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                          UNITED STATES DISTRICT COURT
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                        FOR THE DISTRICT OF NEW JERSEY
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 4 HELSINN HEALTHCARE, S.A. and
   ROCHE PALO ALTO, LLC,
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                                       CIVIL ACTION NUMBER:
               Plaintiffs,
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                                              11-3962
                -vs-
 7
    DR. REDDY'S LABORATORIES, LTD.,
                                               TRIAL
 8 DR. REDDY'S LABORATORIES, INC.,
    TEVA PHARMACEUTICALS USA, INC.,
 oldsymbol{9} and TEVA PHARMACEUTICAL
    INDUSTRIES, LTD.
10
              Defendants.
11
          Clarkson S. Fisher United States Courthouse
12
          402 East State Street
         Trenton, New Jersey 08608
13
         June 11, 2015
14 BEFORE:
                         THE HONORABLE MARY L. COOPER
                         UNITED STATES DISTRICT JUDGE
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23 Certified as True and Correct as required by Title 28, U.S.C.,
    Section 753
24
/S/ Regina A. Berenato-Tell, CCR, CRR, RMR, RPR
/S/ Carol Farrell, CCR, CRR, RMR, CCP, RPR, RSA
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United States District Court Trenton, New Jersey



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       APPEARANCES:
                                                                                                              Colloquy
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       PAUL HASTINGS
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                                                                                               (In open court. June 11, 2015, 9:30 a.m.)
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            JOSEPH O'MALLEY, ESQUIRE
       SAUL FWING
                                                                             2
                                                                                             THE COURT: Good morning, all.
 4
       BY: CHARLES M. LIZZA, ESQUIRE
                                                                             3
       Attorneys for the Plaintiffs
                                                                                             ALL: Good morning, your Honor.
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                                                                              4
                                                                                             THE COURT: Mr. O'Malley.
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       BUDD LARNER
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                                                                                             MR. O'MALLEY: Good morning. Your Honor, before we
       BY: STUART D. SENDER. ESOUIRE
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       Attorneys for the Defendant, Dr. Reddy's Laboratories
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                                                                                    call our next witness, just a minor housekeeping item. From
 8
       WINSTON & STRAWN
                                                                             7
                                                                                    Dr. Candiotti yesterday, I believe we gave the court clerk a
       BY: JOVIAL WONG, ESQUIRE
 9
            GEORGE LOMBARDI, ESQUIRE
JULIA MANO JOHNSON, ESQUIRE
                                                                             8
                                                                                    list of his exhibits, but I don't think we moved them into
                                                                             9
                                                                                    evidence. I have another copy of that list, if need be.
10
            BRENDAN F. BARKER, ESQUIRE
       LITE DEPALMA, GREENBERG, LLC
BY: MAYRA V. TARANTINO, ESQUIRE
                                                                             10
                                                                                           So, I just would like to move those exhibits into
11
       Attorneys for the Defendant, Teva
                                                                             11
                                                                                    evidence.
12
                                                                             12
                                                                                             THE COURT: Has the other side seen it?
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                                                                                             MR. LOMBARDI: We'd just like -- we haven't seen the
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                                                                                    actual list that he's tendering, so we'd just like to see it.
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                                                                                    I don't anticipate any issues.
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                                                                                             MR. O'MALLEY: It's just the exhibits that were --
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                                                                             17
                                                                                             MR. LOMBARDI: I don't anticipate an issue.
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                                                                                             THE COURT: Okay. After the break then, you can move
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                                                                                    it in, Mr. O'Malley. All right?
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                                                                            20
                                                                                             MR. O'MALLEY: So with that, your Honor, we would
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21
                                                                                    like to call our next witness Dr. Carl Peck.
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                                                                                             (Whereupon, CARL CURTIS PECK, witness for the
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                                                                            23
                                                                                    Plaintiffs, sworn.)
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                                                                            24
                                                                                             THE DEPUTY CLERK: Please state and spell your full
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                                                                                    name for the record.
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                                                                                                  United States District Court
                     United States District Court
                                                                                                       Trenton, New Jersey
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Tremon, New Jersey			
1	I N D E X		5
	INDLX		Peck - Direct
2		1	Have a seat.
3		2	THE WITNESS: Carl Curtis Peck.
4		3	MR. O'MALLEY: If I may approach, your Honor. I have
5	WITNESS VOIR DIRECT CROSS REDIRECT RECROSS DIRE	4	the witness' exhibits. We've already distributed copies to
	CARL CURTIS PECK	5	the Court.
6	By Mr. O'Malley 5 20 175 By Lombardi 80 184	6	VOIR DIRE EXAMINATION BY MR. O'MALLEY:
7		7	Q. Good morning, Dr. Peck.
8		8	A. Good morning.
9		9	Q. Dr. Peck, could you please turn to Plaintiffs' Trial
10		10	Exhibit 183.
		11	Do you recognize this document?
11		12	A. I do.
12		13	Q. For the benefit of the Court, can you briefly describe
13		14	your educational background after high school?
14		15	A. So, I spent three years at the University of Kansas in
		16	Lawrence and received a degree in mathematics and chemistry.
15		17	Following that, I took a Fulbright year in Germany
16		18	studying physical chemistry at the University of Tübingen and
17		19	the Technische Hochschule in Stuttgart.
18		20	Q. You may have to spell that, Dr. Peck. Do you have it?
19		21	Never mind.
		22	And go on.
20 21		23	A. Well, thereafter, I went back to Lawrence or to Kansas
22		24	and attended medical school.

