use your Xyrem for purposes other than it was prescribed. Failure to adhere to these rules may result in prosecution and fines as defined in Schedule I of the Controlled Substances Act.



Xyrem Patient Contacts

- Central pharmacy
 - Contacts patient within 24 hours of Xyrem delivery and confirms receipt
 - Provides additional patient counseling, if needed
 - Calls patient prior to each Xyrem shipment, tracks receipt, makes random calls to
 - Monitor use
 - Provide additional information
 - Assess patient compliance



23



Physician and Patient Registry

- Patient Information
 - Rx by name
 - Rx by social security number
 - Rx by date of birth
 - Rx by address
- Physician information
 - Rx by name, address and specialty
 - Prescriptions by volume
 - Prescriptions by dose





Data Availability

- As a registered pharmacy and wholesaler, central pharmacy will
 - Provide required reports to state and federal authorities
 - Provide information to law enforcement authorities upon request per applicable state/federal laws
 - Notify law enforcement of any lost prescriptions
 - Alert state medical board of any troubling physician activities







Benefits of Xyrem Restricted Distribution System

- Makes Xyrem available
 - To patients who need it
 - From one central pharmacy, not 37,000 retail pharmacies
- Education materials underscore responsible use of controlled substance
- Physician and patient verification conducted prior to filling Rx helps prevent diversion and illicit use
- Disciplined physicians identified and prescriptions stopped





Benefits of Xyrem Restricted Distribution System

- Doctor shopping identified, preventing multiple scrips for same person/address
- Patient "pharmacy-shopping" eliminated
- On-going monitoring and calls identify potential overuse of Xyrem
- All physician and patient data in one location and provided to authorities as required and upon request
- Fulfills commitment to support responsible
 distribution of Xyrem

| Questions | |
|-----------|--|
| | |

GAMMA-HYDROXYBUTYRATE (GHB) AND ITS ANALOGS: Nat 1 Confer CURRENT LEGISLATIVE STATUS

Engel PA, Hornfeldt CS. Orphan Medical, Inc., Minnetonka, MN

MAP LEGEND

SCHEDULE I/III

Alabama Alaska Arizona Arkansas Colorado

The current legislative status of GHB SCHEDULE III SCHEDULE IV SCHEDULE I Nevada* New Hampshire* New Mexico* Minnesota* New Jersey South Dakota Washington

Oklahoma

laryland lassachusetts lississippi lissouri

Vontana Vew York North Carolina Vorth Dakota

THE GENERAL ASSEMBLY OF PENNSYLVANIA HOUSE BILL No. 1971 Session of 1999

Amending the act of Amil. II, 1972 (E.1.23) No.6Ay, entitled "An act realing to the manifestre, alle and possession of controlled substance, other drugs, devices and construction controlled substances, other drugs, devices and construction govers on the course and the secretary and Organizer loads of the control cabilities, providing possibles; requiring registration of persons engaged in the drug registration of the revocation or supportion of certain locates and registrations; and repeating an experiment of certain locates and registrations; so repeating the "Limited defining deligater drug". The Genaral Assembly of the Commonweith of Penusylvania beriety enact as follows: Section 1. The definition of "designer drug" in section 2(b) of the act of April 14, 1972 (P.L.231, No.64), known as The Controlled Substance, Drug Device and Cosmetic Act, added Docember 22, 1989 (P.L.769, No.107), is

LEGEND DRUG

SCHEDULE II

Vermont

California Louisiana

Tennessee

Virginia West Virginia Wyoming

Oregon Pennsylvania Rhode Island South Carolina

"Will propose [/III schedule upon approval of Xyrem." The I/III Bill carried over to 2002 legislative session.

to read:

2. Definitions. As used in this act:
or drug" means a substance other th

Controlled Substance Analogues

substances which are not controlled substances, but may be "A new class of substances was created by the Anti-Drug Abuse Act of 1986. Controlled substance analogues are found in the illicit traffic. They are structurally or pharmacologically similar to Schedule I or II controlled substance which meets the definition of a controlled consumption is treated under the CSA as if it were a substances and have no legitimate medical use. A substance analogue and is intended for human controlled substance in Schedule I'

U.S. Department of Justice Drug Enforcement Administration

Current Legislative Status of GHB Analogs

Arizona, California, Hawaii and Missouri have identified ,4-BD and GBL as having similar structure OR similar effect as GHB and are regulating these as "listed chemicals", requiring special record keeping by manufacturers and industrial users.

intended for human consumption" provision, making these Arkansas, Colorado and Kansas have adopted analog language as above adding GVL and including a "... and Schedule I Controlled Substances.

not GVL; no general analog language. Similarly, New York has made all recognized analogs Schedule I but has Florida has classified GBL and 1,4-BD as Schedule I but not included any language defining what an analog is.

analogs and North Dakota has implemented penalties for analog trafficking. The remaining 39 states currently have no current laws recognizing or regulating GHB analogs. North Carolina has established a commission to study

abuse of GHB-like analogs will continue until rigorous and consistent legislative address of analogs exist nationwide. The bill passed by the Pennsylvania State Legislature, While many states have addressed the issue of GHB abuse, marketed analog is found here, marketed as "Tranquili-G" Without such legislation illicit sales of analogs continue, putting consumers at risk. An example of an internetshown, demonstrates such a well written statute.

DEPARTMENT OF HEALTH AND HUMAN SERVICES FOOD AND DRUG ADMINISTRATION CENTER FOR DRUG EVALUATION AND RESEARCH

PERIPHERAL AND CENTRAL NERVOUS SYSTEM DRUGS ADVISORY COMMITTEE

Wednesday, June 6, 2001

8:15 a.m.

Holiday Inn Bethesda, Maryland

| 24 | As we contemplated the distribution of |
|----|---|
| 25 | Xyrem and how to do this responsibly to meet the |
| | 178 |
| | |
| 1 | prior stated goals, we determined that a closed |
| 2 | distribution system would best fit everyone's needs |
| 3 | for this product. The product is manufactured at |
| 4 | one single manufacturing facility. It is sent to |
| 5 | one single national specialty pharmacy. Eventually |
| 6 | it goes by courier to patients with narcolepsy. |
| 7 | [Slide] |
| 8 | The benefits of this program are that not |
| 9 | only is the product distributed from a central |
| 10 | location, but all the controls and all the records |
| 11 | are in one place. |
| 12 | [Slide] |
| 13 | So, how will this work? Because a number |
| 14 | of doctors prescribe medicines for narcolepsy, we |
| 15 | will focus our promotional effects on those |
| 16 | physicians. They include such specialists as |
| 17 | neurologists, pulmonologists, psychiatrists, |
| 18 | internal medicine physicians and several primary |
| 19 | specialties who practice sleep medicine. |
| 20 | [Slide] |
| 21 | Our small sales force will call on these |
| 22 | physicians, communicating the clinical benefits of |
| 23 | Xyrem in narcolepsy. At those calls, the sales |
| 24 | representatives will also review with each |
| 25 | physician something that we call the physician |
| | 179 |
| 1 | Success Program. I will go into the details of |
| 2 | this program in a more in depth fashion in just a |
| 3 | moment. But it is important to know that each |
| 4 | physician will sign that they have reviewed this |
| 5 | program with the sales representative and |

6 understand the program. I should also note that at7 no time will we embark upon physician sampling.

- 8 [Slide]
- 9 I promised to come back to the components
- 10 of the physician Success Program. I know that many
- 11 of you received copies of this but I would like to
- 12 highlight some of the main points. First, because
- 13 we know individuals all learn differently -- some
- 14 by hearing, some by reading, other methods -- we
- 15 have made this a multi-faceted program which
- 16 includes videos, brochures, pamphlets that describe
- 17 four main areas.
- 18 The first is to highlight to physicians
- 19 that the distribution process for Xyrem is
- 20 different, that their patients won't be able to get
- 21 this at the corner drugstore. The second important
- 22 issue that this binder points out to physicians is
- 23 the dosing and administration of Xyrem. The next
- 24 important issue is that of home storage and secure
- 25 handling. The fourth is an important module that

- 1 we call "doctor be wary" which is an educational
- 2 module that educates doctors about the ways that
- 3 drugs are commonly diverted in this country so they
- 4 can be aware of patients who are attempting to
- 5 illegitimately get a prescription from them for
- 6 this product. Each of the kits will also contain a
- 7 number of unique prescribing forms for Xyrem which
- 8 will be necessary in order for the prescription to
- 9 be filled. This is, in essence, a special
- 10 prescription form. As well, contact information
- 11 will be provided should the doctor have any
- 12 questions at all about the program.
- 13 [Slide]
- 14 Once the physician decides to prescribe
- 15 Xyrem the physician faxes this special prescription
- 16 to the specialty pharmacy. Now, I am going to come
- 17 back to how this prescription is verified. So, I
- 18 will ask you to hold on that point for just one

- 19 moment. But, based on that prescription and based
- 20 on the patient's geographic location, the pharmacy
- 21 assigns that patient to a dedicated pharmacy team.
- 22 So, each time that the patient deals with the
- 23 system they are talking with the same pharmacist
- 24 and the same reimbursement specialist.
- 25 [Slide] \

- 1 I mentioned that as the prescription comes
- 2 to the specialty pharmacy there will be a number of
- 3 checks to determine if the physician is, in fact,
- 4 eligible to prescribe Xyrem. We will be utilizing
- 5 DEA's NTIS or National Technical Information
- 6 Services database to ensure that each physician has
- 7 an active valid medical license, and also to ensure
- 8 that that physician has current prescribing
- 9 privileges which allow him or her to prescribe
- 10 Schedule III medications in this country. As a
- 11 backup check, the specialty pharmacy will also be
- 12 checking with the appropriate state medical board
- 13 to determine that there are no pending actions on
- 14 the behalf of the state for that given physician.
- 15 [Slide]
- 16 As a secondary step, the specialty
- 17 pharmacy will also do a check on the patient in
- 18 essence. What they will do is when that
- 19 prescription comes in they will call the
- 20 prescribing physician's office to determine that,
- 21 in fact, that patient is real and a prescription
- 22 has, in fact, been written for that patient.
- 23 [Slide]
- 24 Once insurance reimbursement is obtained,
- 25 the specialty pharmacy contacts the patient, first,

- 1 to determine the patient or the patient designee's
- 2 location and availability for shipment, and also to
- 3 describe to them the contents of the shipment. I

- 4 will come back to the details of this in just a
- 5 moment, but it is important that you know that each
- 6 patient, when they get their first prescription of
- 7 Xyrem will receive a multi-faceted educational
- 8 program called the Xyrem patient Success Program,
- 9 and I will come back to the details of that in just
- 10 a moment.
- 11 In that same shipment they will also
- 12 receive their Xyrem, and that will look something
- 13 like this, with child resistant closure not only on
- 14 the primary container but also on the dosing cups
- ,15 which are provided by the company.
- 16 [Slide]
- 17 The shipment that goes to the patient is
- 18 sent by a special system that has a special, unique
- 19 tracking system called the Rapid Trac System. this
- 20 system will allow detailed real-time tracking of
- 21 that package which is delivered only by the
- 22 authorized signature. If the patient or their
- 23 designee is not available for receipt of the
- 24 package at the time agreed upon with the specialty
- 25 pharmacy, the package will be returned to the

- 1 specialty pharmacy after one delivery reattempt.
- 2 So, a package will not sit on a delivery truck or
- 3 in a hub for weeks at a time or anything like that.
- 4 If the package is lost the system will allow an
- 5 investigation to begin regarding the shipment's
- 6 whereabouts at that point of loss.
- 7 [Slide]
- 8 I spoke a moment ago about the patient
- 9 Success Program. Again, this is a multi-faceted
- 10 program which includes video, brochures and
- 11 pamphlets which deal with a number of important
- 12 issues for patients. First addressed, of course,
- 13 is the distribution process since it is so
- 14 important that the patients understand that the

- 15 only way they will get Xyrem is through the special
- 16 pharmacy and not at their corner drugstore.
- 17 There is information about Xyrem's dosing
- 18 and administration because we feel that that is an
- 19 important message to be delivered in an
- 20 understandable and a very consistent manner.
- 21 There is information on home storage and
- 22 secure handling, and we also are very clear with
- 23 patients about the criminal and civil penalties
- 24 that the public law assigns to any illicit use of
- 25 Xyrem. So, if I were, as a valid narcolepsy

- 1 patient, to take my Xyrem prescription and use it
- 2 to conduct a rape or in an assault situation, or if
- 3 I were to sell it to someone for illicit use I
- 4 would be penalized, I would be subject to C-I
- 5 penalties. The patient Success Program also
- 6 includes contact information for the specialty
- 7 pharmacy should the patient have any questions at
- 8 all, and also reimbursement information.
- 9 [Slide]
- 10 After the Rapid Trac System shows that the
- 11 package has been received by the patient, the
- 12 specialty pharmacist will call the patient within
- 13 24 hours not only to confirm receipt of that
- 14 package but also to again reiterate certain
- 15 important points with the patient. Those include
- 16 the penalties for illicit use of Xyrem; Xyrem's
- 17 dosing and administration; home storage and secure
- 18 handling. The pharmacist will also take the
- 19 opportunity to discuss with the patient the
- 20 child-resistant features on the primary container
- 21 as well as the child-resistant features on the
- 22 dosing cups that are provided.
- 23 [Slide]
- 24 The central data repository designed for
- 25 Xyrem really allows for identification of a number

- 1 of unusual types of behavior, including any
- 2 duplicate prescriptions, any attempts of
- 3 over-prescribing, or any attempts at over-use by
- 4 patients. The benefit here is that that
- 5 information is available prior to filling the 6 prescription so appropriate pharmacist ntervention 7 can occur.
- 8 [Slide]
- 9 As you can see, the Xyrem Success Program
- 10 is a comprehensive program which is designed to
- 11 responsibly distribute this important medication in
- 12 order that patients who need it have it available,
- 13 and it is inaccessible for those who might abuse
- 14 it. Thank you.



Schwegman ■ Lundberg ■ Woessner ■ Kluth

United States Patent Application

COMBINED DECLARATION AND POWER OF ATTORNEY

As a below named inventor I hereby declare that: my residence, post office address and citizenship are as stated below next to my name; that

I verily believe I am the original, first and joint inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled: SENSITIVE DRUG DISTRIBUTION SYSTEM AND METHOD.

The specification of which was filed on December 17, 2002 as application serial no. 10/322,348.

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the patentability of this application in accordance with 37 C.F.R. § 1.56 (attached hereto). I also acknowledge my duty to disclose all information known to be material to patentability which became available between a filing date of a prior application and the national or PCT international filing date in the event this is a Continuation-In-Part application in accordance with 37 C.F.R. § 1.63(e).

I hereby claim foreign priority benefits under 35 U.S.C. §119(a)-(d) or 365(b) of any foreign application(s) for patent or inventor's certificate, or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on the basis of which priority is claimed:

No such claim for priority is being made at this time.

I hereby claim the benefit under 35 U.S.C. § 119(e) of any United States provisional application(s) listed below:

No such claim for priority is being made at this time.

I hereby claim the benefit under 35 U.S.C. § 120 or 365(c) of any United States and PCT international application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT international application in the manner provided by the first paragraph of 35 U.S.C. § 112, I acknowledge the duty to disclose material information as defined in 37 C.F.R. § 1.56(a) which became available between the filing date of the prior application and the national or PCT international filing date of this application:

No such claim for priority is being made at this time.

Attorney Docket No.: 101.031US1 Serial No. 10/322348 Filing Date: December 17, 2002

I hereby appoint the following attorney(s) and/or patent agent(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected herewith:

| Anglin, J. M | Reg. No. 24,916 | Harris, Robert J | Reg. No. 37,346 | Nielsen, Walter W | Reg. No. 25,539 |
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| Chadwick, Robin A | Reg. No. 36,477 | Lemaire, Charles A | Reg. No. 36,198 | Prout, William F | Reg. No. 33,995 |
| Clark, Barbara J | Reg. No. 38,107 | Lundberg, Steven W | Reg. No. 30,568 | Puckett, Ph. D., Craig L | Reg. No. 43,023 |
| Clise, Timothy B | Reg. No. 40,957 | Maki, Peter C | Reg. No. 42,832 | Schumm, Sherry W | Reg. No. 39,422 |
| Cochran, David R | Reg. No. 46,632 | Malen, Peter L | Reg. No. 44,894 | Schwegman, Micheal L | Reg. No. 25,816 |
| Dahl, John M | Reg. No. 44,639 | Mates, Robert E | Reg. No. 35,271 | Speier, Gary J | Reg. No. 45,458 |
| Drake, Eduardo E | Reg. No. 40,594 | McCrackin, Ann M | Reg. No. 42,858 | Steffey, Charles E | Reg. No. 25,179 |
| Embretson, Janet E | Reg. No. 39,665 | McGough, Kevin J | Reg. No. 31,279 | Stordal, Leif T | Reg. No. 46,251 |
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| Gorrie, Gregory J | Reg. No. 36,530 | Mehrle, Joseph P | Reg. No. 45,535 | Tong, Viet V | Reg. No. 45,416 |
| Gortych, Joseph E | Reg. No. 41,791 | Muller, Mark V | Reg. No. 37,509 | Viksnins, Ann S | Reg. No. 37,748 |
| Greaves, John N | Reg. No. 40,362 | Nama, Prakash | Reg. No. 44,255 | Woessner, Warren D | Reg. No. 30,440 |
| Haack, John L. | Reg. No. 36,154 | Nelson, A. J | Reg. No. 28,650 | | - |

I hereby authorize them to act and rely on instructions from and communicate directly with the person/assignee/attorney/firm/organization/who/which first sends/sent this case to them and by whom/which I hereby declare that I have consented after full disclosure to be represented unless/until I instruct Schwegman, Lundberg, Woessner & Kluth, P.A. to the contrary. Please direct all correspondence in this case to Schwegman, Lundberg, Woessner & Kluth, P.A. at the address indicated below:

P.O. Box 2938, Minneapolis, MN 55402

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Telephone No. (612)373-6900

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|--|--|
| Post Office Address: 22345 Bracketts Road | |
| Signature: Wayton T. Poular | Date: April 3, 200 3 |
| Dayton T. Reardan Ph.D. | • |
| Full Name of joint inventor number 2: Citizenship: Post Office Address: Signature: Patti Engle Patti Eng | Residence: Eagan, MN Date: May 13, 2003 |

X Additional inventors are being named on separately numbered sheets, attached hereto.

Attorney Docket No.: 101.031US1 Serial No. 10/322348 Filing Date: December 17, 2002 Page 3 of 4

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

| Full Name of joint inventor number | Full | Name | of joint | inventor | number |
|------------------------------------|------|------|----------|----------|--------|
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Attorney Docket No.: 101.031US1 Page 4 of 4
Serial No. 10/322348

Filing Date: December 17, 2002

§ 1.56 Duty to disclose information material to patentability.

- (a) A patent by its very nature is affected with a public interest. The public interest is best served, and the most effective patent examination occurs when, at the time an application is being examined, the Office is aware of and evaluates the teachings of all information material to patentability. Each individual associated with the filing and prosecution of a patent application has a duty of candor and good faith in dealing with the Office, which includes a duty to disclose to the Office all information known to that individual to be material to patentability as defined in this section. The duty to disclose information exists with respect to each pending claim until the claim is canceled or withdrawn from consideration, or the application becomes abandoned. Information material to the patentability of a claim that is canceled or withdrawn from consideration need not be submitted if the information is not material to the patentability of any claim remaining under consideration in the application. There is no duty to submit information which is not material to the patentability of any existing claim. The duty to disclose all information known to be material to patentability is deemed to be satisfied if all information known to be material to patentability of any claim issued in a patent was cited by the Office or submitted to the Office in the manner prescribed by §§ 1.97(b)-(d) and 1.98. However, no patent will be granted on an application in connection with which fraud on the Office was practiced or attempted or the duty of disclosure was violated through bad faith or intentional misconduct. The Office encourages applicants to carefully examine:
 - (1) prior art cited in search reports of a foreign patent office in a counterpart application, and
 - (2) the closest information over which individuals associated with the filing or prosecution of a patent application believe any pending claim patentably defines, to make sure that any material information contained therein is disclosed to the Office.
- (b) Under this section, information is material to patentability when it is not cumulative to information already of record or being made of record in the application, and
 - (1) It establishes, by itself or in combination with other information, a prima facie case of unpatentability of a claim; or
 - (2) It refutes, or is inconsistent with, a position the applicant takes in:
 - (i) Opposing an argument of unpatentability relied on by the Office, or
 - (ii) Asserting an argument of patentability.

A prima facie case of unpatentability is established when the information compels a conclusion that a claim is unpatentable under the preponderance of evidence, burden-of-proof standard, giving each term in the claim its broadest reasonable construction consistent with the specification, and before any consideration is given to evidence which may be submitted in an attempt to establish a contrary conclusion of patentability.

- (c) Individuals associated with the filing or prosecution of a patent application within the meaning of this section are:
 - (1) Each inventor named in the application:
 - (2) Each attorney or agent who prepares or prosecutes the application; and
 - (3) Every other person who is substantively involved in the preparation or prosecution of the application and who is associated with the inventor, with the assignee or with anyone to whom there is an obligation to assign the application.
- (d) Individuals other than the attorney, agent or inventor may comply with this section by disclosing information to the attorney, agent, or inventor.





IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Dayton T. Reardan et al.

Examiner: Unknown

Serial No.: 10/322,348

Group Art Unit: Unknown

Filed:

December 17, 2002

Docket No:

101.031US1

Title:

SENSITIVE DRUG DISTRIBUTION SYSTEM AND METHOD

PRELIMINARY AMENDMENT

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Prior to taking up this application for examination, please enter the following amendments:

10/06/2004 MBELETE1 00000032 10322348

01 FC:2201 02 FC:2202

IN THE CLAIMS

1. (Original) A method of distributing a sensitive drug, the method comprising:

receiving prescription requests from a medical doctor containing information identifying the patient, the sensitive drug, and various credentials of the doctor;

entering the information into a central database for analysis of potential abuse situations; checking the credentials of the doctor;

confirming with the patient that educational material has been read prior to shipping the sensitive drug;

confirming receipt of the sensitive drug; and generating periodic reports via the central database to evaluate potential abuse patterns.

- 2. (Original) The method of claim 1 wherein receipt of the sensitive drug is confirmed by telephone call from the central pharmacy to the patient.
- 3. (Original) The method of claim 1 and further comprising launching an investigation of lost shipments.
- 4. (Original) The method of claim 1 and further comprising recording the confirmation with the patient that the educational material has been read in the central database.
- 5. (Original) The method of claim 1 and further comprising verifying the patient's home address.
- 6. (Original) The method of claim 1 and further comprising recording a designee identified by the patient to receive the sensitive drug.
- 7. (Original) The method of claim 1 and further comprising establishing a delivery date.

8.

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anticipated date are questioned by the pharmacist.

9. (Original) The method of claim 1 and further comprising shipping comprehensive

printed materials to the physician if the physician is a first time prescriber of the sensitive drug.

(Original) The method of claim 1 wherein prescription refills requested prior to an

10. (Original) The method of claim 1 wherein the credentials of the doctor comprise DEA

(Drug Enforcement Agency) and state license numbers.

11. (Original) A method of monitoring potential abuse of a sensitive drug by use of an

exclusive central database, the method comprising:

generating queries of prescription information from a database containing selected

information for all prescriptions of the sensitive drug, wherein the queries comprise prescriptions

by physician specialty, prescriptions by patient name, prescriptions by frequency and

prescriptions by dose.

12. (Original) The method of claim 11 and further comprising running multiple

predetermined reports based on data in the exclusive central database.

13. (Original) The method of claim 12 wherein such reports are selected from groups of

reports consisting of sales, regulatory, quality assurance, pharmacy, inventory, reimbursement,

patient care, and drug information.

14. (Original) The method of claim 13 wherein sales reports are selected from the group

consisting of prescriptions by zip code, prescriptions by physician by zip code and total dollars

by zip code.

15. (Original) The method of claim 13 wherein regulatory reports are selected from the

group consisting of number of physician registries, number of denied physician registries and

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reasons, number of completed patient registries, number of problem identification, number of

cycle counts performed.

16. (Original) The method of claim 13 wherein inventory reports are selected from the group

consisting of number of returned products and reasons, number of outdated bottles of product,

inventory counts of consignment and production inventory, number of units received, and lots

received.

17. (Original) The method of claim 13 wherein patient care reports are selected from the

group consisting of number of adverse events, number of dosing problems and type, number of

noncompliance episodes and reason, number of patients counseled and reason, number of

discontinued and reason, number of patients referred to physician and reason, number of active

patients, number of new patents, number of restart patients, and number of discontinued patients

and reason.

18. (Original) The method of claim 13 wherein selected reports are run weekly, monthly or

quarterly.

19. (Original) A method of obtaining FDA (Food and Drug Administration) approval for a

sensitive drug, the method comprising:

determining current and anticipated patterns of potential abuse of the sensitive drug;

selecting multiple controls for distribution by an exclusive central pharmacy maintaining

a central database, the controls selected from the group consisting of communicating

prescriptions from a physician to the central pharmacy, identifying the physicians name, license

and DEA (Drug Enforcement Agency) registration information, verifying the prescription;

obtaining patient information, verifying the physician is eligible to prescribe the sensitive drug by

consulting the National Technical Information Services to determine whether the physician has

an active DEA number and check on whether any actions are pending against the physician,

provide comprehensive printed materials to the physician, contacting the patient's insurance

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company if any, verifying patient registry information, providing comprehensive education information to the patient, verifying the patient has reviewed the educational materials, verifying the home address of the patient, shipping via US postal service or similar shipping service, receiving the name of an at least 18 year old designee to receive the drug, confirming receipt of an initial shipment of the drug to the patient, returning the drug to the pharmacy after two attempts to deliver, launching an investigation when a shipment is lost, shipping to another pharmacy for delivery, requiring manufacture at a single location, releasing inventory in a controlled manner to the central pharmacy, questioning early refills, flagging repeat instances of lost, stolen, destroyed or spilled prescriptions, limiting the prescription to a one month supply, requiring rewriting of the prescription periodically, making the database available to the DEA for checking for abuse patterns in the data, cash payments, inappropriate questions; and

negotiating with the FDA by adding further controls from the group until approval is obtained.

- 20. (Original) The method of claim 19 wherein initially selected controls comprise communicating prescriptions from a physician to the central pharmacy, identifying the physicians name, license and DEA registration information, verifying the prescription; obtaining patient information, verifying the physician is eligible to prescribe the sensitive drug by consulting the National Technical Information Services to determine whether the physician has an active DEA number and check on whether any actions are pending against the physician, verifying patient registry information, providing comprehensive education information to the patient, verifying the patient has reviewed the educational materials, verifying the home address of the patient, shipping via US postal service, confirming receipt of an initial shipment of the drug to the patient releasing inventory in a controlled manner to the central pharmacy, flagging repeat instances of lost, stolen, destroyed or spilled prescriptions, and making the database available to the DEA for checking for abuse patterns in the data.
- 21. (Original) The method of claim 19 wherein the sensitive drug is a scheduled drug in Schedule II-V.

approval by the governmental regulatory body.

22. (Original) A method of distributing a sensitive drug, the method comprising: determining current and anticipated patterns of potential abuse of the sensitive drug; selecting multiple controls for distribution of the sensitive drug; and adding additional controls to provide sufficient reassurance to a governmental regulatory body that the sensitive drug distribution can be adequately controlled in order to obtain marketing

- 23. (Original) The method of claim 22 wherein the system allows marketing of a drug product pursuant to FDA subpart 4 regulation embodied in Title 21, CFR Part 314.
- 24. (Original) The method of claim 22 wherein distribution of the sensitive drug is controlled by a central distribution center sufficient to allow the DEA (Drug Enforcement Agency) to approve the central distribution center.
- 25. (Original) The method of claim 22 wherein the governmental regulatory body comprises a state regulatory agency that approves distribution of the sensitive drug in a state.
- 26. (New) A method to control abuse of a sensitive drug by controlling the distribution thereof via an exclusive central pharmacy that maintains a central database that tracks all prescriptions of said sensitive drug and analyzes for potential abuse situations, the method comprising:

determining current and anticipated patterns of potential prescription abuse of said sensitive drug from periodic reports generated by the central database based on prescription request data from a medical doctor, wherein said request data contain information identifying the patient, the drug prescribed, and credentials of the doctor; and

selecting multiple controls for distribution by said exclusive central pharmacy, the controls selected from the group consisting of communicating prescriptions from a physician to the central pharmacy; identifying the physicians name, license, and DEA (Drug Enforcement

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Agency) registration information; verifying the prescription; obtaining patient information; verifying the physician is eligible to prescribe the sensitive drug by consulting the National Technical Information Services to determine whether the physician has an active DEA number and to check on whether any actions are pending against the physician; providing comprehensive printed materials to the physician; contacting the patient's insurance company if any; verifying patient registry information; providing comprehensive education information to the patient; verifying the patient has reviewed the educational materials; verifying the home address of the patient; shipping via US postal service or similar shipping service; receiving the name of an at least 18 year old designee to receive the drug; confirming receipt of an initial shipment of the drug to the patient returning the drug to the pharmacy after two attempts to deliver; launching an investigation when a shipment is lost; shipping to another pharmacy for delivery; requiring manufacture at a single location; releasing inventory in a controlled manner to the central pharmacy; questioning early refills; flagging repeat instances of lost, stolen, destroyed, or spilled prescriptions; limiting the prescription to a one month supply; requiring rewriting of the prescription periodically; and making the database available to the DEA for checking for abuse patterns in the data, for cash payments, and for inappropriate questions.

27. (New) The method of claim 26 wherein initially selected controls comprise communicating prescriptions from a physician to the central pharmacy; identifying the physicians name, license, and DEA registration information; verifying the prescription; obtaining patient information; verifying the physician is eligible to prescribe the sensitive drug by consulting the National Technical Information Services to determine whether the physician has an active DEA number and to check on whether any actions are pending against the physician; verifying patient registry information; providing comprehensive education information to the patient; verifying the patient has reviewed the educational materials; verifying the home address of the patient; shipping via US postal service; confirming receipt of an initial shipment of the drug to the patient; releasing inventory in a controlled manner to the central pharmacy; flagging repeat instances of lost, stolen, destroyed, or spilled prescriptions; and making the database available to the DEA for checking for abuse patterns in the data.

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28. (New) The method of claim 26 which further comprises consulting a separate database to verify that the medical doctor is eligible to prescribe the drug.

29. (New) A method to control abuse of gamma hydroxy butyrate (GHB) by controlling the distribution of GHB via an exclusive central pharmacy that maintains a central database that tracks all prescriptions of GHB and analyzes for potential abuse situations, the method comprising:

determining current and anticipated patterns of potential prescription abuse of GHB from periodic reports generated by the central database based on prescription request data from a medical doctor, wherein said request data contain information identifying the patient, GHB as the drug prescribed, and credentials of the doctor; and

selecting multiple controls for distribution by said exclusive central pharmacy, the controls selected from the group consisting of communicating prescriptions from a physician to the central pharmacy; identifying the physicians name, license, and DEA (Drug Enforcement Agency) registration information; verifying the prescription; obtaining patient information; verifying the physician is eligible to prescribe the sensitive drug by consulting the National Technical Information Services to determine whether the physician has an active DEA number and to check on whether any actions are pending against the physician; providing comprehensive printed materials to the physician; contacting the patient's insurance company if any; verifying patient registry information; providing comprehensive education information to the patient: verifying the patient has reviewed the educational materials; verifying the home address of the patient; shipping via US postal service or similar shipping service; receiving the name of an at least 18 year old designee to receive the drug; confirming receipt of an initial shipment of the drug to the patient returning the drug to the pharmacy after two attempts to deliver; launching an investigation when a shipment is lost; shipping to another pharmacy for delivery; requiring manufacture at a single location; releasing inventory in a controlled manner to the central pharmacy; questioning early refills; flagging repeat instances of lost, stolen, destroyed, or spilled prescriptions; limiting the prescription to a one month supply; requiring rewriting of the

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Title: SENSITIVE DRUG DISTRIBUTION SYSTEM AND METHOD

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prescription periodically; and making the database available to the DEA for checking for abuse patterns in the data, for cash payments, and for inappropriate questions.

- 30. (New) The method of claim 29 wherein initially selected controls comprise communicating prescriptions from a physician to the central pharmacy; identifying the physicians name, license, and DEA registration information; verifying the prescription; obtaining patient information; verifying the physician is eligible to prescribe the sensitive drug by consulting the National Technical Information Services to determine whether the physician has an active DEA number and to check on whether any actions are pending against the physician; verifying patient registry information; providing comprehensive education information to the patient; verifying the patient has reviewed the educational materials; verifying the home address of the patient; shipping via US postal service; confirming receipt of an initial shipment of the drug to the patient; releasing inventory in a controlled manner to the central pharmacy; flagging repeat instances of lost, stolen, destroyed, or spilled prescriptions; and making the database available to the DEA for checking for abuse patterns in the data.
- 31. (New) The method of claim 29 which further comprises consulting a separate database to verify that the medical doctor is eligible to prescribe the drug.

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Filing Date: December 17, 2002

Title: SENSITIVE DRUG DISTRIBUTION SYSTEM AND METHOD

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Docket No: 101.031US1

REMARKS

By this amendment, Applicants have added new claims 26 to 31. No new matter has been added. Support for claim 26 appears in the specification at page 1(in the Summary of the Invention) and in original claim 19. Support for claim 27 appears in original claim 20. Support for claim 28 appears in the specification at page 2, line 1. Support for claim 29 appears at page 4, line 13, in the specification at page 1 (in the Summary of the Invention), and in original claim 19. Support for claim 30 appears at page 4, line 13 and in original claim 20. Support for claim 31 appears at page 4, line 13 and at page 2, line 1.

Serial Number: 10/322,348 Filing Date: December 17, 2002

Title: SENSITIVE DRUG DISTRIBUTION SYSTEM AND METHOD

Page 11 Docket No: 101.031US1

Conclusion

Applicants respectfully submit that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicants' attorney at (703) 239-9592 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully Submitted,

DAYTON T. REARDAN ET AL.

By their Representatives,

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A. P.O. Box 2938
Minneapolis, MN 55402

(703) 239-9592

| Date | 9/30/2004 By Sulla 1 |
|------------|---|
| | Bradley A. Forrest |
| | Reg. No. 30,837 |
| CERTIFIC | ATE UNDER 37 CFR § 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Posta |
| 1450, on t | th sufficient postage as first class mail, in an envelop addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313- |
| Name | Law M. Kiple Signature Man M. Koll |





IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Dayton T. Reardan et al. Examiner:

Unknown

1743

Serial No.:

10/322,348

Group Art Unit:

101.031US1

Filed:

December 17, 2002

Docket:

Title:

SENSITIVE DRUG DISTRIBUTION SYSTEM AND METHOD

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

In compliance with the duty imposed by 37 C.F.R. § 1.56, and in accordance with 37 C.F.R. §§ 1.97 et. seq., the enclosed materials are brought to the attention of the Examiner for consideration in connection with the above-identified patent application. Applicants respectfully request that this Information Disclosure Statement be entered and the documents listed on the attached Form 1449 be considered by the Examiner and made of record. Pursuant to the provisions of MPEP 609, Applicants request that a copy of the 1449 form, initialed as being considered by the Examiner, be returned to the Applicants with the next official communication.

Pursuant to 37 C.F.R. §1.97(b), it is believed that no fee or statement is required with the Information Disclosure Statement. However, if an Office Action on the merits has been mailed, the Commissioner is hereby authorized to charge the required fees to Deposit Account No. 19-0743 in order to have this Information Disclosure Statement considered.

Serial No:10/322,348

Filing Date: December 17, 2002

Title: SENSITIVE DRUG DISTRIBUTION SYSTEM AND METHOD

The Examiner is invited to contact the Applicants' Representative at the below-listed telephone number if there are any questions regarding this communication.

Respectfully submitted,

DAYTON T. REARDAN ET AL.

By their Representatives,

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A. P.O. Box 2938

Minneapolis, MN 55402 (703) 239-9592

Date 9/30/2004

By _/>~_

Reg. No. 36,530

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 30 day of September, 2004.

1

Signature

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Approved for use through 10/31/2002, OMB 681-0031
US Patent & Trademark Office: U.S. DEPARTMENT OF COMMERCES
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number. Substitute for form 1449A/PTO Complete if Known INFORMATION DISCLOSURE **Application Number** 10/322,348 STATEMENT BY APPLICANT December 17, 2002 nany sheets as necessary) **Filing Date First Named Inventor** Reardan, Dayton OCT 0 4 2004 **Group Art Unit** 1743 **Examiner Name** Unknown Attorney Docket No: 101.031US1

| | | | ATENT DOCUMENT | | | |
|-----------------------|------------------------|------------------|--|-------|----------|----------------------------|
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Substitute Disclosure Statement Form (PTO-1449)

• EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional) 2 Applicant is to place a check mark here if English language Translation is attached

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Approved for use through 1031/2002 OM8 851-0031
US Pasent & Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unress it contains a valid OM8 control number. Substitute for form 1449A/PTO Complete if Known INFORMATION DISCLOSURE **Application Number** 10/322,348 TATEMENT BY APPLICANT December 17, 2002 Filing Date Reardan, Dayton **First Named Inventor** OCT 0 4 2004 **Group Art Unit** 1743 **Examiner Name** Unknown Attorney Docket No: 101.031US1

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| Examiner Initials* | Cite No ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T² |

EXAMINER DATE CONSIDERED



Appendix I Copies of Prior Art References

The thirty-six (36) references include:

- 1. 5,845,255
- 2. 5,924,074
- 3. 6,347,329
- 4. 6,021,392
- 5. 6,055,507
- 6. 6,112,182
- 7. 6,315,720
- 8. 6,561,977
- 9. 6,755,784
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- 32. 2004/0117126
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N 10/322348 PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

Dayton T. Reardan et al.

Examiner:

Serial No.:

10/322348

Group Art Unit:

Filed:

December 17, 2002

Docket: 101.031US1

Title:

SENSITIVE DRUG DISTRIBUTION SYSTEM AND METHOD

PETITION TO MAKE SPECIAL UNDER 37 C.F.R. § 1.102(d)

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Applicants hereby petition the Commissioner to advance the above-identified Application out of turn for accelerated examination under the provisions of 37 C.F.R. 1.102(d).

The Application meets the requirements of M.P.E.P. §708.02, section VIII. The petition fee of \$130.00 as set forth in § 1.17(i), which is required pursuant to 37 C.F.R. § 1.102(d), is enclosed. The Application is a new application, not yet having received any examination. Applicants believe that all of the claims are directed to a single invention; however, if the Office shall determine that they do not obviously encompass only a single invention, Applicants agree to make a telephone election without traverse. An enclosed Statement avers that a pre-examination search has been carried out, lists the field of the search, and discusses the relevant references, pointing out how the claimed subject matter is patentable over these references with the particularity required by 37 C.F.R. 1.111(b) and (c). Copies of the references deemed most closely related to the subject matter are enclosed in the accompanying Information Disclosure Statement and Form 1449.

Respectfully submitted,

DAYTON T. REARDAN ET AL.

By their Representatives,

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.

P.O. Box 2938

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(703) 239-9592

Date 9/30/2004

Bv

Bradley A. Forrest Reg. No. 36,530

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to Commissioner for Patents, R.Q. Box 1450, Alexandria, VA 22313-1450 on September 30, 2004.

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Signature

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<u>S/N 10/322348</u> <u>PATENT</u>

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Dayton T. Reardan et al.

Examiner:

Serial No.:

10/322348

Group Art Unit:

Filed:

December 17, 2002

201

Docket: 101.031US1

Title:

SENSITIVE DRUG DISTRIBUTION SYSTEM AND METHOD

PRE-EXAMINATION STATEMENT FOR PETITION TO MAKE SPECIAL UNDER 37 C.F.R. §1.102(d)

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

The undersigned Attorney for Applicant has caused a search to be made for the subject matter claimed in claims 1-31 of the above-identified Application.

The search was conducted in the USPTO classes/subclasses listed below:

| <u>Class</u> 700 / | <u>Subclasses</u> | Description DATA PROCESSING: GENERIC CONTROL SYSTEMS OR SPECIFIC APPLICATIONS |
|------------------------------|-------------------|--|
| | 237 | Authorization (e.g., password, time usage limit, personal identification number (PIN) |
| 705/ | | DATA PROCESSING: FINANCIAL, BUSINESS PRACTICE, MANAGEMENT, OR COST/PRICE DETERMINATION |
| | 1 | AUTOMATED ELECTRICAL FINANCIAL OR BUSINESS |
| | | PRACTICE OR MANAGEMENT ARRANGEMENT |
| | 2 | . Health care management (e.g., record management, ICDA billing) |
| | 3 | Patient record management |
| 707/ | | DATA PROCESSING: DATABASE AND FILE MANAGEMENT |
| | | OR DATA STRUCTURES |
| | 1 | DATABASE OR FILE ACCESSING |
| | 10 | . Distributed or remote access |
| | 104.1 | . Application of database or data structure (e.g., distributed, multimedia, image) |
| 700/ | | NA TOWNSON CONTINUES OF THE CONTINUES OF |
| 709 / | | ELECTRICAL COMPUTERS AND DIGITAL PROCESSING |
| | | SYSTEMS: MULTICOMPUTER DATA TRANSFERRING OR |
| | 200 | PLURAL PROCESSOR SYNCHRONIZATION MULTICOMPUTER DATA TRANSFERRING |
| | 200 | MOLITCOM OTER DATA TRANSFERRING |

. Distributed data processing

PRE-EXAMINATION STATEMENT

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Title: SENSITIVE DRUG DISTRIBUTION SYSTEM AND METHOD

| 217 | . Remote data accessing |
|-----|-------------------------------|
| 218 | Using interconnected networks |
| 219 | Accessing a remote server |

The references found to be relevant to claims 1-31 are listed on Form 1449 of the enclosed Information Disclosure Statement, and copies of each of these references are attached thereto. The following discussion sets forth with particularity the reasons why claims 1-31 are patentable over the relevant references.

In summary, the present claims relate to a new paradigm for controlling distribution of a sensitive drug. Heretofore, sensitive drug access has been restricted via a computer readable storage medium containing information on the patient, the prescriber, and the pharmacy. The computer readable storage medium evaluates risk parameters and generates an approval code to the pharmacy after determining that the degree of risk of contraindications to the patient is acceptable.

The new distribution model of the present system and method permits analysis and control of abuse of the sensitive drug and control of adverse reactions to the sensitive drug. It further permits obtaining FDA approval for the sensitive drug. The new model employs an exclusive central pharmacy that relies upon imposition of controls for distribution of a sensitive drug after a central database has analyzed for potential abuse situations and/or current and anticipated patterns of potential adverse reactions to the drug.

Patent 5,845,255 and related published application 2002/0042725 A1 to Mayaud provide for a **PRESCRIPTION MANAGEMENT SYSTEM.** Disclosed is a remote source database that may provide prescription abuse monitoring parameters. Multiple physicians and/or pharmacists may have access to a patient's prescription history record so that when a patient presents a problem or condition to more than one physician, it may be known. The system also allows for access to comprehensive drug information including scientific literature.

Instant claims 19 and 26 recite a feature that embodies the new distribution model, namely the distribution of a sensitive drug by an exclusive central pharmacy. This feature is not disclosed in Mayaud.

Patents 5,924,074 and 6,347,329 B1 to Evans provide for an ELECTRONIC MEDICAL RECORDS SYSTEM. Disclosed is reference database 104, which includes

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diagnosis module 300, medication manager 302, and procedure module 304. A healthcare

provider may use the reference database for assistance in diagnosing a patient's disease and

prescribing medications to treat the disease. Medication manager 302 provides information on

medications, such as proper dosages, allergies, contraindications, adverse interactions, and side

effects. This system also provides instant access to a patient's electronic record by any

authorized healthcare provider from any geographical location.

Instant claim 19 recites a feature that embodies the new distribution model, namely the

distribution of a sensitive drug by an exclusive central pharmacy. This feature is not disclosed in

Evans.

Patent 6,021,392 to Lester et al. provides for a SYSTEM AND METHOD FOR DRUG

MANAGEMENT. Disclosed is a system for health care supply distribution from a central

location.

Instant claim 1 recites features that embody the new distribution model. For example,

among other distinctions recited in claim 1, checking the credentials of the doctor, patient

education, analysis of potential abuse, and generating periodic reports are not discussed or

suggested by Lester et al. These features do more than simply manage the distribution of health

care supplies as in Lester et al. In contrast, the present model analyses for and determines

potential abuse situations and current and anticipated patterns of potential adverse reactions.

Patent 6,055,507 to Cunningham provides for a METHOD AND SYSTEM FOR

DISPENSING TRACKING AND MANAGING PHARMACEUTICAL TRIAL

PRODUCTS. Disclosed is a centralized pharmaceutical sample distribution management

system for controlling dispensing of samples among prescribers, patients, and pharmacies.

Instant claim 1 recites features that embody the new distribution model. For example,

among other distinctions recited in claim 1, checking the credentials of the doctor, patient

education, analysis of potential abuse, and generating periodic reports are not discussed or

suggested by Cunningham. These features do more than simply manage the distribution of

pharmaceutical samples as in Cunningham. In contrast, the present model analyses for and

determines potential abuse situations and current and anticipated patterns of potential adverse

reactions.

Patent 6,112,182 to Akers et al. provides for a METHOD AND APPARATUS FOR

INTEGRATED MANAGEMENT OF PHARMACEUTICAL AND HEALTHCARE

SERVICES. Disclosed is a database for storing information on patients, doctors, drugs and Practice management system 102 checks for adverse interactions that the prescribed drug may have, and for possible adverse reactions of the patient to the drug due to

allergies. The drug conflict information is maintained in conflict table 410, and is displayed to

the pharmacist. A prescription record is created and kept in the database for the practice

management system 102 each time the drug is dispensed for reference.

Instant claims 19 and 26 recite a feature that embodies the new distribution model, namely the distribution of a sensitive drug by an exclusive central pharmacy. This feature is not disclosed in Akers et al.

Patents 6,315,720 B1, 6,561,977 B2, and 6,755,784 B2 to Williams et al. provide for METHODS FOR DELIVERING A DRUG TO A PATIENT WHILE RESTRICTING ACCESS TO THE DRUG BY PATIENTS FOR WHOM THE DRUG MAY BE CONTRAINDICATED. Disclosed is a computer readable storage medium in which the prescriber, pharmacy and patient may be registered. A storage medium is used to educate and reinforce the actions of patients who are taking a drug, as well as prescribers and pharmacies that distribute the drug. Based on information collected, patients are assigned to risk groups in order to limit unauthorized and inappropriate distribution of a drug.

Instant claims 19 and 26 recite a feature that embodies the new distribution model, namely the distribution of a sensitive drug by an exclusive central pharmacy. This feature is not disclosed in Williams et al.

Patent 6,687,676 B1 and related published application 2004/0107117 A1 to Denny provide a PRESCRIPTION VERIFICATION SYSTEM. Disclosed is a method for verifying/confirming prescription fulfillment, whereby a hosted database receives/provides prescription information including health care provider codes, patient codes, pharmacy system identification codes, and reports having prescription data summarized by patient name, social security numbers, the names of the prescribing health care providers, and the physician's Drug Enforcement Agency (DEA) number as means for minimizing fraud, abuse, and errors associated with prescription drugs.

Instant claim 1 recites features that embody the new distribution model. For example,

SENSITIVE DRUG DISTRIBUTION SYSTEM AND METHOD

among other distinctions recited in claim 1, checking the credentials of the doctor, patient education, analysis of potential abuse, and generating periodic reports are not discussed or suggested by Denny. These features do more than simply verify and confirm fulfillment of prescriptions, as in Denny. In contrast, the present model analyses for and determines potential abuse situations and current and anticipated patterns of potential adverse reactions.

