UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

UNITED STATES OF AMERICA,	:	CA No. 99-2496(GK)
	:	May 2, 2005
Plaintiff,	:	
	:	9:30 a.m.
	:	
v.	:	Washington, D.C.
	:	
PHILIP MORRIS USA, et al.,	:	
	:	
Defendants.	:	

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VOLUME 98

TRANSCRIPT OF TRIAL RECORD
BEFORE THE HONORABLE GLADYS KESSLER
UNITED STATES DISTRICT JUDGE

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P R O C E E D I N G S

THE COURT: Good morning, everyone.

This is United States of America versus Philip Morris. CA 99-2496. And, of course, all counsel are present.

I gather there are some preliminary matters, and I want to go over some scheduling matters as well.

Let me start with a motion -- I don't know why we didn't get it over the weekend; I think you all have heard that from my law clerk.

This is the government's unopposed motion for order relating to production of documents under paragraph 10 of Order 924. Obviously, it's unopposed, but I do like to read orders, everyone, and I haven't had a chance to.

Why are you all looking a little mystified? Is this a consent order you all --

MR. REDGRAVE: Yes.

THE COURT: -- submitted? Good.

MR. REDGRAVE: Yes.

THE COURT: Now, when did you all send it, do you think?

MR. KLONTZ: Your Honor, David Klontz for the government.

We sent that in Friday evening around 6:00 o'clock, I believe or 6:30.

THE COURT: Well, we didn't get it. That's all I can

say. At some point we'll check, and you should check whether it's officially on ECF. I will sign it at some point during the day when I get a chance to at least read it.

MR. KLONTZ: That's fine, Your Honor. It relates to the production that is due today, or you may know if you've seen this.

THE COURT: I've learned never to sign anything I haven't read. Once I made a mistake about that and it ended up in every paper around town and in the Fourth Circuit, so I won't go into that right now. But, of course, I'll get to it today. Don't worry about it everybody.

In terms of today's schedule, I told you all that I have a group to talk to at lunch. You probably don't remember. They are going to come at 1:30, and I anticipate that I'm going to talk to them, and we will do it in the courtroom because it's going to be a moderate size group of people, from 1:30 to 2:00.

I think I will have the courtroom locked at that point, and then at 2:00 we will open the courtroom and I may just be finishing up with them, but that will be a good way to be able to end that conversation. And they come at 1:30. We will take a lunch break at about 12:45. I need a little bit of time. So that will be today.

MR. BIERSTEKER: I think, Your Honor, if I just might interject. My assessment is that we can probably finish with Dr. Wyant before lunch.

THE COURT: Before lunch!

MR. BIERSTEKER: Yes, Your Honor.

MR. BERNICK: And then I think that, by arrangement, Dr. Carmona is not going to appear until tomorrow morning.

THE COURT: Well, that, I knew.

MR. BERNICK: So --

THE COURT: Well, it may be, then -- let's talk this through for a minute.

I don't think it would be terribly difficult to move that up 15 minutes if we really thought -- meaning the talk I have to make -- if we really thought we could finish Dr. Wyant before lunch. I don't want to bring him back for just a short period of time. Maybe we have to kind of be flexible about that because you may not know yet quite how long it will take.

Wednesday, we will have to take an early lunch and probably a little longer than usual because I do have a Judicial Conference Committee telephone call with about five zillion people. That's at 12:00 o'clock. So I'll break at about five of 12:00 just so you know. That's on Wednesday. And we will probably take an hour and a half for lunch that day.

Thursday is a full day.

Tomorrow is a full day. Tomorrow, we are going to start at 10:00, and if need be -- although it doesn't sound like we will need to -- we can go a little bit later tomorrow. But I don't think Dr. Carmona's testimony is going to take very long

from what I read.

MR. BERNICK: I don't think that Dr. Carmona's testimony will take very long, and then we have Dr. Bazerman for Wednesday.

THE COURT: Now, the government is not going to be prepared to start him on Tuesday?

MS. EUBANKS: Well, Your Honor, we received notice from defense counsel that they would prefer that we start him on Wednesday and we were in agreement with that.

Mr. Frederick sent an e-mail, because of the timing for the production of his report and so forth, and so we are in agreement that that's fine.

THE COURT: By the way, I've seen the objections. Now, the responses may have come in and I didn't see them.

MS. EUBANKS: We filed those on Saturday, and they should be hand delivered right about now, Your Honor.

THE COURT: Okay. I have not seen those yet.

Do you think you're going to finish Dr. Bazerman on Wednesday?

MR. FREDERICK: I think so, Your Honor, but Mr. Webb is doing him and I -- you know, I hesitate to predict.

THE COURT: Right.

MS. EUBANKS: With Dr. Bazerman we will have the one-hour live presentation.

THE COURT: That's fine.

Okay. Now -- that takes care of this week -- did counsel want to raise some matters before our first witness this morning?

MS. EUBANKS: Yes, Your Honor, there are two matters, one that I'll ask Mr. Klontz to address dealing with the production for today, and the other is an issue that we raised when we were last together about the closing of the evidence and I will present a motion to Your Honor on that.