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Peck - Direct

1 THE COURT: I think maybe this would be a good time 2 for a break.

MR. O'MALLEY: Perfect. Your Honor. Thank you. (Brief Recess.)

5 THE COURT: Thank you.

6 BY MR. O'MALLEY:

Q. Dr. Peck, did you hear Dr. Fruehauf provide some

8 testimony regarding the results of Helsinn's Phase II 2330 9

study?

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10 A. I did.

11 Let's take a look at Defendants' Trial Exhibit 227. It's

12 in one of the smaller separate notebooks in front of you. It

13 will also be on the screen in front of you. What is this

document?

15 A. So, this is the front page of the clinical section of the

16 NDA, Item 8, and this content identifies the 2330 study report

17 which will follow in Volume 104.

18 Q. And let's look at Defendants' Trial Exhibit 227-0005,

19 near the bottom of the page. What do those dates indicate at

20 the bottom of that page?

21 Right. So this is standard report -- reporting of

certain milestones in the performance of a clinical trial,

23 where the study date was started in May of 1994, the study

24 date was completed on April 1995, meaning the last patient

25 out, and the date of the report is July 1995.

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Peck - Direct

Well, there were five dose groups that were administered.

2 As you can see, they range from .3 to 90 micrograms per

3 kilogram of body weight. There were a total of 161 patients.

4 24 patients were in the 3-microgram-per-kilogram group, a

group of particular interest, but about the same number of patients were in each -- each of the others.

Most of the subjects were male. None of them had received a chemotherapeutic agent before, and basically, it was a small study that was quite unrepresentative of any, you know, broader population.

Q. And, by way of summary, what were the results of this

13 Well, I think we're going to see a richer table, but --14 but there was the identification of one dose group, the 15 30-microgram-per-kilogram group, that yielded a statistically 16 significant difference or finding for one of the outcome 17 measures called complete control after 24 hours.

18 Q. Okay. Now, as you noted, we're going to dig into the 19 details in a moment.

20 Were there any conclusions that could be drawn from 21 Study 2330 regarding the efficacy of the solution that was 22 tested?