Published patent application 2001/0001144 A1 to Kapp provides for a PHARMACY DRUG MANAGEMENT SYSTEM PROVIDING PATIENT SPECIFIC DRUG DOSING, DRUG INTERACTION ANALYSIS, ORDER GENERATION, AND PATIENT DATA MATCHING. Disclosed is a pharmacy drug management system that includes drug interaction module 30. Through the module, each drug to be prescribed will be examined for potential problems associated with other drugs and medical data of the patient such as the medical condition, allergy, and food of the patient. The module allows the input of medical history; allergies, diet, and prescribed drugs from all physicians being seen by the patient.

Instant claims 19 and 26 recite a feature that embodies the new distribution model, namely the distribution of a sensitive drug by an exclusive central pharmacy. This feature is not disclosed in Kapp.

Published patent application 2001/0042050 A1 to Fletcher et al. provides a SECURE ELECTRONIC PROCUREMENT SYSTEM AND METHOD. Disclosed is a secure, Internet-based electronic procurement system allowing a user (e.g., pharmacist) to order and confirm receipt of goods normally subject to a verifiable chain of custody (e.g., narcotics, controlled drugs and substances).

Instant claim 1 recites features that embody the new distribution model. For example, among other distinctions recited in claim 1, checking the credentials of the doctor, patient education, analysis of potential abuse, and generating periodic reports are not discussed or These features do more than simply facilitate the ordering and suggested by Fletcher et al. receipt of drugs as in Fletcher et al. In contrast, the present model analyses for and determines potential abuse situations and current and anticipated patterns of potential adverse reactions.

Published patent application 2001/0047281 A1 to Keresman et al. provides a **SECURE** ON-LINE AUTHENTICATION SYSTEM FOR PROCESSING PRESCRIPTION DRUG FULFILLMENT. Disclosed is a centralized database providing identity authentication over a

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SENSITIVE DRUG DISTRIBUTION SYSTEM AND METHOD

communication network, whereby network users/vendors are registered and provided with a uniquely defined identity as means for allowing ID authentication prior to closing a transaction. For doctors 40 and pharmacies 30, the evaluation preferably includes a verification of their credentials and/or licenses by comparing collected registration data 114 corresponding to data made available from a government office or agency which issued the credentials and/or granted licenses.

Instant claim 1 recites features that embody the new distribution model. For example, among other distinctions recited in claim 1, checking the credentials of the doctor, patient education, analysis of potential abuse, and generating periodic reports are not discussed or suggested by Keresman et al. These features do more than simply authenticate identity as in Keresman et al. In contrast, the present model analyses for and determines potential abuse situations and current and anticipated patterns of potential adverse reactions.

Published patent application 2002/0032581 A1 to Reitberg provides SINGLE-PATIENT DRUG TRIALS USED WITH ACCUMULATED DATABASE: RISK OF HABITUATION. Disclosed is a method of predicting the abuse potential of a drug or substance when administered to an individual patient for chronic therapy or used habitually, and for gaining FDA approval and surveillance post-approval for new drugs which have been discovered for the treatment of chronic illnesses and conditions.

Instant claim 19 recites a feature that embodies the new distribution model, namely the distribution of a sensitive drug by an exclusive central pharmacy in order to obtain FDA approval. This feature is not disclosed in Reitberg.

Published patent application 2002/0032582 A1 to Feeney et al. provides for a SYSTEM FOR MEDICATION DISPENSING AND INTEGRATED DATA MANAGEMENT. Disclosed is a medical system for integrating data management with the process of controllably dispensing products including medications, and whereby a central server connected via a network to a prescription subsystem is configured to receive and process data including DEA, FDA, and drug interactions as means to determine whether the medication is appropriate for a patient.

Instant claim 1 recites features that embody the new distribution model. For example, among other distinctions recited in claim 1, checking the credentials of the doctor, patient education, analysis of potential abuse, and generating periodic reports are not discussed or

suggested by Feeney et al. These features do more than simply control dispensing of drugs at the point of care as in Feeney et al. In contrast, the present model analyses for and determines potential abuse situations and current and anticipated patterns of potential adverse reactions.

Published patent application 2002/0042762 A1 to McQuade et al. provides for TRACKING THE DISTRIBUTION OF PRESCRIPTION DRUGS AND OTHER CONTROLLED ARTICLES. Disclosed is a method for tracking the distribution of controlled articles from a central inventory.

Instant claim 1 recites features that embody the new distribution model. For example, among other distinctions recited in claim 1, checking the credentials of the doctor, patient education, analysis of potential abuse, and generating periodic reports are not discussed or suggested by McQuade et al. These features do more than simply control the distribution and inventory of pharmaceutical samples as in McQuade et al. In contrast, the present model analyses for and determines potential abuse situations and current and anticipated patterns of potential adverse reactions.

Published patent application 2002/0052762 A1 to Kobylevsky et al. provides for a **REMOTE PRESCRIPTION REFILL SYSTEM.** Disclosed is a central pharmacy system having software for automatically processing pharmacy orders.

Instant claim 1 recites features that embody the new distribution model. For example, among other distinctions recited in claim 1, checking the credentials of the doctor, patient education, analysis of potential abuse, and generating periodic reports are not discussed or suggested by Kobylevsky et al. These features do more than simply process refills automatically so as to relieve the burden on pharmacists as in Kobylevsky et al. In contrast, the present model analyses for and determines potential abuse situations and current and anticipated patterns of potential adverse reactions.

Published patent application 2002/0161607 A1 to Subich provides for a **PHARMACEUTICAL DRUG SAMPLE TRACKING AND CONTROL METHOD.** Disclosed is a pharmaceutical drug sample tracking and control method for storing patient information, adverse reaction information experienced by a patient, and patient recovery state, when a patient is treated with a drug sample.

Instant claim 1 recites features that embody the new distribution model. For example,

SENSITIVE DRUG DISTRIBUTION SYSTEM AND METHOD

among other distinctions recited in claim 1, checking the credentials of the doctor, patient education, analysis of potential abuse, and generating periodic reports to evaluate potential abuse patterns are not discussed or suggested by Subich. These features do more than simply store prescription information so that interested parties may access the information.

Published patent application 2003/0046110 A1 to Gogolak provides for a METHOD AND SYSTEM FOR CREATING, STORING, AND USING PATIENT SPECIFIC AND POPULATION-BASED GENOMIC DRUG SAFETY DATA. Disclosed is drug safety database 10, which may be accessed by users as a single virtual database. This source data covers three general areas: adverse event database 20, drug information database 30, and patient or genomic database 40. Adverse event data are acquired by accessing, soliciting, or assembling data on patients experiencing adverse drug reactions, and comparing the data against data from a control set. This data may be provided from pharmaceutical corporations, hospitals, physicians, and government agencies.

Instant claim 1 recites features that embody the new distribution model. For example, among other distinctions recited in claim 1, checking the credentials of the doctor, patient education, analysis of potential abuse, and generating periodic reports are not discussed or suggested by Gogolak. These features do more than simply provide a database as in Gogolak. In contrast, the present model analyses for and determines potential abuse situations and current and anticipated patterns of potential adverse reactions.

Published patent application 2003/0050802 A1 to Jay et al. provides for a MEDICAL SERVICE AND PRESCRIPTION MANAGEMENT SYSTEM. Disclosed is point-of-care device 112, which may connect to health plan database 104. The system allows a doctor to search for drugs and perform drug interaction checking. It helps in dispensing of medication by presenting a warning message when the doctor selects a drug that is likely to cause drug-to-drug interactions or drug-allergy interactions for the patient. The drug interaction warnings may also include an analysis of the patient's family history and living habits.

Instant claim 1 recites features that embody the new distribution model. For example, among other distinctions recited in claim 1, checking the credentials of the doctor, patient education, analysis of potential abuse, and generating periodic reports are not discussed or

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suggested by Jay et al. These features do more than simply allowing a doctor to search for drugs

and perform drug interaction checking as in Jay et al. In contrast, the present model analyses for

and determines potential abuse situations and current and anticipated patterns of potential

adverse reactions.

Published patent application 2003/0093295 A1 to Lilly et al. provides a CONTROLLED

SUBSTANCE TRACKING SYSTEM AND METHOD. Disclosed is a system and method for

providing access to potential medication abuse information comprising identification of

prescription duplications, potential drug interactions, multi-source interstate prescriptive

medication abuse, and fraudulent prescriptive medications. Data storage 122 provides means for

storing/receiving various types of data comprising: a doctor's name, DEA number, patient name,

patient ID, patient address, patient phone number, drugs prescribed, dosage, frequency, start/end

date, duration, quantity, number refills, whether substitution is allowed, generic allowed, notes,

aberrant use flag, date prescription filed, location prescription was filled, pharmacist's name,

phone number, and DEA number.

Instant claim 1 recites features that embody the new distribution model. For example,

among other distinctions recited in claim 1, checking the credentials of the doctor, patient

education, analysis of potential abuse, and generating periodic reports are not discussed or

suggested by Lilly et al. These features do more than simply providing access to potential

medication abuse information as in Lilly et al. In contrast, the present model analyses for and

determines potential abuse situations and current and anticipated patterns of potential adverse

reactions.

Published patent application 2003/0110060 A1 to Clementi provides for a METHOD OF

PROVIDING COMPREHENSIVE DRUG COMPLIANCE INFORMATION. Disclosed is

database 20, which constructs patient report 12. Patient 10 may access this report to see basic

personal information, a record of all medicines being used, interactions between the medicines,

and side effects of the medicine. The drug manufacturer 50 may also receive a number of such

reports and note the side effect in a future product warning.

Instant claim 1 recites features that embody the new distribution model. For example,

among other distinctions recited in claim 1, checking the credentials of the doctor, patient

education, and analysis of potential abuse are not discussed or suggested by Clementi. These

PAR1002 IPR of U.S. Patent No. 7,668,730 features do more than simply provide information as in Clementi. In contrast, the present model analyses for and determines potential abuse situations and current and anticipated patterns of potential adverse reactions.

Published patent application 2003/0127508 A1 to Jones provides a METHOD OF INDIVIDUALLY TRACKING AND IDENTIFYING A DRUG DELIVERY DEVICE. Disclosed is a method and system for identifying an individual drug delivery device and for tracing its ownership, whereby a coded unique identifier is stored in a database for subsequent association/identification of distributing entities (e.g., transferee and a prescribing physician). Additional information added to the database may include the address of a patient, the RX

number, the MD number, the identity of the prescribing physician, the DEA number, the

pharmacy number, and the date of dispensation or transfer.

Instant claim 1 recites features that embody the new distribution model. For example, among other distinctions recited in claim 1, checking the credentials of the doctor, patient education, analysis of potential abuse, and generating periodic reports are not discussed or suggested by Jones. These features do more than simply track and identify a particular drug delivery device as in Jones. In contrast, the present model analyses for and determines potential abuse situations and current and anticipated patterns of potential adverse reactions.

Published patent application 2003/0144876 A1 to Kosinski et al. provides for an APPARATUS AND METHOD FOR PROCESSING PHONE-IN PRESCRIPTION. Disclosed is central or regional pharmacy 138 and prescription processing network 100, whereby identification information including DEA data may be utilized as means to prevent prescription fraud.

Instant claim 1 recites features that embody the new distribution model. For example, among other distinctions recited in claim 1, checking the credentials of the doctor, patient education, analysis of potential abuse, and generating periodic reports are not discussed or suggested by Kosinski et al. These features do more than simply process audible, fax, or e-mail prescription requests as in Kosinski et al. In contrast, the present model analyses for and determines potential abuse situations and current and anticipated patterns of potential adverse reactions.

Published patent application 2003/0229519 A1 to Eidex et al. provides for SYSTEMS

AND METHODS FOR IDENTIFYING FRAUD AND ABUSE IN PRESCRIPTION

CLAIMS. Disclosed is a system for identifying fraudulent prescription claims. The system

monitors prescription transactions and returns appropriate notification messages to pharmacists or

other health care providers. Database 105 may store data relating to pharmacies, doctors, and

consumers. This may include typical doses filled by consumers, the likelihood indicators of fraud

and abuse screening processes, and reports relating to the results of fraud and abuse screening

processes. An example of a method of preventing drug abuse is a comparison of the distance

between the pharmacy and the patient with the statistical average distance that has been previously

computed.

Instant claims 19 and 26 recite a feature that embodies the new distribution model,

namely the distribution of a sensitive drug by an exclusive central pharmacy. This feature is not

disclosed in Eidex et al.

Published patent application 2003/0233256 A1 to Cardenas et al. provides SECURE

MEDICAL PRESCRIPTIONS. Disclosed is a centralized method and system for producing a

secure medical prescription by converting the physician's DEA number into an encrypted code

for placement onto a medical prescription.

Instant claim 1 recites features that embody the new distribution model. For example,

among other distinctions recited in claim 1, checking the credentials of the doctor, patient

education, analysis of potential abuse, and generating periodic reports are not discussed or

suggested by Cardenas et al. These features do more than simply producing secure medical

prescriptions as in Cardenas et al. In contrast, the present model analyses for and determines

potential abuse situations and current and anticipated patterns of potential adverse reactions.

Published patent application 2004/0019567 A1 to Herceg et al. provides for an

ELECTRONIC PRESCRIPTION ORDERING METHOD, SYSTEM, AND PROGRAM

PRODUCT. Disclosed is Web-based central pharmaceutical computer 12 having database 24 as

means for providing electronic prescription ordering.

Instant claim 1 recites features that embody the new distribution model. For example,

among other distinctions recited in claim 1, checking the credentials of the doctor, patient

education, analysis of potential abuse, and generating periodic reports are not discussed or

suggested by Herceg et al. These features do more than ordering prescriptions electronically. In

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contrast, the present model analyses for and determines potential abuse situations and current and

anticipated patterns of potential adverse reactions.

Published patent application 2004/0019794 A1 to Moradi et al. provides a METHOD

AND SYSTEM FOR DELIVERING PRESCRIPTION MEDICINE. Disclosed is a system

and method of distributing medicine, whereby the method provides for: accepting a prescription

and a delivery address from a central server, wherein the prescription is for a medicine and

wherein the delivery address is associated with a person; delivering the medicine to the delivery

address; receiving a confirmation from the person that the medicine was delivered; and

communicating the confirmation to the central server. In addition, the system provides for

registering information relevant to the identification of a prescription issuing physician, patient,

and fulfillment pharmacy.

Instant claim 1 recites features that embody the new distribution model. For example,

among other distinctions recited in claim 1, checking the credentials of the doctor, patient

education, analysis of potential abuse, and generating periodic reports are not discussed or

suggested by Moradi et al. These features do more than prevent receipt of too much medicine as

in Moradi et al. In contrast, the present model analyses for and determines potential abuse

situations and current and anticipated patterns of potential adverse reactions.

Published patent application 2004/0078237 A1 to Kaafarani et al. provides for a

METHOD OF DISPENSING MEDICAL PRESCRIPTIONS. Disclosed is a system which

may protect against fraudulent or illegal re-use of a prescription. It includes steps of prompting

the patient for personal information such as age, weight, telephone number, requested deliver

time, and secret confirmation codes. Another method employs retaining a data slip with a mark

of indelible ink or a patterned die cut.

Instant claims 19 and 26 recite a feature that embodies the new distribution model,

namely the distribution of a sensitive drug by an exclusive central pharmacy. This feature is not

disclosed in Kaafarani et al.

Published patent application 2004/0117126 A1 to Fetterman et al. provides a METHOD

OF **ASSESSING** AND MANAGING **RISKS** ASSOCIATED WITH

PHARMACEUTICAL PRODUCT. Disclosed is method providing a continual and systematic

assessment and management of the risks associated with the use of a pharmaceutical product as

means for gaining regulatory approval and physician adoption. In addition, a hazard assessment is utilized for creating interventions to be utilized in mitigating the risk of the pharmaceutical product, whereby educational materials may be continually evaluated and revised to achieve an expected level of effectiveness on a target audience.

Instant claim 19 recites a feature that embodies the new distribution model, namely the distribution of a sensitive drug by an exclusive central pharmacy in order to obtain FDA approval. This feature is not disclosed in Fetterman et al.

Published patent applications 2004/0122712 A1 and 2004/0122713 A1 to Hill et al. provide a SYSTEM AND METHOD FOR PRESCRIPTION MANAGEMENT. Disclosed is a prescription filling system for allowing physicians 102 and patients 104 to interact with pharmacy system 112 and central fill facility 124 to fill prescriptions. In addition, filled prescriptions may be delivered by central fill facility 124 to pharmacies 106 or home delivered for purchase by patient 104.

Instant claim 1 recites features that embody the new distribution model. For example, among other distinctions recited in claim 1, checking the credentials of the doctor, patient education, analysis of potential abuse, and generating periodic reports are not discussed or suggested by Hill et al. These features do more than provide a prescription filling system to bypass manual filling as in Hill et al. In contrast, the present model analyses for and determines potential abuse situations and current and anticipated patterns of potential adverse reactions.

Published patent application 2004/0162740 A1 to Ericsson et al. provides for a **DIGITIZED PRESCRIPTION SYSTEM.** Disclosed is an apparatus comprising an electronic database containing a plurality of transaction records for transactions in which a prescription medicinal substance is dispensed to a patient. Additionally, a method is utilized in conjunction with FDA and DEA drug information to: obtain a patient's medication history comprising searching the electronic database by the patient's social security number; determine whether a proposed refill or remaining fill transaction is indicative of potential overuse; determine whether a medicinal substance in a proposed transaction will result in possible interactions with a patient's recently dispensed medicinal substances; and identify potential counterfeiting or illicit importation of prescription medicinal substances.

Instant claim 1 recites features that embody the new distribution model. For example,

PRE-EXAMINATION STATEMENT

Serial Number: 10/322348

Filing Date: December 17, 2002

Title: SENSITIVE DRUG DISTRIBUTION SYSTEM AND METHOD

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among other distinctions recited in claim 1, patient education is not discussed or suggested by

Ericsson et al. This feature does more than facilitate exchange of data as in Ericsson et al. In

contrast, the present model analyses for and determines potential abuse situations and current and

anticipated patterns of potential adverse reactions and uses patient education as a control on the

distribution of a sensitive drug.

Published patent application 2004/0176985 A1 to Lilly et al. provides a CONTROLLED

SUBSTANCE TRACKING SYSTEM AND METHOD. Disclosed is a method for tracking

prescription medications, as means to address and control prescription drug abuse, whereby

pharmaceutical information control organization 12 may be implemented as an independent

information utility acting as a central service center for the management of prescriptive

medication drugs.

Instant claim 1 recites features that embody the new distribution model. For example,

among other distinctions recited in claim 1, checking the credentials of the doctor, patient

education, analysis of potential abuse, and generating periodic reports are not discussed or

suggested by Lilly et al. These features do more than generate a medication history for a

particular purchaser as in Lilly et al. In contrast, the present model analyses for and determines

potential abuse situations and current and anticipated patterns of potential adverse reactions.

PRE-EXAMINATION STATEMENT

Serial Number: 10/322348 Filing Date: December 17, 2002

Title: SENSITIVE DRUG DISTRIBUTION SYSTEM AND METHOD

Page 15 Dkt: 101.031US1

In addition, instant claims 19 and 26 recite a feature that embodies the new distribution model, namely the distribution of a sensitive drug by an exclusive central pharmacy. This feature is not disclosed in Lilly et al.

Respectfully submitted,

DAYTON T. REARDAN ET AL.

By their Representatives,

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.

P.O. Box 2938

Minneapolis, MN 55402

(703) 239-9592

Date: 9/30/2004

Bradley A. Forrest

Registration No. 36,530

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on September 32, 2004.

Name:

Signature



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Dayton T. Reardan et al.

SENSITIVE DRUG DISTRIBUTION SYSTEM AND METHOD

Docket No.:

101.031US1

Serial No.: 10/322,348

Filed:

December 17, 2002

Due Date: N/A

Examiner:

Unknown

Group Art Unit: 1743

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

We are transmitting herewith the following attached items (as indicated with an "X"):

- A return postcard.
- Petition to Make Special Under 37 CFR 1.102(d) (1 Pg.).
- $\frac{X}{X}$ $\frac{X}{X}$ $\frac{X}{X}$ $\frac{X}{X}$ $\frac{X}{X}$ Appendix I (2 pgs.).
- An Information Disclosure Statement (2 pgs.), Form 1449 (2 pgs.). Documents NOT enclosed.
- A check in the amount of \$140.00 to cover the fee for additional claims as calculated below.
- Preliminary Amendment (11 pgs.).
- Pre-Examination Statement For Petition To Make Special Under 37 CFR 1.102(d) (15 pgs.).
- A check in the amount of \$130.00 to cover the Petition Fee.

If not provided for in a separate paper filed herewith, If an additional fee is required due to changes to the claims, the fee has been calculated as follows:

| | | CLAIMS AS | AMENDED | | |
|-----------------------|--|--|-------------------------|-----------|----------|
| | (1) Claims Remaining After Amendment | (2) Highest Number Previously Paid For | (3) Present Extra | Rate | Fee |
| TOTAL CLAIMS | 31 | 25 | 6 | x 9.00 = | \$54.00 |
| INDEPENDENT CLAIMS | 6 | 4 | 2 | x 43.00 = | \$86.00 |
| []MULTIPLE DEPENI | DENT CLAIMS PRESE | NTED | | | \$0.00 |
| | | TOTAL | | | \$140.00 |

Please consider this a PETITION FOR EXTENSION OF TIME for sufficient number of months to enter these papers and please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.

Customer Number 21186

Atty: Bradle A. Forrest

Reg. No. 36,530

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Commissioner for Patents, 4.O. Box 1450, Alexandria, VA 22313-1450, on this 30 day of September, 2004.

Name

Signature

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.

(GENERAL)

| Index of Claims | Application/Control No. Applicant(s)/Patent under Reexamination |
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U.S. Patent and Trademark Office

Part of Paper No. 00011

| | Application or Docket Number | | | | | | | | | | | | |
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Dayto

Dayton T. Reardan et al.

Title:

SENSITIVE DRUG DISTRIBUTION SYSTEM AND METHOD

Docket No.:

101.031US1

Serial No.: 10/322,348

Filed:

December 17, 2002

Due Date: N/A

Examiner: Unknown

Group Art Unit: 1743

Mail Stop Amendment

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

We are transmitting herewith the following attached items (as indicated with an "X"):

X A return postcard.

X A Supplemental Information Disclosure Statement (2 pgs.), Form 1449 (2 pgs.), and copies of 33 cited documents.

If not provided for in a separate paper filed herewith, Please consider this a PETITION FOR EXTENSION OF TIME for sufficient number of months to enter these papers and please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.

Customer Number 21186

Atty: Bradley A. Forrest

Reg. No. 30,837

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 200 day of November, 2004.

Name

Signature

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.

(GENERAL)

PATENT

S/N 10/322,348

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

plicant: Dayton T. Reardan et al.

Examiner:

Unknown

Serial No.:

10/322,348

Group Art Unit:

1743

Filed:

NOV 0 4 2004

December 17, 2002

Docket:

101.031US1

Title:

SENSITIVE DRUG DISTRIBUTION SYSTEM AND METHOD

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

MS Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

In compliance with the duty imposed by 37 C.F.R. § 1.56, and in accordance with 37 C.F.R. §§ 1.97 et. seq., the enclosed materials are brought to the attention of the Examiner for consideration in connection with the above-identified patent application. Applicants respectfully request that this Supplemental Information Disclosure Statement be entered and the documents listed on the attached Form 1449 be considered by the Examiner and made of record. Pursuant to the provisions of MPEP 609, Applicants request that a copy of the 1449 form, initialed as being considered by the Examiner, be returned to the Applicants with the next official communication.

Pursuant to 37 C.F.R. §1.97(b), it is believed that no fee or statement is required with the Supplemental Information Disclosure Statement. However, if an Office Action on the merits has been mailed, the Commissioner is hereby authorized to charge the required fees to Deposit Account No. 19-0743 in order to have this Supplemental Information Disclosure Statement considered.

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Serial No :10/322,348

Filing Date: December 17, 2002

Title: SENSITIVE DRUG DISTRIBUTION SYSTEM AND METHOD

Page 2 Dkt: 101.031US1

The Examiner is invited to contact the Applicants' Representative at the below-listed telephone number if there are any questions regarding this communication.

Respectfully submitted,

DAYTON T. REARDAN ET AL.

By their Representatives,

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A. P.O. Box 2938
Minneapolis, MN 55402
(612) 373-6972

Date ///2/2004

By <u>_</u>∠

Bradley A. Forrest Reg. No. 30,837

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1 Kara (VI Kinle

Signature

PTO/SB/08A(10-0 Approved for use through 10/31/2002, OMB 651-00

Substitute for form 1449APTO
INFORMATION DISCLOSURE
STATEMENT BY APPLICANT
(Use as many sheets as necessary)

OTPE

COMPLETE IT Known

Application Number 10/322,348

Filling Date December 17, 2002

First Named Inventor Reardan, Dayton

Group Art Unit 1743

Examiner Name Unknown

Sheet 1 of 2 Attorney Docket No: 101.031US1

| | RADE | | ATENT DOCUMENT | S | | |
|-----------------------|------------------------|------------------|--|-------|----------|-------------------------------|
| Examiner Initial * | USP Document Number | Publication Date | Name of Patentee or Applicant of cited Document | Class | Subclass | Filing Date If Appropriate |
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EXAMINER: Initial if reference considered, whether or not clistion is in conformance with MPEP 509, Oral line through clistion if not in conformance and not considered. Include copy of this form with next communication to applicant, i Applicant's unique citation designation number (optional) a Applicant is to place a check mark here if English language Translation is asserted

PTO/SB/084 10-0
Approved for use through 10/31/2002, ONB 651-003
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| STATEMENT BY APPLICANT | Application Number | 10/322,348 |
| (Use as many sheels as necessary) | Filing Date | December 17, 2002 |
| | First Named Inventor | Reardan, Dayton |
| | Group Art Unit | 1743 |
| , | Examiner Name | Unknown |
| Sheet 2 of 2 | Attorney Docket No: 1 | 01.031US1 |

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| | | FOREIGN PATEN | TOCUMENTS | | · · · · · · | |
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| Examiner Initials* | Foreign Document No | Publication Date | Name of Patentee or Applicant of cited Document | Class | Subclass | T2 |

| | OTHER | R DOCUMENTS NON PATENT LITERATURE DOCUMENTS | |
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| Examiner Initials* | Cite No 1 | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T |

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Commissioner for Patents United States Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450 www.uspto.gov

Schwegman, Lundberg, Woessner & Kluth, P.A. P.O. Box 2938 Minneapolis, MN 55402-0938

In re application of

Dayton T. Reardan, et al.

Application No. 10/322,348

Filed: December 17, 2002

For: SENSITIVE DRUG DISTRIBUTION SYSTEM

AND METHOD

DECISION ON PETITIONTO MAKE SPECIAL(ACCELERATED

EXAMINATION)

This is in response to the renewed petition filed on October 4, 2004 to make the above-identified application special on the basis of special examining procedure for certain new applications - accelerated examination as set forth in MPEP § 708.02 VIII.

The requirements for granting special status under this section are: (A) a petition to make special accompanied by the fee set forth in 37 CFR 1.17(i); (B) all claims being directed to a single invention, or an election without traverse if the Office determines that all the claims are not directed to a single invention; (C) a statement that a pre-examination search was made listing the field of search; (D) one copy of each of the references deemed most closely related to the subject matter encompassed by the claims if said references are not already of record; and (E) a detailed discussion of how the claimed subject matter is patentable over the references in accordance with 37 CFR 1.111 (b) and (c).

Since all of the requirements for special status under MPEP § 708.02 VIII have been met, the petition is **GRANTED**.

The examiner is directed (1) to make an interference search for possible interfering applications, (2) to promptly examine this application out of turn, and (3) if any interfering application is discovered, to examine such application simultaneously and state in the first official letter of such application that it is being taken out of turn because of a possible interference.

Petitioner is advised that this application will continue to be special, throughout its entire prosecution and pendency, including interference or appeal, if any, only if petitioner makes a prompt **bona fide** effort, in response to each Office action, to place the application in condition for allowance, even if it is necessary to conduct an interview with the examiner to accomplish this purpose.

SUMMARY: Petition to Make Special GRANTED.

Randolph A. Reese

Special Programs Examiner Technology Center 3600

571-272-6619

RAR/dcg: 6/1/05

| Ref | Hits | Search Query | DBs | Default Operator | Plurals | Time Stamp |
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| L12 | 37 | (educational or printed) adj1 (material) same (prescriber or physician or doctor) same (new or first adj1 time or no adj1 experience or never adj1 before) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR \ | on sokec title | 2005/06/21 14:53 Lat 3/abstract |
| L15 | . 22 | (sensitive or controlled) and (drug or medication or medicine or prescription) same (first adj1 time) same (prescriber or doctor or physician) same (information or instruction or direction) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR C | ON | 2005/06/21 14:57 dered |
| L16 | 39 | (drug or medication or medicine or prescription) same (first adj1 time) same (prescriber or doctor or physician) same (information or instruction or direction) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR C | ON | 2005/06/21 15:19 |
| S1 | 66586 | (distribut\$3 or provid\$3 or supply\$3 or deliver\$3 or dispens\$3) and ((sensitive or abuse or abusive or addictive) same (drug or medicine or medication or ointment or pharmaceutical or pill or agent) or (sodium adj1 oxybate or gamma adj1 hydroxy adj1 butyrate or narcotic or opium or pain adj1 killer)) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/06/21 14:21 |
| S2 | 4281 | ((705/2) or (705/3) or (600/300)). CCLS. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2005/06/17 13:13 |
| S3 | 348 | S1 and S2 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/06/17 13:14 |

| S4 | 116 | (data adj1 base or database or data adj1 bank or databank) and (enter\$3 or submit\$4 or input\$4 or prompt) and (credential\$3 or certif\$7 or licens\$3) and (refill or re adj1 fill) and (address or residence) and (educational adj1 (material or information or data) or brochure or pamphlet) and (pattern or track\$3 or monitor\$3) and (report or update) and (evaluat\$3 or analy\$4) and (doctor or physician or prescriber) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/06/17 13:35 |
|-----|--------|---|---|------|----------|---|
| \$5 | 8 | S1 and S4 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR (| on on | 2005/06/17 13:19 of titles/ abstracts |
| S6 | 159939 | (distribut\$3 or provid\$3 or supply\$3 or deliver\$3 or dispens\$3) and ((sensitive or abuse or abusive or addictive or controlled) same (drug or medicine or medication or ointment or pharmaceutical or pill or agent) or (sodium adj1 oxybate or gamma adj1 hydroxy adj1 butyrate or narcotic or opium or pain adj1 killer)) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/06/20 11:31 |
| S7 | 14343 | (distribut\$3 or provid\$3 or supply\$3 or deliver\$3 or dispens\$3) and ((sensitive or abuse or abusive or addictive or controlled) adj1 (drug or medicine or medication or ointment or pharmaceutical or pill or agent) or (sodium adj1 oxybate or gamma adj1 hydroxy adj1 butyrate or narcotic or opium or pain adj1 killer)) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR . | ON | 2005/06/17 13:24 |
| \$8 | 8 | S4 and S7 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON (OD) | 2005/06/17 13:24 ced at strace |

| S9 | 119 | (data adj1 base or database or data adj1 bank or databank) and (enter\$3 or submit\$4 or input\$4 or prompt) and (credential\$3 or certif\$7 or licens\$3) and (refill or re adj1 fill or reorder or re adj1 order) and (address or residence) and (educational adj1 (material or information or data) or brochure or pamphlet) and (pattern or track\$3 or monitor\$3) and (report or update) and (evaluat\$3 or analy\$4) and (doctor or physician or prescriber) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/06/17 13:36 |
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| S10 | 41 | (data adj1 base or database or data adj1 bank or databank) and (enter\$3 or submit\$4 or input\$4 or prompt) and (credential\$3 or certif\$7 or licens\$3) and (refill or re adj1 fill or reorder or re adj1 order) and (address or residence) and (educational adj1 (material or information or data) or brochure or pamphlet) and (pattern or track\$3 or monitor\$3) and (report or update) and (evaluat\$3 or analy\$4) and (doctor or physician or prescriber) and (patient) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | on dat | 2005/06/17 13:37 |
| S11 | 8 | (data adj1 base or database or data adj1 bank or databank) and (enter\$3 or submit\$4 or input\$4 or prompt) and (credential\$3 or certif\$7 or licens\$3) and (refill or re adj1 fill or reorder or re adj1 order) and (address or residence) and (educational adj1 (material or information or data) or brochure or pamphlet) and (pattern or track\$3 or monitor\$3) and (report or update) and (evaluat\$3 or analy\$4) and (doctor or physician or prescriber) and (patient) and ((sensitive or abuse or abusive or addictive) same (drug or medicine or medication or ointment or pharmaceutical or pill or agent) or (sodium adj1 oxybate or gamma adj1 hydroxy adj1 butyrate or narcotic or opium or pain adj1 killer)) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | on on | 2005/06/17 13:38 |

| S12 | 32 | (data adj1 base or database or data adj1 bank or databank) and (enter\$3 or submit\$4 or input\$4 or prompt) and (credential\$3 or certif\$7 or licens\$3) and (refill or re adj1 fill or reorder or re adj1 order) and (address or residence) and (educational adj1 (material or information or data) or brochure or pamphlet) and (pattern or track\$3 or monitor\$3) and (report or update) and (evaluat\$3 or analy\$4) and (doctor or physician or prescriber) and (patient) and ((sensitive or abuse or abusive or addictive or controlled) same (drug or medicine or medication or ointment or pharmaceutical or pill or agent) or (sodium adj1 oxybate or gamma adj1 hydroxy adj1 butyrate or narcotic or opium or pain adj1 killer)) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR Drod | od s Jahra | 2005/06/17 17:26 |
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| \$554 | | S53 or S51 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR C | on on | 2005/06/20 15:17 |

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| L12 | 37 | (educational or printed) adj1 (material) same (prescriber or physician or doctor) same (new or first adj1 time or no adj1 experience or never adj1 before) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | on look | 2005/06/21 14:53 ad at abstrates |
| L15 | 22 | (sensitive or controlled) and (drug or medication or medicine or prescription) same (first adj1 time) same (prescriber or doctor or physician) same (information or instruction-or-direction) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/06/21 14:57 who doet thestals train |
| 116 | 39 | (drug_or_medication or medicine or prescription) same (first adj1 time) same (prescriber or doctor or physician) same (information or instruction or direction) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | on (o | 2005/06/21 15:19 Seed at |
| S1 | 66586 | (distribut\$3 or provid\$3 or supply\$3 or deliver\$3 or dispens\$3) and ((sensitive or abuse or abusive or addictive) same (drug or medicine or medication or ointment or pharmaceutical or pill or agent) or (sodium adj1 oxybate or gamma adj1 hydroxy adj1 butyrate or narcotic or opium or pain adj1 killer)) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/06/21 14:21 |
| S2 | 4281 | ((705/2) or (705/3) or (600/300)). CCLS. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2005/06/17 13:13 |
| S3 | 348 | S1 and S2 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/06/17 13:14 |

| \$12 | 32 | (data adj1 base or database or data | US-PGPUB; | OR | ON | 2005/06/17 17:26 |
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| | | adj1 bank or databank) and (enter\$3 or submit\$4 or input\$4 or prompt) and (credential\$3 or certif\$7 or licens\$3) and (refill or re adj1 fill or reorder or re adj1 order) and (address or residence) and (educational adj1 (material or information or data) or brochure or pamphlet) and (pattern or track\$3 or monitor\$3) and (report or update) and (evaluat\$3 or analy\$4) and (doctor or physician or prescriber) and (patient) and ((sensitive or abuse or abusive or addictive or controlled) same (drug or medicine or medication or | USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | | | t obstracts |
| | | ointment or pharmaceutical or pill or agent) or (sodium adj1 oxybate or gamma adj1 hydroxy adj1 butyrate or narcotic or opium or pain adj1 killer)) | | | | |
| 524 | 4 | (data adj1 base or database or data adj1 bank or databank) and (enter\$3 or submit\$4 or input\$4 or prompt) and (credential\$3 or certif\$7 or licens\$3) and (refill or re adj1 fill or reorder or re adj1 order) and (address or residence) and | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR . | ON | 2005/06/17 17:32 |
| | | (educational adj1 (material or information or data) or brochure or pamphlet) and (pattern or track\$3 or monitor\$3) and (report or update) and (evaluat\$3 or analy\$4) and (doctor or physician or prescriber) and (patient) and ((sensitive or abuse or abusive or addictive or controlled) same (drug | | | 100 te | d at abstracts |
| | | or medicine or medication or ointment or pharmaceutical or pill or agent) or (sodium adj1 oxybate or gamma adj1 hydroxy adj1 butyrate or narcotic or opium or pain adj1 killer)) and (state adj1 licens\$3) | | | | |

| S25 8 | (physician or doctor or medical adj1 professional or practitioner) same (request\$3 or submit\$4 or order\$2) same (prescription or medication or medicine or drug or pill) and (central or main) adj1 (database or data adj1 base or databank or data adj1 bank) and (abuse or fraud or abusing or abusive) and (check\$3 or verif\$7 or confirm\$5) same (credential\$3 or certif\$7 or licens\$3) and (ship\$4 or distribut\$3 or supply\$3 or deliver\$3 or dispens\$3) and (receiv\$3 or receipt) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | on Lites | 2005/06/20 TT:20 |
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| S26 118162 | ((sensitive or abuse or abusive or addictive) same (drug or medicine or medication or ointment or pharmaceutical or pill or agent) or (sodium adj1 oxybate or gamma adj1 hydroxy adj1 butyrate or narcotic or opium or pain adj1 killer or cocaine or marijuana)) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/06/17 17:38 |
| S27 5 | S25 and S26 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | on looked | 2005/06/17 17:39) at thes/abstracts |
| S28 5 | (physician or doctor or medical adj1 professional or practitioner or prescriber) same (request\$3 or submit\$4 or order\$2 or enter\$3 or input\$4) same (prescription or medication or medicine or drug or pill or pharmaceutical) and (central or main) adj1 (database or data adj1 base or databank or data adj1 bank) and (abuse or fraud or abusing or abusive) and (check\$3 or verif\$7 or confirm\$5) same (credential\$3 or certif\$7 or licens\$3) and (ship\$4 or distribut\$3 or supply\$3 or deliver\$3 or dispens\$3) and (generat\$3 or creat\$3) same (report or analy\$3 or conclusion or summary or finding or document\$5) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | on X | 2005/06/21 12:59 |

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| S29 | 24 | (physician or doctor or medical adj1 professional or practitioner or prescriber) same (request\$3 or submit\$4 or order\$2 or enter\$3 or input\$4) same (prescription or medication or medicine or drug or pill or pharmaceutical) and (central or main) adj1 (database or data adj1 base or databank or data adj1 bank) and (check\$3 or verif\$7 or confirm\$5) same (credential\$3 or certif\$7 or licens\$3) and (ship\$4 or distribut\$3 or supply\$3 or deliver\$3 or dispens\$3) and (generat\$3 or creat\$3) same (report or analy\$3 or conclusion or summary or finding or | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR OR | ON Like | 2005/06/2011:26 |
| | | document\$5) | | | | |
| 530 | 19 | (physician or doctor or medical adj1 professional or practitioner or prescriber) same (request\$3 or submit\$4 or order\$2 or enter\$3 or input\$4) same (prescription or medication or medicine or drug or pill or pharmaceutical) and (central or main) adj1 (database or data adj1 base or databank or data adj1 bank) and (check\$3 or verif\$7 or confirm\$5) same (credential\$3 or certif\$7 or licens\$3) and (ship\$4 or distribut\$3 or supply\$3 or deliver\$3 or dispens\$3) and (generat\$3 or creat\$3) same (report or analy\$3 or conclusion or summary or finding or document\$5) and (pharmacy) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | on | 2005/06/20 13:39 |
| S31 | 63501 | ((sensitive or abuse or abusive or addictive or controlled) same (drug or medicine or medication or ointment or pharmaceutical or pill or agent) or (sodium adj1 oxybate or gamma adj1 hydroxy adj1 butyrate or narcotic or opium or pain adj1 killer)) same (pattern or finding or analy\$3 or conclusion or result or track\$3 or monitor\$3) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/06/20 11:34 |
| S32 | 4281 | ((705/2) or (705/3) or (600/300)). CCLS. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2005/06/20 11:33 |

| S33 | 303 | S31 and S32 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/06/20 11:33 |
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| S34 | 25010 | ((sensitive or abuse or abusive or addictive or controlled) same (drug or medicine or medication or ointment or pharmaceutical or pill or agent) or (sodium adj1 oxybate or gamma adj1 hydroxy adj1 butyrate or narcotic or opium or pain adj1 killer)) same (pattern or finding or analy\$3 or track\$3 or monitor\$3) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR · | ON | 2005/06/20 11:34 |
| S35 | 25010 | (((sensitive or abuse or abusive or addictive or controlled) same (drug or medicine or medication or ointment or pharmaceutical or pill or agent)) or (sodium adj1 oxybate or gamma adj1 hydroxy adj1 butyrate or narcotic or opium or pain adj1 killer)) same (pattern or finding or analy\$3 or track\$3 or monitor\$3) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/06/20 11:34 |
| S36 | 1028 | (((sensitive or abuse or abusive or addictive or controlled) same (drug or medicine or medication or ointment or pharmaceutical or pill or agent)) or (sodium adj1 oxybate or gamma adj1 hydroxy adj1 butyrate or narcotic or opium or pain adj1 killer)) same (pattern or finding or analy\$3 or track\$3 or monitor\$3) and (prescription or prescribing or medication adj1 order) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/06/20 11:35 |
| S37 | 485 | (((sensitive or abuse or abusive or addictive or controlled) same (drug or medicine or medication or ointment or pharmaceutical or pill or agent)) or (sodium adj1 oxybate or gamma adj1 hydroxy adj1 butyrate or narcotic or opium or pain adj1 killer)) same (pattern or finding or analy\$3 or track\$3 or monitor\$3) and (prescription or prescribing or medication adj1 order) same (doctor or physician) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/06/20 11:36 |
| S38 | 103 | S32 and S37 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON . | 2005/06/20 11:35 |

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|-----|-----|---|---|-------|---------|------------------|
| S39 | 102 | (((sensitive or abuse or abusive or addictive or controlled) adj2 (drug or medicine or medication or ointment or pharmaceutical or pill or agent)) or (sodium adj1 oxybate or gamma adj1 hydroxy adj1 butyrate or narcotic or opium or pain adj1 killer)) same (pattern or finding or analy\$3 or track\$3 or monitor\$3) and (prescription or prescribing or medication adj1 order) same (doctor or physician) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/06/20 11:41 |
| S40 | 97 | (((sensitive abusive or addictive or controlled) adj2 (drug or medicine or medication or ointment or pharmaceutical or pill or agent)) or (sodium adj1 oxybate or gamma adj1 hydroxy adj1 butyrate or narcotic or opium or pain adj1 killer)) same (pattern or finding or analy\$3 or track\$3 or monitor\$3) and (prescription or prescribing or medication adj1 order) same (doctor or physician) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/06/20 11:42 |
| S41 | 97 | (((sensitive or abusive or addictive or controlled) adj2 (drug or medicine or medication or ointment or pharmaceutical or pill or agent)) or (sodium adj1 oxybate or gamma adj1 hydroxy adj1 butyrate or narcotic or opium or pain adj1 killer)) same (pattern or finding or analy\$3 or track\$3 or monitor\$3) and (prescription or prescribing or medication adj1 order) same (doctor_or-physician) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/06/20 11:45 |
| S42 | 9 | (((sensitive or abusive or addictive or controlled) adj2 (drug or medicine or medication or ointment or pharmaceutical or pill or agent)) or (sodium adj1 oxybate or gamma adj1 hydroxy adj1 butyrate or narcotic or opium or pain adj1 killer)) same (pattern or finding or analy\$3 or track\$3 or monitor\$3) same (abuse or abusive or fraud) and (prescription or prescribing or medication adj1 order) same (doctor or physician) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR OR | They on | 2005/06/20 11:44 |

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| S43 | 131 | (((sensitive or abusive or addictive or controlled) adj2 (drug or medicine or medication or ointment or pharmaceutical or pill or agent or substance)) or (sodium adj1 oxybate or gamma adj1 hydroxy adj1 butyrate or narcotic or opium or pain adj1 killer)) same (pattern or finding or analy\$3 or track\$3 or monitor\$3) and (prescription or prescribing or medication adj1 order) same (doctor or physician) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | onender | on d | 2005/06/20 11:57 |
| S44 | 1072 | (((sensitive or abusive or addictive or controlled) adj2 (drug or medicine or medication or ointment or pharmaceutical or pill or agent or substance)) or (sodium adj1 oxybate or gamma adj1 hydroxy adj1 butyrate or narcotic or opium or pain adj1 killer)) same (abuse or abusive or fraud\$5) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | OŅ | 2005/06/20 11:58 |
| S45 | 143 | (((sensitive or abusive or addictive or controlled) adj2 (drug or medicine or medication or ointment or pharmaceutical or pill or agent or substance)) or (sodium adj1 oxybate or gamma adj1 hydroxy adj1 butyrate or narcotic or opium or pain adj1 killer)) same (abuse or abusive or fraud\$5) same (analy\$4 or pattern or track\$3 or monitor\$3) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/06/20 12:00 |
| S46 | 44 | (((sensitive or abusive or addictive or controlled) adj2 (drug or medicine or medication or ointment or pharmaceutical or pill or agent or substance)) or (sodium adj1 oxybate or gamma adj1 hydroxy adj1 butyrate or narcotic or opium or pain adj1 killer)) same (abuse or abusive or fraud\$5) same (analy\$4 or pattern or track\$3 or monitor\$3) and (prescription or prescrib\$3 or medication adj1 order) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/06/20 13:32 |

| S48 | 8 | (physician or doctor or medical adj1 professional or practitioner or prescriber) same (request\$3 or submit\$4 or order\$2 or enter\$3 or input\$4) same (prescription or medication or medicine or drug or pill or pharmaceutical) and (central or main) adj1 (database or data adj1 base or databank or data adj1 bank) and (check\$3 or verif\$7 or confirm\$5) same (credential\$3 or certif\$7 or licens\$3) and (ship\$4 or distribut\$3 or supply\$3 or deliver\$3 or dispens\$3) and (generat\$3 or creat\$3) same (report or analy\$3 or conclusion or summary or finding or document\$5) and (pharmacy) and (educational adj1 (material or information or data) or (brochure) or (pamphlet)) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR OF | ON Color | 2005/06/20 13:44 |
|-----|---|--|---|-------|----------|-------------------------------|
| S54 | 4 | S53 or S51 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/06/20 15:17 ridered 2 |

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| 564 | 23 | (confirm\$3 or verif\$7) same (prescription) same (read) same (instruction or advice) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; | OR | on looke | 2005/06/20 16:02 Lathtes/obs |
| S65 | 1 | (call\$3) same (patient) same (verif\$7 or confirm\$5) same (prescription or medication adj1 order) same (instructions or guidelines or education) | IBM_TDB US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | on | 2005/06/20 16:08 ed at title/abst |
| S66 | 275 | (patient) same (verif\$7 or confirm\$5 or check\$3) same (prescription or medication adj1 order) same (read or instructions or guidelines or education) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/06/20 16:10 |
| S67 | 152 | (patient) same (verif\$7 or confirm\$5 or check\$3) same (prescription or medication adj1 order) same (instructions or guidelines or educational adj1 material) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/06/21 10:12 |
| S68 | . 36 | (patient) same (verif\$7 or confirm\$5 or check\$3) same (prescription or medication adj1 order) same (instructions or guidelines or educational adj1 material) same (database or data adj1 base or databank or data adj1 bank) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM TDB | OR | ON | 2005/06/21 10:17 |
| \$69 | 7 | (patient) same (verif\$7 or confirm\$5 or check\$3) same (prescription or medication adj1 order) same (instructions or guidelines or educational adj1 material) same (prior or before) same (ship\$4 or dispens\$3 or deliver\$3 or send\$3) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR (CO) | on red a | 2005/06/21 10:20 at thes/absta |
| S70 | 29 | (patient) same (verif\$7 or confirm\$5 or check\$3) same (prescription or medication adj1 order or medication or pharmaceutical or drug or pill) same (instructions or guidelines or educational adj1 material) same (prior or before) same (ship\$4 or dispens\$3 or deliver\$3 or send\$3) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | or jook | on ed at | 2005/06/21 10:28 titles/austrace |

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| S71 | 53 | (verif\$7 or confirm\$5 or check\$3) same (prescription or medication adj1 order or medication or pharmaceutical or drug or pill) same (instructions or guidelines or educational adj1 material or prescription adj1 label) same (prior or before) same (ship\$4 or | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/06/21 12:21 |
|------|----|---|---|-----------|-----------------|--|
| \$12 | 11 | dispens\$3 or deliver\$3 or send\$3) clark.inv. and (inform\$2) adj1 consent | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR (| on ON | 2005/06/21 12:27 |
| S73 | 5 | (educational adj1 material) same (prior or before) same (ship\$4 or deliver\$3 or dispens\$3) same (medicine or medication or pharmaceutical or prescription or pill or drug) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/06/21 12:30 |
| 574 | 15 | (educational adj1 material) same (prior or before) same (ship\$4 or deliver\$3 or dispens\$3) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR CON | on nde | 2005/06/21 12:30 red |
| S75 | 6 | (educational adj1 material) same (prior or before) same (ship\$4 or deliver\$3 or dispens\$3) and (medicine or medication or pharmaceutical or prescription or pill or drug) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/06/21 12:54 |
| S83 | 98 | (receipt or receiv\$3 or deliver\$3) same (confirm\$5 or verif\$7 or notif\$7) same (call or phone or telephone) same (pharmacy) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/06/21 13:02 |
| 584 | 91 | (receipt or receiv\$3 or deliver\$3) same (confirm\$5 or verif\$7 or notif\$7) same (call or phone or telephone) same (pharmacy) same (drug or prescription-or-medicine-or-medication) | US-PGPUB; USPAT; USOCR; EPO; JPO; _DERWENT;_ IBM_TDB | OR | ON | 2005/06/21 13:09 |
| \$85 | 16 | (pharmacy) same (telephone or call or phone) same (patient) same (confirm\$5 or verif\$7) same (received or receipt or receiving) same (prescription or medication or medicine or drug or pharmaceutical) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR C | on Dlad H | 2005/06/21 13:23 at los/abstract |

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| 586 | 49 | (pharmacy) same (telephone or call or phone) same (confirm\$5 or verif\$7 or ask or find adj1 out) same (received or receipt or receiving or delivered or sent) same (prescription or medication or medicine or drug or pharmaceutical) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR WY | on ed at | 2005/06/21 13:29 es fabituets | |
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| S88 | 151 | (pharmacist) same (confirm\$5 or verif\$7 or ask or find adj1 out) same (received or receipt or receiving or delivered or sent) same (prescription or medication or medicine or drug or pharmaceutical) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/06/21 13:32 | · |
| S89 | 242 | (pharmacist or pharmacy) same (confirm\$5 or verif\$7 or ask or find adj1 out) same (patient) same (received or receipt or receiving or delivered or sent) same (prescription or medication or medicine or drug or pharmaceutical) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/06/21 13:33 | |
| S90 | 162 | (pharmacist or pharmacy) same (confirm\$5 or verif\$7 or ask or find adj1 out) same (patient) same (received or receipt or receiving or delivered or sent) same (prescription or medication or medicine or drug or pharmaceutical) and (phone or telephone or cellphone) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/06/21 13:33 | |
| \$11 1 | 26 | (investigat\$3) same (lost) same (shipment or delivery or order) same (drug or medicine or medication or prescription or pharmaceutical) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON CON | 2005/06/21 14:10 adored | |
| S11 8 | 105 | (stolen or lost or missing) same (drug or medication or pharmaceutical or prescription) same (investigat\$3) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/06/21 14:17 | |

| S11 9 | 1066 | (stolen or lost or missing) same ((sensitive or abuse or abusive or addictive) same (drug or medicine or medication or ointment or pharmaceutical or pill or agent) or (sodium adj1 oxybate or gamma adj1 hydroxy adj1 butyrate or narcotic or opium or pain adj1 killer)) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/06/21 14:22 |
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| S12 0 | 37 | (stolen or lost or missing) same ((sensitive or abuse or abusive or addictive) same (drug or medicine or medication or ointment or pharmaceutical or pill or agent) or (sodium adj1 oxybate or gamma adj1 hydroxy adj1 butyrate or narcotic or opium or pain adj1 killer)) same (shipment or delivery) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/06/21 14:23 |
| S12 1 | 582 | (stolen or lost or missing) same (drug or medicine or medication or pharmaceutical or prescription) same (shipment or delivery) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/06/21 14:23 |
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Application/Control No.