THE COURT: An oral motion?

MS. EUBANKS: Well, that's exactly how defendants did it when they required the United States to close its case.

It doesn't have to be by motion, but we just want to make sure that the record is clear and that compliance with the particular provision of 471 is met regarding the government's potential for a rebuttal case, and I want to make sure that the court understands where we stand on that and that they comply with the court's orders.

THE COURT: Well, I saw the look on Mr. Frederick's face -- not Mr. Frederick, I'm sorry -- Mr. Redgrave's face. It may be that it will be helpful to at least, during the 15-minute break this morning, advise defendants what you're going to do.

MS. EUBANKS: Well, Your Honor, actually, before we put Dr. Wyant on, it's important that the defendants close their case, and that's exactly what was done on March 7, 2005, when the United States --

THE COURT: The defendants closed their case?

MS. EUBANKS: When the United States presented its last witness on the liability case, defendants insisted that the record had to be closed and that the court needed to allow that, and the court allowed it.

Mr. Webb made an oral motion. It's discussed in the transcript at pages for March 7, 2005, at pages 14397 through 14404, and basically what happened during that time frame is the court did make this statement.

"Let me make it clear. It was never anticipated that once the evidence was in, even if it had not yet -- and I obviously have not yet -- had a chance to go over the prior testimony, that the government -- or anybody, for that matter -- again, it applies to both sides -- would then have an opportunity to fill in the record depending upon my objection -- I'm sorry -- upon my rulings on the objections."

Now, this is important, in fact critical, because we have received notification from joint defendants of a number of motions that they intend to file which we believe go to the issue ultimately of whether the evidence is closed in record with respect to the liability.

Now, the United States had argued before the court that it wasn't proper to close the proof on liability, but in the discussion that we had in the transcript on March 7th the court basically -- not basically -- the court said, "This is going to

apply equally to both sides. Before the defendants present their first evidence in their liability case I'm closing the proof on of the government."

THE COURT: But subject to my rulings on the prior testimony.

MS. EUBANKS: Well, we raised the issue on the prior testimony and what Your Honor indicated is that that is something that will be done after, after this is closed, but that you stated that the government's evidence was closed on liability.

THE COURT: That's right.

MS. EUBANKS: And that the same would apply with defendants' case and this was done before the presentation of our first witness -- of their first witness, I should say, on the liability case.

So I can have a copy of the transcript made. I have a highlighted copy, but I have writing on it, so I don't want to hand that up. But if it's helpful to the court, I can get a copy of the transcript made, but it is essential that defendants rest, especially in light of some of the motions over the weekend that we were notified that they intend to file that go to testimony that is a part of the record.

And we think that it's important, including for reasons that there are motions out there pending with respect to Lynn Beasley's testimony, that the evidence in the record on

liability be closed, just as it was with the United States' case in chief on liability --

THE COURT: Have those motions been filed?

MS. EUBANKS: The reply brief of the United States on the motion dealing with Lynn Beasley's testimony will be filed today. This afternoon it's due.

And we received notification from joint defendants that they intend to -- they want to meet and confer to file a motion to strike the testimony of five or six of the government's witnesses that's already in evidence, several expert witnesses that have already testified in the case. I'm not prepared to discuss the merits. I haven't had the meet and confer.

But what is important is that the same hand that we were dealt with respect to the closure of the evidence before the presentation of the first witness --

THE COURT: I understand.

MS. EUBANKS: -- is also -- we are entitled to that here, and we think it's important given some of the recent communications from defense counsel.

And I can get a copy made of the transcript before Dr. Wyant takes -- actually, I can provide this to you with highlighting and take off my page that has the note on it and you can see basically what statements were made.

THE COURT: I don't need to do that right now.

Mr. Redgrave, do you want to respond briefly in any

fashion now or just simply delay?

MR. REDGRAVE: Your Honor, I could do it either way. In terms of just a brief response.

Clearly, there's that Beasley issue with respect to the Smooth Magazine and whether or not we need to bring in another witness. That matter, we filed our response last week, and I believe the government just indicated they are going to file their reply today. I don't know if there's any need to really argue that. I think we set forth the solution there.

THE COURT: No.

MR. REDGRAVE: But on the closing, it really shouldn't -- on their closing of the evidence on the liability phase, I started to raise last week, Your Honor, a number of problems that the government has created with the way in which they've been handling the objections to the priors and the fact that there may be a need to have additional evidentiary submissions.

It's not something where we should just be having the government unilaterally declare that the record should be closed here. I think Your Honor has recognized on a number of occasions, that given that this is a bench trial, there needs to be some flexibility here in terms of this.

Now, obviously, we don't have any more live liability witnesses currently planned. However, Your Honor's rulings with respect to a number of matters that are still outstanding could

potentially affect that.

In addition, Your Honor, the fact is that we have --

THE COURT: Are you talking about prior testimony?

MR. REDGRAVE: Prior testimony, but then also the exhibits, and this gets to a key issue --

THE COURT: Well, the exhibits are involved with the prior testimony.