Not in my opinion. There are -- there are a number of weaknesses of this study that would cause a POSA to be quite skeptical that even the 30-microgram-per-kilogram dosage would

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Peck - Direct

Q. We've heard that term "last patient out" a few times

2 during trial. What does that mean?

3 That's the date that the very last patient has exited the

clinic or the study unit in a clinical trial.

5 Q. Okay. Now, have you prepared a slide summarizing Study

2230 [sicl?

7 A Thave.

8 Q. Let's please turn to Plaintiffs' Demonstrative Exhibit

209. And let's just take this a piece at a time. Can you

10 summarize your opinion as to what the objective was of Study

2330?

THE COURT: Just again, this is Phase II?

13 MR. O'MALLEY: Phase II, correct.

THE COURT: Phase II. This is the Phase II study for

15 what became Aloxi®, right?

16 BY MR. O'MALLEY:

17 Can you answer that guestion, Dr. Peck?

18 A. So, there were five Phase II studies. This is one of

19 them. It was an exploratory dose-ranging study in cancer

20 patients who were receiving chemotherapy-induced nausea and

21 vomiting -- who were experiencing that. It's an intravenous

study. And the purpose of this was to evaluate graded doses

23 to see the -- to evaluate the safety and to identify a

24 possible signal of benefit. Peck - Direct

1 work. For example, there was an incomplete dose-response 2 pattern.

3 Q. Okay. Before explaining that, why don't we get to the table that you mentioned.

Let's look at Defendants' Trial Exhibit 227-0015. And let's blow up the area around the table. Do you understand what's set forth here?

A. I do. Now, this comes from the final study report of 2330. And it is the primary results of the -- of the potential for benefit. And what you see here are the doses lined up from .3 up to 90 and one --

Q. Would you like a pointer? I'm sorry to interrupt.

13 A. Oh, I'm sorry. Right, right, right, okay.

> So, what you see in this row here are the dose assignments. As I say, there were about 25 subjects in each group. There were a couple of different ways of evaluating whether the drug was having an effect. One was called complete control and the other was called complete response. They differed very slightly, but each required that, you know, there be no -- no vomiting and retching and no requirement for rescue medicines.

> And what you see here is that they -- they roughly line up here, but to compare with the lowest dose groups, .3 to 1, each of the others was statistically evaluated against that



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Peck - Cross

- 1 result of the administration of the formulations that are at 2 issue in this case?
- 3 Just saying that this table is not sufficient to inform me about any one person in the clinical trial.
- 5 Q. I didn't ask you about any one person.
- 6 I just asked you whether you can conclude that anybody 7 in the trial actually experienced a reduction in the 8 likelihood of CINV as a result of the administration of the
- 9 formulation in this case? 10 A. The best you can say is that the raw data expressed as 11 percentage differ among these groups, but you really must 12 apply a statistical test, and in the case of a positive 13 control like this, you have to confirm that the positive --14 that the active ingredient, this is -- I mean, the active drug 15 is actually working in this trial.
- 16 So there's a column missing, a very important column 17 missing, and that's the historical placebo. This is a 18 non-inferiority trial. And Dr. Fruehauf should have explained 19 that a non-inferiority trial is never validated until it's 20 compared with a historical control. And that's missing from 21 this.
- 22 Q. Did you finish your answer?
- 23 Α. I did.

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- 24 Q. Okay. And so I'm just asking you, I think it's a "yes"
- 25 or "no" question, okay? And so let me just ask you: Can you

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Peck - Redirect

- 1 about a document entitled the FDA's Drug Review Process From 2 Information For Consumers Database?
- 3 A. Yes. I do.
- 4 MR. O'MALLEY: I don't know if we're able to pull 5 that up. If I can ask the help of Mr. Lombardi's hot seat
- 6 guy. Thank you.
- 7 BY MR. O'MALLEY:
- 8 Q. Now, this appears to be two pages of text, and there's
 - some, I don't know, cartoon figures in here. Have you seen
- 10 this before?