Applicant(s)/Patent under



United States Patent and Trademark Office

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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---------------------------|------------------------|-----------------------|---------------------|------------------|
| 10/322,348 | 12/17/2002 | Dayton T. Reardan | 101.031US1 | 5446 |
| 21186 | 7590 06/29/2005 | • | EXAM | INER |
| SCHWEGMA | AN, LUNDBERG, W | OESSNER & KLUTH, P.A. | NAJARIA | N, LENA |
| P.O. BOX 293 MINNEAPOL | 8 IS, MN 55402-0938 | | ART UNIT | PAPER NUMBER |
| WIII WEET OF | 15, 1111 55 152 5765 | | 3626 | |

DATE MAILED: 06/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| • | Application No. | Applicant(s) |
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| | 10/322,348 | REARDAN ET AL. |
| Office Action Summary | Examiner | Art Unit |
| | Lena Najarian | 3626 |
| The MAILING DATE of this communication app Period for Reply | ears on the cover sheet with the c | orrespondence address |
| A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period we Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | 16(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) day fill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133). |
| Status | | |
| 1) Responsive to communication(s) filed on 17 De | ecember 2002. | |
| 2a) ☐ This action is FINAL . 2b) ☒ This | action is non-final. | |
| 3) Since this application is in condition for allowan | ice except for formal matters, pro | secution as to the merits is |
| closed in accordance with the practice under E | x parte Quayle, 1935 C.D. 11, 45 | 33 O.G. 213. |
| Disposition of Claims | | |
| 4) ⊠ Claim(s) 1-31 is/are pending in the application. 4a) Of the above claim(s) 11-31 is/are withdraw 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) 1-10 is/are rejected. 7) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restriction and/or | | |
| Application Papers | | |
| 9) The specification is objected to by the Examiner 10) The drawing(s) filed on 17 December 2002 is/ar Applicant may not request that any objection to the of Replacement drawing sheet(s) including the correction of the oath or declaration is objected to by the Example 11) The oath or declaration is objected. | re: a) accepted or b) object drawing(s) be held in abeyance. See on is required if the drawing(s) is obj | e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d). |
| Priority under 35 U.S.C. § 119 | | |
| 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1 Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priori application from the International Bureau * See the attached detailed Office action for a list of | s have been received. s have been received in Applicati ity documents have been receive (PCT Rule 17.2(a)). | on No ed in this National Stage |
| Attachment(e) | | |
| Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 20030414, 15404 | 4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other: | |

U.S. Patent and Trademark Office PTOL-326 (Rev. 1-04)

Office Action Summary

Part of Paper No./Mail Date 20050617

Art Unit: 3626

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C.

121:

I. Claims 1-10, drawn to a method of distributing a sensitive drug, classified in class 705, subclass 2.

- II. Claims 11-18, drawn to a method of monitoring potential abuse of a sensitive drug by use of an exclusive central database, classified in class 707, subclass 3.
- III. Claims 19-25, drawn to a method of obtaining FDA approval for a sensitive drug, classified in class 700, subclass 237.
- IV. Claims 26-31, drawn to a method to control abuse of a sensitive drug, classified in class 705, subclass 4.
- 2. The inventions are distinct, each from the other because of the following reasons:

Inventions I, II, III and IV are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention I has separate utility such as a healthcare management system, invention II has separate utility such as query processing, invention III has separate utility such as authorization, and invention IV has separate utility such as an insurance processing system. See MPEP § 806.05(d).

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3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification and/or because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

- 4. During a telephone conversation with Richard Schwartz on 3/18/05 a provisional election was made without traverse to prosecute the invention of Group 1, claims 1-10. Affirmation of this election must be made by applicant in replying to this Office action. Claims 11-31 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.
- 5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Drawings

6. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: items 232 & 238 (Fig. 2A), item 286 (Fig. 2B), items 262 & 264 (Fig. 2C), item 402 (Fig. 4A), item 434 (Fig. 4B), and item 1200 (Fig. 12). Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the

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specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filling date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and

Claim Rejections - 35 USC § 112

informed of any required corrective action in the next Office action. The objection

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as

being indefinite for failing to particularly point out and distinctly claim the subject

matter which applicant regards as the invention.

to the drawings will not be held in abeyance.

9. Claims 1-10 recite the limitations for which there is no antecedent basis in

the claims. In particular, the following passages lack or have vague antecedent

basis:

(i) "the patient": claim 1, lines 3 & 6

claim 2, line 2

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claim 4, line 2

claim 6, line 2

- (ii) "the patient's": claim 5, line 1
- (iii) "the central pharmacy": claim 2, line 2
- (iv) "the pharmacist": claim 8, line 2
- (v) "the physician": claim 9, line 2
- (vi) Claims 3, 7, and 10 incorporate the deficiencies of claim 1, through dependency, and are also rejected.

Claim Rejections - 35 USC § 101

10. Claims 1-10 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The basis of this rejection is set forth in a two-prong test of:

- (1) whether the invention is within the technological arts; and
- (2) whether the invention produces a useful, concrete, and tangible result.

For a claimed invention to be statutory, the claimed invention must be within the technological arts. Mere ideas in the abstract (i.e., abstract idea, law of nature, natural phenomena) that do not apply, involve, use, or advance the technological arts fail to promote the "progress of science and the useful arts" (i.e., the physical sciences as opposed to social sciences, for example) and therefore are found to be non-statutory subject matter. For a process claim to pass muster, the recited process must somehow apply, involve, use, or advance the technological arts.

Art Unit: 3626

(A) In the present case, it is not clear whether or not the various elements of claims 1-10 clearly and definitely require technology. For example in exemplary claim 1, a database in its broadest sense, may simply be a paper-based table (e.g., chart) or paper files in a file cabinet. As such, the claims when given their broadest reasonable interpretation appear to be devoid of any technological device.

Additionally, for a claimed invention to be statutory, the claimed invention must produce a useful, concrete, and tangible result. In the present case, the claimed invention generates periodic reports to evaluate potential abuse patterns. Although the recited process produces a useful, concrete, and tangible result, since the claimed invention, as a whole, is not within the technological arts as explained above, claims 1-10 are deemed to be directed to non-statutory subject matter.

Claim Rejections - 35 USC § 103

- 11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 12. Claims 1-2, 4-8, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moradi et al. (US 2004/0019794 A1) in view of Lilly et al. (US 2004/0176985 A1) and further in view of Califano et al. (US 2003/0033168 A1).

Application/Control Number: 10/322,348

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(A) Referring to claim 1, Moradi discloses a method of distributing a drug, the method comprising (para. 3 of Moradi):

receiving prescription requests from a medical doctor containing information identifying the patient, the drug, and various credentials of the doctor (para. 35, para. 116, and para. 117 of Moradi);

checking the credentials of the doctor (para. 118 of Moradi); and confirming receipt of the drug (see abstract of Moradi).

Moradi does not expressly disclose that the drug is a sensitive drug, entering the information into a central database for analysis of potential abuse situations, confirming with the patient that educational material has been read prior to shipping the sensitive drug, and generating periodic reports via the central database to evaluate potential abuse patterns.

Lilly et al. disclose that the drug is a sensitive drug, entering the information into a central database for analysis of potential abuse situations, and generating periodic reports via the central database to evaluate potential abuse patterns (para. 33, para. 69, para. 54, and para. 58 of Lilly; the Examiner interprets "controlled substance" to be a form of "sensitive drug").

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the features of Lilly within Moradi. The motivation for doing so would have been to ensure that prescribers have an accurate view of their patients' use of prescription drugs and to help protect professionals from lawsuits and other potential liabilities (para, 58 of Lilly).

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Moradi and Lilly do not disclose confirming with the patient that educational material has been read prior to shipping the drug.

Califano et al. disclose confirming with the patient that educational material has been read prior to shipping the drug (para. 84 of Califano).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the feature of Califano within Moradi and Lilly. The motivation for doing so would have been to ensure that the patient knows about the risks and dangers associated with the drug (para. 43 of Califano).

(B) Referring to claims 2 and 6, Moradi discloses wherein receipt of the drug is confirmed by telephone call from the central pharmacy to the patient (abstract, para. 42, para. 26, and para. 47 of Moradi) and recording a designee identified by the patient to receive the drug (para. 24 of Moradi; the Examiner interprets recipient's...name" to be a form of "designee").

Moradi does not expressly disclose that the drug is a sensitive drug.

Lilly et al. disclose that the drug is a sensitive drug (para. 33 of Lilly; the Examiner interprets "controlled substance" to be a form of "sensitive drug").

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the feature of Lilly within Moradi. The motivation for doing so would have been for the distribution method to be used primarily for drugs that are likely to be abused (para. 9 of Lilly).

(C) Referring to claim 4, Moradi and Lilly do not disclose recording the confirmation with the patient that the educational material has been read in the central database.

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Califano discloses recording the confirmation with the patient that the educational material has been read in the central database (para. 120 of Califano).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the feature of Califano within Moradi and Lilly. The motivation for doing so would have been to have documentation confirming that the patient knows about the risks and dangers associated with the drug (para. 43 of Califano).

- (D) Referring to claim 5, Moradi discloses verifying the patient's home address (para. 43 of Moradi).
- (E) Referring to claim 7, Moradi discloses establishing a delivery date (para. 46 of Moradi).
- (F) Referring to claim 8, Moradi discloses wherein prescription refills requested prior to an anticipated date are questioned by the pharmacist (para. 42 of Moradi).
- (G) Referring to claim 10, Moradi discloses wherein the credentials of the doctor comprise DEA (Drug Enforcement Agency) and state license numbers (para. 116 and para. 117 of Moradi).
- 13. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Moradi et al. (US 2004/0019794 A1) in view of Lilly et al. (US 2004/0176985 A1) in view of Califano et al. (US 2003/0033168 A1) as applied to claim 1 above, and further in view of Andreasson et al. (US 2003/0160698 A1).

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(A) Referring to claim 3, Moradi, Lilly, and Califano do not disclose launching an

investigation of lost shipments.

Andreasson discloses disclose launching an investigation of lost

shipments (para. 79 of Andreasson).

At the time of the invention, it would have been obvious to a person of

ordinary skill in the art to combine the feature of Andreasson within Moradi, Lilly,

and Califano. The motivation for doing so would have been to reduce the risk of

lost or stolen medical products by immediately notifying healthcare workers so

that they may take appropriate action (para. 79 of Andreasson).

14. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over

Moradi et al. (US 2004/0019794 A1) in view of Lilly et al. (US 2004/0176985 A1)

in view of Califano et al. (US 2003/0033168 A1) as applied to claim 1 above, and

further in view of Mayaud (5,845,255).

(A) Referring to claim 9, Moradi, Lilly, and Califano do not disclose shipping

comprehensive printed materials to the physician if the physician is a first time

prescriber of the drug.

Mayaud discloses shipping comprehensive printed materials to the

physician if the physician is a first time prescriber of the drug (col. 37, lines 6-31

of Mayaud).

At the time of the invention, it would have been obvious to a person of

ordinary skill in the art to combine the feature of Mayaud within Moradi, Lilly, and

Califano. The motivation for doing so would have been to reduce the reluctance

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of physicians to prescribe new drugs by providing them with the latest information about the drugs (col. 37, lines 6-23 of Mayaud).

Mayaud does not expressly disclose that the drug is a sensitive drug.

Lilly et al. disclose that the drug is a sensitive drug (para. 33 of Lilly; the Examiner interprets "controlled substance" to be a form of "sensitive drug").

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the feature of Lilly within Mayaud, Moradi, and Califano. The motivation for doing so would have been for the distribution method to be used primarily for drugs that are likely to be abused (para. 9 of Lilly).

Conclusion

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lena Najarian whose telephone number is 571-272-7072. The examiner can normally be reached on 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Thomas can be reached on 571-272-6776. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3626

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-

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free).

6-21-05

JOSEPH THOMAS

SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600

| Search Notes | | | |
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| Application/Control No. | Applicant(s)/Patent under Reexamination | |
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| 10/322,348 | REARDAN ET AL. | |
| Examiner | Art Unit | |
| Lana Najarian | 3636 | |

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|----------|----------|-----------|----------|
| Class | Subclass | Date | Examiner |
| 705 | 2 3 | 6/17/2005 | LN |
| 600 | 300 | 6/17/2005 | LN |
| 705 | 2 3 | 6/20/2005 | LN |
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| SEARCH NOTES (INCLUDING SEARCH STRATEGY) | | | |
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| East (see attached printout) USPAT; USOCR; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB | 6/17/2005 | LN | |
| East (see attached printout) USPAT; USOCR; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB | 6/20/2005 | LN | |
| East (see attached printout) USPAT; USOCR; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB | 6/21/2005 | LN | |
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Part of Paper No. 20050617



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Bib Data Sheet

CONFIRMATION NO. 5446

| SERIAL NUMBE 10/322,348 | | FILING DATE 12/17/2002 RULE | . C | CLASS 705 | GRO | UP ART 3626 | UNIT | D | ATTORNEY OCKET NO. 101.031US1 |
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| APPLICANTS | APPLICANTS | | | | | | | | |
| Dayton T. R | Dayton T. Reardan, Excelsior, MN; | | | | | | | | |
| | Patti A. Eneel, Eagan, MN; Bob Gagne, St. Paul, MN; | | | | | | | | |
| ** CONTINUING E | | ******** | * | | | | | | |
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| ADDRESS 21186 SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A. P.O. BOX 2938 MINNEAPOLIS , MN 55402-0938 | | | | | | | | | |
| TITLE Sensitive drug distribution system and method | | | | | | | | | |
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Application/Control No. Applicant(s)/Patent Under Reexamination 10/322,348 REARDAN ET AL. Notice of References Cited Examiner Art Unit Page 1 of 1 Lena Najarian 3626 U.S. PATENT DOCUMENTS **Document Number** Date Classification Name Country Code-Number-Kind Code MM-YYYY 01-2004 713/185 US-2004/0019794 A1 Moradi et al. В US-2003/0033168 A1 02-2003 Califano et al. 705/3 С US-2004/0176985 A1 09-2004 705/002 Lilly et al. D US-5,845,255 A 12-1998 Mayaud, Christian 705/3 US-2003/0160698 A1 Ε 08-2003 Andreasson et al. 340/573.1 US-F G US-Н US-USı J US-Κ US-US-US-М FOREIGN PATENT DOCUMENTS Document Number Date Name Country Classification Country Code-Number-Kind Code MM-YYYY Ν 0 Ρ Q R S Т **NON-PATENT DOCUMENTS** Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages) U ٧ W

A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).) Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

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| | Applicati n Number | 10/322,348 |
| STAPENED BY APPLICANT | Filing Date | December 17, 2002 |
| (2) | First Nam d Invent r | Reardan Ph.D., Dayton |
| (NAK 1 4 5003 (C) | Group Art Unit | 1743- 3626 AM Elle |
| | Examiner Name | Unknown 16 |
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INFORMATION DISCLOSURE
STATEMENT BY APPLICANT

Application Number

Filing Date

First Named Inventor

Group Art Unit

Examiner Name

Unknown

Attorney Docket No: 101.031US1

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Substitute for form 1449A/PTO Complete if Known INFORMATION DISCLOSURE **Application Number** 10/322,348 KATEMENT BY APPLICANT Filing Date December 17, 2002 **First Named Inventor** Reardan, Dayton OCT 0.4 2004 **Group Art Unit** 1743 Unknown **Examiner Name** Attorney Docket No: 101.031US1

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| Examiner Initials* | Cite No 1 | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-Issue number(s), publisher, city and/or country where published. | T² | | |

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IN THE SPECIFICATION

Please amend the paragraph on page 6, starting at line 17 as follows:

If the information is complete at 212, the MD is contacted at 220 to verify receipt and accuracy of the patient's Rx. This contact is recorded in CHIPS. The intake and reimbursement specialist then sends a consent form and a cover letter to the patient at 224. The insurance provider is contacted at 226 to verify coverage and benefits. At 228, a determination is made regarding coverage for the drug. If it is not available, it is determined at 230 whether the patient is willing and able to pay. If not, a process 232 is performed for handling patients who are uninsured or underinsured. In one embodiment, the process is referred to as a NORD process.

Please amend the paragraph on page 6, starting at line 25 as follows:

If the patient is willing and able to pay at 230, the patient is informed of the cost of the product and is given payment options at 234. At 236, once payment is received, the intake reimbursement specialist submits a coverage approval form with the enrollment form to the pharmacy team as notification to process the patient's prescription. If coverage is approved at 228, the intake reimbursement specialist also submits the <u>coverage eoveral</u> approval form <u>at 238</u> with the enrollment form to the pharmacy team as notification to process the patient's prescription. Processing of the prescription is described below.

Please amend the paragraph on page 7, starting at line 18 as follows:

If any disciplinary actions are identified, as referenced at block 278, management of the pharmacy is notified and either approves processing of the prescription with continued monitoring of the physician, or processing of the prescription is not performed, and the physician is noted in the database as unapproved at 284. The MD is contacted by a pharmacist at 286, and informed that the patient's Rx cannot be processed. The enrollment form is then mailed back to the physician with a cover letter reiterating that the prescription cannot be processed at 288. The patient is also sent a letter at 290 indicating that the prescription cannot be processed and the patient is instructed to contact their physician.

Please amend the paragraph on page 8, starting at line 12 as follows:

At 254, the pharmacist enters the prescription order in the database, creating an order number. The pharmacist then verifies at 256 the prescription and attaches a verification label to the hard copy prescription. At 258, a pick ticket is generated for the order and the order is forwarded to the pharmacy for fulfillment. The shipment is confirmed in the database at 260, the original Rx is filed with the pharmacy Rx's in numerical order at 262, and the order is shipped by USPS Express Mail 264. Use of the US mail invokes certain criminal penalties for unauthorized diversion. Optionally, other mail services may be used. Potential changes in the law may also bring criminal penalties into play. Following shipment, the patient is called by the central pharmacy to confirm that the prescription was received.

Please amend the paragraph on page 8, starting at line 29 as follows:

A refill request process begins at 302 402 in FIG.s 4A and 4B. There are two different paths for refills. A first path beginning at 404 involves generating a report from the central database of patients with a predetermined number of days or product remaining. A second path beginning at 406 is followed when a patient calls to request an early refill.

Please amend the paragraph on page 9, starting at line 12 as follows:

The second path, beginning at 406 results in a note code being entered into the database on a patient screen indicating an early refill request at 432. At 434, a sensitive drug problem identification and management risk diversion report may be completed, documented and distributed. The pharmacist evaluates the patient's compliance with therapy or possible product diversion, misuse or over-use at 436. In one embodiment, cash payers are also identified. The pharmacist then contacts the prescribing physician to alert them of the situation and confirm if the physician approves of the early refill at 438. If the physician does not approve as indicated at 440, the patient must wait until the next scheduled refill date to receive additional product as indicated at 442, and the process ends at 444.

Please amend the paragraph on page 12, starting at line 5 as follows:

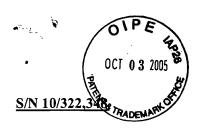
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RESPONSE TO RESTRICTION REQUIREMENT AND AMENDMENT AND RESPONSE UNDER 37 CFR § 1.111

Serial Number: 10/322,348
Filing Date: December 17, 2002
Title: SENSITIVE DRUG DISTRIBUTION SYSTEM AND METHOD

Page 4 Dkt: 101.031US1

FIG. 12 is a copy of one example voucher request 1200 for medication for use with the NORD application request form of FIG. 10. In addition to patient and physician information, prescription information and diagnosis information is also provided.



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

Dayton T. Reardan et al.

December 17, 2002

Examiner:

Unknown

3626

Serial No.: Filed:

10/322,348

Group Art Unit:
Docket:

101.031US1

Title:

SENSITIVE DRUG DISTRIBUTION SYSTEM AND METHOD

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

MS Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

In compliance with the duty imposed by 37 C.F.R. § 1.56, and in accordance with 37 C.F.R. §§ 1.97 *et. seq.*, the enclosed materials are brought to the attention of the Examiner for consideration in connection with the above-identified patent application. Applicants respectfully request that this Supplemental Information Disclosure Statement be entered and the documents listed on the attached Form 1449 be considered by the Examiner and made of record. Pursuant to the provisions of MPEP 609, Applicants request that a copy of the 1449 form, initialed as being considered by the Examiner, be returned to the Applicants with the next official communication.

Pursuant to 37 C.F.R. §1.97(c)(2), Applicants have included the fee of \$180.00 as set forth in 37 C.F.R. §1.17(p). Please charge any additional fees or credit any overpayment to Deposit Account No. 19-0743.

10/04/2005 FMETEKI1 00000018 10322348

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SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Serial No:10/322,348

Filing Date: December 17, 2002

Title: SENSITIVE DRUG DISTRIBUTION SYSTEM AND METHOD

The Examiner is invited to contact the Applicants' Representative at the below-listed telephone number if there are any questions regarding this communication.

Pursuant to 37 C.F.R. 1.98(a)(2), Applicant believes that copies of cited U.S. Patents and Published Applications are no longer required to be provided to the Office. Notification of this change was provided in the United States Patent and Trademark Office OG Noticer dated October 12, 2004. Thus, Applicant has not included copies of any US Patents or Published Applications cited with this submission. Should the Office require copies to be provided, Applicant respectfully requests that notice of such requirement be directed to Applicant's belowsigned representative. Applicant acknowledges the requirement to submit copies of foreign patent documents and non-patent literature in accordance with 37 C.F.R. 1.98(a)(2).

Respectfully submitted,

DAYTON T. REARDAN ET AL.

By their Representatives,

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A. P.O. Box 2938 Minneapolis, MN 55402

(612) 373-6972

Bradley A. Forrest

Reg. No. 30,837

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: MS Amendment, Commissioner for Patents, P.O. Box 1450,

Alexandria, VA 22313-1450, on this 29th day of September, 2005

PATRICIA A. HULTMAN

Name

Substitute for form 1449A/PTO
INFORMATION DISCLOSURE
STATEMENT BY APPLICANT
(Use as many sheets as necessary)

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Sheet 1 of 1

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| Complete if Known | | | | | | |
| | Application Number | 10/322,348 | | | | |
| | Filing Date | December 17, 2002 | | | | |
| | First Named Inventor | Reardan, Dayton | | | | |
| | Group Art Unit | 3626 | | | | |
| | Examiner Name | Lena Najarian | | | | |
| _ | | | | | | |
| | Attorney Docket No: 101.031US1 | | | | | |

| | US PATENT DOCUMENTS | | | | | | | | | | | | |
|-----------------------|------------------------|------------------|---|----------------------------|--|--|--|--|--|--|--|--|--|
| Examiner Initial * | USP Document Number | Publication Date | Name of Patentee or Applicant of cited Document | Filing Date If Appropriate | | | | | | | | | |

| | | FOREIGN PATENT | DOCUMENTS | |
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| Examiner Initials* | Foreign Document No | Publication Date | Name of Patentee or Applicant of cited Document | T² |

| | OTHER DOCUMENTS NON PATENT LITERATURE DOCUMENTS | | | | | | | | | | |
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| Examiner Initials* | Cite No ¹ | include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T² | | | | | | | | |
| | | Preliminary Amendment Pursuant to 37 CFR 1.115 filed with United States Patent and Trademark Office on June 17, 2005 in Application Serial No. 11/104,013 (3 pages). | | | | | | | | | |

EXAMINER

DATE CONSIDERED

REMARKS

This responds to the Office Action mailed on <u>June 29, 2005</u>, and the references cited therewith.

Claims 1, 2, 4, 8 and 9 are amended. Claims 1-10 are now pending in this application.

Affirmation of Election

Restriction to one of the following claims was required:

As provisionally elected by Applicant's representative, Richard Schwartz on March 18, 2005, Applicant elects to prosecute the invention of Group I, claims 1-10.

The claims of the non-elected invention, claims 11-31, are hereby canceled. However, Applicant reserves the right to later file continuations or divisions having claims directed to the non-elected inventions.

Drawing Objection

The drawings were objected to as containing reference numbers not identified in the description. The description has been amended to include such reference numbers. Any text added to the description is fully supported by the drawings.

§112 Rejection of the Claims

Claims 1-10 were rejected under 35 U.S.C. § 112, second paragraph, for indefiniteness. Amendments related solely to addressing antecedence have been made.

§101 Rejection of the Claims

Claims 1-10 were rejected under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter. The claims have been amended to clarify that the database is a computer database. Thus, the recited process clearly involves the technological arts.

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Title: SENSITIVE DRUG DISTRIBUTION SYSTEM AND METHOD

§103 Rejection of the Claims

Claims 1-2, 4-8 and 10 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Moradi et al. (US 2004/0019794 A1) in view of Lilly et al. (US 2004/0176985 A1) and further in view of Califano et al. (US 2003/0033168 A1). Applicant reserves the right to swear behind each of the references at a later date. The rejection is respectfully traversed.

The Examiner has the burden under 35 U.S.C. § 103 to establish a *prima facie* case of obviousness. *In re Fine*, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). To do that the Examiner must show that some objective teaching in the prior art or some knowledge generally available to one of ordinary skill in the art would lead an individual to combine the relevant teaching of the references. *Id*.

The Fine court stated that:

Obviousness is tested by "what the combined teaching of the references would have suggested to those of ordinary skill in the art." *In re Keller*, 642 F.2d 413, 425, 208 USPQ 871, 878 (CCPA 1981)). But it "cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination." *ACS Hosp. Sys.*, 732 F.2d at 1577, 221 USPQ at 933. And "teachings of references can be combined *only* if there is some suggestion or incentive to do so." *Id.* (emphasis in original).

The M.P.E.P. adopts this line of reasoning, stating that

In order for the Examiner to establish a *prima facie* case of obviousness, three base criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *M.P.E.P.* § 2142 (citing *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed.Cir. 1991)).

An invention can be obvious even though the suggestion to combine prior art teachings is not found in a specific reference. In re Oetiker, 24 USPQ2d 1443 (Fed. Cir. 1992). At the same time, however, although it is not necessary that the cited references or prior art specifically suggest making the combination, there must be some teaching somewhere which provides the suggestion or motivation to combine prior art teachings and applies that combination to solve the same or similar problem which the claimed invention addresses (emphasis added).

One of ordinary skill in the art will be presumed to know of any such teaching. (See, e.g., In re Nilssen, 851 F.2d 1401, 1403, 7 USPQ2d 1500, 1502 (Fed. Cir. 1988) and In re Wood, 599 F.2d 1032, 1037, 202 USPQ 171, 174 (CCPA 1979)).

The suggestion to combine the reference in the Office Action is not directed to solving the same or similar problem which the claimed invention addresses. Further, there is no teaching in the prior art of application of the combination to solve the same or similar problems which the claimed invention addresses. The Office Action indicates that the motivation for combining the features of Lilly within Moradi would be "to ensure that prescribers have an accurate view of their patients' use of prescription drugs and to help protect professionals from lawsuits and other potential liabilities (para. 58 of Lilly)." The purpose of the presently claimed invention is to track sensitive drugs and reduce the potential for abuse. These are very different problems, and there is no suggestion to apply the combination to solve the same or similar problem which the claimed invention addresses.

Moradi is directed to "securely providing prescription medication to patients." Abstract. Prescriptions are validated, a pharmacy is selected, and the prescribed medicine is delivered to the patient, as described in the Abstract. As the Office Action indicates, Moradi does not disclose that the drug is a sensitive drug, does not disclose the use of a central database for analysis of potential abuse situations, does not confirm that the patient has read educational material and does not generate periodic reports via a central database to evaluate potential abuse patterns. As is evident from these statements, Moradi lacks quite a few elements of the claimed invention, and the suggestion provided to combine Moradi with Lilly is improper, since the purpose stated is not related to the same or similar problem addressed by the claimed invention. It would seem that a suggestion to combine the references, drawing several different elements from each of the references, should be a very strong suggestion. As indicated above, the suggestion does not even apply the combination to solve the same or similar problem, and thus is a very weak suggestion at best.

Even if one were to combine multiple selected elements from each of Moradi and Lilly, an element of the claimed invention is still lacking. The Office Action indicates that the combination does not disclose "confirming with the patient that educational material has been read prior to shipping the drug." Califano is cited as providing this missing element, and that the Filing Date: December 17, 2002

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motivation for doing so "would have been to ensure that the patient knows about the risks and dangers associated with the drug (para. 43 of Califano)." Califano is directed to obtaining consent for a clinical trial. Abstract. The cited motivation is very different from the purpose of the presently claimed invention, making it very unlikely that one of skill in the art would be motivated to combine the references. As a proper prima facie case of obviousness has not been established, the rejection should be withdrawn.

The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991); MPEP § 2143. The Examiner must avoid hindsight. *In re Bond*, 910 F.2d 831, 834, 15 USPQ2d 1566, 1568 (Fed. Cir. 1990). As indicated above, multiple elements from each of Moradi and Lilly were combined to make the rejection. Because multiple elements from each were used, there is no reasonable expectation of success in making the combination. Further, it points toward the improper use of hindsight, using the claims as a roadmap to make the combination.

A factor cutting against a finding of motivation to combine or modify the prior art is when the prior art teaches away from the claimed combination. A reference may be said to teach away when a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path the applicant took. *In re Gurley*, 27 F.3d 551, 31 USPQ 2d 1130, 1131 (Fed. Cir. 1994); *United States v. Adams*, 383 U.S. 39, 52, 148 USPQ 479, 484 (1966); *In re Sponnoble*, 405 F.2d 578, 587, 160 USPQ 237, 244 (C.C.P.A. 1969); *In re Caldwell*, 319 F.2d 254, 256, 138 USPQ 243, 245 (C.C.P.A. 1963). Lilly describes the cooperative use of a database by multiple different pharmacies, prescribers and patients, to keep track of the prescription history for a patient. It would be an extremely daunting task to get the cooperation of all these parties. The presently claimed invention uses a central database for analysis of potential abuse situations for distribution of a sensitive drug, not to track all prescriptions for a patient. The ambitious path set forth in Lilly would discourage one of skill in the art from considering using it to solve the problems addressed in the presently claimed invention.

Claims 2, 4-8 and 10 depend from claim 1 and distinguish the references for at least the same reasons as claim 1. In addition, claim 2 recites a central pharmacy. The Office Action

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states that Moradi discloses confirming receipt by a telephone call from the central pharmacy. Applicant has reviewed the cited sections of Moradi, and cannot find the concept of a central pharmacy. As the term is used in the present application, a central pharmacy is a pharmacy that exclusively controls the distribution of a sensitive drug. While it may have branches and affiliates, it uses the central database to keep track of all distribution of the sensitive drug. This enables a much improved ability to monitor abuse situations. Patients seeking prescriptions from different doctors will be detected, because the drug is tracked in the central database. Each pharmacy that distributes the sensitive drug also uses the central database. Practically, this is accomplished by obtaining FDA approval that requires the use of the central database. Since any entity that distributes the sensitive drug requires the FDA approval, all must use the same central database. The term central database is used to encompass any real or virtual manifestation of a central database that facilitates evaluation of potential abuse patterns for distribution of the sensitive drug.

Claim 3 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Moradi et al. (US 2004/0019794 A1) in view of Lilly et al. (US 2004/0176985 A1) in view of Califano et al. (US 2003/0033168 A1) as applied to claim 1 above, and further in view of Andreasson et al. (US 2003/0160698 A1). Applicant further reserves the right to swear behind each of the references. This rejection is also respectfully traversed. Claim 3 depends from claim 1 and distinguishes from the references at least in the same manner as claim 1. Andreasson et al. describe monitoring distribution of medical products within a facility as indicated by the title. Claim 3 recites launching an investigation of lost shipments, which implies that the shipments have already left a facility. Monitoring within the facility would not address a lost shipment that has left the facility. As such, there is no showing of a reasonable likelihood of success in making the combination. As a proper prima facie case of obviousness has not been established, the rejection should be withdrawn.

Claim 9 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Moradi et al. (US 2004/0019794 A1) in view of Lilly et al. (US 2004/0176985 A1) in view of Califano et al. (US 2003/0033168 A1) as applied to claim 1 above, and further in view of Mayaud (U.S. Patent

RESPONSE TO RESTRICTION REQUIREMENT AND AMENDMENT AND RESPONSE UNDER 37 CFR § 1.111

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No. 5,845,255). Claim 9 depends from claim 1 and distinguishes from the references at least in the same manner as claim 1. The Office Action cites a motivation to combine the four references as "to reduce the reluctance of physicians to prescribe new drugs by providing them with the latest information about the drugs". This motivation has nothing to do with the problems addressed by the currently claimed invention as identified above. As a proper prima facie case of obviousness has not been established, the rejection should be withdrawn.

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CONCLUSION

Applicant respectfully submits that the claims are in condition for allowance, and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney at (612) 373-6972 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted, DAYTON T. REARDAN ET AL. By their Representatives, SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A. P.O. Box 2938 Minneapolis, MN 55402

(612) 373-6972

Date 9-29-2005

Bradley A. Forrest

Reg. No. 30,837

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PATRICIA A. HULTMAN

Name

Signature

IN THE CLAIMS

Please amend the claims as follows:

(Currently Amended) A method of distributing a sensitive drug, the method comprising: 1. receiving prescription requests from a medical doctor containing information identifying a the patient, the sensitive drug, and various credentials of the doctor;

entering the information into a central computer database for analysis of potential abuse situations;

checking the credentials of the doctor;

confirming with the patient that educational material has been read prior to shipping the sensitive drug;

confirming receipt of the sensitive drug; and

generating periodic reports via the central computer database to evaluate potential abuse patterns.

- (Currently Amended) The method of claim 1 wherein receipt of the sensitive drug is 2. confirmed by telephone call from <u>a the</u> central pharmacy to the patient.
- (Original) The method of claim 1 and further comprising launching an investigation of 3. lost shipments.
- (Currently Amended) The method of claim 1 and further comprising recording the 4. confirmation with the patient that the educational material has been read in the central computer database.
- (Original) The method of claim 1 and further comprising verifying the patient's home 5. address.

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- (Original) The method of claim 1 and further comprising recording a designee identified 6. by the patient to receive the sensitive drug.
- (Original) The method of claim 1 and further comprising establishing a delivery date. 7.
- 8. (Currently Amended) The method of claim 1 wherein prescription refills requested prior to an anticipated date are questioned by a the pharmacist.
- (Currently Amended) The method of claim 1 and further comprising shipping 9. comprehensive printed materials to the doctor physician if the doctor physician is a first time prescriber of the sensitive drug.
- (Original) The method of claim 1 wherein the credentials of the doctor comprise DEA 10. (Drug Enforcement Agency) and state license numbers.
- 11. (Withdrawn) A method of monitoring potential abuse of a sensitive drug by use of an exclusive central database, the method comprising:

generating queries of prescription information from a database containing selected information for all prescriptions of the sensitive drug, wherein the queries comprise prescriptions by physician specialty, prescriptions by patient name, prescriptions by frequency and prescriptions by dose.

- (Withdrawn) The method of claim 11 and further comprising running multiple 12. predetermined reports based on data in the exclusive central database.
- (Withdrawn) The method of claim 12 wherein such reports are selected from groups of 13. reports consisting of sales, regulatory, quality assurance, pharmacy, inventory, reimbursement, patient care, and drug information.

14. (Withdrawn) The method of claim 13 wherein sales reports are selected from the group consisting of prescriptions by zip code, prescriptions by physician by zip code and total dollars by zip code.

- 15. (Withdrawn) The method of claim 13 wherein regulatory reports are selected from the group consisting of number of physician registries, number of denied physician registries and reasons, number of completed patient registries, number of problem identification, number of cycle counts performed.
- 16. (Withdrawn) The method of claim 13 wherein inventory reports are selected from the group consisting of number of returned products and reasons, number of outdated bottles of product, inventory counts of consignment and production inventory, number of units received, and lots received.
- 17. (Withdrawn) The method of claim 13 wherein patient care reports are selected from the group consisting of number of adverse events, number of dosing problems and type, number of noncompliance episodes and reason, number of patients counseled and reason, number of discontinued and reason, number of patients referred to physician and reason, number of active patients, number of new patents, number of restart patients, and number of discontinued patients and reason.
- 18. (Withdrawn) The method of claim 13 wherein selected reports are run weekly, monthly or quarterly.
- 19. (Withdrawn) A method of obtaining FDA (Food and Drug Administration) approval for a sensitive drug, the method comprising:

determining current and anticipated patterns of potential abuse of the sensitive drug; selecting multiple controls for distribution by an exclusive central pharmacy maintaining a central database, the controls selected from the group consisting of communicating prescriptions from a physician to the central pharmacy, identifying the physicians name, license

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and DEA (Drug Enforcement Agency) registration information, verifying the prescription; obtaining patient information, verifying the physician is eligible to prescribe the sensitive drug by consulting the National Technical Information Services to determine whether the physician has an active DEA number and check on whether any actions are pending against the physician, provide comprehensive printed materials to the physician, contacting the patient's insurance company if any, verifying patient registry information, providing comprehensive education information to the patient, verifying the patient has reviewed the educational materials, verifying the home address of the patient, shipping via US postal service or similar shipping service, receiving the name of an at least 18 year old designee to receive the drug, confirming receipt of an initial shipment of the drug to the patient, returning the drug to the pharmacy after two attempts to deliver, launching an investigation when a shipment is lost, shipping to another pharmacy for delivery, requiring manufacture at a single location, releasing inventory in a controlled manner to the central pharmacy, questioning early refills, flagging repeat instances of lost, stolen, destroyed or spilled prescriptions, limiting the prescription to a one month supply, requiring rewriting of the prescription periodically, making the database available to the DEA for checking for abuse patterns in the data, cash payments, inappropriate questions; and

negotiating with the FDA by adding further controls from the group until approval is obtained.

20. (Withdrawn) The method of claim 19 wherein initially selected controls comprise communicating prescriptions from a physician to the central pharmacy, identifying the physicians name, license and DEA registration information, verifying the prescription; obtaining patient information, verifying the physician is eligible to prescribe the sensitive drug by consulting the National Technical Information Services to determine whether the physician has an active DEA number and check on whether any actions are pending against the physician, verifying patient registry information, providing comprehensive education information to the patient, verifying the patient has reviewed the educational materials, verifying the home address of the patient, shipping via US postal service, confirming receipt of an initial shipment of the drug to the patient releasing inventory in a controlled manner to the central pharmacy, flagging

repeat instances of lost, stolen, destroyed or spilled prescriptions, and making the database available to the DEA for checking for abuse patterns in the data.

- (Withdrawn) The method of claim 19 wherein the sensitive drug is a scheduled drug in 21. Schedule II-V.
- (Withdrawn) A method of distributing a sensitive drug, the method comprising: 22. determining current and anticipated patterns of potential abuse of the sensitive drug; selecting multiple controls for distribution of the sensitive drug; and adding additional controls to provide sufficient reassurance to a governmental regulatory body that the sensitive drug distribution can be adequately controlled in order to obtain marketing approval by the governmental regulatory body.
- (Withdrawn) The method of claim 22 wherein the system allows marketing of a drug 23. product pursuant to FDA subpart 4 regulation embodied in Title 21, CFR Part 314.
- (Withdrawn) The method of claim 22 wherein distribution of the sensitive drug is 24. controlled by a central distribution center sufficient to allow the DEA (Drug Enforcement Agency) to approve the central distribution center.
- 25. (Withdrawn) The method of claim 22 wherein the governmental regulatory body comprises a state regulatory agency that approves distribution of the sensitive drug in a state.
- (Withdrawn) A method to control abuse of a sensitive drug by controlling the 26. distribution thereof via an exclusive central pharmacy that maintains a central database that tracks all prescriptions of said sensitive drug and analyzes for potential abuse situations, the method comprising:

determining current and anticipated patterns of potential prescription abuse of said sensitive drug from periodic reports generated by the central database based on prescription Serial Number: 10/322,348

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request data from a medical doctor, wherein said request data contain information identifying the patient, the drug prescribed, and credentials of the doctor; and

selecting multiple controls for distribution by said exclusive central pharmacy, the controls selected from the group consisting of communicating prescriptions from a physician to the central pharmacy; identifying the physicians name, license, and DEA (Drug Enforcement Agency) registration information; verifying the prescription; obtaining patient information; verifying the physician is eligible to prescribe the sensitive drug by consulting the National Technical Information Services to determine whether the physician has an active DEA number and to check on whether any actions are pending against the physician; providing comprehensive printed materials to the physician; contacting the patient's insurance company if any; verifying patient registry information; providing comprehensive education information to the patient; verifying the patient has reviewed the educational materials; verifying the home address of the patient; shipping via US postal service or similar shipping service; receiving the name of an at least 18 year old designee to receive the drug; confirming receipt of an initial shipment of the drug to the patient returning the drug to the pharmacy after two attempts to deliver; launching an investigation when a shipment is lost; shipping to another pharmacy for delivery; requiring manufacture at a single location; releasing inventory in a controlled manner to the central pharmacy; questioning early refills; flagging repeat instances of lost, stolen, destroyed, or spilled prescriptions; limiting the prescription to a one month supply; requiring rewriting of the prescription periodically; and making the database available to the DEA for checking for abuse patterns in the data, for cash payments, and for inappropriate questions.

27. (Withdrawn) The method of claim 26 wherein initially selected controls comprise: communicating prescriptions from a physician to the central pharmacy; identifying the physicians name, license, and DEA registration information; verifying the prescription; obtaining patient information; verifying the physician is eligible to prescribe the sensitive drug by consulting the National Technical Information Services to determine whether the physician has an active DEA number and to check on whether any actions are pending against the physician; verifying patient registry information; providing comprehensive education information to the patient; verifying the patient has reviewed the educational materials; verifying the home address

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of the patient; shipping via US postal service; confirming receipt of an initial shipment of the drug to the patient; releasing inventory in a controlled manner to the central pharmacy; flagging repeat instances of lost, stolen, destroyed, or spilled prescriptions; and making the database available to the DEA for checking for abuse patterns in the data.

- 28. (Withdrawn) The method of claim 26 which further comprises consulting a separate database to verify that the medical doctor is eligible to prescribe the drug.
- 29. (Withdrawn) A method to control abuse of gamma hydroxy butyrate (GHB) by controlling the distribution of GHB via an exclusive central pharmacy that maintains a central database that tracks all prescriptions of GHB and analyzes for potential abuse situations, the method comprising:

determining current and anticipated patterns of potential prescription abuse of GHB from periodic reports generated by the central database based on prescription request data from a medical doctor, wherein said request data contain information identifying the patient, GHB as the drug prescribed, and credentials of the doctor; and

selecting multiple controls for distribution by said exclusive central pharmacy, the controls selected from the group consisting of communicating prescriptions from a physician to the central pharmacy; identifying the physicians name, license, and DEA (Drug Enforcement Agency) registration information; verifying the prescription; obtaining patient information; verifying the physician is eligible to prescribe the sensitive drug by consulting the National Technical Information Services to determine whether the physician has an active DEA number and to check on whether any actions are pending against the physician; providing comprehensive printed materials to the physician; contacting the patient's insurance company if any; verifying patient registry information; providing comprehensive education information to the patient; verifying the patient has reviewed the educational materials; verifying the home address of the patient; shipping via US postal service or similar shipping service; receiving the name of an at least 18 year old designee to receive the drug; confirming receipt of an initial shipment of the drug to the patient returning the drug to the pharmacy after two attempts to deliver; launching an investigation when a shipment is lost; shipping to another pharmacy for delivery; requiring

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manufacture at a single location; releasing inventory in a controlled manner to the central pharmacy; questioning early refills; flagging repeat instances of lost, stolen, destroyed, or spilled prescriptions; limiting the prescription to a one month supply; requiring rewriting of the prescription periodically; and making the database available to the DEA for checking for abuse patterns in the data, for cash payments, and for inappropriate questions.