MR. REDGRAVE: That's correct, Your Honor, the exhibits that are out there, because we believe it's absolutely critical that we have the opportunity to address -- if Your Honor entertains the government's arguments with respect to nexus, I could go through a litany of all the objections that I believe are borderline frivolous, if not beyond.

But to the extent those objections are things that Your Honor needs more evidence that goes critically to the issue of liability in this case, we should have the opportunity to address that and, if necessary, be able to put in additional evidence that gives whatever evidentiary support Your Honor believes is necessary to get those exhibits in. So it's not a matter of just, you know, running up flag and saying, We're done here.

In addition, Ms. Eubanks mentioned a couple of motions that we are seeking to meet and confer with the government that do go to their remedies witnesses -- I'm sorry -- to the liability witnesses, a motion with respect to Rule 702, and then

a separate motion with respect to certain facts that we believe should be admitted on the attribution issue. This is dealing with attribution of authors on documents, and evidence we believe that should come in on that issue as well.

We have not met and conferred, although we have sought meet and confer with the government, we hope to do that today. But those motions should be able to come in and be dealt with by Your Honor in due course, and I don't think it's something that we need to throw a stake in the ground today and fight about as far as that closing.

So, that's the quick synopsis, Your Honor. I could go into detail on the objections and everything, but quite frankly, I think we should try and get the witness today on and off.

Now, honestly, Your Honor --

THE COURT: I do, too. This issue --

MR. REDGRAVE: -- I think we can be done before lunch with everything.

THE COURT: This issue should be very clear on the record. I don't need any extensive briefing -- but again, I'm always looking down the road or up the road -- and, therefore, the government should file no more than a 3-page memorandum. You may not need three pages. If you attach the transcript I'm not going to make your argument, but you figure it out.

And I would think that three days after the government files that, the defendants could file no more than a 3-page

opposition, and if the government wants a 2-page reply, it may not be necessary, that would be due two days later so we can get it resolved.

MS. EUBANKS: We will get that on file immediately, Your Honor, but if I could respond to one thing very briefly that Mr. Redgrave said, and it is the statement that the prior testimony and not knowing the ruling. I'm reading from the transcript where I raised this issue, and I'm quoting, "Your Honor, if I may interrupt with one more thing" --

THE COURT: But I'm going to go over all of that, Ms. Eubanks.

MS. EUBANKS: I understand, Your Honor, but this was done, and it was emphasized that the proof needed to be closed before the next phase began.

But with that in mind -- I mean, that the court's understanding that there may be some issues, because also I want to inform the court under 471 with respect to the government's rebuttal case because these things are obviously tied. If the motion's practice unravels certain things, the motion practice that's mentioned that we haven't had the meet and confers on, that raises questions with respect to Order 471, paragraph E, where we are to inform the court at the close of defendants' case of our rebuttal evidence that we intend to present.

Now, if defendants' case closed today, on the record that we have now the only rebuttal case that we are interested

in presenting to the court is through prior designated testimony, no live witnesses, but that can change depending upon this issue and how this is resolved.

But I did want to be clear because of the terms of 471 that require us to inform the court of a rebuttal case, and we had discussed this briefly before. And I think that we understand what the court needs in the way of a rebuttal case, and right now on this record, we don't think on the liability phase, that we need to present any live testimony.

As I say, though, that could change depending on what happens here, but we will address it, Your Honor. We will get that brief in right away.

THE COURT: Mr. Klontz, briefly, please.

MR. KLONTZ: Excuse me, Your Honor?

THE COURT: Go ahead.

MR. KLONTZ: Two matters actually with respect to Order 924, the production for which is due today.

The first matter relates to the Gruber documents. There were 115 documents cited in the court's order. We have submitted to the court for its in camera review nine of those documents that we believe ought to be withheld from defendants based upon either attorney-client privilege or presidential communications privilege.

THE COURT: And I have those; is that right?

MR. KLONTZ: That's correct.

We have the other documents ready to go to defendants today, probably this morning, and we will ship those out. If the court has not had a chance to review those nine documents we propose to withhold them pending the court's review and would be happy to take care of it that way if that's all right with the court.

THE COURT: Yes, that's agreeable. And I ought to be able certainly by some hour this evening to get a ruling out on the nine documents.

MR. KLONTZ: If the court believes that oral argument as to any of them is necessary and you wish to question me on, I'll certainly be willing to come back to court to discuss the nine documents.

THE COURT: Hopefully not.

MR. KLONTZ: The other matter, Your Honor, is with respect to the production for Dr. Fiore under Order 924. That order requires that certain offices within HHS and the Office of Management and Budget be searched for documents that are potentially responsive to the categories or the three topics that were mentioned in Order 924.

We undertook that search. And I also have ready for service on defendants approximately 20,000 pages, maybe a little bit less than that, almost all of which came from HHS, not surprisingly.

THE COURT: Mr. Wells is going to read them all

overnight, right?

MR. KLONTZ: I wish him the best of luck.

MR. WELLS: It was 10,000 pages yesterday.

MR. KLONTZ: More than 10,000 pages.

THE COURT: Go ahead.

MR. KLONTZ: I thought that was the number, and then I got an e-mail from our folks at CACI that said it was closer to 20,000 pages. So we have those prepared to go.