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- 11 A. Well, I think this was flashed up this morning or this
- 12
- 13 Before today?
- 14 I don't recall.
- 15 Q. Is this an FDA Guidance?
- 16 No, it's not an FDA Guidance. It's a communication to
- 17 consumers to explain some aspects of drug development and
- 18 regulation.
- 19 MR. O'MALLEY: Could we turn to Page 2 of this
- 20 document, please.
- 21 BY MR. O'MALLEY:
- 22 Q. And you were asked some guestions about the bottom of
- 23 Page 2 regarding Phase II?
- 24 A. Yes.
- 25 And in the middle of the paragraph, it states, "This

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Trenton, New Jersey

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Peck - Redirect

- tell from the data you're presented here whether anybody in this study received a reduction in the likelihood of CINV as a result of taking the formulations that are at issue in this case?
- 5 A. No.

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- MR. O'MALLEY: Objection, asked and answered.
- 7 MR. LOMBARDI: It's been -- it hasn't been answered.
- 8 THE COURT: He just answered.
 - THE WITNESS: I just answered "no."
- 10 MR. LOMBARDI: Thank you. Thank you.
- 11 Your Honor, if I could have a minute to confer.
- 12 THE COURT: Yes, always. Would you like to take a 13 little recess?
- 14 MR. LOMBARDI: I think that would be the easiest 15 thing to do.
- 16 THE COURT: That's fine.
- 17 MR. LOMBARDI: Thank you, Your Honor.
- 18 THE COURT: Okay.
- 19 (Recess taken.)
- 20 THE COURT: Mr. Lombardi?
- 21 MR. LOMBARDI: No further questions at this time,
- 22 your Honor.
- 23 THE COURT: Fine. Thank you. Redirect.
- 24 REDIRECT EXAMINATION BY MR. O'MALLEY:

Peck - Redirect

- 1 phase aims to obtain preliminary data on whether the drug
- 2 works in people who have a certain disease or condition."
- 3 Do you see that?
- 4 A. I do.

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- 5 Q. Is this discussion in this consumer piece consistent with
 - your discussion of Phase II clinical trials during my
- 7 examination of you today?
- 8 A. Well. I believe it is, given that we see the word
- 9 "preliminary" in there.
- 10 MR. O'MALLEY: Okav. Could we look at the conference
- 11 report opportunities for integration and so on with Dr. Peck
- 12 as first-named author. And, thank you, again, for the assist.
- 13 BY MR. O'MALLEY:
- 14 Q. You were asked some questions on Page 609 of this
- 15 reference, and, in particular, towards the bottom on the
- 16 left-hand column regarding Phase II.
- 17 Do you recall that?
- 18 A. I do.
- 19 Q. And, in particular, there's a statement here. I would
- 20 like to direct you to towards about the third of the way down,
- 21 "The principal goal of Phase II studies is to provide
- 22 unequivocal evidence of the desired therapeutic effect."
- 23 Do you recall that?
- 24 A. I do.

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Peck - Redirect

- consistent with your testimony regarding what Phase II
- 2 clinical trials are about?
- A. Yes, I think so. That's a goal. That's not always achieved, but that's a goal.
- 4 achieved, but that's a goal.
 5 MR. O'MALLEY: Now, if we can turn to DTX-1019, and
- 7 over the hot seat. Thanks again.
- 8 BY MR. O'MALLEY:

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 ${\bf 9}$ $\,$ Q. Now, I think you were asked some questions regarding the

are you doing it or -- okay. 0009. Just wait till we switch

- 10 first paragraph. "The data suggests that the four higher-dose
- 11 groups of palonosetron" and the dose groups were listed "were
- 12 in general clinically more effective than the lowest-dose
- 13 group," correct?
- 14 A. Yes.
- 15 Q. And before I get there, let me just, as the Court pointed
- 16 out, there's -- the next sentence reads, "A statistically
- 17 significant difference in the proportion of subjects with a
- 18 complete response was achieved only for the comparison between
- 19 .3-1 microgram per kilogram and 30-microgram-per-kilogram
- 20 doses (24 percent versus 50 percent, respectively; p equals
- 21 0.047)."
- 22 Do you see that?
- 23 A. I do.
- Q. That second sentence I read, is that consistent with your
- 25 interpretation of the table from Study 2230 before the