- 30. (Withdrawn) The method of claim 29 wherein initially selected controls comprise: communicating prescriptions from a physician to the central pharmacy; identifying the physicians name, license, and DEA registration information; verifying the prescription; obtaining patient information; verifying the physician is eligible to prescribe the sensitive drug by consulting the National Technical Information Services to determine whether the physician has an active DEA number and to check on whether any actions are pending against the physician; verifying patient registry information; providing comprehensive education information to the patient; verifying the patient has reviewed the educational materials; verifying the home address of the patient; shipping via US postal service; confirming receipt of an initial shipment of the drug to the patient; releasing inventory in a controlled manner to the central pharmacy; flagging repeat instances of lost, stolen, destroyed, or spilled prescriptions; and making the database available to the DEA for checking for abuse patterns in the data.
- 31. (Withdrawn) The method of claim 29 which further comprises consulting a separate database to verify that the medical doctor is eligible to prescribe the drug.

PATENT

OIPE 48/N 10/322,348

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

pplicant: Dayton T. Reardan et al.

Examiner: Lena Najarian

Serial No.:

10/322,348

Group Art Unit: 3626

Filed:

December 17, 2002

Docket No.: 101.031US1

Title:

SENSITIVE DRUG DISTRIBUTION SYSTEM AND METHOD

RESPONSE TO RESTRICTION REQUIREMENT AND AMENDMENT AND RESPONSE UNDER 37 CFR § 1.111

Mail Stop Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

This responds to the Office Action mailed on <u>June 29, 2005</u>. Please amend the above-identified patent application as follows.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

Dayton T. Reardan et al.

Title:

SENSITIVE DRUG DISTRIBUTION SYSTEM AND METHOD

Docket No.:

101.031US1

Filed:

December 17, 2002

Examiner:

Lena Najarian

OCT 0 3 2005

Serial No.: 10/322,348

Due Date: September 29, 2005

Group Art Unit: 3626

MS Amendment

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

We are transmitting herewith the following attached items (as indicated with an "X"):

X Return postcard.

X Response to Restriction Requirement and Amendment and Response Under 37 CFR 1.111 (19 pgs.).

X Supplemental Information Disclosure Statement (2 pgs.), Form 1449 (1 pg.), and copies of 1 cited document

 \underline{X} Check in the amount of \$180.00 to cover the fee for consideration of Information Disclosure Statement under 97(c).

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SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.

Customer Number 21186

Atty: Bradley A. Forrest

Reg. No. 30,837

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PATRICIA A HULTMAN

Name

Signature

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.

(GENERAL)

OCT 0 3 2005

OCKET NO.: CELG-0471

Application No.: 11/104,013

Preliminary Amendment - First Action Not Yet Received

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Marc Elsayed and Bruce Williams

Confirmation No.: Not yet assigned

Application No.: 11/104,013

Group Art Unit: Not yet assigned

Filing Date: April 12, 2005

Examiner: Not yet assigned

For Met

Methods For Delivering A Drug To A Patient While Preventing The Exposure

Of A Foetus Or Other Contraindicated Individual To The Drug

DATE OF DEPOSIT: June 17, 2005

I HEREBY CERTIFY THAT THIS PAPER IS BEING DEPOSITED WITH THE UNITED STATES POSTAL SERVICE AS FIRST CLASS MAIL, POSTAGE PREPAID, ON THE DATE INDICATED ABOVE AND IS ADDRESSED TO THE COMMISSIONER FOR PATENTS, P.O. BOX 1450, ALEXANDRIA, VA 22313-1450.

TYPED NAME: Angela Verrecchio REGISTRATION NO.: 54,510

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

PRELIMINARY AMENDMENT PURSUANT TO 37 CFR § 1.115

| • | Prelim | linary to examination of the above-captioned patent ap | ppitcation, piease amend |
|-------|-------------|---|----------------------------|
| he ap | plicatio | n as follows: | |
| | | Amendments to the Specification begin on page | of this paper. |
| | \boxtimes | Amendments to the Claims are reflected in the l begins on page 2 of this paper. | isting of the claims which |
| | | Amendments to the Drawings begin on page an attached replacement sheet. | of this paper and includ |
| | \boxtimes | Remarks begin on page 3 of this paper. | |

Page 1 of 3

DOCKET NO.: CELG-0471 Application No.: 11/104,013

Preliminary Amendment - First Action Not Yet Received

Fax: 7328053697

PATENT

REMARKS

Claims 1-10 have been canceled, and claims 11-14 added. Support for these claims can be found throughout the specification as originally filed. No new matter has been added. Consideration and allowance of all pending claims is respectfully requested.

Date: June 17, 2005

Registration No. 54,510

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Page 3 of 3

DOCKET NO.: CELG-0471

PATENT

Application No.: 11/104,013

Preliminary Amendment - First Action Not Yet Received

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claims 1-10 (Canceled)

- 11. (New) A method of distributing a drug, comprising:
- a. receiving data from a prescriber for the drug, said data comprising information identifying a patient, the drug, and the prescriber;
 - b. entering the data into a computer database;
 - c. confirming the ability of the prescriber to prescribe the drug;
 - d. confirming that patient educational materials have been read; and
- e. generating periodic reports regarding distribution of the drug via the computer database.
- 12. (New) The method of claim 11, further comprising the step of recording the confirmation that the educational materials have been read in the database.
- 13. (New) The method of claim 11, further comprising the step of blocking inappropriate refill requests.
- 14. (New) The method of claim 11, further comprising the step of shipping educational materials to the prescriber.

| Application or Docket Number | | | | | | | | | | | | | | |
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| • | Search Notes | | | | | | | | | | | |
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| Application/Control No. | Applicant(s)/Patent under Reexamination |
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Application/Control No.

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UNITED STATES PATENT AND TRADEMARK OFFICE

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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | | | | | |
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DATE MAILED: 12/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filled after falls (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Faiture to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filled, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filled on 03 October 2005. 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 1-10 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) claim(s) is/are allowed. 6) Claim(s) is/are allowed. 6) Claim(s) is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. | | Application No. | Applicant(s) |
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| Lena Najarian Lena Najarian 3626 | | 10/322,348 | REARDAN ET AL. |
| Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.138(a). In no event, however, may a reply be timely filled after \$1.6 (9) MCNTPS from the mailing date of this communication. Failure to reply within the set or extended period for reply will. by statute, cause the application to become ABANDONED (36 U.S.C. § 133). Any reply received by the Office later than the communication and the \$1.6 (9) MCNTPS from the mailing date of this communication. Failure to reply within the set or extended period for reply with by statute, cause the application to become ABANDONED (36 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Separation is FINAL. 2b This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 1-10 is/are pending in the application. 4a) Of the above claim(s) is/are allowed. 6) Claim(s) 1-10 is/are rejected. 7) Claim(s) is/are allowed. 6) Claim(s) is/are allowed. Claim(s) is/are allowed. Claim(s) is/are objected to by the Examiner. 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Application Papers 9) The specification is objected to by the Examiner. Application Papers 9) All b or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b Some c) None of: 1. Certified copies of the priority documents have been received. | Office Action Summary | Examiner | Art Unit |
| ASHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.39(s). In no event, however, may a reply be timely fled after Six (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or estended period for reply with pasture, cause the application to become ABANDONED (38 U.S. C. § 133). Any reply received by the Office later then three months after the mailing date of this communication, even if timely filed, may reduce any cered patent term dejicent term dejicen | | Lena Najarian | 3626 |
| WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.39(a). In no event, however, may a reply be timely filed alter SIX (8) MONTH'S from the mailing date of this communication. Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the folice later than three months after the mailing date of this communication. Any reply received by the folice later than three months after the mailing date of this communication, and reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the folice later than three months after the mailing date of this communication, even if timely fitted, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) □ Responsive to communication(s) filled on 03 October 2005. 2a) □ This action is FINAL. 2b) □ This action is non-final. 3) □ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) □ Claim(s) 1-10 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) □ Claim(s) is/are allowed. 6) □ Claim(s) is/are rejected. 7) □ Claim(s) is/are objected to. 8) □ Claim(s) is/are objected to by the Examiner. Application Papers 9) □ The specification is objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) □ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) □ Acknowledgment is made of | | ears on the cover sheet with the c | correspondence address |
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| 2a) ☐ This action is FINAL. 2b) ☐ This action is non-final. 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) ☐ Claim(s) 1-10 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-10 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) is/are objected to. Application Papers 9) ☐ The specification is objected to by the Examiner. 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☐ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No | us | | |
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| 4a) Of the above claim(s) is/are withdrawn from consideration. 5) □ Claim(s) is/are allowed. 6) □ Claim(s) is/are rejected. 7) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restriction and/or election requirement. Application Papers 9) □ The specification is objected to by the Examiner. 10) □ The drawing(s) filed on is/are: a) □ accepted or b) □ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) □ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) □ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) □ All b) □ Some * c) □ None of: 1. □ Certified copies of the priority documents have been received. 2. □ Certified copies of the priority documents have been received in Application No | position of Claims | | |
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| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. | O) The drawing(s) filed on is/are: a) acc Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct | epted or b) objected to by the drawing(s) be held in abeyance. Se ion is required if the drawing(s) is ob | e 37 CFR 1.85(a). ojected to. See 37 CFR 1.121(d). |
| a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. | rity under 35 U.S.C. § 119 | | |
| application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | a) All b) Some * c) None of: 1. Certified copies of the priority documen 2. Certified copies of the priority documen 3. Copies of the certified copies of the priority documen application from the International Burea | s have been received. s have been received in Applicat rity documents have been receiv u (PCT Rule 17.2(a)). | ion No ed in this National Stage |
| Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date 5) Notice of Informal Patent Application (PTO-152) | Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail D | Date |

U.S. Patent and Trademark Office PTOL-326 (Rev. 7-05)

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Office Action Summary

Part of Paper No./Mail Date 20051209

Art Unit: 3626

1.

DETAILED ACTION

Notice to Applicant

1. This communication is in response to the amendment filed 10/3/05. Claims 1-10 are pending. Claims 1, 2, 4, 8, and 9 have been amended.

Drawings

2. The objection to the drawings is hereby withdrawn due to the amendment filed 10/3/05.

Claim Rejections - 35 USC § 112

3. The rejection of claims 1-10 under 35 U.S.C. 112, second paragraph, is hereby withdrawn due to the amendment filed 10/3/05.

Claim Rejections - 35 USC § 101

4. The rejection of claims 1-10 under 35 U.S.C. 101 is hereby withdrawn due to the amendment filed 10/3/05.

Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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6. Claims 1-2, 4-8, and 10 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Moradi et al. (US 2004/0019794 A1) in view of Lilly et al. (US

2004/0176985 A1) and further in view of Califano et al. (US 2003/0033168 A1).

(A) The amendments to claims 1, 2, 4, and 8 were apparently made to overcome

112, 2nd paragraph and/or 101 issues set forth in the prior Office Action.

However, these changes do not affect the scope and breadth of the claims as

originally presented and/or in the manner in which the claims were interpreted by

the Examiner when applying prior art within the previous Office Action. As such,

these claims are rejected under the same rationale given in the prior Office

Action, and incorporated herein.

(B) Claims 5-7 and 10 have not been amended and are rejected for the same

reasons given in the previous Office Action, and incorporated herein.

7. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over

Moradi et al. (US 2004/0019794 A1) in view of Lilly et al. (US 2004/0176985 A1)

in view of Califano et al. (US 2003/0033168 A1) as applied to claim 1 above, and

further in view of Andreasson et al. (US 2003/0160698 A1).

(A) Claim 3 has not been amended and is rejected for the same reasons given in

the previous Office Action, and incorporated herein.

8. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over

Moradi et al. (US 2004/0019794 A1) in view of Lilly et al. (US 2004/0176985 A1)

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in view of Califano et al. (US 2003/0033168 A1) as applied to claim 1 above, and

further in view of Mayaud (5,845,255).

(A) The amendment to claim 9 was apparently made to overcome 112, 2nd

paragraph issues set forth in the prior Office Action. However, these changes do

not affect the scope and breadth of the claim as originally presented and/or in the

manner in which the claim was interpreted by the Examiner when applying prior

art within the previous Office Action. As such, this claim is rejected under the

same rationale given in the prior Office Action, and incorporated herein.

Response to Arguments

9. Applicant's arguments filed 10/3/05 have been fully considered but they

are not persuasive. Applicant's arguments will be addressed hereinbelow in the

order in which they appear in the response filed 10/3/05.

(1) Applicant argues at page 15 that the suggestion to combine the reference in

the Office Action is not directed to solving the same or similar problem which the

claimed invention addresses.

(2) Applicant argues at page 16 that Califano is directed to obtaining consent for

a clinical trial and that the cited motivation is very different from the purpose of

the presently claimed invention, making it very unlikely that one of skill in the art

would be motivated to combine the references.

(3) Applicant argues at page 16 that multiple elements from each of Moradi and

Lilly were combined to make the rejection and that there is no reasonable

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expectation of success in making the combination. Further, it points toward the improper use of hindsight, using the claims as a roadmap to make the combination.

- (4) Applicant argues at page 16 that the prior art teaches away from the claimed combination. Lilly describes the cooperative use of a database by multiple different pharmacies, prescribers and patients, to keep track of the prescription history for a patient. It would be an extremely daunting task to get the cooperation of all these parties. The ambitious path set forth in Lilly would discourage one of skill in the art from considering using it to solve the problems addressed in the presently claimed invention.
- (5) Applicant argues at page 17 that Applicant has reviewed the cited sections of Moradi and cannot find the concept of a central pharmacy. As the term is used in the present application, a central pharmacy is a pharmacy that exclusively controls the distribution of a sensitive drug.
- (6) Applicant argues at page 17 that Andreasson et al. describe monitoring distribution of medical products within a facility as indicated by the title. Claim 3 recites launching an investigation of lost shipments, which implies that the shipments have already left a facility. Monitoring within the facility would not address a lost shipment that has left the facility. As such, there is no showing of a reasonable likelihood of success in making the combination.
- (7) Applicant argues at page 18 that the Office Action cites a motivation to combine the four references "to reduce the reluctance of physicians to prescribe new drugs by providing them with the latest information about the drugs." This

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motivation has nothing to do with the problems addressed by the currently claimed invention as identified above.

(A) As per the first argument, in response to applicant's argument that the suggestion to combine Moradi with Lilly is improper since the purpose stated is not related to the same or similar problem addressed by the claimed invention, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

In addition, the Examiner respectfully submits that Applicant has failed to fully consider the Lilly reference. At para. 12, Lilly discloses reducing misused and abused prescriptions and the need for better tracking and management of prescriptions. As such, it is readily apparent that Lilly and Applicant's invention solve the same or similar problem.

(B) As per the second argument, in response to applicant's argument that Califano is directed to obtaining consent for a clinical trial, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references.

Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

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In response to applicant's argument that the cited motivation is very different from the purpose of the presently claimed invention, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

- (C) As per the third argument, in response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper.

 See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).
- (D) As per the fourth argument, whether or not the Lilly reference discloses tracking all prescriptions for a patient and not just sensitive drugs is immaterial to the issue at hand, especially since Lilly is directed to a tracking system for controlled substances. In addition, it is irrelevant whether the applied references contain elements in addition to or beyond those claimed by Applicant, and not required by Applicant, insofar as Applicant uses the word "comprising" at end of each preamble of the pending claims. The Examiner understands this claim language to mean "having at least". If Applicant desires to claim an invention that is exclusively limited to only those elements specifically recited in the claims,

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the Examiner suggests that Applicant use the term "consisting of" rather than "comprising".

- (E) As per the fifth argument, in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "a central pharmacy is a pharmacy that exclusively controls the distribution of a sensitive drug") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).
- (F) As per the sixth argument, the Examiner respectfully submits that para. 79 of Andreasson discloses tracking the delivery of medical products and immediately notifying healthcare workers and/or administrators of any missing medical products so that they make take appropriate action to recover and/or investigate the missing medical products. Para. 43 discloses comparing the information of the medical products shipped to the healthcare facility with the information received from the pharmacy terminal to verify that all of the medical products shipped to the healthcare facility were received by the pharmacy. As such, it is readily apparent that Andreasson teaches launching an investigation of lost shipments.
- (G) As per the seventh argument, in response to applicant's argument that the motivation to combine the four references has nothing to do with the problems addressed by the currently claimed invention, the fact that applicant has recognized another advantage which would flow naturally from following the

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suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lena Najarian whose telephone number is 571-272-7072. The examiner can normally be reached on Monday - Friday, 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Thomas can be reached on 571-272-6776. The

Application/Control Number: 10/322,348

Art Unit: 3626

fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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| Substitute for form 1449A/PTO | LOCUET | Complete if Known | Complete if Known | | |
| INFORMATION DISC STATEMENT BY APP | | Application Number | 10/322,348 | | |
| (Use as many sheets as necessary | TPE | Filing Date | December 17, 2002 | | |
| | 100° E | First Named Inventor | Reardan, Dayton | | |
|) / oi | CT 0 3 2005 🛣 | Group Art Unit | 3626 | | |
| 1 | (نځ | Examiner Name | Lena Najarian | | |
| Sheet 1 of 1 | TRADEMARK OF | Attorney Docket No: 1 | 101.031US1 | | |

| | | US PA | TENT DOCUMENTS | |
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| Examiner Initial * | USP Document Number | Publication Date | Name of Patentee or Applicant of cited Document | Filing Date If Appropriate |

| | FOREIGN PATENT DOCUMENTS | | | | |
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| Examiner Initials* | Foreign Document No | Publication Date | Name of Patentee or Applicant of cited Document | Τ² | |

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| Examiner Initials* | Cite No 1 | include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T² |
| Ln | | Preliminary Amendment Pursuant to 37 CFR 1.115 filed with United States Patent and Trademark Office on June 17, 2005 in Application Serial No. 11/104,013 (3 pages). | |

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|----------|------------------|----------|-----------------|---------|
| EXAMINER | Lena | Nationan | DATE CONSIDERED | 12-4-05 |
| | <i>/ /u ce c</i> | | | |

REQUEST FOR CONTINUED EXAMINATION (RCE) TRANSMITTAL

Subsection (b) of 35 U.S.C. § 132, effective on May 29, 2000, provides for continued examination of an utility or plant application filed on or after June 8, 1995.

See The American Inventors Protection Act of 1999 (AIPA).

| Application Number | 10/322,348 |
|---------------------------|-------------------|
| Filing Date | December 17, 2002 |
| First Named Inventor | Dayton T. Reardan |
| Group Art Unit | 3626 |
| Examiner Name | Lena Najarian |
| Attorney Docket Number | 101.031US1 |
| Customer No. | 21186 |

This is a Request for Continued Examination (RCE) under 37 CFR § 1.114 of the above-identified application entitled <u>SENSITIVE DRUG DISTRIBUTION SYSTEM AND METHOD</u>. Submission required under 37 C.F.R. § 1.114

- 1. _ Consider the amendment(s)/reply under 37 C.F.R. § 1.116 previously filed on .
- 2. _ Consider the arguments in the Appeal Brief or Reply Brief previously filed on .
- 3. X Amendment Under 37 CFR § 1.116 (11 pages) is enclosed.
- 4. _ New power of attorney (pages) is enclosed.
- 5. X Information Disclosure Statement is enclosed (2 pages), with:
 - a. Form 1449 (1 pages)
 - b. Copies of IDS Citations (1)
- 6. X Please charge Deposit Account 19-0743 in the amount of \$395.00 to pay the RCE filing fee required under C.F.R. § 1.17(e).
- 7. X The Commissioner is hereby authorized to credit overpayments or charge any fees set forth in 37 CFR §§ 1.16 through 1.18 to Deposit Account No. 19-0743.
- 8. __ Petition for Extension of Time in the prior application (1 page) is enclosed along with authorization to charge Deposit Account 19-0743 in the amount of to pay the extension fee.
- 9. X Others: Communication Concerning Related Applications (2 pgs.).

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.

Atty: Bradley A. Forrest

- myser-llast

Reg. No. 30,837

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being filed using the USPTO's electronic filing system EFS-Web, and is addressed to: Mail Stop RCE, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 24 day of March, 2006.

Name

EXPEDITED PROCEDURE - EXAMINING GROUP 3626

<u>S/N 10/322,348</u> <u>PATENT</u>

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

Dayton T. Reardan et al.

Examiner: Lena Najarian

Serial No.:

10/322,348

Group Art Unit: 3626

Filed:

December 17, 2002

Docket No.: 101.031US1

Title:

SENSITIVE DRUG DISTRIBUTION SYSTEM AND METHOD

AMENDMENT & RESPONSE UNDER 37 C.F.R. 1.116

Mail Stop RCE Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

In response to the Final Office Action mailed <u>December 29, 2005</u>, please amend the application as follows:

AMENDMENT AND RESPONSE UNDER 37 CFR § 1.116 – EXPEDITED PROCEDURE

Page 5 Dkt: 101.031US1

Serial Number: 10/322,348

Filing Date: December 17, 2002

SENSITIVE DRUG DISTRIBUTION SYSTEM AND METHOD Title:

REMARKS

This responds to the Office Action mailed on December 29, 2005.

New claims 32 - 37 have been added. Claims 1-10 and 32-37 are now pending in this application.

New claims 32 - 37 distinguish the references for reasons similar to those provided below regarding claim 1. In addition, claim 32 recites the use of an exclusive central pharmacy and an exclusive central database to track distribution and potential diversion of the sensitive drug.

In paragraph E of the Response to Arguments section of the Final Office Action, it is stated that the then pending claims did not recite that a central pharmacy is a pharmacy that exclusively controls distribution of a sensitive drug. New claims 32 - 37 have been written based on claim 1 to include language that expressly addresses exclusivity of distribution. Such claims also address exclusivity of the central database. None of the references cited are believed to address such exclusivities. The original claims are also believed to describe aspects of centralization, as described in the previous response. The submission of new claims 32-37 is not an admission otherwise.

§103 Rejection of the Claims

Claims 1-2, 4-8 and 10 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Moradi et al. (US 2004/0019794 A1) in view of Lilly et al. (US 2004/0176985 A1) and further in view of Califano et al. (US 2003/0033168 A1).

The suggestion to combine the reference in the Office Action is not directed to solving the same or similar problem which the claimed invention addresses. Further, there is no teaching in the prior art of application of the combination to solve the same or similar problems which the claimed invention addresses. The Office Action indicates that the motivation for combining the features of Lilly within Moradi would be "to ensure that prescribers have an accurate view of their patients' use of prescription drugs and to help protect professionals from lawsuits and other

Filing Date: December 17, 2002

SENSITIVE DRUG DISTRIBUTION SYSTEM AND METHOD

potential liabilities (para. 58 of Lilly)." As stated in the response to arguments section A of the Final Office Action, Lilly also describes reducing misused and abused prescriptions and the need for better tracking and management of prescription in Paragraph 12. However, the purpose for such reductions is related to abuse by the patient, and not abuse of a sensitive drug as claimed. The purpose of the presently claimed invention is to track sensitive drugs and reduce the potential for abuse, such as diversion of the sensitive drug.

Moradi is directed to "securely providing prescription medication to patients." Abstract. In other words, it is directed to making sure that the patient receives the medication, not preventing abuse, such as further distribution by the patient. Prescriptions are validated, a pharmacy is selected, and the prescribed medicine is delivered to the patient, as described in the Abstract. As the Office Action indicates, Moradi does not disclose that the drug is a sensitive drug, does not disclose the use of a central database for analysis of potential abuse situations, does not confirm that the patient has read educational material and does not generate periodic reports via a central database to evaluate potential abuse patterns. As is evident from these statements, Moradi lacks quite a few elements of the claimed invention, and the suggestion provided to combine Moradi with Lilly is improper, since the purpose stated is not related to the same or similar problem addressed by the claimed invention. It would seem that a suggestion to combine the references, drawing several different elements from each of the references, should be a very strong suggestion.

Even if one were to combine multiple selected elements from each of Moradi and Lilly, an element of the claimed invention is still lacking. The Office Action indicates that the combination does not disclose "confirming with the patient that educational material has been read prior to shipping the drug." Califano is cited as providing this missing element, and that the motivation for doing so "would have been to ensure that the patient knows about the risks and dangers associated with the drug (para. 43 of Califano)." Califano is directed to obtaining consent for a clinical trial. Abstract. It is not directed toward preventing abuse. The cited motivation is very different from the purpose of the presently claimed invention of distributing a sensitive drug in a manner that helps prevent abuse, making it very unlikely that one of skill in the art would be motivated to combine the references. As a proper prima facie case of obviousness has not been established, the rejection should be withdrawn.

Title:

Filing Date: December 17, 2002

SENSITIVE DRUG DISTRIBUTION SYSTEM AND METHOD

The Response to Arguments section B of the Final Office Action, the Examiner states that the test for obviousness is what the combined teachings of the references would have suggested to those of ordinary skill in the art. This, however, does not address the fact that there is no proper suggestion to combine the references in the first place, since they are not directed towards the same or similar problems. Thus, one does not even arrive at the question of what the combination suggests if the combination is not proper.

Further in section B of the response to arguments in the Final Office Action, the Examiner states: "In response to applicant's argument that the cited motivation is very different from the purpose of the presently claimed invention, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious." No such recognition is being stated by Applicant. Applicant is merely trying to say that the art addresses a different problem than that of the invention as claimed, and thus, the references are not properly combinable. The language quoted from the Final Office Action appears to state that Applicant simply recognized new advantages flowing from the combination of the references. This statement is respectfully traversed, as Applicant is merely stating that the combination is improper, since the references are directed to problems that are not similar to those addressed by the claimed invention.

The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991); MPEP § 2143. The Examiner must avoid hindsight. *In re Bond*, 910 F.2d 831, 834, 15 USPQ2d 1566, 1568 (Fed. Cir. 1990). As indicated above, multiple elements from each of Moradi and Lilly were combined to make the rejection. Because multiple elements from each were used, there is no reasonable expectation of success in making the combination. Further, it points toward the improper use of hindsight, using the claims as a roadmap to make the combination.

The Final Office Action in section C, purports to address the above argument by reciting that reconstruction based on hindsight is proper so long as it takes into account only knowledge that was within the level of ordinary skill and does not include knowledge gleaned only from the applicant's disclosure. Section C does not state how only knowledge within the level of ordinary

Filing Date: December 17, 2002

SENSITIVE DRUG DISTRIBUTION SYSTEM AND METHOD

skill was used, and further does not address the argument that a reasonable expectation of success in making the combination has not been shown.

A factor cutting against a finding of motivation to combine or modify the prior art is when the prior art teaches away from the claimed combination. A reference may be said to teach away when a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path the applicant took. In re Gurley, 27 F.3d 551, 31 USPO 2d 1130, 1131 (Fed. Cir. 1994); United States v. Adams, 383 U.S. 39, 52, 148 USPQ 479, 484 (1966); In re Sponnoble, 405 F.2d 578, 587, 160 USPO 237, 244 (C.C.P.A. 1969); In re Caldwell, 319 F.2d 254, 256, 138 USPQ 243, 245 (C.C.P.A. 1963). Lilly describes the cooperative use of a database by multiple different pharmacies, prescribers and patients, to keep track of the prescription history for a patient. It would be an extremely daunting task to get the cooperation of all these parties. The presently claimed invention uses a central database for analysis of potential abuse situations for distribution of a sensitive drug, not to track all prescriptions for a patient. The ambitious path set forth in Lilly would discourage one of skill in the art from considering using it to solve the problems addressed in the presently claimed invention.

Claims 2, 4-8 and 10 depend from claim 1 and distinguish the references for at least the same reasons as claim 1. In addition, claim 2 recites a central pharmacy. The Office Action states that Moradi discloses confirming receipt by a telephone call from the central pharmacy. Applicant has reviewed the cited sections of Moradi, and cannot find the concept of a central pharmacy. As the term is used in the present application, a central pharmacy is a pharmacy that exclusively controls the distribution of a sensitive drug. While it may have branches and affiliates, it uses the central database to keep track of all distribution of the sensitive drug. This enables a much improved ability to monitor abuse situations. Patients seeking prescriptions from different doctors will be detected, because the drug is tracked in the central database. Each pharmacy that distributes the sensitive drug also uses the central database. Practically, this is accomplished by obtaining FDA approval that requires the use of the central database. Since any entity that distributes the sensitive drug requires the FDA approval, all must use the same central database. The term central database is used to encompass any real or virtual manifestation of a

Filing Date: December 17, 2002

SENSITIVE DRUG DISTRIBUTION SYSTEM AND METHOD

central database that facilitates evaluation of potential abuse patterns for distribution of the sensitive drug.

Claim 3 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Moradi et al. (US 2004/0019794 A1) in view of Lilly et al. (US 2004/0176985 A1) in view of Califano et al. (US 2003/0033168 A1) as applied to claim 1 above, and further in view of Andreasson et al. (US 2003/0160698 A1). Applicant further reserves the right to swear behind each of the references. This rejection is also respectfully traversed. Claim 3 depends from claim 1 and distinguishes from the references at least in the same manner as claim 1. Andreasson et al. describe monitoring distribution of medical products within a facility as indicated by the title. Claim 3 recites launching an investigation of lost shipments, which implies that the shipments have already left a facility. Monitoring within the facility would not address a lost shipment that has left the facility. As such, there is no showing of a reasonable likelihood of success in making the combination. As a proper prima facie case of obviousness has not been established, the rejection should be withdrawn.

In paragraph F of the Response to Arguments section of the Final Office Action, the Examiner indicates that para. 79 of Andreasson discloses tracking the delivery of medical products and immediately notifying healthcare workers of any missing medical product so they can investigate. Note that the start of para. 79 recites "..a closed-loop system for tracking and monitoring medical products within a healthcare facility,..." While Andreasson may describe launching an investigation, it lacks the concept of shipping drugs to a patient, and investigating lost shipments to the patient as claimed.

Claim 9 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Moradi et al. (US 2004/0019794 A1) in view of Lilly et al. (US 2004/0176985 A1) in view of Califano et al. (US 2003/0033168 A1) as applied to claim 1 above, and further in view of Mayaud (U.S. Patent No. 5,845,255). Claim 9 depends from claim 1 and distinguishes from the references at least in the same manner as claim 1. The Office Action cites a motivation to combine the four references as "to reduce the reluctance of physicians to prescribe new drugs by providing them with the latest information about the drugs". This motivation has nothing to do with the problems

AMENDMENT AND RESPONSE UNDER 37 CFR § 1.116 - EXPEDITED PROCEDURE

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SENSITIVE DRUG DISTRIBUTION SYSTEM AND METHOD

addressed by the currently claimed invention as identified above. As a proper prima facie case of obviousness has not been established, the rejection should be withdrawn.

In paragraph G of the Response to Arguments section of the Final Office Action, the Examiner again recites something about recognizing another advantage which would flow naturally from following the suggestion of the prior art, which as stated above, Applicant has not done. It is believed that such an argument incorrectly presupposes that the references are properly combinable, which Applicant believes they are not.

AMENDMENT AND RESPONSE UNDER 37 CFR § 1.116 – EXPEDITED PROCEDURE

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SENSITIVE DRUG DISTRIBUTION SYSTEM AND METHOD

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CONCLUSION

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney (612) 373-6972 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

DAYTON T. REARDAN ET AL.

By their Representatives,

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.

md Jula- [leafelf

P.O. Box 2938

Minneapolis, MN 55402

(612) 373-6972

Date 3-29-2006

By James

Reg. No. 30,837

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being filed using the USPTO's electronic filing system EFS-Web, and is addressed to: Mail Stop RCE, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this day of March, 2006.

JOHN D. GUSTAV-WRATHALL

Name

Kianatura

SENSITIVE DRUG DISTRIBUTION SYSTEM AND METHOD

IN THE CLAIMS

Please amend the claims as follows.

1. (Previously Presented) A method of distributing a sensitive drug, the method comprising:

receiving prescription requests from a medical doctor containing information identifying a patient, the sensitive drug, and various credentials of the doctor;

entering the information into a central computer database for analysis of potential abuse situations;

checking the credentials of the doctor;

confirming with the patient that educational material has been read prior to shipping the sensitive drug;

confirming receipt of the sensitive drug; and

generating periodic reports via the central computer database to evaluate potential abuse patterns.

- 2. (Previously Presented) The method of claim 1 wherein receipt of the sensitive drug is confirmed by telephone call from a central pharmacy to the patient.
- 3. (Original) The method of claim 1 and further comprising launching an investigation of lost shipments.
- 4. (Previously Presented) The method of claim 1 and further comprising recording the confirmation with the patient that the educational material has been read in the central computer database.
- (Original) The method of claim 1 and further comprising verifying the patient's home 5. address.

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SENSITIVE DRUG DISTRIBUTION SYSTEM AND METHOD

- 6. (Original) The method of claim 1 and further comprising recording a designee identified by the patient to receive the sensitive drug.
- 7. (Original) The method of claim 1 and further comprising establishing a delivery date.
- 8. (Previously Presented) The method of claim 1 wherein prescription refills requested prior to an anticipated date are questioned by a pharmacist.
- 9. (Previously Presented) The method of claim 1 and further comprising shipping comprehensive printed materials to the doctor if the doctor is a first time prescriber of the sensitive drug.
- 10. (Original) The method of claim 1 wherein the credentials of the doctor comprise DEA (Drug Enforcement Agency) and state license numbers.
- 11. 31. (Cancelled)
- 32. (New) A method of distributing a sensitive drug under exclusive control of an exclusive central pharmacy, the method comprising:

receiving prescription requests from a medical doctor containing information identifying a patient, the sensitive drug, and various credentials of the doctor;

entering the information into an exclusive computer database associated with the exclusive central pharmacy for analysis of potential abuse situations;

checking the credentials of the doctor;

confirming with the patient that educational material has been read prior to shipping the sensitive drug;

confirming receipt by the patient of the sensitive drug; and

generating periodic reports via the exclusive computer database to evaluate potential diversion patterns.

SENSITIVE DRUG DISTRIBUTION SYSTEM AND METHOD

(New) A method of distributing a sensitive drug under exclusive control of an exclusive 33. central pharmacy, the method comprising:

receiving prescription requests from a medical doctor containing information identifying a patient, the sensitive drug, and various credentials of the doctor;

entering the information into an exclusive computer database associated with the exclusive central pharmacy for analysis of potential abuse situations;

checking the credentials of the doctor;

confirming receipt by the patient of the sensitive drug; and

generating periodic reports via the exclusive computer database to evaluate potential diversion patterns.

- 34. (New) The method of claim 33 wherein the exclusive central pharmacy controls the exclusive central database.
- 35. (New) The method of claim 33 and further comprising selectively blocking shipment of the sensitive drug to a patient.
- 36. (New) The method of claim 33 wherein an abuse pattern is associated with a patient, and shipment is blocked upon such association.
- (New) The method of claim 33 wherein the sensitive drug comprises gamma hydroxy 37. butyrate (GHB).

| Electronic Acknowledgement Receipt | | | |
|------------------------------------|---|--|--|
| EFS ID: | 1014264 | | |
| Application Number: | 10322348 | | |
| Confirmation Number: | 5446 | | |
| Title of Invention: | Sensitive drug distribution system and method | | |
| First Named Inventor: | Dayton T. Reardan | | |
| Customer Number: | 21186 | | |
| Filer: | Gregg Alan Peacock/John Gustav-Wrathall | | |
| Filer Authorized By: | Gregg Alan Peacock | | |
| Attorney Docket Number: | 101.031US1 | | |
| Receipt Date: | 29-MAR-2006 | | |
| Filing Date: | 17-DEC-2002 | | |
| Time Stamp: | 18:36:53 | | |
| Application Type: | Utility | | |
| International Application Number: | | | |

Payment information:

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| Payment was successfully received in RAM | \$395.0 |
| RAM confirmation Number | 165 |
| Deposit Account | 190743 |

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows: Charge any Additional Fees required under 37 C.F.R. Section 1.16 and 1.17

File Listing:

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| Warnings: | | | | | |
| Information: | | | | | |
| 3 | Fee Worksheet (PTO-875) | fee-info.pdf | 8169 | no | 2 |
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New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

<u>S/N 10/322,348</u> <u>PATENT</u>

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Dayton T. Reardan et al.

Examiner:

Lena Najarian

Serial No.:

10/322,348

December 17, 2002

Group Art Unit: 3626 Docket: 101.0

101.031US1

Filed: Title:

SENSITIVE DRUG DISTRIBUTION SYSTEM AND METHOD

INFORMATION DISCLOSURE STATEMENT

MS RCE Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

In compliance with the duty imposed by 37 C.F.R. § 1.56, and in accordance with 37 C.F.R. §§ 1.97 et. seq., the enclosed materials are brought to the attention of the Examiner for consideration in connection with the above-identified patent application. Applicants respectfully request that this Information Disclosure Statement be entered and the documents listed on the attached Form 1449 be considered by the Examiner and made of record. Pursuant to the provisions of MPEP 609, Applicants request that a copy of the 1449 form, initialed as being considered by the Examiner, be returned to the Applicants with the next official communication.

Pursuant to 37 C.F.R. §1.97(b), it is believed that no fee or statement is required with the Information Disclosure Statement. However, if an Office Action on the merits has been mailed, the Commissioner is hereby authorized to charge the required fees to Deposit Account No. 19-0743 in order to have this Information Disclosure Statement considered.

Serial No :10/322,348

Filing Date: December 17, 2002

Title: SENSITIVE DRUG DISTRIBUTION SYSTEM AND METHOD

Pursuant to 37 C.F.R. 1.98(a)(2), Applicant believes that copies of cited U.S. Patents and Published Applications are no longer required to be provided to the Office. Notification of this change was provided in the United States Patent and Trademark Office OG Notices dated October 12, 2004. Thus, Applicant has not included copies of any US Patents or Published Applications cited with this submission. Should the Office require copies to be provided, Applicant respectfully requests that notice of such requirement be directed to Applicant's below-signed representative. Applicant acknowledges the requirement to submit copies of foreign patent documents and non-patent literature in accordance with 37 C.F.R. 1.98(a)(2).

The Examiner is invited to contact the Applicants' Representative at the below-listed telephone number if there are any questions regarding this communication.

Respectfully submitted,

DAYTON T. REARDAN ET AL.

By their Representatives,

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A. P.O. Box 2938
Minneapolis, MN 55402
(612) 373-6972

l. Jupa-Walls

Date 3-29-2006

Bradley A. Forrest Reg. No. 30,837

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being filed using the USPTO's electronic filing system EFS-Web, and is addressed to: Mail Stop RCE, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 2.9 day of March, 2006.

Jahn V. Ensper-Wardell

Signature

| Substitute for form 1449A/PTO | Under the Paperwork Reduction Act of 1995, no persons are | required to respond to a collection of information unless it contains a valid OMB control number | |
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| | Complete if Known | | |
| INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary) | Application Number | 10/322,348 | |
| | Filing Date | December 17, 2002 | |
| | First Named Inventor | Reardan, Dayton | |
| | Group Art Unit | 3626 | |
| | Examiner Name | Najarian, Lena | |
| | | | |
| Sheet 1 of 1 | Attorney Docket No: 101.031US1 | | |

| US PATENT DOCUMENTS | | | | |
|-----------------------|---------------------|---------------------|---|-------------------------------|
| Examiner initial * | USP Document Number | Publication Date | Name of Patentee or Applicant of cited Document | Filing Date If Appropriate |

| FOREIGN PATENT DOCUMENTS | | | | | | | |
|--------------------------|---------------------|------------------|--|----|--|--|--|
| Examiner Initials* | Foreign Document No | Publication Date | Name of Patentee or Applicant of cited Document | T² | | | |

| OTHER DOCUMENTS NON PATENT LITERATURE DOCUMENTS | | | | | | |
|---|--------------|---|----|--|--|--|
| Examiner Initials* | Cite No 1 | include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T² | | | |
| | | "System for Thalidomide Education and Prescribing Safety (S.T.E.P.S.) Starter Kit", Celgene Corporation, (2001),103 pgs. | | | | |

EXAMINER DATE CONSIDERED

| Electronic Patent Application Fee Transmittal | | | | | | | |
|---|----------------------|---|----------|--------|-------------------------|--|--|
| Application Number: | 10322348 | | | | | | |
| Filing Date: | ng Date: 17-Dec-2002 | | | | | | |
| Title of Invention: | | Sensitive drug distribution system and method | | | | | |
| First Named Inventor: | Dayton T. Reardan | | | | | | |
| Filer: | | Gregg Alan Peacock/John Gustav-Wrathall | | | | | |
| Attorney Docket Number: | 101.031US1 | | | | | | |
| Filed as Small Entity | | | | | | | |
| Utility Filing Fees | | | | | | | |
| Description | | Fee Code | Quantity | Amount | Sub-Total in USD(\$) | | |
| Basic Filing: | | | | | | | |
| Pages: | | | | | | | |
| Claims: | | | | | | | |
| Miscellaneous-Filing: | | | | | | | |
| Petition: | | | | | | | |
| Patent-Appeals-and-Interference: | | | | | | | |
| Post-Allowance-and-Post-Issuance: | | | | | | | |
| Extension-of-Time: | | | | | | | |

| Description | Fee Code | Quantity | Amount | Sub-Total in USD(\$) | |
|-----------------------------------|-------------------|----------|--------|-------------------------|--|
| Miscellaneous: | | | | | |
| Request for continued examination | 2801 | 1 | 395 | 395 | |
| | Total in USD (\$) | | | 395 | |

<u>S/N 10/322,348</u> <u>PATENT</u>

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Dayton T. Reardan et al.

Examiner: Lena Najarian

Serial No.:

10/322,348

Group Art Unit: 3626

Filed:

December 17, 2002

Docket: 101.031US1

Title:

SENSITIVE DRUG DISTRIBUTION SYSTEM AND METHOD

COMMUNICATION CONCERNING RELATED APPLICATION(S)

MS RCE

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Applicants would like to bring to the Examiner's attention the following related application(s) in the above-identified patent application:

| <u>Serial/Patent No.</u> 10/979665 | Filing Date/Issue Date November 2, 2004 | Attorney Docket 101.031US2 | <u>Title</u> SENSITIVE DRUG DISTRIBUTION SYSTEM AND METHOD |
|---------------------------------------|--|-------------------------------|--|
| 11/097651 | April 1, 2005 | 101.031US3 | SENSITIVE DRUG DISTRIBUTION SYSTEM AND METHOD |
| 11/097985 | April 1, 2005 | 101.031US4 | SENSITIVE DRUG DISTRIBUTION SYSTEM AND METHOD |

Continuations and divisionals may be later filed on the cases listed above, or cited to the Examiner in any previous Communication Concerning Related Applications. Applicants request that the Examiner review all continuations and divisionals of the above-listed or previously-cited patent applications before allowing the claims of the present patent application.

COMMUNICATION CONCERNING RELATED APPLICATIONS

Serial Number: 10/322,348 Filing Date: December 17, 2002

Title: SENSITIVE DRUG DISTRIBUTION SYSTEM AND METHOD

Page 2 Dkt: 101.031US1

Respectfully submitted,

DAYTON T. REARDAN ET AL.

By Applicants' Representatives,

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A. P.O. Box 2938
Minneapolis, MN 55402

(612) 373-6972

Date 3-29-2006

Ву ____

Bradley A. Forrest Reg. No. 30,837

Name

Signature

System for Thalidomide Thalidomide Enhanced S.T.E.P.S.** Materials! For use starting 7/30/01 Prescribing Safety (S.T.E.P.S.**)

- Pocket Guide to S.T.E.P.S.™ and Patient Surveys
- Patient Brochure
- Your Contraceptive Choices Brochure
- Emergency Contraception Brochure

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Moving Theories Into Clinical Practice: Thalidomide Enhanced S.T.E.P.S.™ Program



WARNING: SEVERE, LIFE-THREATENING HUMAN BIRTH DEFECTS.

IF THALIDOMIDE IS TAKEN DURING PREGNANCY, IT CAN CAUSE SEVERE BIRTH DEFECTS OR DEATH TO AN UNBORN BABY, THALIDOMIDE SHOULD NEVER BE USED BY WOMEN WHO ARE PREGNANT OR WHO COULD BECOME PREGNANT WHILE TAKING THE DRUG. EVEN A SINGLE DOSE (I CAPSULE (50 MG)) TAKEN BY A PREGNANT WOMAN DURING HER PREGNANCY CAN CAUSE SEVERE BIRTH DEFECTS.

BECAUSE OF THIS TOXICITY AND IN AN EFFORT TO MAKE THE CHANCE OF FETAL EXPOSURE TO THALOMID® (thalidomide) AS NEGLIGIBLE AS POSSIBLE, THALOMID® (thalidomide) IS APPROVED FOR MARKETING ONLY UNDER A SPECIAL RESTRICTED DISTRIBUTION PROGRAM APPROVED BY THE FOOD AND DRUG ADMINISTRATION. THIS PROGRAM IS CALLED THE "SYSTEM FOR THALIDOMIDE EDUCATION AND PRESCRIBING SAFETY (S.T.E.P.S. "M")".

UNDER THIS RESTRICTED DISTRIBUTION PROGRAM, ONLY PRESCRIBERS AND PHARMACISTS REGISTERED WITH THE PROGRAM ARE ALLOWED TO PRESCRIBE AND DISPRESSE THE PRODUCT. IN ADDITION, PATIENTS MUST BE ADVISED OF, AGREE TO, AND COMPLY WITH THE REQUIREMENTS OF THE S.T.E.P.S. "M" PROGRAM IN ORDER TO RECEIVE PRODUCT.

To educate pharmacists about:

- The pharmacology of thalidomide (THALOMID®)
- The enhanced System for Thalidomide Education, and Prescribing Safety
- The management of side effects associated with thalidomide (THALOMID®) S.T.E.P.S.™ program required for prescribing and dispensing thalidomide for the treatment of erythema

At the end of this program, pharmacists should be able to:

- Outline the pharmacology (absorption, distribution, metabolism, elimination, drug interactions) of thalidomide (THALOMID®)
- Discuss the dosage and administration of thalidomide (THALOMID®) for the treatment of erythema nodosum leprosum
- Describe the elements of the enhanced S.T.E.P.S.™ program
- Understand the side effects related to thalidomide (THALOMID*) and management of these side effects

TARGET AUDIENCE

thalidomide (THALOMID®). This program has been designed for pharmacists engaged in dispensing

leprosum (ENL). cutaneous manifestation of moderate to severe erythema nodosum Thalidomide (THALOMID®) is indicated for the acute treatment of the



ACCREDITATION

Education as a provider of pharmacy continuing education. of Pharmacy is approved by the American Council on Pharmaceutical Extension Services in Pharmacy at the University of Wisconsin Schoo

completion (score of 70% or better) of the post-test and evaluation materials. Statements of credit for continuing pharmaceutical education participation wil ACPE Universal Program #073-999-01-022-H01. Expiration 4/9/04 be mailed within one month of completion of the course, based on successful This course is accredited for 1 continuing education hour (0.1 CEU).

educational grant from Celgene Corporation. of Wisconsin School of Pharmacy, and is supported by an unrestricted This program is presented by Extension Services in Pharmacy at the University

ACKNOWLEDGMENT

from Celgene Corporation. This program is supported through an unrestricted educational grant

REFERENCES.