Now, almost all of those pages are from HHS. There is a small number, probably about a hundred pages, that are from the Office of Management and Budget.

The topic I wanted to discuss with you this morning, Your Honor, was the problems with being able to certify with absolute certainty that we have gotten every single document from OMB.

What we did have the health division do was search all of their files, hard copy files, and their individual computers for potentially responsive documents. Those were provided to us.

In an excess of caution -- and probably this was a mistake -- we asked OMB if they could search their e-mail electronic archives, going through the same process that we've gone through with earlier with respect to EOP and the Clinton White House documents.

They did do a search using the search terms "quit line"

and "smoking and cessation" together in a document. The responses came to -- potential hits came to several hundred thousand pages.

Now, I can tell you that I did not look through all of those. We had problems just getting them from the Office of Administration on behalf of OMB. The last of those came in yesterday.

Based upon my brief review, it does not appear that there will be further relevant documents that would come from that search. There's an awful lot of documents about folks trying to quit smoking at OMB where they've sought help on the web for helping to quit smoking.

There are perhaps a couple of copies of the press releases that HHS released with respect to the quit line back to 2003, 2004.

An awful lot of document relate to diesel emissions. I'm not sure why --

THE COURT: To what?

MR. KLONTZ: Diesel emissions.

THE COURT: That's what I thought you said.

MR. KLONTZ: There must be something about smoking and cessation in those documents. But, as I said, we've not tried to look through all of those. It would take a huge amount of time to do that.

We believe we've materially complied with Order 924,

but I did want to alert Your Honor to our having undertaken the search and not having been able to complete it. If the court orders us to carry further with it, we will do so, but it's our hope it won't be necessary.

We believe that, based upon the very small number of OMB documents that were turned up from the hard copy search and the personal computer search, that it would -- I won't say futile because I can't represent that based on my review, but I should say that the OMB spent more than $50,000 just doing this search to come up with these apparently useless documents. It would cost substantially more to carry this further and we hope that that will not be necessary.

THE COURT: Mr. Frederick.

Mr. Redgrave, why am I doing this this morning? I'm sorry. Go ahead.

MR. REDGRAVE: I've got three different names now this morning.

THE COURT: Two. Two only, I think.

MR. REDGRAVE: Two, in addition to my own. Depending on how today goes, I might choose another name.

Your Honor, I'll start with this matter with respect to the production under 924 on the cessation documents. This is a big problem.

We've been asking for a rolling production of these documents, and of course, we've gotten, since that initial

production a long time ago on these searches ordered by 924, nothing yet. Nothing. Okay?

We got an estimate yesterday of 10,000. Now we hear it was more than 10,000. When I hear more than 10,000 in a letter, I think it may be 10,000, 11,000, 12,000. Now it's doubled. Okay?

And just wishing Mr. Wells luck on reviewing those in a short order is not enough, Your Honor. I think we are in a situation here where we seriously need to look at an additional day of deposition for Dr. Fiore so that we have an adequate opportunity to go through it.

It's just not reasonable for us to suddenly go from 10,000 and our staffing for that to doubling that, and who knows what else comes. So that's the first issue here. We've got a big difference in that production and what it means to us and a fair opportunity to review it and to depose this gentleman.

Secondly, Your Honor, with respect to these e-mails, I'll tell you. I've done a lot of work on a lot of cases with respect to e-mails, electronic discovery, and one thing I found especially with respect to more recent files is a lot of things aren't printed any more. They are not printed and put into a hard copy file. They are kept in electronic files.

So the fact that Mr. Klontz said maybe, you know, we didn't find that much in the paper files, that means it's not in the electronic, is just an non-starter.

And with respect to the problems they apparently have found in doing search terms, that's something, Your Honor, we actually dealt with last time by sitting down with the government and saying, what search terms did you use. And I think Your Honor will remember a status conference about, maybe even three years ago, we went through this and you ordered the parties to sit down and go through that.

And I think that's something we should go through here with respect to the government and say, "What search terms did you use? We can help you narrow this."

We are not interested in diesel emissions, Your Honor, but we are not interested in having a search just cut off because you found a lot of diesel emission documents.

That's no reason to say, "Well, I found a lot of junk. We're not going to look further." And it certainly wasn't a statistically significant sampling from what I heard, it's just they found a lot of these.

That's not sufficient. That's not sufficient to give us a fair opportunity to get the documents that are responsive to the order Your Honor entered compelling them to produce these documents. We need those.

One other thing, Your Honor, I'll raise briefly. The government has said there are a number of privilege documents that are so highly sensitive that they don't want to produce those. And they indicated they are going to put those on a

privilege log. It's not going to be very long, I hope. But certainly those documents at a minimum should be tendered for in camera review where Your Honor can look at those claims to see if they pass muster.

So we've got significant concerns with this breaking news that we got in a letter yesterday afternoon, and now it's significantly expanded by Mr. Klontz here in court.

This is a big problem, Your Honor.

MR. WELLS: Your Honor, before he speaks, just to talk about the practical realities.

