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



PARTICIPANTS

Claudia H. Kawas, M.D., Consultant and Acting Chairman Sandra Titus, Ph.D., Executive Secretary

MEMBERS:

Ella P. Lacey, Ph.D., Consumer Representative, LaRoy P. Penix, M.D. Richard D. Penn, M.D. Gerald Van Belle, Ph.D.

CONSULTANTS:

Gustavo C. Roman, M.D. Jerry S. Wolinsky M.D.

XYREM CONSULTANTS:

VOTING:

Pippa Simpson, Ph.D. Carol Falkowski, Ph.D.

NON-VOTING:

Christine A. Sannerud, Ph.D. Jerry Frankenheim, Ph.D. Jo-Ellen Dyer, Ph.D.

ON PONE-LINK - NON-VOTING:

Ronald Chervin, M.D. Christian Guilleminault, M.D.

FDA:

Robert Temple, M.D. Russell Katz, M.D. Ranjit Mani, M.D. John Feeney, M.D. Deborah B. Leiderman, M.D.

3

CONTENTS

Call to Order and Introductions	4
Conflict of Interest	6
FDA Overview, Russell Katz, M.D.	8
Orphan Medical Presentation:	
Introduction, David Reardan, Ph.D.	19
Medical Need, Emmanuel Mignot, M.D.	25
Efficacy, William Houghton, M.D.	36
Polysomnographic Effects of Xyrem, Jed Black, M.D.	55
Safety and Summary of Risk/Benefit Assessment,	33
William Houghton, M.D.	61
FDA Response to the Presentation, Ranjit Mani, M.D.	84
Committee Discussion and Deliberations	89
201100101010101010101010101010101010101	0,7
FDA Invited Speakers on Risk Management Issues:	
Epidemiology of GHB Abuse Issues,	
Carol Falkowski	131
Adverse Medical Effects with GHB,	
Jo Ellen Dyer	148
Sponsor Presentation on Risk Management and Abuse Liability, Bob Balster, Ph.D. 162 Risk Management, Patti Engel, R.N., BSN	176
	170
Open Public Hearing:	
Sharon Fitzgerald, Littleton, Colorado	187
Richard L. Gelulla, MSW, National Sleep	
Foundation	191
Abbey S. Meyers, National Organization	
for Rare Disorders, Inc.	197
Robert L. Cloud, Narcolepsy Network	200
Cindy Pekarick	204
Eric C. Strain, M.D., College on Problems of	200
Drug Dependence	208
Deborah Zvorsec, Ph.D., Hennepin County Medical Center	212
Trinka Porrata, LAPD	213
Matt Speakman	218 223
Charles F. Cichon, National Association of Drug	223
Diversion Investigators	227
Debbie Alumbaugh, Michael's Message	22,
Foundation, Inc.	230
Brian A. Hunter, Young Adults with Narcolepsy	233
Joe Spillane, Pharm.D., ABAT	237
Mali Einen	241
Sandra Jones	246
	_ +
Continued Committee Discussion and Deliberations	249



- 1 PROCEEDINGS
- 2 Call to Order and Introductions
- 3 DR. KAWAS: Good morning, everyone, and
- 4 welcome to the Wednesday, June 6, 2001 meeting of
- 5 the Peripheral and Central Nervous System Advisory
- 6 Committee. My name is Claudia Kawas, and I think
- 7 we can begin with introductions, please, perhaps
- 8 over by Dr. Temple's side.
- 9 DR. TEMPLE: Bob Temple, I am the Office
- 10 Director.
- DR. KATZ: Russ Katz, Division of
- 12 Neuropharmacological Drug Products, FDA.
- DR. FEENEY: John Feeney, neurology team
- 14 leader, FDA.
- DR. MANI: Ranjit Mani, modical reviewer,
- 16 Neuropharm., FDA.
- DR. LEIDERMAN: Deborah Reiderman,
- 18 Director, Controlled Substance Staff, FDA.
- 19 DR. SIMPSON: Pippa Simpson, University of
- 20 Arkansas Medical Sciences, biostatistician.
- 21 DR. FALKOWSKI: Carol Falkowski, drug
- 22 abuse researcher, Hazelden Foundation.
- DR. ROMAN: Gustavo Roman, Professor of
- 24 Neurology at the University of Texas, San Antonio.
- DR. WOLINSKY: Jerry Wolinsky, Professor



5

- 1 of Neurology, University of Texas, Houston.
- DR. TITUS: Sandy Titus, FDA, the
- 3 administrator of the Peripheral and Central Nervous
- 4 System Committee.
- 5 DR. PENN: Richard Penn, neurosurgeon at
- 6 the University of Chicago.
- 7 DR. LACEY: Ella Lacey, professor emerita,
- 8 Illinois University, Carbondale, Illinois.
- 9 DR. VAN BELLE: Gerald Van Belle,
- 10 Department of Biostatistics, from the University of
- 11 Washington.
- 12 DR. PENIX: LaRoy Penix, Associate
- 13 Professor of Neurology at Moorehouse School of
- 14 Medicine.
- DR. SANNERUD: Christina Sannerud, Drug
- 16 and Chemical Evaluation Section, Drug Enforcement
- 17 Administration.
- DR. DYER: I am Jo Dyer, with the
- 19 University of California, San Francisco and the San
- 20 Francisco Poison Control System, California.
- DR. FRANKENHEIM: Jerry Frankenheim,
- 22 pharmacologist, National Institute on Drug Abuse.
- DR. KAWAS: Today we have met to discuss
- 24 the consideration of Xyrem, proposed to reduce the
- 25 incidence of cataplexy and to improve the symptom



DOCKET

Explore Litigation Insights



Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time** alerts and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.