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| POST-TEST | PROGRAM EVALUATION | MANAGEMENT OF SIDE EFFECTS | THALIDOMIDE IN CLINICAL PRACTICE | SYSTEM FOR THALIDOMIDE EDUCATION AND PRESCRIBING SAFETY | ENHANCED S.T.E.P.S." PROGRAM | DOSAGE AND ADMINISTRATION. | PHARMACOLOGY | INTRODUCTION | TABLE OF CONTENTS |
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NTRODUCTION

worldwide markets.1 (pp458,459),2 (p1239) Thalidomide was that it had teratogenic properties, forcing its withdrawal from against potential future epidemics (p458). Closely monitored prompted the FDA to implement even more stringent standards dent during this period. Nevertheless, the thalidomide experience Consequently, reports of phocomelia had become increasingly eviin the United States due to a medical reviewer's concern about associated with one of the most devastating tragedies of modern nonbarbiturate sedative and antiemetic until it was discovered In the 1950s and 60s, thalidomide gained widespread use as a cutaneous manifestations of moderate to severe erythema (THALOMID®, Celgene Corporation) was approved by the US early as 1965.4 However, it was not until 1998 that thalidomide the treatment of lepra reactions had already been published as the treatment of other conditions (p469) Favorable results in research on thalidomide's pharmacologic and immunologic actions reports of neuropathy associated with thalidomide use in Europe. limbs).² (p1241) Thalidomide was never approved for marketing (defective development of the limbs) or amely (absence of medicine; over 10,000 reports of children born with phocomelia suppress recurrence. nodosum leprosum (ENL) and as maintenance therapy to Food and Drug Administration for the acute treatment of the for its embryopathy, but also to exploit its significant potential for has continued since the 1960s, in part to reveal the mechanism

this agent, a comprehensive program, the System for Thalidomide Education and Prescribing Safety (S.T.E.P.S."), has been In accordance with the concerns over the teratogenic effects of developed to control and monitor access to thalidomide.5

PHARMACOLOGY

THALOMID® Trade Name

Generic Name Thalidomide

Chemical Name

C₁₃H₁₀N₂O₄ Alpha-N-(phthalimido)glutarimide Chemical Structure

ABSORPTION

(AUC) or peak concentration (C_{max}) and an increase in Imax meal causes minor (<10%) changes in the extent of absorption not been fully determined, but coadministration with a high-fat ence of food on the rate or extent of thalidomide absorption has hours to achieve peak plasma concentrations (Tmax). The influhumans. Absorption from the gastrointestinal tract takes 2.9-5.7 development of an intravenous formulation and thereby the to 6.0 hours. ability to assess the absolute bioavailability of oral thalidomide in Thalidomide has a poor aqueous solubility, which has hampered

DISTRIBUTION

and organs, including the placenta. Thalidomide and/or its chronic dosing.9 (p395) pounds, thalidomide does not accumulate in fatty tissue after ejaculate of human males.8 Unlike some other sedative comadministration in rabbits7 (p1019) and is also present in the breakdown products have been found in semen following orathat even and wide distribution occurs throughout most tissues protein binding is unknown. Animal studies have demonstrated has a large apparent volume of distribution. The extent of plasma Human pharmacokinetic studies to date indicate that thalidomide

METABOLISM

Thalidomide undergoes spontaneous and rapid nonenzymatic hydrolytic cleavage at physiologic pH into its 20+ metabolites in plasma. The exact metabolic route and fate are not known in humans. Overall, very little metabolism of thalidomide is thought to occur via the hepatic CYP P450 enzyme system.⁶ Recent evaluation of single- and multiple-dose pharmacokinetic parameters of oral thalidomide (200 mg/day) in healthy female volunteers indicates that thalidomide does not inhibit or induce its own metabolism over a 21-day period.¹⁰ (p488)

ELIMINATION

Animal data suggest that thalidomide is quickly excreted in the urine with a nonabsorbed portion of the drug excreted unchanged in the feces.⁹ (p395) The mean half-life of elimination ranges from approximately 5 to 7 hours following a single dose; at 48-hour levels, thalidomide is undetectable in the urine.⁶ The renal clearance of thalidomide is 1.15 mL/min with less than 0.7% of the dose excreted in the urine as unchanged drug. When R- and S-isomers were measured separately in healthy male volunteers, their mean terminal half-lives were nearly identical with a mean of 4.7 hours.¹¹ The effects of renal or hepatic dysfunction on the clearance of thalidomide are not known, and additional studies are needed to determine if age-related physiologic changes affect clearance.

DRUG INTERACTIONS

Systematic evaluation of drug-drug interactions with thalidomide has not been conducted except with oral contraceptives. The results of two clinical trials that evaluated the effect of thalidomide on the plasma pharmacokinetics of oral contraceptives suggest that the efficacy of hormonal contraceptives is unlikely to be affected by concomitant therapy. ¹⁰ (p489)¹²

An early pharmacology study in mice showed that thalidomide enhances the sedative effect of barbiturates and alcohol and the catatonic effects of chlorpromazine and reserpine.⁶ Central nervous system stimulants (methylamphetamine, methylphenidate) counteracted the depressant effects of thalidomide.¹³ (p8)

Medications known to be associated with peripheral neuropathy should be used with caution in patients receiving thalidomide.⁶

DOSAGE AND ADMINISTRATION

INITIAL USE

For an episode of cutaneous ENL, thalidomide should be administered at an initial dose of 100 to 300 mg/day, administered once per day with water, preferably at bedtime and at least 1 hour after the evening meal. Patients weighing less than 50 kg should be started at the low end of the range. In the case of a severe cutaneous ENL reaction, a dose up to 400 mg/day can be given. Dosing with thalidomide should continue until signs and symptoms of active reaction have subsided, usually a period of at least 2 weeks. Patients may be tapered off medication in 50-mg increments every 2 to 4 weeks.

SPECIAL POPULATIONS6

Geriatric Use

No systematic studies in geriatric patients have been conducted Thalidomide has been used in clinical trials in patients up to 90 years of age. Adverse events in patients over the age of 65 did not appear to differ in kind from those reported for younger individuals.

Pediatric Use

Safety and effectiveness in pediatric patients below the age of 12 years have not been established.

Use in Nursing Mothers

It is not known whether thalldomide is excreted in human milk. Because many drugs are excreted in human milk and due to the potential for serious adverse reactions in nursing infants from thalidomide, a decision should be made whether to discontinue nursing or to discontinue the drug, taking into account the importance of the drug to the mother.

Pregnancy Category X

Because of the known teratogenicity of thalidomide, thalidomide is contraindicated in women who are or may become pregnant and are not using the two required types of birth control or who are not continually abstaining from reproductive heterosexual sexual intercourse.

Patients With Renal Impairment

The pharmacokinetics of thalidomide in patients with renal dysfunction has not been determined.

Patients With Hepatic Impairment

The pharmacokinetics of thalidomide in patients with hepatic dysfunction has not been determined.

Patients With Hansen's Disease

Analysis of data from a small study in Hansen's disease patients suggests that these patients, relative to healthy patients, may have an increased bioavailability of thalidomide.

HIV-Seropositive Patients

There is no apparent significant difference in measured pharmacokinetic parameter values between healthy human patients and HIV-scropositive patients following single-dose administration of thalidomide capsules.

How Supplied

The product is supplied as hard gelatin, 50-mg, white opaque capsules, imprinted "Celgene" with a "do not get pregnant" logo. Cartons contain either ten (10) blister packs of 14 capsules each (140 capsules total) or ten (10) blister packs of 28 capsules each (280 capsules total).

ENHANCED S. T.E.P.S.™ PROGRAM STRAFOR THALIDOMIDE EDUCATION AND PRESCRIBINGS OF

Due to its removal from worldwide markets for causing life-threatening human birth defects, the current distribution of thalidomide is tightly controlled by the FDA in an attempt to avoid these predictable and preventable teratogenic effects. In compliance with the FDA's unprecedented requirements, Celgene Corporation developed an oversight system for stringent monitoring, including contraceptive counseling.⁶ (p1721) This program—for patients, physicians, and pharmacists—is called the System for Thalidomide Education and Prescribing Safety (S. T.E. P.S. TM) and its compliance requirements have been incorporated into the product labeling. The S. T.E. P.S. TM program has been specifically designed for THALOMID[®] (thalidomide), manufactured by Celgene Corporation, and does not currently apply to any other product.

and filing the informed consent form. Each prescription for (OCR) "reads" the form, thus minimizing human data entry errors is then signed by the patient and prescriber and faxed directly generated by the prescriber from a software application. The form and patient registration form have been combined and will be of the art technology. For example, the informed consent form program. The S.T.E.P.S.TM program has been revised utilizing state and the FDA monitor compliance with all requirements of the therefore, the pharmacist is no longer responsible for collecting mentioned above, patients will be registered by their prescriber; his/her survey that must be written on the prescription. As Prescribers will obtain an authorization number at the end of the telephone using the keypad to eliminate long delays. (IVR) technology. In other words, questions will be answered via be conducted via the telephone using integrated voice recognition Patient and prescriber surveys as well as pharmacy calls will now into Celgene Customer Care where optical character recognition through education and controlled access. Celgene Corporation The goal of $S.T.E.P.S.^{TM}$ is to prevent any fetal exposure to the drug

PATIENT PROCEDURES

participate in mandatory and confidential patient phone surveys. share their thalidomide medication with anyone and they must sex continuously during treatment and they must take regular contraceptive methods. Females of childbearing potential must thalidomide treatment only if they agree to use appropriate they have sex with a woman. All patients must also agree not to is discontinued. Males must agree to use a latex condom each time thalidomide treatment and continued for 4 weeks after thalidomide pregnancy tests. Birth control must be initiated 4 weeks prior to agree to use two reliable forms of contraception or abstain from pregnancy test. Once treatment has begun, patients can continue patients who are of childbearing potential must test negative on a prescriber. Before beginning treatment, all patients are required to complete an informed consent form, which is provided by their requirements, in addition to their own. Patients are required to pharmacists and prescribers should be informed of the patient's receive contraceptive counseling from their prescriber, and female To enhance their patient's safety during treatment with thalidomide

Any patient, physician, or pharmacist with a question or concern

- contact his/her immunology specialist/S.T.E.P.S." field coordinator regarding the new S.T.E.P.S." program should:
- 3. visit www.stepsinfo.com

call 1-888-4CELGENE or

HALIDOMIDE IN CLINICAL PRACTICE

of the cutaneous manifestation of moderate to severe ENL with orchitis, myalgia, and hepatosplenomegaly, within a similarly short time thalidomide. Treatment with thalidomide can resolve lesions within over 1600 patients consistently report generally successful treatment reinstitution of therapy. Thirty-two other published studies involving repeated relapses upon drug withdrawal and remission with of patients with ENL, controlled on thalidomide, demonstrated relapse was derived from a retrospective evaluation of 102 patients nodosum leprosum (ENL), an inflammatory complication of Hansen's Thalidomide is currently approved for the treatment of erythema 1 to 2 days and can also relieve other symptoms, such as headache, treated under the auspices of the US Public Health Service. A subset disease.6 Data on the efficacy of thalidomide in prevention of ENL

MANAGEMENT OF SIDE FILE

SIDE EFFECT RECOGNITION AND MANAGEMENT

Teratogenic effects

Common side effects may include:

- Sedation/somnolence/fatigue
- Neutropenia
- Orthostatic hypotension/dizziness
- Peripheral neuropathy

Constipation

Peripheral or dependent edema

effects are dose-dependent, in many cases it may not be each one of these side effects is temporary and reversible once Except for teratogenicity and some cases of peripheral neuropathy, in resolution of the side effect. necessary to discontinue therapy, and dose reduction may result thalidomide usage is discontinued. Because most of these side

TERATOGENIC EFFECTS

product label and in patient information brochures provided by ening birth defects. The boxed warning that appears on the thalidomide taken while pregnant can cause severe and life-threat-Prevention of birth defects is the major focus of the S.TE.P.S." Celgene Corporation is presented below. program and patients are warned that even a single dose of

MIDE IS TAKEN DURING PREGNANCY, IT CAN CAUSE SEVERE BIRTH DEFECTS WOMEN WHO ARE PREGNANT OR WHO COULD BECOME PREGNANT WHILE OR DEATH TO AN UNBORN BABY. THALIDOMIDE SHOULD NEVER BE USED BY WARNING: SEVERE, LIFE-THREATENING HUMAN BIRTH DEFECTS. IF THALIDO-PREGNANT WOMAN CAN CAUSE SEVERE BIRTH DEFECTS TAKING THE DRUG. EVEN A SINGLE DOSE [1 CAPSULE (50 MG)] TAKEN BY A

> of thalidomide during pregnancy has been identified. 15 (p321) Neither a safe level nor a window of opportunity for administration reported.1 (pp458,461,462),2 (pp1238-1241),14 (pp491,492) deformities of the ears, and mid-line hemangiomas have also been esophageal fistulae, neural tube abnormalities, micro-ophthalmia, ty, but in addition, congenital heart disease, duodenal stenosis, the most prominent thalidomide-associated congenital abnormali-Phocomelia (defective shortened limbs) of the upper extremities is

SEDATION/SOMNOLENCE/FATIGUE

confusion, and impaired memory. In patients experiencing weakness, fatigue, sedation, mood changes, decreased libido, strategies to prevent or manage this side effect: excessive somnolence, the physician may use the following Signs and symptoms associated with this adverse event include

Preventive Strategies

- Recommend an evening dose to minimize the effects of daytime somnolence.
- Initiate thalidomide with a low-dose and titrate gradually.

Management Strategies

- No action may be necessary at the beginning of treatment as tolerance to the sedative effects may only develop after
- Because the sedative effect is dose-related, lowering the with daily doses <200 mg. patient's dose should be considered before discontinuing thalidomide therapy. Sedation is less frequent and more mild
- Inform patient to avoid co-administration with alcohol, barbiturates, as thalidomide has been shown to enhance their depressant effect drowsiness unless they have consulted their physician first. reserpine, chlorpromazine, and any other sedatives/tranquilizers, Advise patient to avoid any other medications that cause
- Consider that methylphenidate and methylamphetamine may antagonize the sedative effects of thalidomide.
- Situations in which drowsiness may be hazardous should

\asii

The commonly described thalidomide-associated rash is characterized by generalized mild erythema, itching, and dryness of the skin, which occur over the trunk, back, and proximal extremities. Serious dermatologic reactions including Stevens-Johnson syndrome and toxic epidermal necrolysis (TEN), which may be fatal, have rarely been reported in association with thalidomide therapy. Patients who develop rash during therapy with thalidomide should have prompt medical evaluation. If clinically appropriate, thalidomide therapy should be discontinued. Evaluation and management should consider the following:

- The most common rashes associated with thalidomide are mild and transient and can be treated symptomatically.
- Patients who experience rash accompanied by systemic signs or symptoms may be at risk for the development of severe hypersensitivity reactions. These patients should permanently discontinue treatment and should not be rechallenged with thalidomide.
- Renal insufficiency may increase the risk for hypersensitivity reactions with erythroderma and eosinophilia.
- Patients with ENL may develop a transient, thalidomide-associated allergic dermatitis. This can generally be controlled with oral histamines, and thalidomide treatment can be continued. In addition, some patients have been successfully rechallenged with a lower dose of thalidomide. If treatment is discontinued, the rash will usually resolve within 24 hours.
- If the rash is exfoliative, purpuric, or bullous, or if Stevens-Johnson syndrome or toxic epidermal necrolysis are suspected, use of thalidomide should not be resumed and the patient should not be rechallenged.
- Be aware that the use of topical and systemic corticosteroids and antihistamine therapy for thalidomide-associated rashes has not been evaluated in controlled clinical trials.

leutropenia

Neutropenia has been reported in association with thalidomide therapy in a variety of patient populations. Thalidomide has no known direct myelosuppressive effects. Effects of thalidomide on blood cell counts may occur indirectly through thalidomide's effects on tumor

necrosis factor alpha (TNF- α) or other immunomodulatory and inflammatory cytokines, which influence blood cell regulation, recruitment, and activation. Depending on a patient's condition, baseline and monthly white blood cell (WBC) counts may be considered. For patients who may be prone to neutropenia, baseline and biweekly WBC counts should be taken for at least the first 3 months of treatment, then monthly thereafter if the counts are stable.

Thalidomide therapy should not be initiated in a patient who has an absolute neutrophil count (ANC) below 750/mm³. Depending upon the severity of the neutropenia, consider the following management strategies:

- Consider decreasing the patient's dose or, if necessary, discontinuing thalidomide therapy,
- For patients whose ANC decreases below 750/mm³, re-evaluate the patient's entire treatment regimen and consider discontinuing thalidomide, if clinically appropriate, until the neutropenia resolves.
- For patients whose ANC decreases below 500/mm³, discontinue thalidomide until the neutropenia has resolved.
- The therapeutic administration of granulocyte colony stimulating factor (G-CSF) appears potentially to be safe and effective. The use of G-CSF to treat thalldomide-associated neutropenia has not been evaluated in controlled clinical trials.

Orthostatic Hypotension/Dizziness

This condition may be accompanied by bradycardia, weakness, unsteady gait, confusion, and blurred vision. Once recognized, management of this side effect includes:

- Advising the patient to sit upright for a few minutes before standing from a recumbent position.
- Re-evaluating the patient's treatment regimen and considering adjusting the dose(s) of any concomitant medications that may contribute to or exacerbate dizziness, hypotension, or bradycardia, including diuretics, vasodilators, phosphodiesterase type 5 (PDE5) inhibitors, anti-hypertensive agents, other cardiovascular medications, or agents for prostatic hypertrophy (alpha-adrenergic blockers).
- Adjusting the patient's dose of thalidomide or, if necessary, discontinuing treatment.

Constipation

Several measures can be taken to minimize and prevent the effects of this condition.

- When initiating thalidomide treatment, consider concurrent use of a stool softener.
- Patients can be advised to increase their daily intake of fluids as tolerated to approximately six to eight 8-ounce glasses per day, and increase dietary fiber as tolerated, including fresh fruits, vegetables, whole grain cereals, and breads.
- A bowel regimen should be considered in patients who will be titrated to higher doses.
- Start with a mild emollient/lubricant laxative such as docusate codium. I to 3 times daily as needed.
- sodium 1 to 3 times daily as needed.

 If needed, add a stimulant such as senna-based laxative twice a day
- If tolerated in patients who are adequately hydrated and have normal renal function, saline or hyperosmotic laxatives such as milk of magnesia or factulose may be considered.
- If no stool within 4 days, try magnesium citrate or polyethylene glycol 3350 (Colyte[®], Colytely[®], Nulytely[®]).*
- Consider adjusting the thalidomide dose or, if necessary, discontinuing therapy. Be aware that concurrent use of thalidomide and laxatives, bowel evacuants, or gastrointestinal prokinetic agents has not been evaluated in controlled clinical studies.

Peripheral Neuropathy

This is a potentially severe, and sometimes irreversible, side effect of thalidomide treatment. The appearance and severity of peripheral neuropathy does not appear to be related to the dose or duration of thalidomide treatment and inter-individual patient susceptibility may be more relevant.⁶ (p1238), ¹⁶ (p66), ¹⁷ (p266)

Symptoms are mainly sensory, especially in the lower limbs. They can include symmetrical, painful paresthesias of the hands and feet, hyperesthesia, pallor and coldness of the fingers and toes, and superficial sensory loss. In addition, less common symptoms that may still help identify this condition include muscle cramps, muscle

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weakness, postural tremor, decreased muscle stretch reflexes, palma erythema, and brittle nails.² (pp1238-1241),¹⁵ (p68),¹⁷ (pp543-544)

Thalidomide treatment should be re-evaluated if it is determined that the neuropathy is drug-related. While sensory symptoms often improve after discontinuation, they may not resolve completely. (p550) In addition, management strategies should include the following:

- Patients with HIV infection and underlying malignancies may be at higher risk for peripheral neuropathy malignancies. (p1223)
- Patients should be regularly evaluated for signs or symptoms of peripheral neuropathy. Neurologic examinations should be performed every 30 days after starting treatment and periodically thereafter. ¹⁴ (p492)
- Measurement of sensory nerve action potentials at baseline and every 6 months during treatment may be useful in patients at risk for the development of neuropathy. If the amplitude decreases by more than 30%, electrophysiologic testing should be performed more frequently, and if the decrease is more than 50% from baseline, discontinuation of challdomide therapy should be considered. ¹³ (p492)

Peripheral or Dependent Edema

- Intermittent elevation of the lower extremities is helpful to some patients and resting in a supine position may be necessary for several hours each day.
- Wearing elastic stockings may be helpful
- Diuretics have been successful in some cases when used concomitantly with thalidomide, but be aware that this has not been evaluated in controlled clinical trials.¹⁹ (p308)
- Consider adjusting the thalidomide dose or, if necessary, discontinuing therapy.

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PROGRAM EVALUATION

Enhanced S.T.E.P.S.™ Program Moving Theories Into Clinical Practice: Thalidomide

How to obtain Pharmacy CE Credit ACPE Program #073-999-01-022-H01

exam score of 70% or greater is required to earn CE credits. issued within one month of receipt of all evaluation materials; an Pharmacy. No payment is required. A statement of CE credit will be questions and send this program evaluation to Extension Services in questions found on pages 21-22; complete the other evaluation this program, record on the answer form your answers to the test To earn 1 hour (0.1 CEU) of pharmacy CE credit for completion of

Mail or fax the evaluation form to:

Enhanced S.T.E.P.S.™ Program

Extension Services in Pharmacy

777 Highland Avenue

Fax: 608-262-2431 Madison, WI 53705-2222

Phone: 608-262-3130

Please circle the appropriate response for each evaluation component:

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POST-TEST

- 1. In 1998, thalidomide was approved by the US Food and Drug Administration for the acute treatment of:
- a. hematologic tumors, including advanced refractory multiple myeloma.
- **b.** cutaneous manifestations of moderate to severe erythema nodosum leprosum (ENL).
- c. reduction of load from primary HIV infection, as adjunctive therapy.
- d. b and c.
- e. all of the above
- 2. THALOMID® (thalidomide) is metabolized completely in the hepatic CYP P450 enzyme system.
- a. True.
- b. False.
- 3. Following a single dose of THALOMID® (thalidomide), the mean half-life of elimination is approximately:
- a. 1 to 3 hours.
- b. 5 to 7 hours.
- c. 8 to 10 hours.
- **d.** 12 hours.
- 4. The current distribution of thalidomide is tightly controlled by effects, which are predictable and preventable. the FDA in an attempt to avoid its associated teratogenic
- a. Irue.
- b. False.
- 5. Females of childbearing potential must agree to use continuously during treatment. reliable form(s) of contraception or abstain from sex
- a. one. c. three. b. two.
- **6.** Among the changes of the enhanced S.T.E.P.S.™ program is:
- b. the requirement for pharmacists to contact physicians if a. the removal of the pharmacist's requirement to register patients.

they are presented with an old prescription.

- c. the requirement for the pharmacist to record the prescription confirmation number directly on the prescription.
- d. none of the above.
- e. all of the above.

- 7. Pharmacists can accept prescriptions for automatic refills ONLY when:
- a. they have a written informed consent form on file.
- **b.** Celgene Corporation has approved the prescription.
- the patient has completed his/her 28-day course of therapy
- e. none of the above.
- 8. Side effects associated with thalidomide therapy include: a. sedation/somnolence/fatigue.
- c. constipation. b. orthostatic hypotension/dizziness.
- all of the above.

d. peripheral neuropathy.

- 9. For patients with neutropenia, the physician should:
- a. re-evaluate the patient's treatment regimen and consider neutropenia resolves for any patient whose absolute neutrophil count (ANC) decreases below 750/mm³. discontinuing THALOMID® (thalidomide) until the
- discontinue THALOMID® (thalidomide) until the neutropenia has resolved for any patient whose ANC decreases below 500/mm³
- consider decreasing dose, or if necessary, discontinuing THALOMID® (thalidomide) treatment
- d. a and c, but not b.
- e. all of the above.
- 10. For ENL, THALOMID® (thalidomide) should be administered at an initial dose of 100 to 300 mg/day and up to 400 mg/day for severe reactions. In addition:
- a. it should be administered once per day with water, preferably at bedtime and at least 1 hour after the evening meal.
- b. it should be started at the low end of the range for patients weighing less than 50 kg.
- c. when tapering patients off medication, it should be done in 50-mg decrements every 2 to 4 weeks.
- d. all of the above.

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NOW THAT YOU'RE TAKING THALOMID® (thalidomide)

WARNING: SEVERE, LIFE-THREATENING HUMAN BIRTH DEFECTS.

IF THALIDOMIDE IS TAKEN DURING PREGNANCY, IT CAN CAUSE SEVERE BIRTH DEFECTS OR DEATH TO AN UNBORN BABY. THALIDOMIDE SHOULD NEVER BE USED BY WOMEN WHO ARE PREGNANT OR WHO COULD BECOME PREGNANT WHILE TAKING THE DRUG. EVEN A SINGLE DOSE [1 CAPSULE (50 mg)] TAKEN BY A PREGNANT WOMAN CAN CAUSE SEVERE BIRTH DEFECTS.

Please read and follow all S.T.E.P.S.™ procedures:



WHAT YOU SHOULD KNOW ABOUT THALOMID® (thalidomide) THERAPY

ork with your doctor

During treatment with THALOMID* (thalidomide), it is important to work closely with your doctor and the other members of your health care team to recognize and carefully monitor possible side effects associated with THALOMID* (thalidomide) therapy. You are in the best position to identify any changes and report them to your doctor. This brochure outlines side effects that may occur in some patients during treatment with THALOMID* (thalidomide) and offers suggestions to help manage these effects in order to help you obtain the benefit of THALOMID* (thalidomide) therapy.

Side effects, with the possible exception of numbness, tingling, pain or burning sensation in the feet or hands (peripheral neuropathy) — which in some cases is irreversible—are temporary and should resolve when you stop taking THALOMID* (thalidomide).

3



Birth Defects

WARNING: SEVERE, LIFE-THREATENING HUMAN BIRTH DEFECTS.

IF THALIDOMIDE IS TAKEN DURING PREGNANCY, IT CAN CAUSE SEVERE BIRTH DEFECTS OR DEATH TO AN UNBORN BABY. THALIDOMIDE SHOULD NEVER BE USED BY WOMEN WHO ARE PREGNANT OR WHO COULD BECOME PREGNANT WHILE TAKING THE DRUG. EVEN A SINGLE DOSE [1 CAPSULE (50 MG)] TAKEN BY A PREGNANT WOMAN CAN CAUSE SEVERE BIRTH DEFECTS.

Drowsiness

Signs and symptoms associated with this sedative effect may include:

· Dizziness, weakness, fatigue, incoordination, trembling, confusion, mood changes

WHAT TO DO

- Taking THALOMID® (thalidomide) in the evening may minimize daytime drowsiness
- Some patients are able to develop a tolerance to the sedative effect of THALOMID*
 (thalidomide), with a decrease in the drowsiness occurring after several weeks
 of treatment
- Ask your doctor about adjusting your dose before stopping THALOMID® (thalidomide)
- If you are drowsy, do not drive a car or operate machinery while taking THALOMID® (thalidomide)
- Avoid alcohol and medications that may cause drowsiness, such as sedatives or tranquilizers, unless directed by your doctor

Rash

WHAT TO DO

- Notify your doctor immediately if a rash develops during treatment with THALOMID® (thalidomide)
- If a rash occurs, do not take another dose of THALOMID* (thalidomide) until you have been evaluated and given instructions by your doctor

Sudden dizziness after standing from a reclining or sitting position (orthostatic hypotension)

WHAT TO DO

- Sit upright for a few minutes before standing up from a reclining position
- Be sure your doctor knows about all other medications you are taking before starting treatment with THALOMID* (thalidomide)
 - It is especially important for your doctor to know about any blood pressure medications, diuretics ("water pills"), or heart medications
- Ask your doctor about adjusting your dose before stopping THALOMID® (thalidomide)

Numbness, tingling, pain, or burning sensation in the feet or hands (peripheral neuropathy)

WHAT TO DO

Notify your doctor at the occurrence of symptoms that typically begin as numbness and tingling in the toes and fingertips

- Be sure you tell your doctor about all of the medications you are taking
 Other medications can contribute to these symptoms
- Avoid tight-fitting shoes and socks
- Wear shoes and socks that offer good air circulation to avoid overheating of feet
- Keep feet uncovered in bed to avoid friction and overheating
- Maintain moderate activity (such as walking), as tolerated, to enhance blood circulation
- · Massaging affected areas may improve circulation and temporarily dull pain
- Soaking affected areas in cool water may help





Constipation

WHAT TO DO

- During THALOMID® (thalidomide) therapy, drink plenty of fluids (six to eight 8-ounce glasses per day)
- · Increase your daily intake of dietary fiber
 - Good sources of dietary fiber include fresh fruits (including prunes or prune juice) and vegetables, plus whole grain breads and cereals
- To help prevent constipation, ask your doctor if you might benefit from starting a mild laxative at the start of THALOMID* (thalidomide) therapy
- Ask your doctor about adjusting your dose before stopping THALOMID* (thalidomide)

Swelling or fluid retention in the feet, ankles, and legs (peripheral or dependent edema)

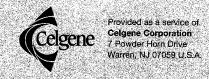
WHAT TO DO

- If swelling or fluid retention occurs while taking THALOMID* (thalidomide), consult your
 doctor before trying any prescription or over-the-counter medications (including
 diuretics or "water pills") or treatments for swelling, bloating, water weight gain
- · For some patients, occasional elevation of the feet and legs is helpful
- Lying down to rest for several hours each day may be necessary
- · Wearing elastic stockings may also be helpful
- Ask your doctor about adjusting your dose before stopping THALOMID* (thalidomide)

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Please see full Prescribing Information behind flap.





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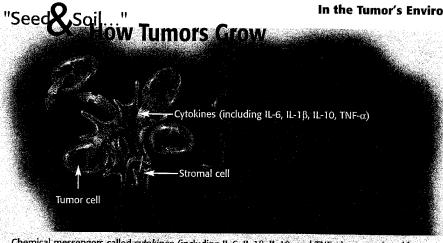
"Seed Soil " How Tumors Grow

When cancer cells multiply to form a growth, it is called a tumor. Tissue surrounds the tumor much like the way soil surrounds a seed. Seeds depend on soil to provide nutrients and other chemicals for growth. Similarly, tumors depend on surrounding tissue for certain chemicals to grow and survive. By changing the way some of these chemicals interact in the tissue surrounding tumors, it may be possible to slow, or even stop, tumor growth.

How Altering Its "Soil" May Stop a Tumor's Growth

A tumor depends greatly on its surrounding tissue for the chemicals it needs to grow. Changing the nature of this "soil" can create an environment that is hostile to tumor growth. Using certain drugs, a tumor's "soil" can be changed to:

- · Interfere with the ability of specific chemicals to help tumors grow
- Make it harder for tumor cells to "stick" to body cells
- Boost the production of special cells that can attack tumors
- Block a tumor's ability to increase its blood supply



Chemical messengers called cytokines (including IL-6, IL-1β, IL-10, and TNF-α) are produced by stromal and/or tumor cells and help the tumor get the chemicals it needs for growth and survival.

Interfering With Chemical Messengers Called Cytokines

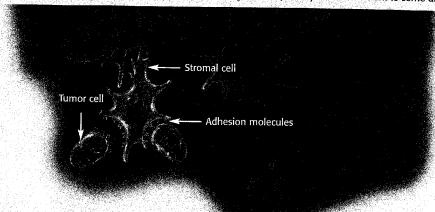
As a tumor develops in an organ of the body, the cells surrounding and supporting the organ (called stromal cells) produce a number of special proteins (called cytokines). Cytokines carry chemical "messages" between cells that help them receive nutrients and other chemicals needed for survival. The tumor uses cytokines to "request" more of the chemicals it needs to grow. It may also produce cytokines itself. The cytokines most involved with helping tumor cells grow include:

- Interleukin-6 (IL-6)
- Interleukin-1 beta (IL-1B)
- Interleukin-10 (IL-10)
- Tumor necrosis factor-alpha (TNF-α)

Certain drugs can interfere with the production of cytokines or their "message-carrying" ability. In this way, they deprive a tumor of the chemicals it needs for growth.

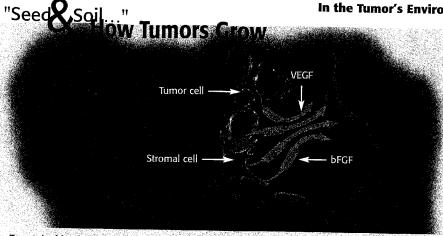


Tiny antennae-like growths (called *adhesion molecules*) on tumor cells help them "stick" to an organ, which triggers the release of cytokines that help the tumor grow and possibly make it resistant to some drugs.



Making It Harder for Tumor Cells to "Stick" to Body Cells

To grow, tumor cells must first attach themselves to an organ in the body. Tiny antennae-like growths (called *adhesion molecules*) cover the tumor cells to help them "stick" to an organ. As tumor cells "stick," they trigger the release of cytokines from surrounding stromal cells. This helps the tumor grow and may even make it resistant to some drugs. Certain drugs can make tumor cells less "sticky" by changing the shape and arrangement of adhesion molecules on the surface of the tumor cell. This makes it harder for tumor cells to attach to, and grow on, body cells.

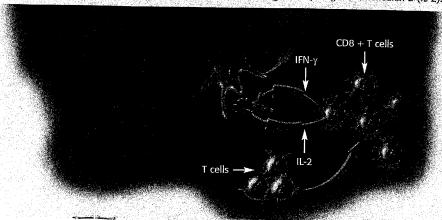


To get the blood supply they need for growth, tumors release cytokines called growth factors (VEGF and bFGF), which help create new blood vessels through a process called angiogenesis.

Stopping the Blood Supply to a Tumor

Like any other cells in the body, tumor cells need a blood supply to get the oxygen and nutrients they need to grow. To help a tumor "connect" with a blood supply, its cells release specific cytokines called growth factors. The two main growth factors involved are called vascular endothelial growth factor (VEGF) and basic fibroblast growth factor (bFGF). VEGF and bFGF help create new blood vessels (called capillaries) from existing vessels through a process called angiogenesis. Certain drugs can block the production of VEGF and bFGF, and they may also interrupt angiogenesis at different stages in its process. This slows or even stops the formation of new blood vessels, "starving" the tumor of the blood supply it needs to grow.

Specialized cells, the CD8+ T cells, are produced by the body's immune system and are designed to attack tumor cells with the help of two substances called interferon gamma (IFN-y) and interleukin-2 (IL-2).



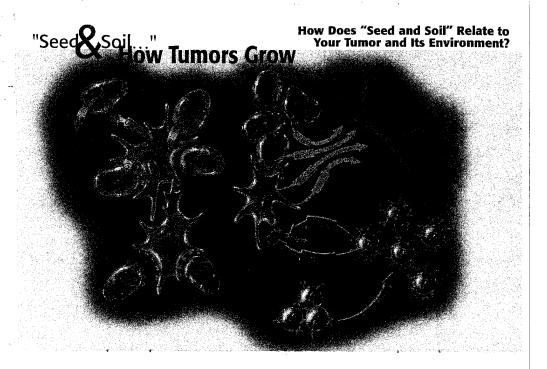
Boosting the Body's Ability to Attack Tumor Cells

When bacteria and tumor cells are found in the body, they are recognized as "foreign" or "enemies" by the body's immune system. This triggers the release of different cells, called T cells, that are designed to attack foreign cells. One type of T cell, the CD8+ T cell, specializes in attacking tumor cells. To help it, the CD8+ T cell produces substances including *interferon gamma* (IFN- γ) and *interleukin-2* (IL-2). Drugs that help the immune system produce more CD8+ T cells significantly boost the body's ability to fight tumor cells.

Creating "Hostile Soil" Where Tumors Can't Grow

Like a seed, a tumor needs certain nutrients and other chemicals from its surrounding environment to grow and survive. By changing the chemical makeup of the tissue surrounding a tumor (its' "soil"), it may be possible to stop, and even reverse, tumor growth. There are a number of different ways certain drugs can be used to create this "hostile soil."

- Certain drugs can interfere with the production of cytokines (such as IL-6, IL-1 β , IL-10, and TNF- α) or with their "message-carrying" ability, depriving a tumor of the chemicals it needs for growth.
- Some drugs can make tumor cells less able to "stick" to organ cells by changing the shape and arrangement
 of adhesion molecules on the surface of the tumor cell. This makes it harder for tumor cells to attach to,
 and grow on, body cells.
- Drugs can be used to help the immune system produce more CD8+ T cells (and the IFN-γ and IL-2 they
 produce) to significantly boost the body's ability to fight tumor cells.
- Other drugs block the production of growth factors called VEGF and bFGF and may also interrupt
 angiogenesis. This slows or even stops the formation of new blood vessels, "starving" a tumor of the
 blood supply it needs to grow.



How Does "Seed and Soil" Relate to Your Tumor and Its Environment?

Research has shown that certain drugs can create a hostile environment for tumor growth and survival. Tumor growth and survival is threatened or even stopped.

Your doctor is informing you about the "seed and soil" theory to explain tumors and their environments because it may be involved in your illness. He or she will explain how your treatment may be related to the tumor's environment. Be sure to ask your doctor any questions you may have regarding your treatment.

Glossary of Terms

Adhesion molecules Small, antennae-like growths on the surface of some tumor

cells that make it easier for them to "stick" to the extracellular

matrix, stromal cells, or organ cells and begin to grow.

Angiogenesis A process by which new capillaries (the body's smallest

blood vessels) form from existing capillaries.

Cytokines Proteins released by various types of cells that control the

way the immune system responds. Cytokines carry chemical "messages" between cells that help them receive nutrients

and other chemicals needed for survival.

Extracellular matrix A complex network of proteins to which cells anchor

themselves. Most cells, including tumor cells, need to anchor to the extracellular matrix to survive. Alterations in the extracellular matrix may lead to cell death (apoptosis).

Growth factors Certain cytokines that stimulate the creation and growth of

blood vessels.

Stromal cells Cells that make up the tissue surrounding and supporting

an organ, but are not part of the organ itself.

T cells The general name for a variety of cells, triggered by the

body's immune system, that are designed to attack foreign

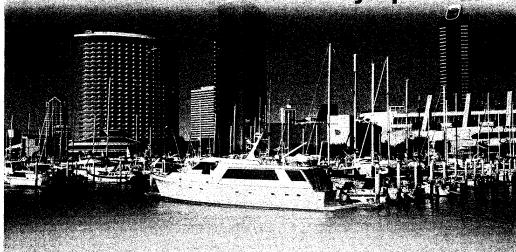
cells, such as bacteria.

Tumor A growth of cancerous tissue (tumor cells).

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Celgene Corporation cordially invites you to attend an

Educational Breakfast Symposium



Targeting the Tumor Microenvironment

Symptom Management Symposium

Saturday, May 19, 2001 6:00AM — 8:00AM

San Diego Marriott Hotel & Marina, Marriott Hall Balfroom San Diego, CA



Agenda

6:00AM - 8:00AM

- ◆ Introduction Melodie Thomas, RN, BSN, OCN®, CCRP
- ◆ Affecting Tumors in Their Microenvironment James R. Berenson, MD
- ◆ Challenges in Managing Multiple Myeloma Melodie Thomas, RN, BSN, OCN®, CCRP
- ◆ Effective Symptom Management Jami Mayorga, RN, BSN, OCN®
- ◆ Prevention Strategies: The S.T.E.P.S. Program Jami Mayorga, RN, BSN, OCN®
- Panel Q & A
- ◆ Closing Remarks Melodie Thomas, RN, BSN, OCN®, CCRP

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Faculty



James R. Berenson, MD

Dr Berenson is currently the director for the multiple myeloma and bone metastasis programs at Cedars-Sinai Medical Center in Los Angeles, California. Recent publications include a review of the clinical use of oral bisphosphonates in metastatic bone disease in *Cancer* and germline *CDKN2A* mutations in multiple myeloma in *Blood*. In addition, Dr Berenson authored a chapter on the biology and treatment of myeloma bone disease in *Cancer and the Skeleton* (Martin Bunitz Ltd. Publishers, 2000).



Jami Mayorga, RN, BSN, OCN®

Ms Mayorga is a nurse clinician for the Department of Medical Oncology, Hematology, and Bone Marrow Transplant at the Arlington Cancer Center, Arlington, Texas. Recent presentations include a discussion of angiogenesis and metastatic disease at the Central Alabama Oncology Nursing Society Meeting and an update on management of outpatient allogeneic transplant patients at the Annual Meeting of the International Society for Experimental Hematology. Publications include a description of the effects of massive doses of CD34+ stem cells in matched sibling allogeneic transplants in the journal Blood.



Melodie Thomas, RN, BSN, OCN®, CCRP

Ms Thomas is the director of nursing research for The Sarah Carnon Cancer Center in Nashville, Tennessee She has published extensively on the use of systemic therapy in a number of turnor types. Ms Thomas regularly presents at medical centers and for the Cocology Nursing Society and the American Cancer Society on applicasing the training prief of presenting related symptoms and the Chickelpress and the Chickelpress and the Chickelpress and the



OmegaMed Inc. 50 Dey Street An educational symposium sponsored by Symptom Management Symposium Jersey City, NJ 07306-9720 Targeting the San Diego Marriott Hotel & Marina, Marriott Hall Ballroom Tumor Microenvironment ırday, May 19, 2001, PRESORTED
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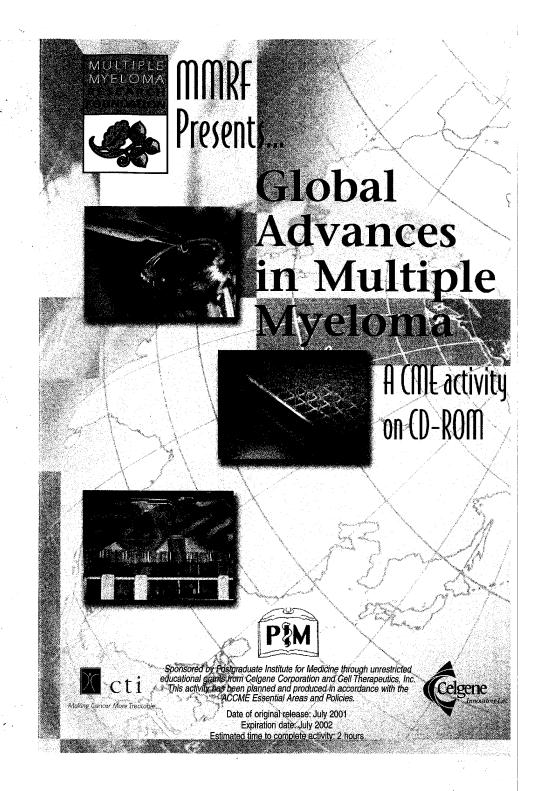
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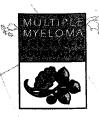
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In May 2001, multiple myeloma's scientific elite gathered in Banff, Alberta, for the VIIIth International Myeloma Courant C Dear Doctor: Dann, Anuer ta, 101 the vinus international riverona vvoi Kanup. In a series of dazzling lectures, the participants poured out the state-of-theart science on multiple myeloma, which has an annual incidence of more than 14,000 patients in the United States alone. For oncologists and hematologists who need to know the evolving

world of multiple myeloma, the Multiple Myeloma Research Foundation MOTIO OF MUNICIPAL MYCHOMIA, WITH PRINCIPAL PR (MINIC) has developed Global Advances III Multiple Myelol CME activity on CD-ROM, which focuses on these emerging CITE activity on CD-ROITI, which tocuses on these emerging the workshop. treatment options, as they were discussed during the workshop. Each of the presentations featured on the Global Advances CD-ROM,

together with related abstracts contained in the companion booklet, includes key findings about today's and tomorrow's approaches to includes key findings about today's and format most common hematotherapies for multiple myeloma – the second most common hematotherapies for multiple myeloma — the second most common hemal therapies for multiple myeloma — the second most common hemal therapies for multiple myeloma — the second most common hemal therapies for multiple myeloma — the second most common hemal therapies for multiple myeloma — the second most common hemal therapies for multiple myeloma — the second most common hemal therapies for multiple myeloma — the second most common hemal therapies for multiple myeloma — the second most common hemal therapies for multiple myeloma — the second most common hemal therapies for multiple myeloma — the second most common hemal therapies for multiple myeloma — the second most common hemal therapies for multiple myeloma — the second most common hemal therapies for multiple myeloma — the second most common hemal therapies for multiple myeloma — the second most common hemal therapies for multiple myeloma — the second most common hemal therapies for multiple myeloma — the second most common hemal therapies for many hemal the second most common hemal the second mos We invite you to participate in this compelling and engaging program

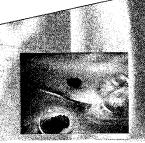
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Featured Abstracts

Angiogenesis-

presentation by S. Vincent Rajkumar, MD

- Expression of Angiogenic Factors in Multiple Myeloma
- Interactions Between Myeloma Cells and Bone Marrow Microenvironment: Clues for the Biology and Management of the Disease
- Expression of VEGF and its Receptors in Myeloma
- Increasing Rationale for Targeting VEGF and Anti-Angiogenesis Approaches in Myeloma Therapy

Arsenic Trioxide in Multiple Myeloma: Rationale and Future Directions – presentation by Mohamad A. Hussein, MD

- Background and Review of the Clinical Experience with Arsenic Trioxide
- Potential for Assemic Trioxide as an Agent for Multiple Myeloma
- Preclinical Data with Arsenic Trioxide in Multiple Myeloma
- Role of Glutathione Depletion in Arsenic-based Treatment
- Arsenic Troxide Ascorbic Acid for the Treatment of Refractory/Relapsed Multiple Mueloma
- Arsenic Iri Oxide in the Management of Advanced Multiple Mueloma Patients

Thalidomide: Mechanisms of Action and Clinical Outcomes -

presentations by Kenneth Anderson, MD and Bart Barlogie, MD, PhD

- Toward Corney Hyeloma: Keeping the Pressure on Tumor Cells and the Microenvironment with High Base (Reiphalan and Thandomide
- Thalidomide filone and in Combination for Previously Untreated Myeloma
- Angiogenesis and Anti-angiogenic Therapy with Thalidomide for Myeloma

New Therapies -

presentation by Kenneth Anderson, MD

- The Tumor Microenvironment: How it influences drug response and drug resistance in myeloma
- Yaults and Drug Resistance in Multiple Migeloma
- Results of a Phase I/II Trial with 60Ho-DOTINP Plus High Dose Chemotherapy in Patients with Multiple Mucloma
- Antibody-Based Immunotherapy Against a Myeloma Cell-Specific Antigen AM 24
- Novel Biologically Based Therapies for Myeloma







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The Multiple Myeloma Research Foundation (MMRF) is an international nonprofit organization dedicated to accelerating a search for a cure for multiple myeloma. The MMRF focuses on

the following five goals: funding research, raising awareness, providing information, building collaboration and advocating optimal patient care.