I've been preparing to take Dr. Fiore's deposition --

THE COURT: When is it scheduled, by the way?

MR. WELLS: 9:00 AM Thursday in Madison, Wisconsin, which means, as you know, that I have to leave on Wednesday.

THE COURT: Right. I know.

MR. WELLS: And I'm prepared to take --

THE COURT: I practically know the schedule from what you all have told me.

MR. WELLS: And we got a letter yesterday saying that it would be 10,000 or more documents, which I interpreted to mean, okay, it may be 11,000. I did not expect in any way it would be double.

And we've been asking from day one, pleading for a rolling production. I say, Could you give us something on Friday? Sunday? Saturday? We've gotten nothing. And the

notion that I can get 20,000 documents today at 5:00 o'clock and adequately review them for this deposition is just not realistic.

And what I would ask, Your Honor, is that we hold a Thursday date, let me take his deposition --

THE COURT: I'm sorry. Say that again. What you ask is?

MR. WELLS: That we hold the Thursday date. Let me go to Madison and take his deposition, and then that you grant us a second date in which I -- permit me, after having reviewed the documents, to continue the deposition. It's just impossible to look at 20,000 documents in one day.

THE COURT: What date, everybody -- for some reason, I don't have nine -- oh, yes, I do. Excuse me. Let me just check something.

That was entered April 17th. So the government has had a little over two weeks or about two weeks to produce, although there was a great deal of material, obviously, to produce.

Who wants to reply? Mr. Brody?

MR. BRODY: What's the specific question?

What information are you specifically interested in, Your Honor?

THE COURT: Well, there's a number of issues that defendants have raised.

Number one, obviously, they want at least the

opportunity, if they need it, to have another either half day or day -- I wasn't clear -- of Dr. Fiore's deposition so that, if they need it, so that they can look at the additional 10,000 or so pages.

I have to -- well, no, let me just see. There's a serious issue with the e-mails. And certainly from Mr. Redgrave's response, the defendants are not satisfied with Mr. Klontz's representations, which are not final representations -- he made that very clear -- about the nonresponsiveness of the e-mails.

And then I gather -- I didn't hear this from Mr. Klontz -- that a small number of documents are going to be logged as privileged and that those documents certainly have to be addressed by me before we're done.

MR. BRODY: A very small number, Your Honor. Mr. Klontz can speak to the specific numbers.

In terms of Dr. Fiore's deposition, I mean, first of all, if it is 20,000 pages -- and I think it's less than 20,000, but we don't want to underestimate the number here before the court -- as I recall from the document production days, that's about eight boxes of documents. It's not as if we're talking about an entire roomful of documents with 20,000 pages.

The other thing is the -- you know, defendants are certainly aware that the documents generally relate to a single issue which they have asked to have discovery on, and that is

HHS setting up a 1-800 Quit Now number. I think 2004 is when that happened.

As Your Honor is very likely aware from the briefing on these issues, Dr. Fiore is offering opinions about setting up a national smoking cessation program. And his expert report, if you're looking at his expert report, certainly defendants are entitled to take any angle that they think is potentially fruitful on the cross-examination, but this production that they have asked for, and it was their request that they said, Go to these offices, you know, Give us these documents, and we undertook the search and came up with the documents very short time period.

We're talking two weeks for 20,000 pages from various HHS subcomponents as well as one office within OMB which was specified in the order.

But this is a very small part of what Dr. Fiore's testimony is about, and to suggest that these were somehow critical documents or even important documents for the cross-examination is something that we strongly disagree with.

And I think that to say that somehow we need to hold his deposition open for additional time will simply guarantee that defendants will make this an issue at a time when we're going to be filing the written direct testimony of Dr. Fiore.

THE COURT: When are you going to have the final number of documents known to report to me?

MR. BRODY: We should have that known by 5:00 today.

MR. KLONTZ: Before that, Your Honor. They are ready to go out, the ones we have.

And I can represent a little bit further with respect to the documents that will go out today. I have reviewed every single one of those, and I've not read every line of every documents, but I've reviewed them.

There is a huge amount of duplication within those. The way that HHS preserved its e-mail strings was if there were eight e-mails, they saved the e-mail with the eight, then the seven, then with six, then with five, then with four, then with three, and then soon there was one, and then sometimes from several offices.

So, even if there are 20,000 pages -- not 20,000 documents as Mr. Wells has now expanded the universe -- there are probably a quarter, probably less than that, of original pages, maybe a thousand or 2,000 at most.

There is substantial -- more than substantial duplication. So having looked at those over the weekend for the purposes of privilege and for duplication, for everything, I didn't tried to weed out the duplicates. Obviously, that wasn't our role to do that. It was to produce every single copy. And so those are going to be in the boxes. It is not that massive of an undertaking, Your Honor.

THE COURT: Let me ask you another question.

When are you going to be logging your privilege documents? And what number are we talking about, approximately? Are we talking about five, 10, 50?

MR. KLONTZ: We're talking about three from the Office of Management and Budget, and I believe -- I gave the number to defendants in the letter yesterday. In fact, would Your Honor like a copy of the letter I sent to them? I do have a copy of that letter here.