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Peck - Redirect

- 1 interpretations in these type of FDA documents.
- 2 A T did.
- 3 Q. Do I recall that correctly?
- 4 A. I did.
- 5 Q. What did you mean by that?
- 6 A. Well, you know, this is a -- you know, when a company
- 7 says this clearly shows, clearly, you know, that's a judgment
- 8 call. It is a very positive qualification. It's sort of
- $9\,$ meant to persuade, and it's -- what FDA in advertising calls
- 10 fluff. They permit a little fluff in advertising.
- 11 What they don't permit is submitting data that turns
- 12 out to be fraudulent or incomplete. That's a very serious
- problem. But the way companies represent varies, and it
- varies within the company over time, and we've certainly seen this in this case.
- 16 Q. Now, with respect to this same document and this
- 17 interpretation, you testified, I believe, that the FDA makes
- 18 up its own mind.
- 20 A. Well, certainly.

Do you recall that?

- Q. And what did the FDA decide with respect to Study 2230
 - specifically whether it was sufficient to show efficacy of any
- 23 dose?

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- 24 A. Well, this isn't the document I think that documents
- 25 that, but in a 1999 meeting minutes with FDA, the FDA clearly

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Trenton, New Jersey

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- Peck Redirect
- 1 reanalysis?
 2 A. Yes. it is.
- 3 Q. Okay. Now, with respect to the first sentence, and
- 4 specifically the words, "clinically more effective," Mr.
- 5 Lombardi took you to several Helsinn or Syntex documents where 6 they characterized the Phase II data in terms of clearly -- in
- 7 terms of showing efficacy, the words varied.
- 8 Do you recall that?
- 9 A. I do.
- 10 $\,$ Q. And I believe you said that that was the author's
- 11 interpretation.
- 12 Do you recall that?
- 13 MR. LOMBARDI: And, Your Honor, I object. There's no 14 foundation for this witness to testify as to what the author 15 was doing. I think he said that during the cross-examination.
- 16 THE COURT: Well, I'll permit latitude on the 17 redirect. Overruled as to this.
- 18 BY MR. O'MALLEY:
- 19 Q. Do you recall saying that?
- 20 A. I recall something like that, that representations by
- companies before FDA and various settings vary with respect totheir championship and, you know, sort of attempt to persuade
- FDA, but it's -- it's just a matter of words.
- $\,\,$ Q. Now, you have said, I believe, that there was some

Peck - Redirect

- said that 2330, you know, would be admissible to the pivotal
- 2 study. The data could be supportive. It didn't say this
- 3 study report, it didn't say these results could be supportive,
 - but it referenced the data.
- $5\,$ Q. Now, if we could turn to DTX-0264.0009, and this is the
- 6 table that's attached to the August Consulting letter
- 7 requesting a meeting with the FDA.
- 8 Do you recall that?
- 9 A. Ido. Yes, Ido.
- 10 Q. Now, you testified in cross-examination something about a
- 11 historical control missing?
- 12 A. Yes.
- 13 Q. Could you please explain what you meant by that.
- 14 A. I will. The term adequate and well controlled means
- 15 that -- and it's very well accepted in the scientific
- 16 community -- that in a randomized, blinded study, you compare
 - the main effect of interest with a control group.
 - when --

medicines.

- THE COURT: The main what of interest?
- THE WITNESS: The main effect, so, for example, in this case the reduction of nausea and vomiting and rescue
- 23 It must be compared and it must be compared under

rigorous, statistical conditions. When the comparison group