Contact Information:

Web Address: www.multiplemyeloma.org Email Address: themmrf@themmrf.org

Mailing Address: 3 Forest Street, New Canaan, CT 06840

Phone number: 203-972-1250







Global Advances in Multiple Myeloma c/o AOI Communications, Inc. 405 El Camino Real, #131 Menlo Park, CA 94025-5240



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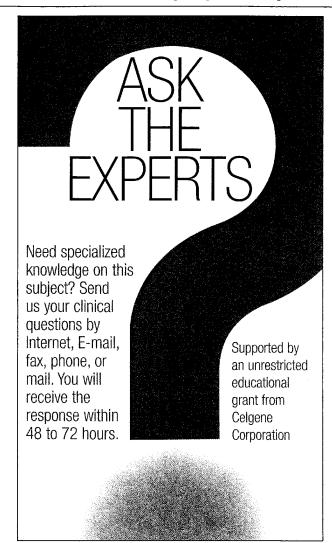
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ASK THE EXPERTS: Immunomodulatory Agents— New and Emerging Therapies



Houston, TX

SPECIALTY: ONCOLOGY/HEMATOLOGY AREA OF INTEREST: MYELOMA Director, Multiple Myeloma Medical Sciences Mohamad Hussein, MD Little Rock, AR University of Arkansas for Associate Professor K. Raman Desikan, MD CARCINOMA Michael Gordon, MD Houston, TX Robert Amato, DO

MALIGNANCIES GASTROINTESTINAL AREA OF INTEREST

AREA OF INTEREST: LEUKEMIA

Assistant Professor Deborah Thomas, MD

MD Anderson Cancer Center Department of Leukemia

Little Rock, AR

Cleveland, OH

Taussig Cancer Center

Foundation The Cleveland Clinic Medical Oncology

Department of Hematology/

Medical Sciences University of Arkansas for Assistant Professor of Medicine Rangaswamy Govindarajan, MD

AREA OF INTEREST: RENAL CELL

Meet the ASK THE EXPERTS Panel

Scott Department of Urology Baylor College of Medicine Associate Professor

Phoenix, AZ of Medicine University of Arizona College Associate Dean for Research Department of Medicine Associate Professor of Medicine

New York, NY Cancer Center Clinical Immunology Service Melanoma Section Associate Attending Physician

MYELODYSPLASIA AREA OF INTEREST: Memorial Sloan-Kettering

Associate Professor of Medicine

Alan List, MD

Section of

SPECIALTY: DERMATOLOGY Department of Dermatology Professor and Chair Joseph Jorizzo, MD Wake Forest University School

AREA OF INTEREST: LEPROSY Samuel Moschella, MD

Winston-Salem, NC of Medicine

Senior Consultant Burlington, MA Harvard Medical School Clinical Professor Department of Dermatology Dermatology Lahey Clinic

NURSING ISSUES

Lorraine Anderson, ANP

St. Vincents Comprehensive Multiple Myeloma Program

New York, NY Cancer Center AREA OF INTEREST:

Center Tucson, AZ

University of Arizona Cancer Transplant Program of Medicine

Department of Medicine Hematology/Oncology

University of Arizona College

Director, Bone Marrow

AREA OF INTEREST:

BRAIN TUMORS

Boston, MA Children's Hospital Neuro-Oncology Director, Pediatric Medical Mark Kieran, MD, PhD Dana-Farber Cancer Institute

AREA OF INTEREST: MELANOMA

Los Angeles, CA

Wen-Jen Hwu, MD, PhD

Immunologic Disease Department of Rheumatic & Immunology Head, Section of Clinical

Leonard Calabrese, D0

Foundation The Cleveland Clinic

SPECIALTY: GASTROENTEROLOGY

AREA OF INTEREST:

INFLAMMATORY BOWEL DISEASE

Cedars-Sinai Medical Center Inflammatory Bowel Disease Associate Clinical Director Eric Vasiliauskas, MD

SPECIALTY: RHEUMATOLOGY

Cleveland, OH



Overview

using immunomodulatory agents. of physicians and nurses with considerable experience with an opportunity to pose questions to a panel The ASK THE EXPERTS program provides you

- Peer-to-peer communication
- Convenient access to current disease state information
- Practice-based responses to diagnostic and treatment challenges regarding immunomodulatory agents



Immunomodulatory Agents

states with varying degrees of success. Currently, these to treat a variety of disease associated with major diseases. immune system that have been specific components of the have been shown to modulate Immunomodulatory agents These agents have been used

Mechanism of Action

rheumatology and dermatology.

agents are being studied and have shown great promise

in many different forms of cancer, and in the fields of

agents is not fully understood; however, they are The exact mechanism of action of immunomodulatory



Present Your Question

| Address Phone | - Addmaga | | |
|--|--------------------------------------|------------------------|-------------------------------|
| PhonePager | | | |
| Would you like to receive your response by: □ E-mail □ Fax □ Phone □ Mail If you would like to receive your response by telephone, please provide 2 call-back dates and times when you will be available to receive a response: Date 1 | | | |
| Would you like to receive your response by: □ E-mail □ Fax □ Phone □ Mail If you would like to receive your response by telephone, please provide 2 call-back dates and times when you will be available to receive a response: Date 1 Date 2 TimeAM/PM TimeAM/PM Patient History Age Weight Sex: □ Male □ Female Symptoms/chief complaint Previous serious illness(es) Current medications Question | Fax | | |
| □ E-mail □ Fax □ Phone □ Mail If you would like to receive your response by telephone, please provide 2 call-back dates and times when you will be available to receive a response: Date 1 | E-mail | | |
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Overview (continued)

such as rheumatoid arthritis, inflammatory bowel many chronic inflammatory and immunologic disorders, cytokine. Overproduction of TNF-α has been linked to disease, and Crohn's disease. tumor necrosis factor-alpha (TNF-\alpha), which is a thought to regulate the production of the protein

of action are ongoing in a variety of disease states. of the growth of blood vessels that feed tumors. This antiangiogenic effect of these agents has shown promise in treating a variety of cancers. Many clinical trials of immunomodulatory agents that have similar mechanisms Another possible mechanism of action is the inhibition

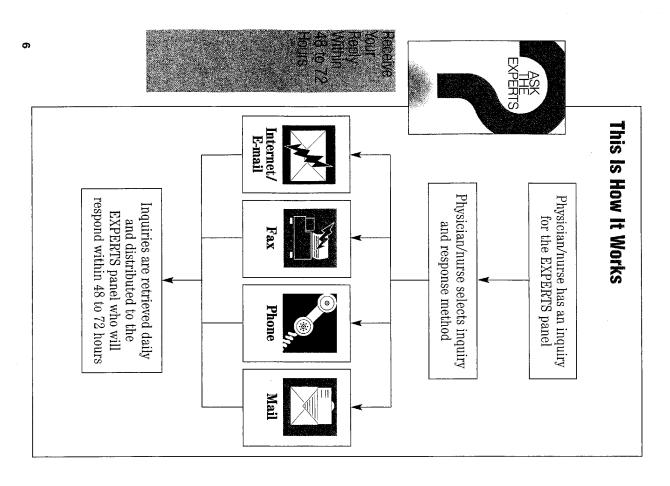
ASK THE EXPERTS

compounds, to serve as a resource for their peers convened a multidisciplinary panel of experts, who clinicians has surrounded this class of agents. A great deal of interest on the part of practicing with less experience with these agents. have investigated and/or used immunomodulatory this problem, the ASK THE EXPERTS program has immunomodulatory agents should be used. To address However, much confusion exists about when and how

Disclaimer

the patient. Health care professionals placing an inquiry are solely and fully investigate all treatment options to determine optimal care. responsible for the treatment of their patients and should fully evaluate and the responding physician/nurse and are not based on a full clinical evaluation of informational purposes only. Answers represent the experience and opinion of Please note that answers provided by the ASK THE EXPERTS panel are for





Contact the EXPERTS

Internet/E-mail

- Visit the www.immunoinfo.com Web site
- Complete the Present Your Question form
- Or E-mail your question to Submit form electronically
- Panel member responds expert@immunoinfo.com

- Complete the Present Your Question form
- Fax the form to: (203) 359-2170
- Panel member responds

Telephone

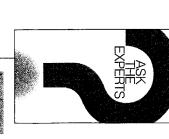
- Provide call-back dates and times
- If the expert is unsuccessful in reaching you, Panel member responds during designated times
- Panel member responds Mail the form to: PharmaCom Group, Inc., 76 Progress Drive, Stamford, CT 06902

Complete the Present Your Question form

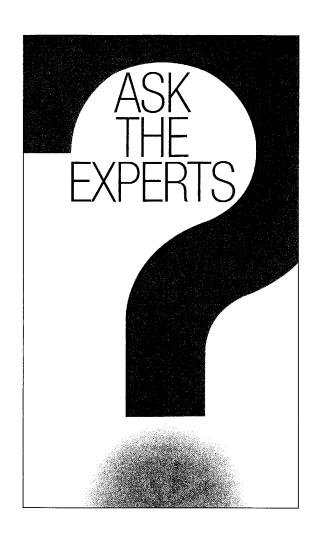
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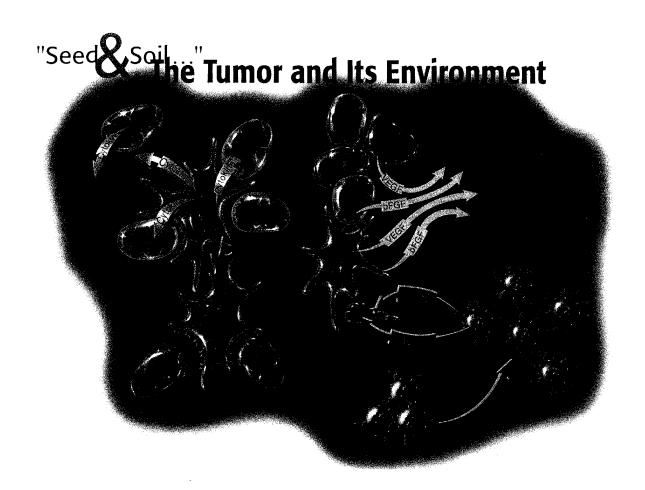
*Subject to the variables of direct mail delivery.

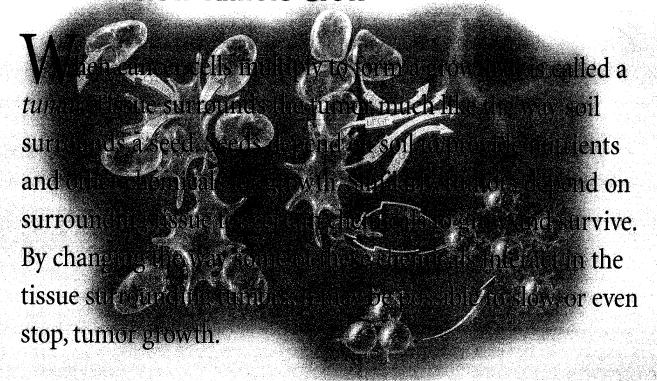




- Call (888) 739-2191
- Answer the *Present Your Question* voice prompts
- you will receive a written response







How Altering Its "Soil" May Stop a Tumor's Growth

A tumor depends greatly on its surrounding tissue for the chemicals it needs to grow. Changing the nature of this "soil" can create an environment that is hostile to tumor growth. Using certain drugs, a tumor's "soil" can be changed to:

- Interfere with the ability of specific chemicals to help tumors grow
- Make it harder for tumor cells to "stick" to body cells
- Boost the production of special cells that can attack tumors
- Block a tumor's ability to increase its blood supply

An educational service developed by Celgene Corporation in conjunction with Paul G. Richardson, MD, Dana-Farber Cancer Institute



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Patient Resource Pack

▼ Detach and affix to patient chart ▼

• Complete prescriber survey with every prescription



Patient registration date: __

| | monthly | every 6 | months |
|------------------|--|----------------------|--------------------|
| Date of Visit | Date of Pregnancy Test (If applicable) | Prescriber Survey | Patient Survey* |
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| indicated in In: | structions for Prescribers. | | |

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Important Information for Men and Women Taking



50 mg Capsules

in blister packs containing 28 or 14 capsules

WARNING: SEVERE, LIFE-THREATENING HUMAN BIRTH DEFECTS.

IF THALIDOMIDE IS TAKEN DURING PREGNANCY, IT CAN CAUSE SEVERE BIRTH DEFECTS OR DEATH TO AN UNBORN BABY. THALIDOMIDE SHOULD NEVER BE USED BY WOMEN WHO ARE PREGNANT OR WHO COULD BECOME PREGNANT WHILE TAKING THE DRUG. EVEN A SINGLE DOSE [1 CAPSULE (50 mg)] TAKEN BY A PREGNANT WOMAN CAN CAUSE SEVERE BIRTH DEFECTS.

WARNING: FOR YOUR HEALTH AND SAFETY, PLEASE READ THIS BOOKLET CAREFULLY. ALSO, BE SURE YOU UNDERSTAND WHAT YOUR DOCTOR HAS TOLD YOU ABOUT THALOMID (THALIDOMIDE) BEFORE STARTING TREATMENT.

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| Section 4: Letter from Thalidomide Victims Association | |

Before taking THALOMID® (thalidomide), you must:

- Understand that THALOMID[®] (thalidomide) can cause severe birth defects
- Know how to prevent pregnancy, if you are a woman
- Understand that you must use latex condoms EVERY TIME you have sexual contact with a woman, if you are a man
- Understand that you must NEVER share this drug with friends, relatives, or anyone else
- Know about other health problems called "side effects"
- Understand that you must NEVER donate blood or sperm while you are taking THALOMID[®] (thalidomide)

How to Use This Booklet

For easy reading, this booklet has four sections. If you are a woman, read all of Sections 1, 2, and 4. If you are a man, read all of Sections 1, 3, and 4.

This booklet contains important information about THALOMID® (thalidomide), but may not answer all of your questions about the drug. If you need more information, ask your doctor before starting treatment.

A video presentation of the information in this booklet is available from your doctor. You may borrow a copy to view at home.



When you see this symbol, it means the information nearby is an important reminder not to get pregnant.

THALOMID* (thalidomide) can cause severe birth defects.

Section 1: Information for All Patients

General guidelines for taking THALOMID® (thalidomide)

- THALOMID® (thalidomide) MUST NEVER be used by pregnant women or women who are able to become pregnant and are not using the required two methods of birth control. Just ONE CAPSULE (50 mg) taken by a pregnant woman can cause severe birth defects.
- Men taking THALOMID® (thalidomide) must use latex condoms every time they have sexual contact with women since THALOMID® (thalidomide) is found in semen or sperm.
- This medicine is ONLY for you. DO NOT SHARE IT WITH ANYONE, even someone who has symptoms like yours. It must be kept out of the reach of children and should never be given to women who are able to become pregnant.
- Contact your doctor immediately if you have any strange or unusual reactions to THALOMID® (thalidomide).
- Keep THALOMID* (thalidomide) in a cool, dry place.
- THALOMID® (thalidomide) does not induce abortion of the fetus and should never be used for contraception.

Birth defects READ THIS SECTION CAREFULLY!

If a woman taking THALOMID® (thalidomide) gets pregnant, her baby will almost certainly have severe birth defects—or may even die. Women taking THALOMID® (thalidomide) MUST NOT become pregnant, and men taking THALOMID® (thalidomide) must not have sexual contact with a woman without

using a latex condom. If you have sexual contact without birth control for any reason, stop taking THALOMID* (thalidomide) immediately and talk to your doctor. If your doctor is not available, call 1-888-668-2528 for information about emergency contraception.



THALOMID* (thalidomide) can cause severe birth defects, including missing or severely deformed legs and arms. These babies often have hands attached directly to their shoulders and feet attached directly to their hips. Photo reprinted by permission.

Other medical problems

Warnings for all patients:

THALOMID® (thalidomide) can cause other health problems called "side effects," including:

Drowsiness:

THALOMID® (thalidomide) often causes drowsiness. If you are drowsy, you should not operate machinery or drive a car while taking THALOMID® (thalidomide).

Nerve damage:

Nerve damage is a common and potentially severe side effect that may be irreversible. Arms, hands, legs, and feet may tingle, hurt, or feel numb. If so, stop taking THALOMID® (thalidomide) and call your doctor right away.

Precaution

Do not drink alcohol or take any other medicines that may make you sleepy without consulting your doctor.

Allergic reaction:

If you have a red, itchy rash, stop taking THALOMID* (thalidomide) and call your doctor right away. You may also have a fever or fast heartbeat.

• Dizziness:

If you feel dizzy, sit upright for a few minutes prior to standing up from a lying down or sitting position.

ANY OF THESE SIDE EFFECTS SHOULD BE REPORTED TO YOUR DOCTOR IMMEDIATELY!

Ask your doctor about other side effects associated with THALOMID® (thalidomide).

Section 2: Facts for Women

WARNING: THALOMID® (thalidomide) can cause SEVERE BIRTH DEFECTS. It must not be taken if you are pregnant. If you are capable of becoming pregnant you will need to use <u>TWO</u> methods of birth control for 4 weeks before beginning THALOMID® (thalidomide) therapy. Your doctor must confirm that you are NOT PREGNANT with pregnancy tests. Please read and understand all warnings.



Before treatment:

- You must sign a form that says you understand the risk of birth defects, and that you agree not to become pregnant while taking THALOMID® (thalidomide).
- Remember that this medicine is ONLY for you. YOU MUST NOT SHARE IT with ANYONE, even someone who has symptoms like yours. It must be kept out of the reach of children and should never be given to women who are able to have children.
- If there is ANY chance that you can get pregnant you must begin <u>TWO</u> methods of birth control 4 weeks BEFORE you start taking THALOMID® (thalidomide).

3

- Your doctor must give you a pregnancy test within the 24 hours before you begin taking THALOMID® (thalidomide). If you are pregnant, you cannot take THALOMID* (thalidomide).
- You will have pregnancy tests before and during treatment, even if you agree not to have sexual contact.
- You will be given information about the following acceptable birth control methods:

Highly effective methods

- Intrauterine device (IUD)
- Hormonal (birth control pills, injections, or implants)
- Tubal ligation
- Partner's vasectomy

Additional effective methods

- Latex condom
- Diaphragm
- Cervical cap

Remember: You must use at least one highly effective method and one additional effective method AT THE SAME TIME. However, your doctor may recommend that you use two barrier methods for medical reasons.

REMEMBER THAT THE ONLY METHOD OF BIRTH CONTROL THAT IS 100% EFFECTIVE IS NOT HAVING SEXUAL CONTACT AT ALL.

During treatment:

- You must take part in a mandatory, confidential survey that will help make sure that everyone taking THALOMID® (thalidomide) receives, understands, and follows information designed to prevent birth defects.
- If you are able to have children, you must continue to use TWO methods of birth control, as discussed with your doctor.
- You must talk to your doctor before changing any birth control methods you have already agreed to use.

- You should have a pregnancy test done by your doctor every week during the first 4 weeks of treatment. You will then have a pregnancy test every 4 weeks if your menstrual cycles are regular, or every 2 weeks if your cycles are irregular. You may also need to have a pregnancy test if you miss your period or have unusual menstrual bleeding.
- You will receive no more than a 4-week (28-day) supply of THALOMID® (thalidomide) at a time. You will not receive any THALOMID® (thalidomide) capsules unless testing proves that you are not pregnant. Your THALOMID* (thalidomide) prescription cannot be refilled automatically.
- If you have sexual contact without birth control or if, for any reason, you think you may be pregnant, you must IMMEDIATELY stop taking THALOMID® (thalidomide) and tell your doctor. If your doctor is not available, call 1-888-668-2528 for information about emergency contraception.
- If you get pregnant, you must IMMEDIATELY stop taking THALOMID® (thalidomide). Contact your doctor immediately to discuss your pregnancy. If you do not have an obstetrician, your doctor will refer you to one for care and counseling.
- You must not breast-feed a baby while you are being treated with THALOMID® (thalidomide).
- You must NEVER donate blood while you are being treated with THALOMID® (thalidomide).
- You should be examined by your doctor for nerve damage every month for 3 months after beginning treatment and periodically thereafter. Tests for nerve damage are simple and are not painful.

After treatment:

 You must continue to use the same <u>TWO</u> methods of birth control for 4 weeks after you receive your last dose of THALOMID® (thalidomide).

Section 3: Facts for Men

WARNING: THALOMID® (thalidomide) can cause SEVERE BIRTH DEFECTS if a woman receives the drug during pregnancy. Because THALOMID® (thalidomide) is present in semen or sperm, you must USE A LATEX CONDOM EVERY TIME you have sexual contact with a woman who is able to get pregnant.



Before treatment:

- You must sign a form that says you understand the risk of birth defects and that you agree to NEVER have sexual contact with a woman unless you use a latex condom (read Section 1).
- Remember that this medicine is ONLY for you. You CANNOT share it with ANYONE, even someone who has symptoms like yours. It must be kept out of the reach of children and should never be given to women who are able to have children.

During treatment:

- You must take part in a mandatory, confidential survey that will help make sure that everyone taking THALOMID® (thalidomide) receives, understands, and follows information in the survey designed to help prevent birth defects. Men must participate in the survey because having sexual contact with a woman without a latex condom or sharing THALOMID® (thalidomide) capsules could result in exposing an unborn baby to the drug.
- You must use a latex condom every time you have sexual contact with a woman while you are taking THALOMID® (thalidomide) and for 4 weeks after you stop taking the drug.

 You must tell your doctor if you have sexual contact with a woman without using a latex condom, or if you think for any reason that your partner may be pregnant. If your doctor is not available, call 1-888-668-2528 for information about emergency contraception.

REMEMBER THAT THE ONLY BIRTH CONTROL METHOD THAT IS 100% EFFECTIVE IS NO SEXUAL CONTACT AT ALL.

- You must NOT donate sperm or blood while you are taking THALOMID® (thalidomide) or for 4 weeks after you stop taking the drug.
- You should be examined by your doctor for nerve damage every month for 3 months after beginning treatment and periodically thereafter. Tests for nerve damage are simple and are not painful.

After treatment:

 You must use a latex condom EVERY TIME you have sexual contact with a woman for 4 weeks after receiving your last dose of THALOMID® (thalidomide).



Section 4: Warning from Thalidomide Victims Association of Canada (TVAC)

Dear Doctor/Patient:

Have you ever met someone who was born disabled after exposure to thalidomide?

We have. In fact, we are *thalidomiders*—the name we have adopted to describe the surviving children of mothers who were prescribed thalidomide during their pregnancy as a sedative or for nausea and other symptoms of "morning sickness."

You've undoubtedly seen the dramatic photographs of babies with severe birth defects caused when thalidomide is taken <u>EVEN ONCE</u> by a pregnant woman. You know the risks!

The Thalidomide Victims Association of Canada (TVAC) was formed to meet the needs of the approximately 125 thalidomiders alive in Canada today, and to aid the surviving 10 thalidomiders living in the United States. Of the 10,000 to 12,000 children born with thalidomide deformities around the world in the early sixties, 5,000 survive today. No one will ever know how many children were miscarried or were stillborn because of thalidomide.

TVAC exists as a survivors group to determine and find solutions to the ongoing problems we face. TVAC has also undertaken a mandate of monitoring the responsible use of thalidomide and ensuring the tragedy of the past never happens again.

Because of our own personal traumas, and those of our families, we have always stated that we can <u>never accept</u> a world with thalidomide in it.

However, as we know first-hand how people may suffer, we also concede that no one should suffer needlessly. If thalidomide can extend a life, or offer a better quality of life to people with debilitating or chronic illnesses, then we are forced to accept the fact that thalidomide use may be their choice.

As well, we are forced to prefer the regulated use of thalidomide over the alternative:

One thalidomide baby born out of ignorance is far worse than one born out of a legitimate attempt to regulate and control the distribution process of this drug.

Since you may soon be involved in prescribing or taking thalidomide, we need for you to be fully aware of the power you have ...

- the responsibility to see that you fully understand the risks thalidomide poses ...
- the commitment to do whatever it takes to make sure that <u>NOT EVEN ONE woman loses a child due</u> to thalidomide.

We were as surprised as anyone when the people at Celgene Corporation, makers of THALOMID* (thalidomide), sought the opinions and input of those of us at TVAC concerning the use of thalidomide in the United States. We felt it was a respectful step in the right direction that our feelings, opinions, and knowledge were being considered.

We are also consoled to know that Celgene Corporation has instituted a comprehensive program to help physicians and pharmacists inform patients about side effects and risks and ensure that they are aware of precautions they must take before, during and after therapy.

The System for Thalidomide Education and Prescribing Safety (S.T.E.P.S.™) is a multifaceted program developed to help ensure that fetal exposure to THALOMID® (thalidomide) does not occur. All of the materials you need to comply with this system are enclosed.

Meanwhile, we make you one promise:

The Thalidomide Victims Association of Canada will continue to watch the progression of events where thalidomide use is concerned.

We have to!

For further information regarding the history of thalidomide or the status of survivors today, please feel free to contact us.

Sincerely,

Randolph Warren Chief Executive Officer Thalidomide Victims Association of Canada

andled Uhue

Giselle Cole Past President Thalidomide Victims Association of Canada

Thalidomide Victims Association of Canada

P.O. Box 9061, Sub 40 London, Ontario N6E 1VO

Tel: (519) 681-0357

Fax: (519) 685-1518



Warning to patients taking THALOMID® (thalidomide)

50 mg Capsules in blister packs containing 28 or 14 capsules

Attention Women:

Do NOT take THALOMID® (thalidomide) if you are pregnant, if you are breast-feeding, or if you are able to become pregnant and are not using the required two forms of birth control.

Attention Men:

You must use a latex condom EVERY TIME you have sexual contact with a woman.

If you have any questions, call 1-888-4-CELGENE

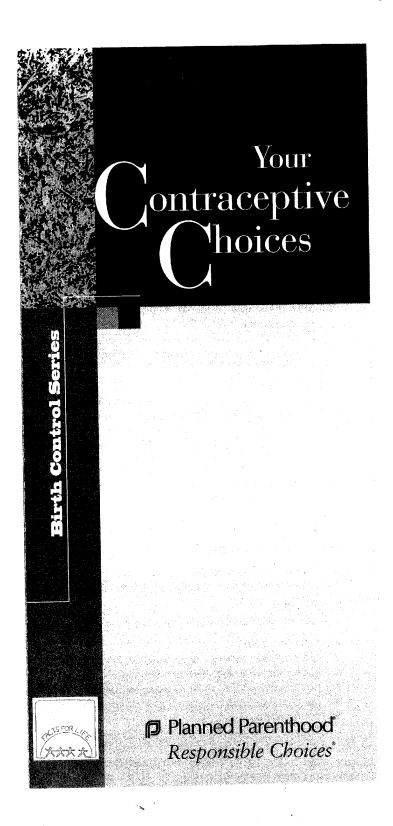


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If You Choose Continuous Abstinence...

... you will not have any sex play with a partner. This will keep sperm from joining egg.

EFFECTIVENESS

100%

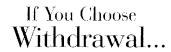
* prevents sexually transmitted infections

ADVANTAGES

* no medical or hormonal side effects

POSSIBLE PROBLEMS

- * difficult for many people to abstain from sex play for long periods
- # forgetting to protect against pregnancy or sexually transmitted infections when abstinence ends



... the man will pull his penis out of the vagina before he "comes" to keep sperm from joining egg.

EFFECTIVENESS

81-96%

nearly 100% with condom

- * pregnancy is possible if sperm are spilled on the vulva
- * not effective against sexually transmitted infections

ADVANTAGES

* can be used when no other method is available

POSSIBLE PROBLEMS

- * requires great self-control, experience, and trust
- * not for men who ejaculate prematurely
- * not for men who don't know when to pull out
- * not recommended for sexually inexperienced men
- * not recommended for teens

If You Choose Outercourse...

... you will have sex play without vaginal intercourse. This will keep sperm from joining egg.

EFFECTIVENESS

nearly 100%

- * pregnancy possible if sperm are spilled on the vulva
- # effective against HIV and many other sexually transmitted infections — unless body fluids are exchanged through unprotected oral or anal intercourse

ADVANTAGES

- * no medical or hormonal side effects
- * can be used as safer sex if no body fluids are exchanged
- * may prolong sex play and enhance orgasm
- * can be used when no other methods are available

POSSIBLE PROBLEMS

- * difficult for many people to abstain from vaginal intercourse for long periods
- * people often forget to protect themselves against pregnancy or sexually transmitted infections if intercourse takes place

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If You Choose Sterilization...

 \dots you will have an operation to keep sperm from joining egg.

Tubal sterilization — intended to permanently block woman's tubes where sperm join egg

Vasectomy — intended to permanently block man's tubes that carry sperm

EFFECTIVENESS

99.5-99.9%

- * not effective against sexually transmitted infections
- * latex or female condoms can reduce risk of infection

ADVANTAGES

- permanent protection against pregnancy
- * no lasting side effects
- * no effect on sexual pleasure
- * protects women whose health would be seriously threatened by pregnancy

POSSIBLE PROBLEMS

- * mild bleeding or infection right after operation
- * some people later regret not being able to have children
- * negative reaction to anesthetic
- * reversibility cannot be guaranteed
- * rarely, tubes reopen, allowing pregnancy to occur
- * pregnancies that rarely occur are more likely to be ectopic (in the fallopian tubes)

Tubal sterilization

- * bruising where the incision is made
- * very rare injury to blood vessels or bowe!

Vasectomy

- * infection or blood clot in or near the testicles
- ** temporary bruises, swelling, or tenderness of the scrotum
- * sperm leakage may form temporary small lumps near testicles

COST

\$1,000 - \$2,500 for tubal sterilization.

\$240 - \$520 for vasectomy.

(Vasectomy costs less because it is a simpler procedure that can be done in the clinician's office.)

If You Choose Norplant*...

... your clinician will put six small capsules under the skin of your upper arm. Capsules constantly release small amounts of hormone that

- * prevent release of egg
- * thicken cervical mucus to keep sperm from joining egg Removal must be done by clinician.

EFFECTIVENESS

99,95%

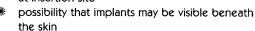
- * not effective against sexually transmitted infections
- * latex or female condom can reduce risk of infection

ADVANTAGES

- * protects against pregnancy for five years
- * no daily pill
- * nothing to put in place before intercourse
- * can use while breast-feeding starting six weeks after delivery
- * can be used by some women who cannot take the Pill

POSSIBLE PROBLEMS

- ** side effects include irregular bleeding and other discomforts, including headaches, depression, and weight gain or loss
- possible scarring and/or discoloration of the skin at insertion site



- * rarely, infection at insertion site
- * pregnancies, which rarely occur, are more likely to be ectopic (in the fallopian tubes)
- * removal is sometimes difficult, requiring more than one appointment

COST

\$500 - \$750 for exam, implants, and insertion.

\$100 - \$200 for removal.

Check with your local family planning clinic for information.

If You Choose Depo-Provera*...

... your clinician will give you a shot of the hormone progestin in your arm or buttock every 12 weeks to

- * prevent release of egg
- * thicken cervical mucus to keep sperm from joining egg
- * prevent fertilized egg from implanting in uterus

EFFECTIVENESS

99.7%

- * not effective against sexually transmitted infections
- * latex or female condoms can reduce risk of infection

ADVANTAGES

- * protects against pregnancy for 12 weeks
- * reduces menstrual cramps
- * no daily pill
- * nothing to put in place before intercourse
- * can be used by some women who cannot take the Pill
- * protects against cancer of the lining of the uterus and iron deficiency anemia
- * can be used while breast-feeding immediately after delivery

POSSIBLE PROBLEMS

- * side effects include loss of monthly period, irregular bleeding, increased appetite, headaches, depression, abdominal pain, and increased or decreased sex drive
- * side effects not reversed until medication wears off (up to 12 weeks)
- * may cause delay in getting pregnant after shots are stopped
- * pregnancies, which rarely occur, are more likely to be ectopic (in the fallopian tubes)

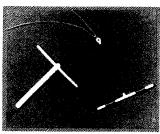
COST

\$20 - \$40 for visits to a clinician.

\$30 – \$75 per injection. Some family planning clinics charge according to income.



If You Choose The IUD (Intrauterine Device)...



Progestasert® and ParaGard®

- ... your clinician will put a small plastic device in your uterus. The IUD contains copper or hormones that
- * keep sperm from joining egg
- prevent fertilized egg from implanting in uterus

EFFECTIVENESS

97.4--99.2%

- * not effective against sexually transmitted infections
- * latex or female condoms can reduce risk of infection

ADVANTAGES

- * nothing to put in place before intercourse
- * copper IUDs may be left in place for up to 10 years
- * no daily pill
- # IUDs with hormones may reduce menstrual cramps and may be left in place for one year.

POSSIBLE PROBLEMS

- * increase in cramps
- * spotting between periods
- * heavier and longer periods
- ** increased chance of tubal infection for women who contract a sexually transmitted infection, which may lead to infertility
- * rarely, wall of uterus is punctured during insertion
- * rarely, insertion can cause infection
- ** pregnancies, which rarely occur, are more likely to be ectopic (in fallopian tubes)

COST

\$150 - \$300 for exam, insertion, and follow-up visit. Some family planning clinics charge according to income.

You May Want Emergency Contraception if...

His condom broke. You forgot to take your pill. He didn't pull out in time. You weren't using any birth control. He forced you to have unprotected sex.

Emergency Contraception (EC) \dots

... is designed to prevent pregnancy after unprotected vaginal intercourse.

... is provided in two ways:

- **Emergency IUD insertion** within five days of unprotected intercourse is **99.9% effective.**
- ** Emergency contraception pills two doses of hormonal pills taken 12 hours apart and started within 72 hours of unprotected sex reduces the risk of pregnancy 75–89%. The sooner a woman starts EC, the more effective it may be. Nausea, vomiting, and cramping are common side effects when combined hormones estrogen and progestin are used.

Don't use emergency hormonal contraception if you

- * are pregnant
- * are allergic to the medication

Consult your clinician about what kind of emergency contraception pills may be best for you.

Call toll-free 1-800-230-PLAN

for an appointment with the nearest Planned Parenthood center.

Planned Parenthood

www.plannedparenthood.org www.teenwire.com

2012

Your Contraceptive Choices 11/00-500 ISBN 0-934586-84-5

2.1

If You Choose Lunelle...

 \dots your clinician will give you a shot with the hormones estrogen and progestin in your arm, buttock, or thigh every month to

- * prevent release of egg
- * thicken cervical mucus to keep sperm from joining egg
- * prevent fertilized egg from implanting in uterus

EFFECTIVENESS

more than 99%

- * not effective against sexually transmitted infections
- * latex or female condoms can reduce risk of infection

ADVANTAGES

- protects against pregnancy for one month
- * no daily pill
- * nothing to put in place before intercourse

Although results of studies won't be available for some time, it is assumed that the advantages of Lunelle are similar to those of combination pills:

- * periods become more regular
- # less: menstrual cramping, acne, iron deficiency anemia, premenstrual tension, menstrual flow, and rheumatoid arthritis
- * protects against ovarian and endometrial cancers, pelvic inflammatory disease, noncancerous growths of the breasts, ovarian cysts, and osteoporosis (this
- ovarian cysts, and osteoporosis (thinning of the bones)
- # fewer tubal pregnancies

POSSIBLE PROBLEMS

- * must receive injection once a month
- * rare but serious health risks, including blood clots, heart attack, and stroke — women who are over 35 and smoke are at a greater risk
- * other side effects include temporary irregular bleeding, loss of monthly period, weight gain or loss, depression, nausea, breast tenderness, and other discomforts

COST

\$30 – \$35. Some family planning clinics charge according to income.

If You Choose The Pill...

... your clinician will prescribe the right pill for you. Take one pill once a day. Complete one pill-pack every month. Combination pills contain estrogen and progestin. Others are progestin-only. Pills contain hormones that work in different ways.

- * Combination pills prevent release of egg.
- ** Both types thicken cervical mucus to keep sperm from joining egg.
- * Both types also may prevent fertilized egg from implanting in uterus.



EFFECTIVENESS

95-99.9%

- * not effective against sexually transmitted infections
- * latex or female condoms can reduce risk of infection

ADVANTAGES

- * nothing to put in place before intercourse
- * periods become more regular
- # less: menstrual cramping, acne, iron deficiency anemia, premenstrual tension, menstrual flow
- ** protects against ovarian and endometrial cancers, pelvic inflammatory disease, non-cancerous growths of the breast, ovarian cysts, and may protect against osteoporosis (thinning of the bones)
- # fewer tubal pregnancies

POSSIBLE PROBLEMS

- * must be taken daily
- * rare but serious health risks, including blood clots, heart attack, and stroke — women who are over 35 and smoke are at greater risk
- * side effects include temporary irregular bleeding, loss of monthly period, weight gain or loss, depression, nausea, breast tenderness, and other discomforts

COST

\$15 -- \$25 per monthly pill-pack at drugstores --- often less at clinics.

\$35 – \$125 for exam. Some family planning clinics charge according to income.

If You Choose The Condom...

... you will cover penis with a sheath before intercourse to keep sperm from joining egg.

The sheath may be made of thin latex, plastic, or animal tissue.

Lubricate condoms with spermicide to immobilize sperm and increase protection against pregnancy.

EFFECTIVENESS

86-98%

nearly 100% with withdrawal

Latex condoms are effective against many sexually transmitted infections — including HIV, the virus that can cause AIDS.

ADVANTAGES

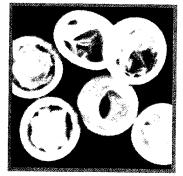
- * easy to buy in drugstores, supermarkets, etc.
- * can help relieve premature ejaculation
- * can be put on as part of sex play
- * can be used with other methods to reduce risk of infection

POSSIBLE PROBLEMS

- * uncooperative partners
- * latex allergies
- * loss of sensation
- * breakage

COST

50¢ and up. Some family planning centers give them away or charge very little.



If You Choose

The Diaphragm or Cervical Cap...

... your clinician will fit you with a shallow latex cup (diaphragm) or a thimble-shaped latex cap (cervical cap). Clinician also will show you how to coat diaphragm or cap with spermicide and put it in your vagina to keep sperm from joining egg.

EFFECTIVENESS

80-94% — diaphragm

80-90% — cervical cap for women who have not had a child

60-80% — cervical cap for women who have had a child

- * not effective against sexually transmitted infections
- * latex or female condoms can reduce risk of infection

ADVANTAGES

- no major health concerns
- * can last several years

POSSIBLE PROBLEMS

- * can be messy
- * allergies to latex or spermicide
- * should not be used during vaginal bleeding or infection

Diaphragm

- increased risk of bladder infection
- * can only be left in place for up to 24 hours

Cervical Cap

- # difficult for some women to use
- * only four sizes difficult to fit some women
- * can only be left in place for up to 48 hours



Diaphragm



Cervical Cap

COST

\$13 – \$25 for diaphragm or cap.

\$50 - \$125 for examination.

Often costs less at family planning clinics.

\$4 – \$8 for supplies of spermicide jelly or cream.

If You Choose

The Female Condom or Spermicide...

... you will follow package instructions and insert **female condom** deep in your vagina to keep sperm from joining egg, or

... you will follow package instructions and insert **spermicide** — contraceptive foam, cream, jelly, film, or suppository — deep into your vagina shortly before intercourse to keep sperm from joining egg. Spermicides immobilize sperm.

Follow package instructions to remove **female condom**. **Spermicide** dissolves in vagina.

EFFECTIVENESS

79-95% female condom

72-94% spermicide

The **female condom** reduces the risk of sexually transmitted infections, including HIV. Use it or the latex condom with all other methods for protection against infection.

ADVANTAGES

- * easy to buy in drugstores, supermarkets, etc.
- * insertion may be part of sex play
- * erection unnecessary to keep female condom in place
- # female condoms can be used by people allergic to latex or spermicide
- * external ring of female condom may stimulate clitoris

POSSIBLE PROBLEMS

Spermicide

- * can be messy
- * may irritate vagina or penis which may increase risk of infection
- * may set off allergies

Female condom

- * may be noisy
- may irritate vagina or penis
- * may slip into vagina during intercourse
- * may be difficult to insert

COST

\$2.50 for female condom.

\$8 for applicator kits of **foam** and **gel**. \$4 - \$8 for refills. Similar prices for **films** and **suppositories**.





If You Choose

Periodic Abstinence or FAMs

(Fertility Awareness Methods)...

... a professional will teach you how to chart your menstrual cycle and to detect certain physical signs to help you predict fertility or "unsafe" days. Abstain from intercourse (periodic abstinence) or use condoms, diaphragms, cervical caps, or spermicide (FAMs) during nine or more "unsafe" days.

Predicting fertility includes

- * checking temperature daily
- * checking cervical mucus daily
- * recording menstrual cycles on calendar

EFFECTIVENESS

75-99%

* not effective against sexually transmitted infections

ADVANTAGE:

- * no medical or hormonal side effects
- * calendars, thermometers, and charts easy to get

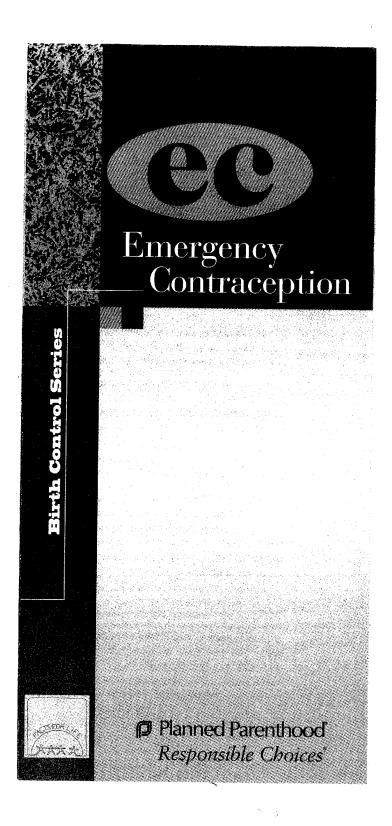
POSSIBLE PROBLEMS

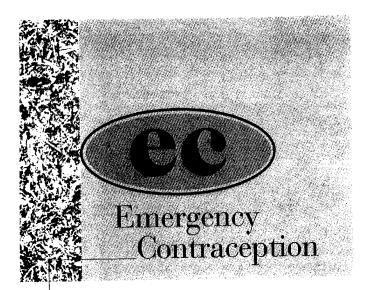
- * requires months of training before effective use
- * uncooperative partners
- * taking risks during "unsafe" days
- * poor record keeping
- * illness and lack of sleep affect body temperature
- * changes caused by vaginal infections and douches
- * cannot use with irregular periods or temperature patterns

COST

\$5 – \$8 and up for temperature kits (drugstores). Free classes often available in health and church centers.







... can **prevent** pregnancy *after* unprotected vaginal intercourse. It is also called post-coital or "morning-after" contraception.

... is available from health care providers, Planned Parenthood health centers, and other women's health and family planning centers.

... is provided in two ways

- * emergency contraceptive pills (ECPs)
- * insertion of an IUD

... is used only if a woman is **not already pregnant** from a previous act of intercourse. It prevents pregnancy by stopping ovulation, fertilization, or implantation. It will not effect an existing pregnancy. And it will not cause an abortion.

ECPs

ECPs are given in two doses of hormonal pills. Some ECPs are "combination pills" with estrogen and progestin — synthetic hormones like the ones a woman's body makes. Others are progestin-only. Women who can't take estrogen may be able to take progestin-only pills.

Some clinicians review your medical history before they prescribe ECP. Some may want you to give informed consent by signature or over the telephone.

How to Use ECPs

ECPs are taken in two doses, 12 hours apart. They work best when the first dose is taken within 72 hours of unprotected vaginal intercourse. Some are designed specifically for emergency contraception — Plan B® (progestin-only) and Preven® (estrogen and progestin). Certain other birth control pills can be used for EC.

Several brands have been shown to be effective. The number of pills in a dose depends on the brand.

Use the same brand for both doses.

| Pill Brand | Manufacturer | 1st Dose |
|--------------|-----------------------------|------------------|
| Alesse® | Wyeth-Ayerst | 5 pink pills |
| Levlen® | Berlex | 4 light orange p |
| Levlite® | Berlex | 5 pink pills |
| Levora® | Watson | 4 white pills |
| Lo/Ovral® | Wyeth-Ayerst | 4 white pills |
| LowOgestrel® | Watson | 4 white pills |
| Nordette® | Wyeth-Ayerst | 4 light orange p |
| Ogestrel® | Watson | 2 white pills |
| Ovral® | Wyeth-Ayerst | 2 white pills |
| Ovrette®* | Wyeth-Ayerst | 20 yellow pills |
| Plan B®* | Woman's Capital Corporation | 1 white pill |
| PRFVEN® | Gynétics | 2 blue pills |
| Tri-Levlen® | Berlex | 4 yellow pills |
| Triphasil® | Wyeth-Ayerst | 4 yellow pills |
| Trivora® | Watson | 4 pink pills |

With a regular 28-pill birth control pack, use any of the first 21 pills for Don't use the last seven pills in a 28-day pack. They are only reminder hormones. With Triphasil or Tri-Levlen, use only the yellow ones. With

FIRST DOSE: Swallow the pills in the first dose within 72 hours — three days — after having unprotected sex. If you are not using progestin-only pills, you may want to eat saltines or soda crackers or drink a glass of milk 30 minutes before taking each dose to avoid vomiting. You can buy medication to reduce nausea, such as Dramamine® or Bonamine®.

SECOND DOSE: Swallow the second dose 12 hours after taking the first dose. If you threw up after the first dose, be sure to use an anti-nausea medication 30 minutes before taking the second one. Or you may want to take the second dose as a vaginal suppository by inserting the pills with your fingers as high into the vagina as you can reach. (The medication will be absorbed through the vaginal tissue.)

2nd Dose (12 hours later)

| 3e pills | 5 pink pills 4 light orange pills 5 pink pills |
|----------|--|
| S | 4 white pills |
| S | 4 white pills |
| S | 4 white pills |
| 3e pills | 4 light orange pills |
| \$ | 2 white pills |
| S | 2 white pills |
| oills | 20 yellow pills |
| | 1 white pill |
| | 2 blue pills |
| lls | 4 yellow pills |
| lls | 4 yellow pills |
| | 4 pink pills |
| | |

Is for emergency contraception. iinder pills that contain no With Trivora, use only the pink ones. If you vomit the second dose, do not take any extra pills. They probably won't reduce the risk of pregnancy. But they will probably make you sick to your stomach.

After You Take the Pills

- * Your next period may be earlier or later than usual.
- Your flow may be heavier, lighter, or more spotty than usual.
- # If you see other health care providers before you get your period, remember to tell them that you have taken emergency contraception pills.
- * Schedule a follow-up visit with your clinician if you do not have your period in three weeks or if you have symptoms of pregnancy.
- ** Be sure to use another method of contraception if you have vaginal intercourse any time before you get your period again.
- * Continue using the birth control method of your choice for as long as you want to avoid pregnancy.

Side Effects

Side effects associated with the use of ECPs usually taper off one or two days after the second dose has been taken.

- # Half of the women who take the combined pills feel sick to their stomachs, but only for about 24 hours.
- * Up to one out of three women throw up with combined pills.
- * The risk of nausea and vomiting is lower with progestin-only ECPs.
- Breast tenderness, irregular bleeding, fluid retention, dizziness, and headaches may also occur.

Frequent use of ECPs may cause periods to become irregular and unpredictable. The side effects of anti-nausea medication may include lightheadedness, dizziness, or feeling spacey. Please follow the precautions on the package insert.

Emergency contraception may not prevent ectopic pregnancy. An ectopic pregnancy is one that develops outside the uterus. It must be treated to prevent complications that may be fatal.

If you think you may have an ectopic pregnancy, get medical attention immediately. Signs of ectopic pregnancy include

- * severe pain on one or both sides of the lower abdomen
- * abdominal pain and spotting, especially after a very light or missed menstrual period
- # feeling faint or dizzy

ECPs will not harm a fetus. Still, you should not use emergency contraception if you are pregnant.

Emergency IUD Insertion

A clinician can insert an IUD for emergency contraception within seven days of unprotected intercourse.

The Copper T 380A IUD (ParaGard®) is used for emergency contraception. It can be left in place for up to 10 years for very effective contraception. Or the IUD can be removed after your next menstrual period, when it is certain that you are not pregnant.

IUD insertion for emergency contraception is not recommended for

- * women with more than one sex partner or whose partners have more than one partner
- * women with new partners
- * women who have been raped

Uterine cramping may occur during insertion. Some women feel a bit dizzy, and rarely a woman may faint.

If you have an IUD inserted, you may want to have someone with you to escort or drive you home. You may need to rest afterwards.