THE COURT: No, I don't think so, Mr. Klontz.

MR. KLONTZ: Let me refer to that, if I may. I think I had the numbers in there as to what the logged pages were, or to be logged pages are.

There are 12 documents, totally approximately 70 pages. So three, I believe, from OMB, nine from HHS.

If I could respond just briefly further with the e-mail issue. The problem with the search was the health division files could be searched within the health division by individual file -- by individual files by individual computers.

The OMB search, the e-mail search had to be of OMB as a whole. They could not search the electronic archived e-mails by the health division alone.

And, for instance, the quit line, the cessation e-mails that I found, the personal web searches, were from folks outside of the health division. I'm quite certain -- I can't say that, the diesel emission ones I believe came from -- I can't remember

which section it was, but I believe that was outside, also. But we're talking about the entirety of OMB for the search. It's -- again, I won't represent that there will not be any possible hits in there, but we're talking about a massive amount of data that came from all of OMB.

At this stage of the case, Your Honor, this is not -- we are not in discovery again like we were two years ago. You recall the defendants asked for the sun, the moon, and the stars in their original briefing papers with respect to what led to 924, and the court restricted the search to these particular areas. We've made that search. We think there ought not to be further searching with respect to the universe of OMB's e'mails for two years on the possibility that something else might come up.

THE COURT: When are you going to have your 12 documents put together?

MR. KLONTZ: I can have the privilege logs prepared today and I can deliver those 12 documents to the court for in camera review by this afternoon, by 5:00 o'clock this afternoon.

THE COURT: Mr. Bernick, briefly. Poor Dr. Wyant is never going to get on.

MR. BERNICK: I understand that Your Honor, but this really is a matter of critical importance to us as both the prior counsel have indicated. And there's a very distinctive history here.

I was involved in the negotiations that -- or the attempted negotiations that concerned the discovery program that's now underway. And there is a couple of relevant facts that I want to underscore to the court.

Number one, Your Honor will recall that we did dramatically reduce the scope of what we were asking for, and we got down to a scope of production and we got down to the question of Dr. Fiore, and that was a very dramatic reduction given the fact that it's a new $130 billion claim.

Number two, we specifically took up the issue of subject matter in connection with the document requests.

Your Honor, in issuing Order 924, didn't confine it to the quit line. Paragraph 10A of 924 deals specifically with a different subject, which is the National Cessation Program. So this is just not a question of the quit line, it's the National Cessation Program, the documents that relate to that, notwithstanding Mr. Brody's representations.

Number three, even during the course of their attempted mediation the government represented, not in the mediation itself, but represented independently of that, that they were going through the process of gathering up documents.

So this business of getting documents is not just in the last two weeks. They've been on notice -- certainly been on notice for weeks of the fact that we were very, very interested in these documents.

The notion that we only are now finding out about these issues is just almost incomprehensible. These issues have really been out there in the forefront, and we asked, and I asked Mr. Brody specifically right here to give us a rolling production of these documents, and it must have been like three or four weeks ago when we were going down this road.

And so we now find out about all of these issues literally hours from the time that the documents are due to be produced. Mr. Klontz just indicated to the court that many of the documents are ready to go now. Well, if they are ready to go now, why don't we have them?

And for the court and for us to now rely upon representations that are based upon information that we don't have any independent verification of regarding the content of the e-mails, regarding the content of the documents which we have not had an opportunity to look at, you know, days from a deposition that's supposed to take place -- I mean, it's like we are in a TRO process.

We are not in a TRO process, this is a full trial. We ought to have access to these documents so that we can review them. We ought to have access to the electronic discovery so that we can take a look at that. We shouldn't have to rely upon representations that are now being made.

Now, if these matters had been flagged for us earlier on, if we had gotten a rolling production, if we had known about

the e-mail problems, well, we probably wouldn't be here talking about it today, but this is literally the first time that we learned it's 20,000 documents.

Yesterday, or over the weekend was the first time we learned about the electronic discovery problem, or Friday at 6:00 o'clock in the evening.

We cannot be compelled to proceed with a once-and-that's-it deposition two days from now. That is just an impossibility.

And I know that Your Honor, by virtue of the questions that you're asking, is zeroing on when are we going to have certainty? And I think that that's fine. We ought to have an awful lot more certainty about what's taking place. But that cannot be used to squeeze us and compromise our rights to the full discovery that Your Honor has permitted us. This is a discovery process.

So we're prepared, as Mr. Wells indicates, to go forward with the deposition on Thursday. We do not want to delay this matter. But at the same time that shouldn't be outcome determinative of our rights in this regard, and particularly when we've had this dialogue for weeks and we've made these requests for such a long period of time.

THE COURT: I must say I don't understand why the government hasn't been providing at least some materials. The order was entered two or two and a half weeks ago. However,

that order, as we all know, came after at least one or two weeks had been devoted to mediation, and I did not know the -- well, of course, I know the subject matter. I didn't know any of the details of it, but, more importantly, the parties did. And the parties had some idea certainly of what the core discovery was that was going to have to be provided. So, I really don't understand why there wasn't some rolling production.

In terms of where we are right now, two things at a minimum, and this is just at a minimum. I want the government and the defendants to confer -- and because we're going to have a little bit longer lunch, it may be that you can do that at lunch -- about the search words that were used in the e-mails. That may or may not produce anything useful, I don't know, but at least that's a first step before 2:00 o'clock.

Second of all, I want to know as soon as possible as to what the final number really is of the pages you're going to turn over. Again, it may not be dispositive at this point, but, you know, I'm hearing various things, including the fact that many of these pages are duplicates, and I certainly accept that.

At this moment -- and this is definitely a tentative ruling -- at this moment I am not going to foreclose the possibility -- I emphasize possibility, everybody -- that it may be necessary to have some additional time with Dr. Fiore. It may not be. I mean, I think there are too many things unknown. I want the government to be providing all documents that are

ready as soon -- as early today as humanly possible and not wait just until the 5:00 o'clock deadline.

And, finally, I certainly will expect -- let's just focus on Dr. Fiore ahead of Dr. Gruber actually at this point. I want the 12 documents submitted. I will certainly look at those tonight and be prepared to make rulings about those tonight so that everybody knows whether they've got to deal with them.

I'll also try and do the nine Gruber documents. I'm just not sure how long that will all take. And I think that you need to come back to me with a little more information this afternoon.

MR. BRODY: We will do that, Your Honor. I can assure you that the -- despite the -- I guess call it negotiation time before the entry of Order 924 and despite the two to two and a half weeks since Order 924 was entered, that there has been no time wasted on our side in doing this, given the different components of HHS and --

THE COURT: It may not have been.

MR. BRODY: -- OMB involved.

THE COURT: Mr. Brody, it may not have been wasted, I'm not saying that, but I also can't believe there weren't documents you couldn't have shipped over to them in the meantime.

MR. BRODY: Mr. Klontz can speak to that. But given

the extraordinary effort that was taking place, even through this morning, to review, process, and get this production out -- I mean, we are really happy that we didn't have to request additional time above and beyond what's provided in the order to get this done to get these documents to defendant today. And I would hate for the court to think that it was not an incredible effort on our part using all of the time that we had to get this done.

THE COURT: Well, I know everybody is working very hard. I think we are ready to proceed with the witness at this time.

MR. KINNER: Good morning, Your Honor.

THE COURT: Good morning, Mr. Kinner.

MR. KINNER: Russell Kinner, United States Department of Justice, for the United States. The United States calls Dr. Wyant to the stand.

THE COURT: Who will be doing Dr. Wyant's cross?

MR. BIERSTEKER: I will, Your Honor.

THE COURT: All right.

THE DEPUTY CLERK: Please remain standing and raise your right hand.

TIMOTHY WYANT, Ph.D., Government's witness, SWORN

THE DEPUTY CLERK: You may be seated.

DIRECT EXAMINATION

BY MR. KINNER:

Q. Dr. Wyant, would you state your full name for the record, please?
A. Timothy Wyant.
Q. And do you have your written direct testimony before at the stand?
A. Yes, I do.
Q. Have you read that written direct testimony?
A. Yes, I have.
Q. Do you have written out some changes that in your opinion need to be made to your testimony?
A. Yes, I have two.
Q. And would you tell the court what those changes are, please?
A. In the current written direct there's a sentence beginning on page 22, line 13, and ending on page 22, line 14, that reads "The more recent calculations simply added two additional diseases--"

THE COURT: Excuse me a minute. Line 13.

Okay, go ahead, please.

A. The current sentence reads, "The more recent calculations simply added two additional diseases that are caused by smoking."

And that sentence should be replaced by one that reads, "The more recent calculation included some minor updates, one of which was the inclusion of two additional diseases that the Surgeon General has added to the list of diseases that are

caused by smoking."
Q. And there was a second change that you wished to make.
A. On page 161, line 12, there is a 3 percent that should be changed to about 5 percent.
Q. With those changes, do you adopt your written direct testimony as your testimony here today?
A. Yes, I do.
MR. KINNER: Your Honor, the United States moves the admission of Dr. Wyant's written direct testimony as adopted by the witness and moves the court's acceptance of Dr. Wyant as an expert in the application of biostatistics as set forth in the written direct testimony.
MR. BIERSTEKER: No objection to qualify the witness as an expert in biostatistics. There are pending objections before the court with respect to the written direct. But apart from those, I have no objection.
THE COURT: All right. The written testimony may be admitted, and the witness may be accepted as an expert in the field of biostatistics.
MR. KINNER: Thank you, Your Honor.
BY MR. KINNER:
Q. Dr. Wyant, have you created a series of animations and other exhibits to assist the court in understanding the age profile of adults in Dr. Gruber's youth-addicted population and the application of generally-accepted statistical principles to

calculations and projections of excess adverse health effects of smoking in that population?

A. Yes, I have.

Q. Doctor, what is the definition of the youth-addicted population that you will be using in your testimony?

A. Youth-addicted population consists of adults who smoked as youths during the period 1954 to 2000. And by "smoked as youths," I mean they smoked under the age of 21, and this population is further restricted to adults who smoked more than five cigarettes a day under the age of 21 and during that time period.