The side effects, advantages, and disadvantages of using IUDs for emergency contraception are the same as those associated with using IUDs for ongoing contraception.

continued over 🛶

For more information about IUDs...

Ask your clinician for a copy of the Planned Parenthood pamphlet, *Understanding IUDs*, for more information about the advantages and disadvantages of the IUD as a regular method of birth control.

How Well Emergency Contraception Works

- ** Combined ECPs reduce the risk of pregnancy by 75 percent. For example, eight out of 100 women will become pregnant after having unprotected sex once during the second or third week of their cycles. But only two out of 100 will become pregnant after taking ECPs.
- Progestin-only ECPs reduce the risk of pregnancy by 89 percent. Only one woman out of 100 will become pregnant after taking progestin-only ECPs.

Timing is important

Timing affects how well ECPs work:

- * ECPs work best taken as soon as possible after unprotected intercourse.
- * The closer a woman is to ovulation at the time of unprotected intercourse, the greater her chances of pregnancy.
- ** Emergency IUD insertion reduces the risk of pregnancy by 99.9 percent. Only one out of 1,000 women will become pregnant after emergency IUD insertion.

Emergency contraception is meant for emergencies only. It is not as effective as the regular use of reversible contraception — Norplant®, Depo-Provera®, Lunelle®, the IUD, or the Pill.

ECPs do not continue to prevent pregnancy during the rest of the cycle. Other methods of birth control must be used.

Emergency contraception offers no protection against sexually transmitted infections. Consider testing for sexually transmitted infections if there is a possibility that unprotected sex put you at risk.

Where to Get Emergency Contraception

Emergency contraception is available at Planned Parenthood, college, public, and women's health centers; private doctors; and hospital emergency rooms — unless they are affiliated with religions that oppose the use of birth control.

Some clinics and clinicians will prescribe ECPs over the phone and call the prescription in to a pharmacy. ECPs are available directly from some pharmacists in Washington state.

You can get the names and phone numbers of five emergency contraception providers nearest you by calling, toll-free, the emergency contraception hotline — 1-888-NOT-2-LATE. Or contact the nearest Planned Parenthood health center at 1-800-230-PLAN.

Emergency Contraception to Go

Packs of ECPs are available from some women's health centers. Some may only provide them to women whose medical histories are well known to their clinicians. Take-home kits allow women to use ECPs in emergency situations without having to wait to see their clinicians.

Costs Vary Widely

Fees may be lesser at family planning clinics and health centers. Some use a sliding scale. Costs also depend on region and location and on which of the following services are needed. Here are some estimates:

| ECP | Range of Costs |
|-----------------------------------|----------------|
| Plan B [®] | \$8 - \$20 |
| PREVEN® | \$8 - \$20 |
| one pack of combination pills | \$20 – \$35 |
| two packs of progestin-only pills | \$50 |
| visit with health care provider | |
| (if needed) | \$35 – \$150 |
| pregnancy test (if needed) | \$10 – \$20 |

IUD — The ParaGard® IUD costs about \$400 for exam, IUD, and insertion. It lasts for 10 years. However, that amounts to only \$40 a year if left in place.

Planned Parenthood®

Every child wanted and loved. Every woman in charge of her destiny.

Nationwide, Planned Parenthood affiliates provide medical services and sexuality education for millions of women, men, and teenagers each year. Planned Parenthood also serves women and men around the world.

Call toll-free 1-800-230-PLAN for an appointment with the nearest Planned Parenthood center.

Support sexual and reproductive health and rights for women and men worldwide. Visit www.plannedparenthood.org and click on Responsible Choices.

For a free catalog of Planned Parenthood sexual health resources, call toll-free 1-800-669-0156 or visit www.plannedparenthood.org/store.

Written by Jon Knowles Revised by Danielle Dimitrov

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ISBN 0-934586-77-2

You May Want Emergency Contraception If His condom broke or slipped off, and he ejaculated inside your vagina. You forgot to take your birth control Your diaphragm or cervical cap slipped out of place, and he ejaculated inside your vagina. You miscalculated your "safe" days. He didn't pull out in time. You weren't using any birth control. He forced you to have unprotected vaginal sex. Contact your health care provider immediately if you have had unprotected intercourse and you think you might become pregnant. Ask About Emergency Contraception. Planned Parenthood* www.plannedparenthood.org www.teenwire.com EC — Emergency Contraception 11/00-125 2.13.5 2675 ISBN 0-934586-77-2

Pocket Guide to *S.T.E.P.S.*™ and Patient Surveys

As a patient who is registered in the *S.T.E.P.S.*" program for THALOMID® (thalidomide), you will need to complete a brief, confidential telephone survey before you can receive a prescription for the medication.

Patient Telephone Survey Frequency: Monthly

- Adult females who are able to become pregnant
- Female children
- Male patients

Patient Telephone Survey Frequency: Every 6 Months

• Adult females who are not able to become pregnant

- Prior to filling your prescription, call the Celgene Customer Care Center at 1-888-4-CELGENE (1-888-423-5436) PRESS "1" to complete the survey
- Be prepared with your Social Security Number
- Your doctor will write an authorization number on every prescription you receive for THALOMID® (thalidomide)
- After you have completed the phone survey, take the prescription to a registered *S.T.E.P.S.*™ pharmacy. To locate one, call 1-888-4-CELGENE (1-888-423-5436)

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Programa de información y prescripción segura de talidomida (S.TE.P.S.)

Guía de bolsillo sobre el programa *S.T.E.P.S.*™ y encuestas para el paciente

Todos los pacientes inscritos en el programa *S.T.E.P.S.*™ del fármaco THALOMID® (talidomida) deben completar una breve encuesta telefónica confidencial antes de poder recibir la receta para obtener dicho fármaco.

Frecuencia de la encuesta telefónica para el paciente: Mensual

- Mujeres adultas que pueden quedar embarazadas
- Niñas
- Pacientes varones

Frecuencia de la encuesta telefónica para el paciente: Cada 6 meses

 Mujeres adultas que no pueden quedar embarazadas

- Antes de obtener el medicamento, llame al Centro de Atención al Cliente de Celgene al teléfono 1-888-4-CELGENE (1-888-423-5436). OPRIMA EL "1" para realizar la encuesta.
- Tenga a la mano su número del Seguro Social.
- Su médico escribirá un número de autorización en cada receta de THALOMID® (talidomida) que le entregue.
- Al finalizar su encuesta telefónica, lleve la receta a una farmacia participante en el programa S.T.E.P.S.™ Para averiguar cuáles son las farmacias participantes, llame al 1-888-4-CELGENE (1-888-423-5436).

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S.T.E.P.S.™ At-A-Glance

Initial Prescription

- Counsel and perform pregnancy testing (if applicable)
- Provide mandatory contraception counseling
- Complete, print, and sign Patient Registration/Informed Consent Form
- Fax Patient Registration/Informed Consent Form to 1-888-432-9325
- Instruct patient to complete phone survey prior to filling prescription
- Complete a prescriber phone survey by calling 1-888-4-CELGENE (1-888-423-5436) and obtain a new authorization number for each prescription
 - -Be prepared with:
 - Prescriber DEA number
 - Patient's Social Security Number
 - Date and result of patient's last pregnancy test (if applicable)
- Write the authorization number on the prescription
- Average daily dose
- Total number of days supplied

Subsequent Prescriptions

- Perform scheduled pregnancy testing (if applicable)
- Instruct patient to complete surveys as scheduled, prior to filling prescription
- Complete a prescriber phone survey
 - —Be prepared with:
 - Prescriber DEA number
 - Patient's Social Security Number
 - Date and result of patient's last pregnancy test (if applicable)
- Obtain authorization number for each new prescription
- Write the authorization number on the new prescription

Please see complete Instructions for Prescribers.

• Average daily dose

Total number of days supplied



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Celgene

Prescriber Guide to Fax Back Services Call 1-888-423-5436

- For prescribers who do not have access to a computer or whose computer systems are not compatible with the MAC® or Windows® disks provided with *S.T.E.P.S.*™ program materials
- In 14 languages, to meet patient needs:
 - Patient Registration/Informed Consent Forms
 - Patient Brochure
 - Survey Forms
- Instructions in English for prescribers

Available languages:

| Cambodian | French (France) | Japanese | Polish | Spanish |
|-----------|-----------------|----------|-----------|------------|
| Chinese | German | Korean | Portugese | Vietnamese |
| English | Italian | Laotian | Russian | |

The documents you request will be faxed directly to the number you indicate. Please be prepared to provide:

- Prescriber's
 - Name
 - DEA or Social Security number
 - Full address
- Patient's
 - Name
 Full address
 Phone number
 Date of birth
 Social Security number
 Diagnosis
 For female patients, whether the patient is menstruating, has had a hysterectomy, or has been without menses for at least 24 months

With this information, the Celgene Customer Care Center will generate the applicable form(s) and have them faxed to the number you request.





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Instructions for Prescribers

Review the S.T.E.P.S.™ Starter Kit

S.T.E.P.S.™ Prescriber Resources (1 per registered prescriber)

- Computer disks to generate Patient Registration/Informed Consent Forms (available for MAC® and Windows®)
- S.T.E.P.S.™ At-A-Glance
- Prescriber Guide to Fax Back Services
- Instructions for Prescribers
- Emergency Contraception Brochure
- THALOMID® (thalidomide) Patient Chart Sticker for each chart (located on Patient Resource Pack)
- Full Prescribing Information for THALOMID® (thalidomide)

S.T.E.P.S.™ Patient Resource Pack (1 per patient)

- Pocket Guide to S.T.E.P.S.™ and Patient Surveys
- Brochure entitled Important Information for Men and Women Taking THALOMID® (thalidomide)

(A videotape presentation of this information is provided with the S.T.E.P.S.™ Starter Kit)

- Your Contraceptive Choices Brochure
- Emergency Contraception Brochure

S.T.E.P.S.™ System Set-up for Prescribers

- Insert appropriate computer software (disk)
- Install S.T.E.P.S.™ Patient Registration/Informed Consent Form Program
- Computer software (disk) is only installed once





Patient Registration

Before a patient can receive THALOMID® (thalidomide), he or she must understand and, along with the prescriber, sign a Patient Registration/Informed Consent Form (available on computer disk).

Prescribers who do not have access to a computer or whose computer systems are not compatible with the MAC® or Windows® disks provided with S.T.E.P.S.™ materials, should use the Prescriber Guide to Fax Back Services. These services provide Patient Registration/Informed Consent Forms, Patient Brochures, and Survey Forms in 14 languages, including English.

- Generate appropriate Patient Registration/Informed Consent Form
 - Enter patient data
 - Enter prescriber data
- Print and complete the Patient Registration/Informed Consent Form
 - Patient and/or parent/legal guardian must be read the Patient Registration/Informed Consent Form in the language of their choice (available in 14 languages through the Celgene Customer Care Center at 1-888-423-5436)
 - Each statement must be initialed by the patient to indicate understanding
 - The form must be completed and signed by both prescriber and patient
 - If the patient is under 18 years of age, his or her parent/legal guardian must read this material, initial the statements, sign the form, and agree to ensure compliance
- Fax the completed Patient Registration/Informed Consent Form to the Celgene Customer Care Center at 1-888-432-9325

Initial THALOMID® (thalidomide) Prescriptions

THALOMID® (thalidomide) is indicated for the acute treatment of the cutaneous manifestations of moderate to severe erythema nodosum leprosum (ENL). THALOMID® (thalidomide) is not indicated as monotherapy for such ENL treatment in the presence of moderate to severe neuritis.

THALOMID® (thalidomide) is also indicated as maintenance therapy for prevention and suppression of the cutaneous manifestations of ENL recurrence.

After the appropriateness of THALOMID® (thalidomide) therapy has been established, please refer to the following step-by-step guidelines:

Female Patients

- Provide comprehensive counseling on the benefits and risks of THALOMID® (thalidomide) therapy
 - Patients must be counseled on the risk of birth defects, other side effects, and important precautions associated with THALOMID® (thalidomide) therapy
- Provide contraceptive counseling, including counseling on emergency contraception
 - Use the patient education materials provided in the S.T.E.P.S.™ Patient Resource Pack

System for Thalidomide Education and Prescribing Safety (S.T.E.P.S.")

Female Patients (continued)

- Determine whether patient is of childbearing potential
 - Female patients must thoroughly understand the need for two recommended forms of birth control beginning 4 weeks before therapy, all during therapy, and for at least 4 weeks after stopping therapy with THALOMID® (thalidomide)
 - Contraceptive methods must include at least one highly effective method (e.g., intrauterine device [IUD], hormonal [birth control pills, injections, or implants], tubal ligation, or partner's vasectomy) AND one additional effective barrier method (e.g., latex condom, diaphragm, or cervical cap)
 - If hormonal or IUD contraception is medically contraindicated, another highly effective method or two barrier methods must be used AT THE SAME TIME
- Continue selected birth control options for at least 4 weeks prior to initiating THALOMID® (thalidomide), all during therapy, and 4 weeks after discontinuing therapy
- Perform an in-office pregnancy test, even if continuous abstinence is the chosen method of birth control, in all female patients of childbearing potential:
 - Pregnancy test must be performed, with negative results in written form, within the 24 hours before beginning THALOMID® (thalidomide) therapy
 - Women of childbearing potential should also receive a pregnancy test every week for the first 4 weeks of therapy
 - Then, every month if patient has regular menses; every 2 weeks if irregular menses
 - Pregnancy test must be performed with a sensitivity of at least 50 mIU/mL
 - Pregnancy testing and counseling should be performed if a patient misses her period or if there is any abnormality in menstrual bleeding
 - If pregnancy does occur during treatment, THALOMID® (thalidomide) must be immediately discontinued. Any suspected fetal exposure to THALOMID® (thalidomide) must be reported immediately to the FDA via the MedWATCH number at 1-800-FDA-1088 and also to Celgene Corporation. The patient should be referred to an obstetrician/gynecologist experienced in reproductive toxicity for further evaluation and counseling

Male Patients

- Provide comprehensive counseling on the risks and benefits of THALOMID® (thalidomide) therapy
 - Patients must be counseled on the risk of birth defects, other side effects, and important precautions associated with THALOMID® (thalidomide) therapy
- Provide contraceptive counseling, including counseling on emergency contraception
 - Use the patient education materials provided in the S.T.E.P.S.™ Patient Resource Pack
 - Male patients must be instructed to use a latex condom every time they have heterosexual sexual contact (e.g., sexual intercourse, oral sex, or anal sex), even if they have undergone a successful vasectomy, as THALOMID® (thalidomide) is present in semen

System for Thalidomide Education and Prescribing Safety (S.T.E.P.S.")

Issuing a THALOMID® (thalidomide) Prescription

Before issuing a prescription for THALOMID® (thalidomide), be sure that contraceptive counseling and pregnancy testing have been performed as required.

- Instruct the patient to complete a brief telephone survey
- Complete a brief prescriber telephone survey for every patient before each prescription is written
 - An authorization number will be issued upon completion of the survey and must be written on the prescription
- Provide prescription
 - Write authorization number on the prescription
 - Prescriptions cannot be issued by telephone
 - Prescribe no more than 4 weeks (28 days) of therapy, with no automatic refills
 - Inform the patient that all prescriptions must be filled within 7 days
 - It is recommended that female patients of childbearing potential initially receive no more than a 1-week supply for each of the first 4 weeks to coincide with weekly pregnancy testing requirements

Subsequent THALOMID® (thalidomide) Prescriptions

The prescriber must complete a brief phone survey and obtain a new authorization number *EVERY TIME* a prescription for THALOMID® (thalidomide) is written.

Female Patients

- Repeat patient counseling
- Female patients must complete a brief telephone survey, according to the following schedule:
 - Monthly
 - Adult females of childbearing potential
 - Female children
 - Every 6 months
 - Adult females not of childbearing potential
- Perform pregnancy test every 4 weeks if patient's menstrual cycles are regular, every 2 weeks if cycles are irregular
 - It is recommended that pregnancy tests be performed within the 24 hours before providing subsequent prescriptions
 - Pregnancy tests must be performed even if continuous abstinence is the chosen method of birth control
- If pregnancy test is negative, provide a prescription for no more than a 4-week (28-day) supply of THALOMID® (thalidomide) therapy
- Telephone prescriptions are not permitted

Male Patients

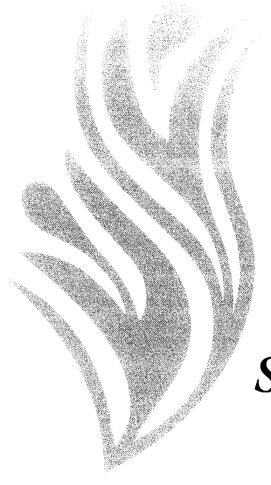
- Repeat patient counseling
- Male patients must complete a brief phone survey once monthly
- Provide a new prescription for no more than a 4-week (28-day) supply of THALOMID® (thalidomide)
- Telephone prescriptions are not permitted

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Emergency Contraceptive Pills: Medical and Service Delivery Guidelines

Consortium for Emergency Contraception



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CONSORTIUM FOR EMERGENCY CONTRACEPTION



Emergency Contraceptive Pills: Medical and Service Delivery Guidelines

October 2000

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FOREWORD

Offering emergency contraception is an important way for family planning and reproductive health programs to improve the quality of their services and better meet the needs of their clients. Emergency contraception is needed because no contraceptive method is 100 percent reliable and few people use their method perfectly each time they have sex. Furthermore, emergency contraception is useful in cases of sexual assault.

Emergency contraceptive pills (ECPs), the most commonly used and most convenient form of emergency contraception, are not difficult to provide. Specially packaged ECPs or supplies of regular oral contraceptives that can be used for ECPs are readily available in most places. Providers can be trained easily in the correct use, counseling, and follow-up related to ECPs. Nevertheless, providing ECPs does entail unique service delivery issues, such as the need to ensure rapid access to the method to maximize efficacy and the importance of counseling clients about additional, ongoing methods to prevent both pregnancy and sexually transmitted infections after the ECPs are used.

An essential component of programs providing emergency contraception is informing women about this

important option before they need it. Because the time-frame for seeking treatment is short, women need to be aware that emergency contraception is an option, know where they can seek services, and understand that services should be started as soon as possible, but optimally within three days (72 hours) of unprotected sex. Providing emergency contraceptive information and, if practical, supplies of ECPs at the time of a regular contraceptive visit is one way of ensuring that women have the resources they need to protect themselves from pregnancy in the event of unprotected intercourse or a contraceptive failure.

The organizations that make up the Consortium for Emergency Contraception have compiled these service delivery guidelines to give family planning and reproductive health programs the information they need to provide ECPs safely and effectively. The recommendations in these guidelines reflect the latest available research on emergency contraception, and have been reviewed by internationally recognized reproductive health experts. Local programs can adapt these guidelines as necessary to comply with national or other requirements.

SUMMARY SERVICE PROTOCOL FOR EMERGENCY CONTRACEPTIVE PILLS

Emergency contraceptive pills (ECPs) are an important option for women who recently have had unprotected intercourse or a contraceptive failure and who do not want to become pregnant. ECPs have been shown to be safe and effective in studies conducted over the past two decades. For further information, see relevant sections of this manual.

Indication

To prevent pregnancy after unprotected intercourse.

Regimens

Levonorgestrel-only regimen

0.75 mg levonorgestrel (or 1.5 mg norgestrel) as soon as possible but optimally within 72 hours after unprotected intercourse; repeat in 12 hours.

Combined estrogen-progestin (Yuzpe) regimen

100 mcg ethinyl estradiol plus 0.50 mg of levonorgestrel (or 1.0 mg norgestrel) as soon as possible, but optimally within 72 hours after unprotected intercourse; repeat in 12 hours.

Both regimens are available in some locations as products formulated and labeled specifically for use as ECPs, or they can be made up from a variety of regular oral contraceptive pills (see Table 1). The levonorgestrel-only regimen is preferred because it is more effective and is associated with a lower incidence of side effects.

Treatment should be initiated as soon as possible. Recent research has indicated that efficacy declines substantially over time after intercourse.

Mode of Action

The exact mode of action of ECPs is not known. In some studies, ECPs have been shown to prevent or delay ovulation. They also may prevent pregnancy through the following additional mechanisms, though these have not been proven:

- by affecting the movement of sperm through the cervical mucus;
- by altering transport of sperm, ovum, or embryo;
- by interfering with corpus luteum function;
- by preventing fertilization;
- · by inhibiting implantation.

Which mechanism is active in a particular case may depend on the time in the cycle when the ECPs are taken. The two ECP regimens discussed in these guidelines do not disrupt an established (implanted) pregnancy.

Effectiveness

The levonorgestrel-only regimen reduces the risk of pregnancy by about 85 percent after a single act of intercourse. The combined regimen reduces the risk of pregnancy by about 74 percent. The levonorgestrel regimen is significantly and substantially more effective than the combined regimen. Both regimens appear to be more effective the sooner after sex they are used. ECPs are not as effective as consistent and correct use of most modern contraceptive methods.

Side Effects

Side effects of both regimens include nausea, vomiting, abdominal pain, fatigue, headache, dizziness, breast tenderness, and irregular vaginal spotting or bleeding. The levonorgestrel-only regimen is associated with a significantly lower risk of nausea and vomiting than the combined regimen. In most women, menses will come up to a week earlier or later than expected.

Prevention of Nausea and Vomiting

The incidence of nausea and vomiting in women using the levonorgestrel-only regimen is low enough that prophylactic treatment with antiemetic drugs is not warranted. However, antiemetics may be appropriate for women who use the combined regimen. Meclizine (50 mg, taken one hour before the first ECP dose) has been shown to significantly reduce the incidence of nausea and vomiting associated with the combined regimen. Patients should be warned that meclizine may cause drowsiness. Other antiemetic regimens also may be effective.

Management of Vomiting

If vomiting occurs within one hour after either dose, repeat the dose, if feasible. In cases of severe vomiting, vaginal administration of ECPs may be effective.

Precautions

The only medical condition in which ECPs should not be used is confirmed pregnancy. ECPs will not be effective



if pregnancy already is established. ECPs may be given when pregnancy status is unclear and pregnancy testing is not available, as there is no evidence suggesting harm to the woman or to an existing pregnancy.

There are no other known medical conditions in which ECPs should not be used. Since the pills are used for such a short time, experts believe that the precautions associated with continuous use of combined oral contraceptives and levonorgestrel-only pills do not apply to ECPs.

Screening

If possible, establish that the client is not pregnant by determining the time since her last normal menstrual period. Ascertain the date and time of unprotected intercourse. If intercourse occurred more than 72 hours before screening, counsel the client that the hormonal treatment may still have limited effectiveness. (IUD insertion may be a more effective option, if medically appropriate.) No pelvic exam or other tests are needed unless pregnancy is suspected.

Special Situations

Breastfeeding

ECPs may be used, as there is no evidence of danger to the woman or infant.

Unprotected act(s) more than 72 hours ago

ECPs may be used, but clients should be informed that efficacy will be low.

More than one prior unprotected act

One ECP regimen may be given to cover all unprotected acts, but clients should understand that efficacy to prevent pregnancy from acts more than 72 hours prior will be low.

Repeated ECP use

ECPs may be used as frequently as requested, but clients should be informed that ongoing, correct use of other contraceptive methods provides more effective protection over time.

Use of ECPs before intercourse

Clients should be discouraged from using ECPs before intercourse, since ECPs may not be as effective as other contraceptive methods, and no data exist on the effectiveness of this practice.

Unprotected sex during the "infertile period"

Because it often is difficult to define the infertile period with certainty, ECPs generally are recommended

any time that unprotected sex occurs and the client is concerned that she is at risk for pregnancy.

Concurrent use of other drugs

Clients should be counseled about the possibility of drug interactions and managed accordingly (see Section 2.7).

Use of other formulations

Combined estrogen-progestin pill formulations containing the progestin norethindrone in place of levonorgestrel can be used when standard regimens are not available (see Section 2.7).

Counseling

Clients may feel stressed or embarrassed to talk about unprotected intercourse. Nonjudgmental counseling is crucial. Ideally, counseling should include a review of efficacy and possible side effects of ECPs, and clients should be given information about regular contraceptive methods to use after taking ECPs. Whenever possible, clients should be provided with a temporary method, such as condoms, for use in the immediate future. At a minimum, the following messages should be conveyed:

- The client should take the first dose of ECPs as soon as possible, and the second dose 12 hours after the first.
- Following ECP use, if the client's menstrual period is more than one week later than expected, she should seek evaluation and care for possible pregnancy.
- ECPs do not prevent pregnancy from sexual acts after treatment. Therefore, clients should use another form of contraception after using ECPs. ECPs are not suitable for ongoing contraception because the risk of pregnancy, the incidence of side effects, and the total hormone dose will be high.
- ECPs do not protect against HIV/AIDS or sexually transmitted infections (STIs). Clients who had unprotected intercourse should be counseled about evaluation for possible infection and risk-reduction techniques (particularly condom use), if appropriate.

Follow-up

Advise the client to see a health care provider if she has any questions or reason for concern.

EMERGENCY CONTRACEPTIVE PILLS: MEDICAL AND SERVICE DELIVERY GUIDELINES

1. Introduction

Despite the availability of highly effective methods of contraception, many pregnancies are unplanned and unwanted. These pregnancies carry a higher risk of morbidity and mortality, often due to unsafe abortion. Many of these unplanned pregnancies can be avoided using emergency contraception.

1.1 Definition

Emergency contraceptive pills (ECPs) are hormonal methods of contraception that can be used to prevent pregnancy after an unprotected act of sexual intercourse.

ECPs sometimes are referred to as "morning-after" or "post-coital" pills. The term "emergency contraceptive pills" is preferred because it conveys the important message that the treatment should not be used as an ongoing contraceptive method, and it avoids giving the mistaken impression that the pills must be taken on the morning after sex.

These guidelines deal with medical and service delivery issues related to two types of ECPs: (1) pills containing a progestin only (levonorgestrel or norgestrel), and (2) pills containing a combination of a progestin (levonorgestrel or norgestrel) and an estrogen (ethinyl estradiol).

A brief overview of the use of IUDs for emergency contraception is included in the Appendix.

1.2 Indications

ECPs are indicated to prevent pregnancy after unprotected sexual intercourse, including:

- when no contraceptive has been used;
- when there is a contraceptive failure or misuse, including:
 - condom breakage, slippage, or misuse
 - two or more consecutive missed oral contraceptive pills
 - more than 2 weeks late for a progestin-only contraceptive injection (depot medroxyprogesterone acetate or norethisterone enanthate)
 - more than 3 days late for a combined estrogenplus-progestin injection (medroxyprogesterone acetate and estradiol cypionate)
 - diaphragm or cap dislodgment, breakage, tearing, or early removal

- failed coitus interruptus (e.g., ejaculation in vagina or on external genitalia)
- failure of a spermicide tablet or film to melt before intercourse
- miscalculation of the periodic abstinence method or failure to abstain on fertile day of cycle
- intrauterine device (IUD) expulsion
- in cases of sexual assault when the woman was not protected by a reliable contraceptive method.

2. Emergency Contraceptive Pills

2.1 ECP Regimens

Two ECP regimens are discussed in these guidelines:

Levonorgestrel-only regimen

0.75 mg levonorgestrel (or 1.5 mg norgestrel) as soon as possible, but optimally within 72 hours after unprotected intercourse; repeat in 12 hours.

Combined estrogen-progestin (Yuzpe) regimen

100 mcg ethinyl estradiol plus 0.5 mg of levonorgestrel (or 1.0 mg norgestrel) as soon as possible, but optimally within 72 hours after unprotected intercourse; repeat in 12 hours.

Both regimens are available in some locations as products formulated and labeled specifically for use as ECPs. They also can be made up from a variety of regular oral contraceptive pills (see Table 1). The levonorgestrel-only regimen is preferred because it is more effective and is associated with a lower risk of nausea and vomiting.¹

Treatment should not be delayed unnecessarily, as efficacy appears to decline substantially with time.²

2.2 Mode of Action

The precise mechanism of action of ECPs in a particular case cannot be known and may depend on the time in the menstrual cycle when the intercourse occurred and when the ECPs were taken. Some studies have suggested that the combined regimen taken before ovulation can inhibit or delay ovulation.³⁻⁵ Some studies have shown histologic or biochemical alterations in the endometrium after treatment with the regimen, leading to the suggestion that the regimens may act by impairing endometrial receptivity to implantation of a fertilized egg.⁴⁻⁶ However, other studies



have found no such effects on the endometrium,⁵ and it is not clear whether the endometrial changes that have been observed would be sufficient to inhibit implantation. Additional possible mechanisms include thickening of the cervical mucus resulting in trapping of sperm; alterations in the transport of sperm, egg, or embryo; interference with corpus luteum function; and direct inhibition of fertilization. No clinical data exist regarding these possibilities. Nevertheless, statistical evidence on the effectiveness of ECPs suggests that there must be a mechanism of action other than delaying or preventing ovulation.⁷

Data from studies of high-dose oral contraceptives indicate that the two ECP regimens described in these guidelines do not cause abortion; that is, they do not interrupt or damage a pregnancy, defined as beginning after implantation has occurred.^{8,9}

2.3 Efficacy

Levonorgestrel-only regimen

The largest study of the efficacy of this regimen included 1,001 women using the regimen at 21 centers in 14 countries. The authors of this study concluded that the regimen prevents about 85 percent of the pregnancies that would occur if the treatment is not used. For example, if 100 women had unprotected sex, about 8 would typically become pregnant. If all 100 women used the regimen, however, only 1 would become pregnant. Thus, use of the levonorgestrel-only regimen reduced the chance of pregnancy by about eight-fold.

Combined estrogen-progestin regimen

A meta-analysis of eight studies of the efficacy of the combined regimen including more than 3,800 women in eight studies concluded that the regimen prevents about 74 percent of expected pregnancies. For example, if 100 women had unprotected sex without using the regimen, about 8 would become pregnant. If all 100 women had unprotected sex and used the regimen, only 2 would become pregnant. Thus, use of the combined regimen reduces the chance of pregnancy by about four-fold.

A large randomized trial that directly compared the two regimens showed that the levonorgestrel regimen is significantly more effective than the combined regimen. The relative risk of pregnancy in this study was 0.36, indicating that the chance of pregnancy among women who received the levonorgestrel regimen was about one third the chance among those who received the combined regimen.¹

Three studies have suggested that the combined regimen is substantially more effective the sooner after sex the pills are taken. 1,11,12 The largest of these studies showed that

the pregnancy risk was three times higher if the first ECP dose was taken on the third day after sex rather than on the first day. Older studies did not show this time effect, ¹³ but they may not have been as rigorously conducted as the more recent research. Two studies ^{1,11} have indicated that the efficacy of the levonorgestrel regimen also decreases with time after intercourse, but the numbers of pregnancies were smaller, and the trend was not statistically significant.

ECPs are inappropriate for regular use as an ongoing contraceptive method for several reasons. First, ECPs are less effective than most modern methods over the long term. Because the ECP pregnancy rates are based on a single use, they cannot be directly compared to failure rates of ongoing contraceptives, which represent the risk of failure during a prolonged period (e.g., one year) of use. However, if ECPs were used as an ongoing method, the cumulative risk of pregnancy during a full year of use would likely be higher than the risk associated with regular hormonal contraceptives, male condoms, and other barrier methods.14 In addition, very frequent ECP use would result in more side effects and exposure to a higher total hormone dose than would regular use of either combined oral contraceptive pills or progestin-only pills. Data are not available on the incidence of serious medical complications in women who use ECPs frequently over a long period of time.

2.4 Side Effects, Prevention, and Management

Nausea and vomiting

Nausea occurs in approximately 23 percent of women and vomiting occurs in about 6 percent of women using levonorgestrel-only ECPs.¹ Nausea and vomiting occur in about 43 percent and 16 percent, respectively, of clients using the combined regimen.¹5 In studies directly comparing the two regimens, the levonorgestrel regimen has been shown to cause significantly and substantially less nausea and vomiting than the combined regimen. If they occur, these symptoms are usually limited to the first three days after treatment.¹6

Prevention

The best way to minimize nausea and vomiting is to use the levonorgestrel-only regimen instead of the combined regimen whenever possible. Nausea and vomiting are uncommon enough with the levonorgestrel-only regimen that prophylactic administration of an antiemetic drug is not routinely warranted. However, if the combined regimen is used, antiemetic pretreatment may be considered, depending on program and client resources. Meclizine is the only drug that has been proven to be effective; a single



Management

If vomiting occurs within one hour of taking either ECP dose, some experts believe that the dose should be repeated.¹⁷ In cases of severe vomiting, ECPs can be administered vaginally. Studies of regular oral contraceptive pills administered by this route suggest that the hormones are absorbed through the vaginal mucosa.^{18,19}

Irregular vaginal bleeding

A small number of women may experience irregular bleeding or spotting after taking ECPs. ¹¹ Such irregular bleeding should not be confused with menses, which is the much-anticipated evidence of success of treatment. Clients should be informed that ECPs do not necessarily bring on menses immediately (a common misperception among ECP clients); most women will have their menstrual period within one week before or after the expected time.

Management

After using ECPs, if the menstrual period is more than a week later than expected, the possibility of pregnancy should be considered, and the client should be advised to seek appropriate evaluation (such as a pregnancy test) and care.

Other side effects of ECPs

Other side effects may include abdominal pain, breast tenderness, headache, dizziness, and fatigue. These side effects usually do not occur more than a few days after treatment, and they generally resolve within 24 hours. ¹⁶

Management

A non-prescription pain reliever can be used to reduce discomfort due to headaches or breast tenderness.

Aside from these side effects, there are no known adverse medical effects to the woman from use of ECPs. There are also no known teratogenic effects on the fetus in the event of inadvertent ECP use during early pregnancy

(see Section 2.5). ECPs do not appear to increase either the absolute risk of ectopic pregnancy or the chance that a pregnancy following ECP use will be ectopic.

2.5 Precautions

- ECPs should not be given to a woman who has a confirmed pregnancy because the treatment will not be effective.
- If, after evaluation, the woman wants ECPs and pregnancy cannot be ruled out with certainty, it is permissible to give ECPs if you explain that she could already be pregnant, in which case the regimen will not be effective. However, results from studies of high-dose oral contraceptives suggest that neither the pregnant woman nor the fetus will be harmed if ECPs are inadvertently used during early pregnancy.⁸
- There are no other known medical conditions in which ECPs should not be used. Since the pills are used for a short time, experts believe that the precautions associated with continuous use of combined oral contraceptives and levonorgestrel-only pills do not apply.²⁰ Women with previous ectopic pregnancy may use ECPs.

2.6 Screening

Screen the client for ECP use by:

- assessing the date of the last menstrual period and whether it was normal, to exclude the possibility that the client may already be pregnant. If the client has not had a recent menstrual period for a discernible reason other than pregnancy (for example, she has been using an injectable contraceptive, she has recently been pregnant, she is breastfeeding, or she often has irregular or prolonged cycles), or if the client cannot remember the date of her last menstrual period accurately, then ECPs may be administered, as long as the client understands that pregnancy has not been ruled out;
- determining how long ago the unprotected coital act occurred. If it occurred earlier than 72 hours previously, treatment may be given, but the client should be warned that efficacy may be limited (see Section 2.7).

Other health assessments (e.g., pregnancy test, blood pressure measurement, laboratory tests, pelvic exam) are not required but can be offered if medically indicated for other reasons and desired by the client. Providers also should ask if the client is currently using a regular method of contraception; this question can be a good starting point for a discussion of regular contraceptive use and how to use methods correctly.

2.7 Special Issues

Use in breastfeeding women

A woman who is exclusively breastfeeding and who has not had a menstrual period since delivery is unlikely to be ovulatory and therefore may not need ECPs. However, a woman who is providing supplemental feeding to her infant or who has had menses since delivery may be at risk for pregnancy. A single treatment with ECPs is unlikely to have an important effect on milk quantity or quality. Some hormones may pass into the breast milk, but they are unlikely to affect the infant adversely.

Use after unprotected act(s) more than 72 hours ago

Studies of efficacy of treatment given within 72 hours show a declining effectiveness as the 72 hours progress, but suggest that ECPs probably retain some limited efficacy even after that time.² Recent data looking at use beyond 72 hours suggest that ECPs retain some efficacy when taken more than 72 hours after intercourse.¹⁷ Since ECPs apparently pose no danger either to the woman or to the embryo if the ECPs fail, it is reasonable to provide them if program and client resources permit and the client is fully counseled about the possibility of pregnancy. A more effective approach would be to insert a copper IUD (see Appendix), if the woman is otherwise a candidate for emergency IUD insertion.

Use after more than one unprotected act

ECPs should not be withheld if the client has had more than one unprotected act of intercourse, unless she is known to already be pregnant. However, clients should be informed that, as the interval between the earliest unprotected act and the use of the ECPs lengthens, the efficacy of the ECPs will be lower. Clients should be encouraged to use ECPs as promptly as possible after unprotected sex, and not to wait until they have had a series of unprotected acts. Only one ECP regimen should be given at a time, regardless of the number of prior unprotected acts.

Repeated use

ECPs are not intended for repeated use (see Section 2.3). However, given the low likelihood of harm from limited repeated use, ECPs should not be denied just because the woman has used them before, even within the same menstrual cycle. All women who use ECPs, especially those who use them repeatedly, should be given information about other forms of contraception and counseling about how to avoid future contraceptive failure.

Use of ECPs before intercourse

No data are available about how long the contraceptive effect of ECPs persists after the pills have been taken. Presumably ECPs taken immediately before intercourse are as effective as ECPs taken immediately afterwards. However, if a woman has the opportunity to plan to use a contraceptive method before intercourse, a method other than ECPs, such as condoms or another barrier method, is recommended.

Use of ECPs during the "infertile period"

Studies have shown that fertilization can result from intercourse only during a five- to seven-day interval around the time of ovulation.²¹ Theoretically, ECPs should not be needed if unprotected intercourse occurs at other times of the cycle, because the chance of pregnancy even without ECPs would be zero. However, in practice, it often is difficult to determine for certain whether a specific act of intercourse occurred on a fertile or infertile cycle day. Therefore, ECPs generally should be provided any time unprotected sex occurs and the client is concerned that she is at risk for pregnancy. In situations when the unprotected act is extremely unlikely to result in pregnancy, the client's anxiety level and the availability of program and client resources should be taken into account in making the decision.

Drug interactions

No specific data are available about the interactions of ECPs with other drugs that the client may be taking. However, it seems reasonable that drug interactions would be similar to those with regular oral contraceptive pills. A full discussion of this matter is beyond the scope of these guidelines, but several excellent references on the subject are available.²²⁻²⁵ Women taking drugs that may reduce the efficacy of oral contraceptives (including but not limited to rifampin, certain anticonvulsant drugs, and Saint John's wort) should be advised that the efficacy of ECPs may be reduced. Consideration may be given to increasing the amount of hormone administered in the ECPs, either by increasing the amount of hormone in one or both doses, or by giving an extra dose.

Use of other formulations

New research shows that combined estrogen-progestin pill formulations containing the progestin norethindrone in place of levonorgestrel can be used as emergency contraceptives where the levonorgestrel-only or standard combined regimens are not available. Norethindrone combination pills offer an efficacy and side effect profile similar to combined pills containing levonorgestrel.¹⁷

2.8 Counseling

As with any contraceptive method, ECPs should be provided in a manner that is respectful of clients and responsive to their needs for information and counseling. Clients may feel particularly anxious after unprotected intercourse due to fear of becoming pregnant, worry about missing the 72-hour window of opportunity for hormonal emergency contraception, embarrassment at failing to use contraception effectively, general embarrassment about sexual issues, rape-related trauma, concern about AIDS, or a combination of these factors. Providers should be as supportive as possible of the client's choices and refrain from making judgmental comments or indicating disapproval through body language or facial expressions while discussing ECPs with clients. Supportive attitudes will help set the stage for follow-up counseling about regular contraceptive use and prevention of STIs. Actively involving the client in the counseling process, for example, by asking her what she has heard about ECPs, discussing her experience with other contraceptive methods (particularly the incident that led to the ECP request), and exploring her current approach to protecting herself from STIs (especially condom use), and then validating or correcting her ideas as appropriate, may be more effective in ensuring compliance than simply providing her with information.

Whenever possible, ensure that counseling is conducted in private. In situations where privacy is inadequate (for instance, in many pharmacies), advise clients to contact a health care or family planning provider for additional information and counseling about regular contraceptive methods. Reassure all clients, regardless of age or marital status, that all information that they give to the provider, as well as the fact that they have received treatment, will be kept confidential.

When possible, give clients written as well as verbal instructions for taking the ECPs. Pictorial instructions may help clients whose literacy may be limited.

2.9 Information for the Client

Clients should be given information about efficacy, side effects, and mechanism of action of ECPs. In addition, counseling should be provided on how to prevent future contraceptive emergencies and on contraceptive options that they can use to prevent pregnancy after ECP use. However, care should be taken to avoid overwhelming clients with so much information that they cannot absorb it all. In addition, some clients may not want counseling on certain topics (such as information on other contraceptive methods or on the mechanism of action of ECPs) at the time they receive ECPs. Providers should not deny

ECPs to women who refuse more than the minimum information needed to ensure that they use the ECPs correctly. The following key messages should be conveyed whenever possible:

- Clients should take the first dose of ECPs as soon as
 possible after sex to maximize efficacy. The second
 dose should be taken 12 hours after the first. Ensure
 that clients understand how to calculate the 12-hour
 interval. They should not take extra doses unless they
 vomit within one hour after a dose.
- After taking ECPs, if the next menstrual period is more than one week later than normally expected, the client should consider the possibility that she may be pregnant. Advise her where to obtain appropriate evaluation and care.
- ECPs do not prevent pregnancy from sexual acts after treatment, and they are not suitable for ongoing contraception because pregnancy rates, incidence of side effects, and total hormone dose will be high. Give clients information about other contraceptive methods or about where to obtain such information. If possible, provide a contraceptive method such as condoms that can be used in the immediate future.
- ECPs do not protect against HIV/AIDS or STIs. The act of unprotected intercourse that prompted the request for ECPs may have put her at risk for these infections. Advise her where to obtain evaluation and treatment for STIs, if appropriate, and how to reduce her risk of acquiring STIs in the future.

2.10 Follow-up

Clients should be advised to seek follow-up care if they:

- need ongoing contraceptive counseling or a contraceptive method;
- have menses more than a week later than expected;
- suspect they may be pregnant; or
- have other reasons for concern.

2.11 If the Client Becomes Pregnant

A woman who has used ECPs may later find herself to be pregnant because the ECPs have failed, because she was already pregnant before taking the ECPs, or because coital acts after taking the ECPs led to pregnancy. In any of these cases:

 Advise the client about all available options, and let her decide which is most appropriate for her situation. Her

- decision should be respected and supported. Refer the client to other service providers as appropriate.
- If she decides to continue the pregnancy, reassure her that there is no evidence of any teratogenic effect following ECP use. Available data suggest that ECPs do not increase the likelihood that a subsequent pregnancy will be ectopic.

2.12 Starting or Resuming Regular Contraception After ECP Use

Whenever possible, clients receiving ECPs should be given contraceptive counseling and provided with an ongoing contraceptive method, such as condoms, for at least immediate future use. However, such counseling may not be appropriate in all situations or may not be desired by clients at the time of ECP provision, and it should not be a prerequisite for providing ECP services. Clients who need or desire counseling but who do not receive it at the ECP visit should be referred for a follow-up appointment at the earliest convenient time.

Clients may wish to restart their previous contraceptive method after taking ECPs, or they may prefer to initiate a new method. If the reason for requesting ECPs is because the regular contraceptive method failed (for example, the condom broke, or the client missed taking oral contraceptive pills), discuss with the client the reasons for failure and how it can be prevented in the future.

Women with risk factors for STIs, such as young age or residence in a location where STIs are especially prevalent, should receive special counseling on how to prevent STIs as well as pregnancy. Use of condoms in addition to or as the primary contraceptive method should be emphasized.

Guidelines for initiating or restarting contraceptive use after using ECPs follow:

Male or female condom

Can be used immediately.

Diaphragm or cervical cap

Can be used immediately.

Spermicidal foam, tablets, jelly, cream, or film

Can be used immediately.

Oral contraceptives

Two options are recommended:

a. The client may wait until the beginning of her next menstrual cycle and then start a new pack according to the package instructions for the pill brand being

- used. In this case, she should be advised to use a barrier contraceptive method or abstain from intercourse for the remainder of the current cycle.
- b. The client may start oral contraceptives on the day after she takes the ECPs. She may begin a new pack of pills, or if she was using oral contraceptives before taking the ECPs (i.e., the ECPs were indicated because of missed pills), she may resume taking pills from the pack that she was previously using. She should use a barrier method for at least seven days after starting or restarting the oral contraceptive pills. She may have some irregular bleeding until the onset of menses.

Injectables

Initiate progestin-only injectables within 7 days after the beginning of the next menstrual cycle. Initiate combined injectables within 5 days after the beginning of the next menstrual cycle. The client should use a barrier contraceptive or abstain from intercourse until she receives the injection.

Implants (e.g., Norplant®)

Insert within 7 days after the beginning of next menstrual cycle. Use a backup method or abstain from intercourse until the implants are inserted.

IUD

Insert during the next menstrual period. The client should use a barrier contraceptive or abstain from intercourse until the IUD is inserted.

NOTE: If the client intends to use an IUD as a long-term method and meets IUD screening criteria, emergency insertion of a copper-bearing IUD may be an alternative to ECP use (see Appendix).

Natural family planning

Natural family planning may be initiated after the first normal menstrual period following ECP use. An alternate nonhormonal contraceptive method should be used in the interim.

Female or male sterilization

Perform the operation only after informed consent can be ensured. It is not recommended that clients make this decision under the stressful conditions that often surround ECP use. Defer female sterilization until after the client's first menstrual period, to ensure that she is not pregnant. Use a backup method or abstain from intercourse until the sterilization procedure is performed.

3. ECP Service Delivery Systems

ECPs can be distributed safely and effectively by a variety of trained personnel and through a variety of clinical and nonclinical service delivery systems. For instance, doctors, nurses, midwives, pharmacists, and other clinically trained personnel as well as community health workers and trained sexual assault counselors may be able to provide ECPs, depending on the local regulations and practices. Over-the-counter provision (without interaction with a provider) also has been suggested as a way to increase rapid access to ECPs.

All ECP providers should be given appropriate training and follow clear service delivery guidelines. Training should include information on indications for ECP use, recommended ECP regimens, mode of action, efficacy, side effects and their management, precautions and screening, client information and counseling needs, and follow-up procedures. In addition, since ECPs are a backup method, the training also should include information about other contraceptive methods, if necessary for the audience. The training often is most effective if it is participatory in nature and includes exercises to build participant skills in the areas of screening, counseling, and follow-up. A provider training curriculum, Emergency Contraceptive Pills, Module 5, A Comprehensive Training Course, is available from Pathfinder International. (To request a copy, contact Pathfinder International, Medical Services, 9 Galen Street, Suite 217, Watertown, MA 02172 USA, or on the Internet at www.pathfind.org. A Spanish version also is available.)

Given that ECPs appear to be most effective when taken soon after unprotected intercourse, every effort should be made to ensure that women know about ECPs and have ready access to them. This can be accomplished by:

- routinely informing women about ECPs at the time of regular family planning visits;
- instituting mass-media informational campaigns and advertising ECP services;
- providing women with an advance supply of ECPs;
- providing ECPs through non-clinical settings, such as through community-based services, social marketing programs, and the commercial sector (e.g., pharmacies).

Programs also should attempt to make ECP services available to high-risk audiences, such as youth and victims of sexual assault.

3.1 Youth

Reaching adolescents with emergency contraceptive information and services poses special challenges to programs. Young women may find it difficult to access relevant information about and/or services for emergency contraception because they:

- are unaware of the availability of ECPs;
- lack confidence or are embarrassed to visit a family planning clinic;
- do not know of the existence of the clinic;
- find the clinic hours inconvenient;
- fear a pelvic examination; or
- are anxious about judgmental attitudes of the providers.

Programs should work to ensure that clinics serving adolescents are youth-friendly (for example, by ensuring privacy and confidentiality, accessible facilities, reasonably priced services, and flexible hours—particularly during evenings and weekends).

3.2 Sexual Assault Victims

Reaching women who have been forced to have sex also poses special challenges. ECP providers should be attentive to the possibility that these women may be:

- unaware that something can be done to prevent pregnancy after sexual assault;
- unwilling to report the assault and therefore unwilling to seek services;
- concerned they will be blamed for the assault by the medical provider; or
- also in need of diagnosis and treatment for STIs.

Program managers and providers should ensure that police stations, emergency health care centers, and other facilities where women may seek help after an assault can provide clients with ECPs, if appropriate, or at least with information about where to obtain ECPs as promptly as possible.

TABLE 1. ECP Formulations

| eoglassical de la companya de la com | Formulation (per Pill) | Common Brand Names | First Dose (Number of Tablets) | Second Dose (Number of Tablets) |
|--|---|--|--------------------------------------|---------------------------------------|
| Levonorgestrel- only Regimen | LNG 0.75 mg | Levonelle-2, NorLevo, Plan B, Postinor-2, Vikela | 1 | 1 |
| | LNG 0.03 mg | Microlut, Microval, Norgeston | 25 | 25 |
| | LNG 0.0375 mg | Ovrette | 20 | 20 |
| Combined Regimen | EE 50 mcg + LNG 0.25 mg or EE 50 mcg + NG 0.50 mg | Eugynon 50, Fertilan, Neogynon, Noral, Nordiol, Ovidon, Ovral, Ovran, PC-4, Preven | 2 | 2 |
| | EE 30 mcg + LNG 0.15 mg or EE 30 mcg + NG 0.30 mg | Lo/Femenal, Microgynon 30, Nordette, Ovral L, Rigevidon | 4 | 4 |

Abbreviations:

EE = ethinyl estradiol

LNG = levonorgestrel

NG = norgestrel

For all regimens, the first dose should be taken as soon as possible after intercourse, but optimally within 72 hours, and the second dose should be taken 12 hours after the first dose.



APPENDIX: USE OF IUDS FOR EMERGENCY CONTRACEPTION

Copper-bearing IUDs can be used as a method of emergency contraception. They are most appropriate for women in stable relationships who wish to retain the IUD for long-term contraception and who meet the screening requirements for regular IUD use. When inserted within five days of unprotected intercourse, copper-bearing IUDs are the most effective method of emergency contraception; they reduce the risk of pregnancy by more than 99 percent.²⁶

However, emergency IUD insertion requires a much higher degree of training and clinical oversight than administration of ECPs, including screening to eliminate clients who are already pregnant (e.g., a pregnancy test, if the woman is not menstruating), who have pelvic inflammatory disease or another reproductive tract infection, or who are at high risk for STIs. In many instances, the act of unprotected intercourse that led to the request for emergency contraception might put the woman at increased risk of STIs, in which case the IUD is not an optimal contraceptive choice.

For further information about use of IUDs for emergency contraception, consult the IPPF Medical and Service Delivery Guidelines (the most recent edition, which contains information about emergency contraception, is available from IPPF, Regent's College, Inner Circle, Regent's Park, London NW1 4NS, England), or the World Health Organization publication Emergency Contraception—A Guide for Service Delivery (1998).

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ABOUT THE CONSORTIUM FOR EMERGENCY CONTRACEPTION

The mission of the Consortium for Emergency Contraception is to expand access to and ensure safe and locally appropriate use of emergency contraception worldwide within the broader context of family planning and reproductive health, with emphasis on developing countries.

The seven founding members of the Consortium initially focused on introducing a dedicated emergency contraceptive pill product in selected "demonstration" countries. As interest in emergency contraception and the Consortium grew, the Consortium expanded its membership to include a wide range of organizations working to ensure that women have access to all forms of emergency contraception. The specific objectives of the expanded Consortium are to:

- serve as an authoritative source of information about emergency contraception;
- be a voice for expanded access to and safe and appropriate use of emergency contraception;
- serve as a strategic planning forum for emergency contraception service delivery and information, education, and communication efforts;
- set high-quality medical and service delivery guidelines for emergency contraception based on the most current information available;
- facilitate information sharing and networking among Consortium members and other groups working to

broaden knowledge of and access to emergency contraception;

- encourage partnerships between public-sector organizations and private industry that are designed to make high-quality products for emergency contraception available to large numbers of women worldwide at an affordable price;
- seek and promote new emergency contraceptive methods that are safe and effective.

The Consortium welcomes applications for membership from non-commercial agencies that share the Consortium's overall goal of expanding access to emergency contraceptive products and services in developing countries. Interested applicants should contact the Consortium Coordinator. The Consortium and the American Society for Emergency Contraception also jointly produce an electronic update of emergency contraception activities worldwide. If you would like to subscribe or contribute an article to this update, please contact contact the American Society for Emergency Contraception at Amsocec@aol.com.

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CONSORTIUM FOR EMERGENCY CONTRACEPTION

Asociación Colombiana para el Estudio e la Población
Asociación Para la PRevención de Embarazos No DEseados
AVSC International • British Pregnancy Advisory Service
The Concept Foundation* • CONRAD Program • DKT International
Family Health International • Institute for Reproductive Health
International Planned Parenthood Federation (and affiliates)*
International Planned Parenthood Federation/Western Hemisphere Region • Ipas
JSI Research and Training Center for Women's Health • Marie Stopes International
Meridian Development Foundation • Pacific Institute for Women's Health*
PATH (Program for Appropriate Technology in Health)* • Pathfinder International*
Population Council* • Population Services International • SHILO Pregnancy Advisory Service
World Health Organization Special Programme of
Research, Development and Research Training in Human Reproduction*

* Founding member, 1995.

EAST Search History

| Ref | _Hits_ | Search Query | DBs | Default | Plurals | Time Stamp |
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EAST Search History

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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
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| 10/322,348 | 12/17/2002 | Dayton T. Reardan | 101.031US1 | 5446 | |
| 21186 7. | 590 06/19/2006 | | EXAM | INER | |
| SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A. | | | NAJARIAN, LENA | | |
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| - | , | | 3626 | | |
| | | | DATE MAILED: 06/19/2000 | 6 | |

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| | | Application No. | Applicant(s) | | | | |
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| | | 10/322,348 | REARDAN ET AL. | | | | |
| | Office Action Summary | Examiner | Art Unit | | | | |
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| Status | | | | | | | |
| 1)⊠ | Responsive to communication(s) filed on 2 | 2 <u>9 March 2006</u> . | | | | | |
| 2a)[| This action is FINAL . 2b)⊠ | This action is non-final. | | | | | |
| 3) | Since this application is in condition for all closed in accordance with the practice und | , | | | | | |
| Disposi | tion of Claims | | | | | | |
| 4)⊠ | Claim(s) 1-10 and 32-37 is/are pending in | the application. | , | | | | |
| | 4a) Of the above claim(s) is/are with | ndrawn from consideration. | | | | | |
| 5)[_ | Claim(s) is/are allowed. | • | | | | | |
| | Claim(s) 1-10 and 32-37 is/are rejected. | | | | | | |
| 7) | Claim(s) is/are objected to. | | | | | | |
| 8)[_] | Claim(s) are subject to restriction a | nd/or election requirement. | | | | | |
| Applicat | tion Papers | | | | | | |
| | The specification is objected to by the Exa | | | | | | |
| 10) | The drawing(s) filed on is/are: a) | | • | | | | |
| | Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | |
| 11) | Replacement drawing sheet(s) including the co | | | | | | |
| 11)[| The oath or declaration is objected to by the | ie Examiner. Note the attache | J Office Action of John PTO-152. | | | | |
| Priority | under 35 U.S.C. § 119 | | | | | | |
| | Acknowledgment is made of a claim for for All b Some * c None of: 1. Certified copies of the priority docur | ments have been received. | | | | | |
| | 2. Certified copies of the priority documents have been received in Application No | | | | | | |
| | Copies of the certified copies of the application from the International But | · • | received in this National Stage | | | | |
| * | See the attached detailed Office action for a | , , , , , | received. | | | | |
| • | | | | | | | |
| Attachme | nt(s) | | | | | | |
| 1) 🔀 Noti | ice of References Cited (PTO-892) | | Summary (PTO-413) | | | | |
| 3) 🛛 Info | ice of Draftsperson's Patent Drawing Review (PTO-94t rmation Disclosure Statement(s) (PTO-1449 or PTO/S | | s)/Mail Date nformal Patent Application (PTO-152) | | | | |

U.S. Patent and Trademark Office PTOL-326 (Rev. 7-05)

Office Action Summary

Part of Paper No./Mail Date 20060530

Art Unit: 3626

DETAILED ACTION

Notice to Applicant

1. This communication is in response to the request for continued examination (RCE) filed 3/29/06. Claims 1-10 and 32-37 are pending. Claims 11-31 have been cancelled. Claims 32-37 are newly added.

Double Patenting

2. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer <u>cannot</u> overcome a double patenting rejection based upon 35 U.S.C. 101.

3. Claims 1-10 are provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1-10 of copending Application No. 10/979,665. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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5. Claim 34 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite

for failing to particularly point out and distinctly claim the subject matter which applicant

regards as the invention.

6. Claim 34 recites the limitation "the exclusive central database" in lines 1-2.

There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 1-2, 4-8, 10, and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moradi et al. (US 2004/0019794 A1) in view of Lilly et al. (US 2004/0176985 A1) and further in view of Califano et al. (US 2003/0033168 A1).

(A) Referring to claim 1, Moradi discloses a method of distributing a drug, the method

comprising (para. 3 of Moradi):

receiving prescription requests from a medical doctor containing information identifying a patient, the drug, and various credentials of the doctor (para. 35, para. 116, and para. 117 of Moradi);

checking the credentials of the doctor (para. 118 of Moradi); and confirming receipt of the drug (see abstract of Moradi).

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Moradi does not expressly disclose that the drug is a sensitive drug, entering the information into a central computer database for analysis of potential abuse situations, confirming with the patient that educational material has been read prior to shipping the sensitive drug, and generating periodic reports via the central computer database to evaluate potential abuse patterns.

Lilly et al. disclose that the drug is a sensitive drug, entering the information into a central computer database for analysis of potential abuse situations, and generating periodic reports via the central computer database to evaluate potential abuse patterns (para. 33, para. 69, para. 54, and para. 58 of Lilly; the Examiner interprets "controlled substance" to be a form of "sensitive drug").

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the features of Lilly within Moradi. The motivation for doing so would have been to ensure that prescribers have an accurate view of their patients' use of prescription drugs and to help protect professionals from lawsuits and other potential liabilities (para. 58 of Lilly).

Moradi and Lilly do not disclose confirming with the patient that educational material has been read prior to shipping the drug.

Califano et al. disclose confirming with the patient that educational material has been read prior to shipping the drug (para. 84 of Califano).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the feature of Califano within Moradi and Lilly. The motivation

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for doing so would have been to ensure that the patient knows about the risks and dangers associated with the drug (para. 43 of Califano).

(B) Referring to claims 2 and 6, Moradi discloses wherein receipt of the drug is confirmed by telephone call from a central pharmacy to the patient (abstract, para. 42, para. 26, and para. 47 of Moradi) and recording a designee identified by the patient to receive the drug (para. 24 of Moradi; the Examiner interprets "recipient's…name" to be a form of "designee").

Moradi does not expressly disclose that the drug is a sensitive drug.

Lilly et al. disclose that the drug is a sensitive drug (para. 33 of Lilly; the Examiner interprets "controlled substance" to be a form of "sensitive drug").

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the feature of Lilly within Moradi. The motivation for doing so would have been for the distribution method to be used primarily for drugs that are likely to be abused (para. 9 of Lilly).

(C) Referring to claim 4, Moradi and Lilly do not disclose recording the confirmation with the patient that the educational material has been read in the central computer database.

Califano discloses recording the confirmation with the patient that the educational material has been read in the central computer database (para. 120 of Califano).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the feature of Califano within Moradi and Lilly. The motivation

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for doing so would have been to have documentation confirming that the patient knows about the risks and dangers associated with the drug (para. 43 of Califano).

- (D) Referring to claim 5, Moradi discloses verifying the patient's home address (para. 43 of Moradi).
- (E) Referring to claim 7, Moradi discloses establishing a delivery date (para. 46 of Moradi).
- (F) Referring to claim 8, Moradi discloses wherein prescription refills requested prior to an anticipated date are questioned by a pharmacist (para. 42 of Moradi).
- (G) Referring to claim 10, Moradi discloses wherein the credentials of the doctor comprise DEA (Drug Enforcement Agency) and state license numbers (para. 116 and para. 117 of Moradi).
- (H) Referring to claim 32, Moradi discloses a method of distributing a drug under exclusive control of an exclusive central pharmacy, the method comprising (para. 3 and para. 24 of Moradi):

receiving prescription requests from a medical doctor containing information identifying a patient, the drug, and various credentials of the doctor (para. 35, para. 116, and para. 117 of Moradi);

checking the credentials of the doctor (para. 118 of Moradi); and confirming receipt by the patient of the drug (see abstract of Moradi).

Moradi does not expressly disclose that the drug is a sensitive drug, entering the information into an exclusive computer database associated with the exclusive central pharmacy for analysis of potential abuse situations, confirming with the patient that

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educational material has been read prior to shipping the sensitive drug, and generating periodic reports via the exclusive computer database to evaluate potential diversion

patterns.

Lilly et al. disclose that the drug is a sensitive drug, entering the information into

an exclusive computer database associated with the exclusive central pharmacy for

analysis of potential abuse situations, and generating periodic reports via the exclusive

computer database to evaluate potential diversion patterns. (para. 33, para. 69, para.

54, para. 58, para. 61, para. 11, and para. 57 of Lilly; the Examiner interprets "controlled"

substance" to be a form of "sensitive drug").

At the time of the invention, it would have been obvious to a person of ordinary

skill in the art to combine the features of Lilly within Moradi. The motivation for doing so

would have been to ensure that prescribers have an accurate view of their patients' use

of prescription drugs and to help protect professionals from lawsuits and other potential

liabilities (para. 58 of Lilly).

Moradi and Lilly do not disclose confirming with the patient that educational

material has been read prior to shipping the drug.

Califano et al. disclose confirming with the patient that educational material has

been read prior to shipping the drug (para. 84 of Califano).

At the time of the invention, it would have been obvious to a person of ordinary

skill in the art to combine the feature of Califano within Moradi and Lilly. The motivation

for doing so would have been to ensure that the patient knows about the risks and

dangers associated with the drug (para. 43 of Califano).

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9. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Moradi et

al. (US 2004/0019794 A1) in view of Lilly et al. (US 2004/0176985 A1) in view of

Califano et al. (US 2003/0033168 A1) as applied to claim 1 above, and further in view of

Andreasson et al. (US 2003/0160698 A1).

(A) Referring to claim 3, Moradi, Lilly, and Califano do not disclose launching an

investigation of lost shipments.

Andreasson discloses disclose launching an investigation of lost shipments

(para. 79 of Andreasson).

At the time of the invention, it would have been obvious to a person of ordinary

skill in the art to combine the feature of Andreasson within Moradi, Lilly, and Califano.

The motivation for doing so would have been to reduce the risk of lost or stolen medical

products by immediately notifying healthcare workers so that they may take appropriate

action (para. 79 of Andreasson).

10. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Moradi et

al. (US 2004/0019794 A1) in view of Lilly et al. (US 2004/0176985 A1) in view of

Califano et al. (US 2003/0033168 A1) as applied to claim 1 above, and further in view of

Mayaud (5,845,255).

(A) Referring to claim 9, Moradi, Lilly, and Califano do not disclose shipping

comprehensive printed materials to the doctor if the doctor is a first time prescriber of

the drug.

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para. 24 of Moradi):

Mayaud discloses shipping comprehensive printed materials to the doctor if the doctor is a first time prescriber of the drug (col. 37, lines 6-31 of Mayaud).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the feature of Mayaud within Moradi, Lilly, and Califano. The motivation for doing so would have been to reduce the reluctance of physicians to prescribe new drugs by providing them with the latest information about the drugs (col. 37, lines 6-23 of Mayaud).

Mayaud does not expressly disclose that the drug is a sensitive drug.

Lilly et al. disclose that the drug is a sensitive drug (para. 33 of Lilly; the Examiner interprets "controlled substance" to be a form of "sensitive drug").

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the feature of Lilly within Mayaud, Moradi, and Califano. The motivation for doing so would have been for the distribution method to be used primarily for drugs that are likely to be abused (para. 9 of Lilly).

Claims 33-36 rejected under 35 U.S.C. 103(a) as being unpatentable overMoradi et al. (US 2004/0019794 A1) in view of Lilly et al. (US 2004/0176985 A1).(A) Referring to claim 33, Moradi discloses a method of distributing a drug under exclusive control of an exclusive central pharmacy, the method comprising (para. 3 and

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receiving prescription requests from a medical doctor containing information identifying a patient, the drug, and various credentials of the doctor (para. 35, para. 116, and para. 117 of Moradi);

checking the credentials of the doctor (para. 118 of Moradi); and confirming receipt by the patient of the drug (see abstract of Moradi).

Moradi does not expressly disclose that the drug is a sensitive drug, entering the information into an exclusive computer database associated with the exclusive central pharmacy for analysis of potential abuse situations, confirming with the patient that educational material has been read prior to shipping the sensitive drug, and generating periodic reports via the exclusive computer database to evaluate potential diversion patterns.

Lilly et al. disclose that the drug is a sensitive drug, entering the information into an exclusive computer database associated with the exclusive central pharmacy for analysis of potential abuse situations, and generating periodic reports via the exclusive computer database to evaluate potential diversion patterns. (para. 33, para. 69, para. 54, para. 58, para. 61, para. 11, and para. 57 of Lilly; the Examiner interprets "controlled substance" to be a form of "sensitive drug").

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the features of Lilly within Moradi. The motivation for doing so would have been to ensure that prescribers have an accurate view of their patients' use of prescription drugs and to help protect professionals from lawsuits and other potential liabilities (para. 58 of Lilly).

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(B) Referring to claim 34, Moradi discloses wherein the exclusive central pharmacy controls the exclusive central database (para. 7 and para. 43 of Moradi).

(C) Referring to claim 35, Moradi discloses selectively blocking shipment of the drug to a patient (para. 45 and para. 46 of Moradi).

Moradi does not expressly disclose that the drug is a sensitive drug.

Lilly discloses that the drug is a sensitive drug (para. 2 of Lilly).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify Moradi to include Lilly's sensitive drug with the motivation of tracking and managing controlled substances in order to reduce abuse (para. 2 and para. 12 of Lilly)

(D) Referring to claim 36, Moradi discloses wherein abuse is associated with a patient, and shipment is blocked upon such association (para. 45 and para. 46 of Moradi).

Moradi does not expressly disclose an abuse pattern.

Lilly discloses detecting medication patterns (see para. 58 of Lilly).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the feature of Lilly within Moradi. The motivation for doing so would have been to proactively deal with potential abuse problems (para. 58 of Lilly).

12. Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over Moradi et al. (US 2004/0019794 A1) in view of Lilly et al. (US 2004/0176985 A1), and further in view of Melker et al. (US 2002/0177232 A1)

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(A) Referring to claim 37, Moradi and Lilly do not disclose wherein the sensitive drug

comprises gamma hydroxy butyrate (GHB).

Melker teaches that gamma hydroxy butyrate (GHB) is an illicit substance (para.

3 of Melker).

At the time of the invention, it would have been obvious to modify Moradi and

Lilly to include gamma hydroxyl butyrate. The motivation for doing so would have been

to include drugs of recent concern, such as GHB (para. 3 of Melker).

Response to Arguments

13. Applicant's arguments filed 3/29/06 have been fully considered but they are not

persuasive. Applicant's arguments will be addressed hereinbelow in the order in which

they appear in the response filed 3/29/06.

(1) Applicant argues at pages 5-6 that the suggestion to combine the reference in the

Office Action is not directed to the same or similar problem which the claimed invention

addresses. Further, there is no teaching in the prior art of application of the

combination to solve the same or similar problems which the claimed invention

addresses. Lilly describes reducing misused and abused prescriptions and the need for

better tracking and management of prescription in Paragraph 12. However, the purpose

of such reductions is related to abuse by the patient, and not abuse of a sensitive drug

as claimed. The purpose of the presently claimed invention is to track sensitive drugs

and reduce the potential for abuse, such as diversion of the sensitive drug.

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(2) Applicant argues at page 6 that Califano is directed to obtaining consent for a clinical

trial. It is not directed toward preventing abuse. The cited motivation is very different

from the purpose of the presently claimed invention of distributing a sensitive drug in a

manner that helps prevent abuse, making it very unlikely that one of skill in the art would

be motivated to combine the references.

(3) Applicant argues at page 7 that multiple elements from each of Moradi and Lilly were

combined to make the rejection. Because multiple elements from each were used,

there is no reasonable expectation of success in making the combination. Further, it

points toward the improper use of hindsight, using the claims as a roadmap to make the

combination.

(4) Applicant argues at page 8 that Lilly describes the cooperative use of a database by

multiple different pharmacies, prescribers and patients, to keep track of the prescription

history for a patient. It would be an extremely daunting task to get the cooperation of all

these parties. The presently claimed invention uses a central database for analysis of

potential abuse situations for distribution of a sensitive drug, not to track all prescriptions

for a patient. The ambitious path set forth in Lilly would discourage one of skill in the art

from considering using it to solve the problems addressed in the presently claimed

invention.

(5) Applicant argues at page 8 that Applicant has reviewed the cited sections of Moradi,

and cannot find the concept of a central pharmacy. As the term is used in the present

application, a central pharmacy is a pharmacy that exclusively controls the distribution

of a sensitive drug.

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(6) Applicant argues at page 9 that while Andreasson may describe launching an

investigation, it lacks the concept of shipping drugs to a patient, and investigating lost

shipments to the patient as claimed.

(7) Applicant argues at pages 9-10 that the Office Action cites a motivation to combine

the four references as "to reduce the reluctance of physicians to prescribe new drugs by

providing them with the latest information about the drugs." This motivation has nothing

to do with the problems addressed by the currently claimed invention as identified

above. As a proper prima facie case of obviousness has not been established, the

rejection should be withdrawn.

(A) As per the first argument, the Examiner fails to understand the distinction between

the tracking and management of drugs to reduce misused and abused prescriptions, as

taught by Lilly and "potential abuse," as claimed by Applicant. At para. 11, Lilly

discloses that "abuse" includes reselling drugs on the street. As such, it is respectfully

submitted that both Lilly and Applicant's invention are directed to the same or similar

problem of diversion of sensitive drugs.

(B) In response to applicant's argument that Califano is directed to obtaining consent for

a clinical trial and not directed toward preventing abuse, the test for obviousness is not

whether the features of a secondary reference may be bodily incorporated into the

structure of the primary reference; nor is it that the claimed invention must be expressly

suggested in any one or all of the references. Rather, the test is what the combined

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teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

In addition, it is respectfully submitted that all of the applied references relate to health care management. As such, the references are combinable to a person of ordinary skill in the art.

- (C) As per the third argument, the issue of obviousness is not determined by what the references expressly state but by what they would reasonably suggest to one of ordinary skill in the art, as supported by decisions in *In re DeLisle* 406 Fed 1326, 160 USPQ 806; *In re Kell, Terry and Davies* 208 USPQ 871; and *In re Fine*, 837 F.2d 1071, 1074, 5 USPQ 2d 1596, 1598 (Fed. Cir. 1988) (citing *In re Lalu*, 747 F.2d 703, 705, 223 USPQ 1257, 1258 (Fed. Cir. 1988)). Further, it was determined in *In re Lamberti et al*, 192 USPQ 278 (CCPA) that:
 - (i) obviousness does not require absolute predictability;
 - (ii) non-preferred embodiments of prior art must also be considered; and
- (iii) the question is not <u>express</u> teaching of references, but what they would suggest.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a

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reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

- (D) As per the fourth argument, in response to applicant's argument that Lilly is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, the Examiner respectfully submits that Lilly is directed to the tracking and management of prescriptions to reduce misuse and abuse (para. 12 of Lilly). As such, Lilly is in the field of applicant's endeavor and is pertinent to the particular problem with which the applicant was concerned.
- (E) As per the fifth argument, the Examiner respectfully submits that throughout Moradi reference is made to a pharmacy (note para. 24 and item 106 of Fig. 1). As such, it is respectfully submitted that the broadest reasonable interpretation of the term "central pharmacy" would include the pharmacy that is disclosed in Moradi. In addition, it is noted that the features upon which applicant relies (i.e., exclusively controls the distribution of a sensitive drug) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).
- (F) As per the sixth argument, the Examiner respectfully submits that para. 79 of Andreasson discloses tracking the delivery of medical products and immediately

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notifying healthcare workers and/or administrators of any missing medical products so that they make take appropriate action to recover and/or investigate the missing medical products. Para. 43 discloses comparing the information of the medical products shipped to the healthcare facility with the information received from the pharmacy terminal to verify that all of the medical products shipped to the healthcare facility were received by the pharmacy. As such, it is readily apparent that Andreasson teaches launching an investigation of lost shipments.

(G) As per the seventh argument, the reason or motivation to modify the reference may often suggest what the inventor has done, but for a different purpose or to solve a different problem. It is not necessary that the prior art suggest the combination to achieve the same advantage or result discovered by applicant. *In re Linter*, 458 F.2d 1013, 173 USPQ 560 (CCPA 1972).

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited but not applied prior art teaches a system for dispensing drugs in health care institutions (4,847,764); a medicine dispensing apparatus (3,556,342); a system and method for tracking medical devices (US 2004/0008123 A1); a method and system for prescription distribution security (US 2003/0197366 A1); and a distribution system (US 2002/0010661 A1).

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15. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Lena Najarian whose telephone number is 571-272-

7072. The examiner can normally be reached on Monday - Friday, 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Joseph Thomas can be reached on 571-272-6776. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

6-2-06

PATENT EXAMINER

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Part of Paper No. 20060530

| Search | Notes |
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| Application/Control No. | Applicant(s)/Patent under Reexamination |
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| 10/322,348 | REARDAN ET AL. |
| Examiner | Art Unit |
| Lena Najarjan | 3626 |

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| (Use as many sheets as necessary) | Filing Date | December 17, 2002 | | |
| | First Named Inventor | Reardan, Dayton | | |
| | Group Art Unit | 3626 | | |
| | Examiner Name | Najarian, Lena | | |
| Sheet 1 of 1 | Attorney Docket No: 1 | 101.031US1 | | |

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U.S. Patent and Trademark Office PTO-892 (Rev. 01-2001)

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Part of Paper No. 20060530

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TO:

Commissioner for Patents

Attn: Lena Najarian

Patent Examining Corps

Facsimile Center P.O. Box 1450

Alexandria, VA 22313-1450

OUR REF: 101.031US1

FROM: Bradley A. Forrest

Reg. No. 30,837

TELEPHONE: 571-272-7072

FAX NUMBER (571) 273-8300

* Please deliver to Examiner Lena Najarian in Art Unit 3626. *

Document(s) Transmitted: Proposed Claims for Examiner Interview (9 pages).

Total pages of this transmission, including cover letter: 10 pgs.

If you do NOT receive all of the pages described above, please telephone us at 612-373-6900 or fax us at 612-339-3061.

In re. Patent Application of: Dayton T. Reardan et al.

Examiner: Lena Najarian

Serial No.: 10/322,348

Group Art Unit: 3626

Filed: December 17, 2002

Docket No.: 101.031US1

Title: SENSITIVE DRUG DISTRIBUTION SYSTEM AND METHOD

Please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

I hereby certify that this paper is being transmitted by facsimile to the U.S. Patent and Trademark Office

John Gustav-Wrathall

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PAGE 1/10 * RCVD AT 7/28/2006 6:40:41 PM [Eastern Daylight Time] * SVR:USPTO-EFXRF-6/39 * DNIS:2738300 * CSID:612 339 3061 * DURATION (mm-ss):07-24

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Proposed claims for 101.031US1 (serial 10/322,348)

fax to 571-273-8300

1. (Previously Presented) A method of distributing a sensitive drug, the method comprising:

receiving prescription requests from a medical doctor containing information identifying a patient, the sensitive drug, and various credentials of the doctor;

entering the information into a central computer database for analysis of potential abuse situations;

checking the credentials of the doctor;

confirming with the patient that educational material has been read prior to shipping the sensitive drug;

confirming receipt of the sensitive drug; and

generating periodic reports via the central computer database to evaluate potential abuse patterns.

- 2. (Previously Presented) The method of claim 1 wherein receipt of the sensitive drug is confirmed by telephone call from a central pharmacy to the patient.
- 3. (Original) The method of claim 1 and further comprising launching an investigation of lost shipments.
- 4. (Previously Presented) The method of claim 1 and further comprising recording the confirmation with the patient that the educational material has been read in the central computer database.
- 5. (Original) The method of claim 1 and further comprising verifying the patient's home address.
- 6. (Original) The method of claim 1 and further comprising recording a designee identified by the patient to receive the sensitive drug.

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- 7. (Original) The method of claim 1 and further comprising establishing a delivery date.
- 8. (Previously Presented) The method of claim 1 wherein prescription refills requested prior to an anticipated date are questioned by a pharmacist.
- 9. (Previously Presented) The method of claim 1 and further comprising shipping comprehensive printed materials to the doctor if the doctor is a first time prescriber of the sensitive drug.
- 10. (Original) The method of claim 1 wherein the credentials of the doctor comprise DEA (Drug Enforcement Agency) and state license numbers.
- 11. 31. (Cancelled)
- 32. (Previously Presented) A method of distributing a sensitive drug under exclusive control of an exclusive central pharmacy, the method comprising:

receiving prescription requests from a medical doctor containing information identifying a patient, the sensitive drug, and various credentials of the doctor;

entering the information into an exclusive computer database associated with the exclusive central pharmacy for analysis of potential abuse situations;

checking the credentials of the doctor;

confirming with the patient that educational material has been read prior to shipping the sensitive drug;

confirming receipt by the patient of the sensitive drug; and generating periodic reports via the exclusive computer database to evaluate potential diversion patterns.

33. (Previously Presented) A method of distributing a sensitive drug under exclusive control of an exclusive central pharmacy, the method comprising:

receiving prescription requests from a medical doctor containing information identifying a patient, the sensitive drug, and various credentials of the doctor;

entering the information into an exclusive computer database associated with the exclusive central pharmacy for analysis of potential abuse situations;

checking the credentials of the doctor;

- 34. (Previously Presented) The method of claim 33 wherein the exclusive central pharmacy controls the exclusive central database.
- 35. (Previously Presented) The method of claim 33 and further comprising selectively blocking shipment of the sensitive drug to a patient.
- 36. (Previously Presented) The method of claim 33 wherein an abuse pattern is associated with a patient, and shipment is blocked upon such association.
- 37. (Previously Presented) The method of claim 33 wherein the sensitive drug comprises gamma hydroxy butyrate (GHB).

Additional limitations:

1 - only way to distribute sensitive drug is through use of the central database.

This differs significantly from Moradi et al., which selects a pharmacy based on the patient's location and ensures delivery of a prescription. There is no discussion in Maradi et al., of requiring use of the central database to distribute a sensitive drug. In other words, many different pharmacies may or may not use the system of Moradi et al. In the current claims, the use of a single central database is required for all distribution of the sensitive drug.

Lilly describes cooperative use of a database by multiple pharmacies to keep track of a prescription history for patients. This does not describe requiring the use of a central database for tracking all shipments of a sensitive drug. Thus, neither reference, alone or combined, suggests the requirement that all shipments of a sensitive drug be controlled through the use of a central database.

None of the references, alone or combined, suggest that a sensitive drug can only be distributed under control of a single source, or required to be tracked through the use of a single central database. It provides the ability to track potential abuse patterns with much greater accuracy, and may have been the basis for allowing the life improving drug Xyrem, to make it onto the market.

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A progression of claims based off claim 32 and 33.

38. (Proposed) A method of distributing a sensitive drug, the method comprising: receiving prescription requests from an authorized prescriber containing information identifying a patient, the sensitive drug, and various credentials of the authorized prescriber;

entering the information into an exclusive computer database for analysis of potential abuse situations, wherein the use of the exclusive computer database is required for distribution of the sensitive drug;

checking the credentials of the authorized prescriber;

confirming with the patient that educational material has been read prior to providing the sensitive drug to the patient;

confirming receipt by the patient of the sensitive drug; and generating periodic reports via the exclusive computer database to evaluate potential diversion patterns.

Last element optional?



39. (Proposed) A method of distributing a sensitive drug, the method comprising: receiving prescription requests at a central pharmacy from an authorized prescriber containing information identifying a patient, the sensitive drug, and various credentials of the authorized prescriber;

entering the information into an exclusive computer database under exclusive control of the central pharmacy for analysis of potential abuse situations, wherein the use of the exclusive computer database is required for distribution of the sensitive drug;

checking the credentials of the authorized prescriber;

confirming with the patient that educational material has been read prior to providing the sensitive drug to the patient;

confirming receipt by the patient of the sensitive drug; and

generating periodic reports via the exclusive computer database to evaluate potential diversion patterns.



40. (Proposed) A method of distributing a sensitive drug under control of an exclusive central pharmacy, the method comprising:

receiving prescription requests at the central pharmacy from an authorized prescriber containing information identifying a patient, the sensitive drug, and various credentials of the authorized prescriber;

entering the information into an exclusive computer database under exclusive control of the central pharmacy for analysis of potential abuse situations, wherein the use of the exclusive computer database is required for distribution of the sensitive drug;

checking the credentials of the authorized prescriber;

confirming with the patient that educational material has been read prior to providing the sensitive drug to the patient;

checking the exclusive central computer database for potential abuse associated with the patient;

providing the sensitive drug to the patient provided information in the exclusive computer database is not indicative of potential abuse;

41. (Proposed) A method of distributing a sensitive drug under exclusive control of a central pharmacy, the method comprising:

receiving prescription requests at the central pharmacy from an authorized prescriber containing information identifying a patient, the sensitive drug, and various credentials of the authorized prescriber;

entering the information into an exclusive computer database under exclusive control of the central pharmacy for analysis of potential abuse situations, wherein the use of the exclusive computer database is required for distribution of the sensitive drug;

checking the credentials of the authorized prescriber;

confirming with the patient that educational material has been read prior to providing the sensitive drug to the patient;

checking the exclusive central computer database for potential abuse associated with the patient or the authorized prescriber;

providing the sensitive drug to the patient <u>under control of the exclusive</u> <u>central pharmacy</u> provided information in the exclusive computer database is not indicative of potential abuse;

42. (Proposed) A method of distributing a sensitive drug under an exclusive controlling entity, the method comprising:

receiving prescription requests from an authorized prescriber containing information identifying a patient, the sensitive drug, and various credentials of the authorized prescriber;

entering the information into an exclusive computer database under exclusive control of the exclusive controlling entity for analysis of potential abuse situations, wherein the use of the exclusive computer database is required for distribution of the sensitive drug;

checking the credentials of the authorized prescriber;

confirming with the patient that educational material has been read prior to providing the sensitive drug;

checking the exclusive central computer database for potential abuse associated with the patient;

providing the sensitive drug to the patient provided information in the exclusive computer database is not indicative of potential abuse;

Proposed claims for 101.031US1 (serial 10/322,348)

fax to 571-273-8300

1. (Previously Presented) A method of distributing a sensitive drug, the method comprising:

receiving prescription requests from a medical doctor containing information identifying a patient, the sensitive drug, and various credentials of the doctor;

entering the information into a central computer database for analysis of potential abuse situations;

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confirming receipt of the sensitive drug; and

generating periodic reports via the central computer database to evaluate potential abuse patterns.

- 2. (Previously Presented) The method of claim 1 wherein receipt of the sensitive drug is confirmed by telephone call from a central pharmacy to the patient.
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- 6. (Original) The method of claim 1 and further comprising recording a designee identified by the patient to receive the sensitive drug.

PAGE 3/11 * RCVD AT 7/31/2006 11:52:51 AM [Eastern Daylight Time] * SVR:USPTO-EFXRF-3/11 * DNIS:2738300 * CSID:612 339 3061 * DURATION (mm-ss):03-24

- 7. (Original) The method of claim 1 and further comprising establishing a delivery date.
- 8. (Previously Presented) The method of claim 1 wherein prescription refills requested prior to an anticipated date are questioned by a pharmacist.
- 9. (Previously Presented) The method of claim 1 and further comprising shipping comprehensive printed materials to the doctor if the doctor is a first time prescriber of the sensitive drug.
- 10. (Original) The method of claim 1 wherein the credentials of the doctor comprise DEA (Drug Enforcement Agency) and state license numbers.
- 11. 31. (Cancelled)
- 32. (Previously Presented) A method of distributing a sensitive drug under exclusive control of an exclusive central pharmacy, the method comprising:

receiving prescription requests from a medical doctor containing information identifying a patient, the sensitive drug, and various credentials of the doctor;

entering the information into an exclusive computer database associated with the exclusive central pharmacy for analysis of potential abuse situations;

checking the credentials of the doctor;

confirming with the patient that educational material has been read prior to shipping the sensitive drug;

confirming receipt by the patient of the sensitive drug; and generating periodic reports via the exclusive computer database to evaluate potential diversion patterns.

33. (Previously Presented) A method of distributing a sensitive drug under exclusive control of an exclusive central pharmacy, the method comprising:

receiving prescription requests from a medical doctor containing information identifying a patient, the sensitive drug, and various credentials of the doctor;

entering the information into an exclusive computer database associated with the exclusive central pharmacy for analysis of potential abuse situations;

checking the credentials of the doctor;

confirming receipt by the patient of the sensitive drug; and
generating periodic reports via the exclusive computer database to evaluate
potential diversion patterns.

- 34. (Previously Presented) The method of claim 33 wherein the exclusive central pharmacy controls the exclusive central database.
- 35. (Previously Presented) The method of claim 33 and further comprising selectively blocking shipment of the sensitive drug to a patient.
- 36. (Previously Presented) The method of claim 33 wherein an abuse pattern is associated with a patient, and shipment is blocked upon such association.
- 37. (Previously Presented) The method of claim 33 wherein the sensitive drug comprises gamma hydroxy butyrate (GHB).

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This differs significantly from Moradi et al., which selects a pharmacy based on the patient's location and ensures delivery of a prescription. There is no discussion in Maradi et al., of requiring use of the central database to distribute a sensitive drug. In other words, many different pharmacies may or may not use the system of Moradi et al. In the current claims, the use of a single central database is required for all distribution of the sensitive drug.

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A progression of claims based off claim 32 and 33.

38. (Proposed) A method of distributing a sensitive drug, the method comprising: receiving prescription requests from an authorized prescriber containing information identifying a patient, the sensitive drug, and various credentials of the authorized prescriber;

entering the information into an exclusive computer database for analysis of potential abuse situations, wherein the use of the exclusive computer database is required for distribution of the sensitive drug;

checking the credentials of the authorized prescriber;

confirming with the patient that educational material has been read prior to providing the sensitive drug to the patient;

confirming receipt by the patient of the sensitive drug; and generating periodic reports via the exclusive computer database to evaluate potential diversion patterns.

Last element optional?

39. (Proposed) A method of distributing a sensitive drug, the method comprising: receiving prescription requests at a central pharmacy from an authorized prescriber containing information identifying a patient, the sensitive drug, and various credentials of the authorized prescriber;

entering the information into an exclusive computer database under exclusive control of the central pharmacy for analysis of potential abuse situations, wherein the use of the exclusive computer database is required for distribution of the sensitive drug;

checking the credentials of the authorized prescriber;

confirming with the patient that educational material has been read prior to providing the sensitive drug to the patient;

confirming receipt by the patient of the sensitive drug; and

generating periodic reports via the exclusive computer database to evaluate potential diversion patterns.

40. (Proposed) A method of distributing a sensitive drug under control of an exclusive central pharmacy, the method comprising:

receiving prescription requests at the central pharmacy from an authorized prescriber containing information identifying a patient, the sensitive drug, and various credentials of the authorized prescriber;

entering the information into an exclusive computer database under exclusive control of the central pharmacy for analysis of potential abuse situations, wherein the use of the exclusive computer database is required for distribution of the sensitive drug;

checking the credentials of the authorized prescriber;

confirming with the patient that educational material has been read prior to providing the sensitive drug to the patient;

checking the exclusive central computer database for potential abuse associated with the patient;

providing the sensitive drug to the patient provided information in the exclusive computer database is not indicative of potential abuse;

41. (Proposed) A method of distributing a sensitive drug under exclusive control of a central pharmacy, the method comprising:

receiving prescription requests at the central pharmacy from an authorized prescriber containing information identifying a patient, the sensitive drug, and various credentials of the authorized prescriber;

entering the information into an exclusive computer database under exclusive control of the central pharmacy for analysis of potential abuse situations, wherein the use of the exclusive computer database is required for distribution of the sensitive drug;

checking the credentials of the authorized prescriber;

confirming with the patient that educational material has been read prior to providing the sensitive drug to the patient;

checking the exclusive central computer database for potential abuse associated with the patient or the authorized prescriber;

providing the sensitive drug to the patient <u>under control of the exclusive</u> <u>central pharmacy</u> provided information in the exclusive computer database is not indicative of potential abuse;

42. (Proposed) A method of distributing a sensitive drug under an exclusive controlling entity, the method comprising:

receiving prescription requests from an authorized prescriber containing information identifying a patient, the sensitive drug, and various credentials of the authorized prescriber;

entering the information into an exclusive computer database under exclusive control of the exclusive controlling entity for analysis of potential abuse situations, wherein the use of the exclusive computer database is required for distribution of the sensitive drug;

checking the credentials of the authorized prescriber;

confirming with the patient that educational material has been read prior to providing the sensitive drug;

checking the exclusive central computer database for potential abuse associated with the patient;

providing the sensitive drug to the patient provided information in the exclusive computer database is not indicative of potential abuse;

confirming receipt by the patient of the sensitive drug; and

generating periodic reports via the exclusive computer database to evaluate potential diversion patterns.

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July 31, 2006

Time: $\frac{(0.30 \text{ A},\text{M})}{(\text{Minneapolis}, \text{Minn.})}$.

TO: Commissioner for Patents

Attn: Lena Najarian

Patent Examining Corps

Facsimile Center

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FROM: Bradley A. Forrest

OUR REF: 101.031US1

Reg. No. 30,837

FAX NUMBER (571) 273-8300

* Please deliver to Examiner Lena Najarian in Art Unit 3626. *

Document(s) Transmitted: Proposed Interview Agenda (1 page); Proposed Claims for Examiner Interview (9 pages).

PLEASE NOTE: I neglected to send the proposed interview agenda with the proposed claims on Friday. Here is the agenda, with the proposed claims.

Total pages of this transmission, including cover letter: 11 pgs.

If you do NOT receive all of the pages described above, please telephone us at 612-373-6900 or fax us at 612-339-3061.

In re. Patent Application of: Dayton T. Reardan et al.

Examiner: Lena Najarian

Serial No.: 10/322,348

Group Art Unit: 3626

Filed: December 17, 2002

Docket No.: 101.031US1

Title: SENSITIVE DRUG DISTRIBUTION SYSTEM AND METHOD

Please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

I hereby certify that this paper is being transmitted by facsimile to the U.S. Patent and Trademark Office on the date shown below.

John D Sonfeer a Maffell
John Gustav-Wrathall

 $\frac{7-3(-06)}{\text{Date of Transmission}}$

PAGE 1/11 * RCVD AT 7/31/2006 11:52:51 AM [Eastern Daylight Time] * SVR:USPTO-EFXRF-3/11 * DNIS:2738300 * CSID:812 339 3061 * DURATION (mm-ss):03-24

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JUL 3 1 2006

Application No. 10/322,348

Filed: 12/17/2002

Interview Agenda 2PM August 2, 2006.

Attendees:

For Applicant: Brad Forrest; Felissa Cagan

For USPTO: Examiner Najarian and Supervisor Thomas

- 1. Objective of Interview
- 2. Problems associated with sensitive drug distribution
- 3. Discussion of the current claims and art used to reject the claims.
- 4. Propose new claims/claim limitations to place claims in condition for allowance.

PAGE 2/11 * RCVD AT 7/31/2006 11:52:51 AM [Eastern Daylight Time] * SVR:USPTO-EFXRF-3/11 * DNIS:2738300 * CSID:612 339 3061 * DURATION (mm-ss):03-24

| | Application No. Applicant(s) | | | | | |
|--|---|--|--|--|--|--|
| Interview Summary | 10/322,348 | REARDAN ET AL. | | | | |
| · · · · · · · · · · · · · · · · · · · | Examiner | Art Unit | | | | |
| | Lena Najarian | 3626 | | | | |
| All participants (applicant, applicant's representative, PTO | personnel): | | | | | |
| (1) <u>Lena Najarian</u> . | (3) <u>Brad Forrest</u> . | | | | | |
| (2) <u>Joseph Thomas</u> . | (4) <u>Felissa Cagan</u> . | | | | | |
| Date of Interview: <u>02 August 2006</u> . | | | | | | |
| Type: a)☐ Telephonic b)☐ Video Conference c)⊠ Personal [copy given to: 1)☐ applicant 2 | ²)⊠ applicant's representative |] | | | | |
| Exhibit shown or demonstration conducted: d) Yes If Yes, brief description: | e)⊠ No. | | | | | |
| Claim(s) discussed: WAS addition I, in particular | r + proposed new cla | ims | | | | |
| Identification of prior art discussed: Movadi + Lilly | | | | | | |
| Agreement with respect to the claims f)☐ was reached. g |)□ was not reached. h)⊠ N | /A. | | | | |
| Substance of Interview including description of the general reached, or any other comments: | nature of what was agreed to | if an agreement was | | | | |
| (A fuller description, if necessary, and a copy of the amend allowable, if available, must be attached. Also, where no callowable is available, a summary thereof must be attached | opy of the amendments that w | | | | | |
| THE FORMAL WRITTEN REPLY TO THE LAST OFFICE A INTERVIEW. (See MPEP Section 713.04). If a reply to the GIVEN A NON-EXTENDABLE PERIOD OF THE LONGER INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERVIEW DATE, OR THE SUBSTANCE OF THE INTERVIEW ON THE SUBSTANCE OF THE INTERVIEW OF THE INTERVIEW OF THE SUBSTANCE OF THE INTERVIEW OF T | last Office action has already OF ONE MONTH OR THIRTY ERVIEW SUMMARY FORM, V RVIEW. See Summary of Red | been filed, APPLICANT IS DAYS FROM THIS WHICHEVER IS LATER, TO cord of Interview | | | | |
| Discussed possible amendments to the | e claims. The Ex | aminers will | | | | |
| reconsider the applied references | in light of a | any amendments | | | | |
| reconsider the applied references tremarks to be made in n | esponse to the r | 191-final | | | | |
| rejection. | | | | | | |
| Joseph Thoras SUPERVISORY PATENT EXAMINER | | | | | | |
| Examiner Note: You must sign this form unless it is an Attachment to a signed Office action. | | Nafauan ature, if required | | | | |

U.S. Patent and Trademark Office PTOL-413 (Rev. 04-03)

Interview Summary

Paper No. 20060731

Summary of Record of Interview Requirements

Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record

A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

37 CFR §1.2 Business to be transacted in writing.

All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:

- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:

- 1) A brief description of the nature of any exhibit shown or any demonstration conducted,
- 2) an identification of the claims discussed,
- 3) an identification of the specific prior art discussed,
- 4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
- 5) a brief identification of the general thrust of the principal arguments presented to the examiner,
 - (The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
- 6) a general indication of any other pertinent matters discussed, and
- 7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.