Q. And then your calculation extends from 1954 to what date?

A. 2050.

MR. KINNER: Mr. Jackson, could we please have Exhibit 17406 on the board, please?

Q. Dr. Wyant, does this exhibit contain your expert opinions based on the calculations that you and your colleagues have made in this case?

A. Yes, it does.

Q. Doctor, would you briefly explain your conclusions to the court?

A. This exhibit summarizes the calculations that we made of smoking-attributable adverse health effects in the youth-addicted population and, in particular, among the 57 million adults in that population.

This exhibit shows several different adverse health effects. They are all smoking-attributable adverse health effects. And by that I mean, they are not simply additions of the number of times these health effects occurred overall in the youth-addicted population, but only the excess adverse health effects attributable to smoking.

So, for example, for deaths in the first row, at age 50 during the course of tracking this population, some of these smokers died. We simply add up those deaths.

We looked at the number of deaths that would have occurred in that group if the death rate for 50-year-old never smokers had applied and subtracted those deaths out, and what we accumulate here are only the excess deaths among the smokers compared to what would have occurred if rates for never smokers had applied.

And when we made that calculation for the youth-addicted population, the total smoking-attributable premature deaths that we calculated is 13.4 million.

We had available to us demographic information on death rates and life expectancies and that allowed us to calculate the years and the ages at which these premature deaths are likely to occur and also the life expectancies of similar never smokers at the times of these deaths, and given those statistics we could calculate the number of years of life lost attributable to smoking as these premature deaths occurred, and when we added up

those total years of life lost, the total came to 173.5 million.

We also could take an average years of life lost per premature death by dividing the 173.5 million by 13.4 million, and that calculation leads to the average in the third row, 12.9 years of life lost for each smoking-attributable premature death. That is an average.

So some of the smokers in this population would likely have died at ages in the thirties and forties and lost, on average, 30 or more years of life; others died at much older ages, 85 or 90, and perhaps lost on average only a year or two of life for premature death; but when you averaged them altogether, they come to 12.9 years of life lost per smoking-attributable premature death.

The next adverse health effect in this summary chart is Disease Treatment Years --

THE COURT: Dr. Wyant, let me interrupt you because I had questions about how you defined Disease Treatment Years, and I'd like you to explain it more fully and correct me if I'm wrong about something of the.

As I understood the written testimony, Disease Treatment Years covered one visit to a doctor for treatment for the particular diseases laid out by Dr. Samet in his testimony. Is that correct?

THE WITNESS: It's almost correct, Your Honor.

A Disease Treatment Year is tallied if during one

calendar year, such as 2001, a person has a medical encounter, goes to the doctor, goes to the hospital one or more times for one of those diseases.

THE COURT: I thought that's what I said. I may not have included a hospital visit.

All right. Go ahead, please.

BY MR. KINNER:

Q. Let's see. We were about to address the 107.6 million Excess Disease Treatment Years?

A. That's correct.

Q. And is there -- let's see. So if someone had the average of 1.9 Excess Disease Treatment Years, how did you arrive at that calculation? Or could you provide an example of someone who had an average of approximately two Excess Disease Treatment Years?

A. Yes. If we go to the Disease Treatment Years' line.

First of all, I should say these are for specific major diseases identified Dr. Samet, such as lung cancer, emphysema, coronary heart disease, or stroke.

And again to be clear here, and before talking about the Excess Disease Treatment Years, but just the basic definition of Disease Treatment Years that we use, if a person, for example, goes to the doctor for treatment of emphysema in the year 2000, and then in 2001 does not see a doctor for any of these diseases, and then in 2002 may go to the doctor several times, we count that as two Disease Treatment Years.

They had one or more encounters in 2000, none in 2001, and then several encounters in 2002. And every time there's a calendar year in which one or more of these encounters occur we add one Disease Treatment Year to the totals that we're calculating.

In the Total row here for Disease Treatment Years, you've added up the excess number of treatment years that we calculate will occur through 2050 among these adults compared to what would occur if the disease treatment rates for never smokers applied, and when we calculate this total, it comes to 107.6 million Excess Disease Treatment Years in this population.

Again, we can take an average and divide that 107.6 million by the 57 million adults and that average as shown here comes to about 1.9 years per person. So on average -- that's about two calendar years -- on average, the 57 million adults in this population we expect will be treated for one of these diseases in two different calendar years through 2050. Again, that's an average.

There are many of these adults who will likely never be treated for one of these diseases through 2050, and of course they will not add any excess treatment years to our total.

But there are other adults who are diagnosed with one of these diseases that would likely have never been diagnosed had they not smoked, and such people may be treated for six, seven, eight calendar years, and in that case they would be

adding Excess Disease Treatment Years to the total.

But when we do take the average here of excess treatment years in total over the 57 million adults it comes, as it shows here, to approximately two calendar years per person through 2050 that is attributable to smoking.

THE COURT: And do I understand correctly that in Dr. Wecker's calculations he omitted any Disease Treatment Year in which the cost of the medical encounters was less than a hundred dollars? Is that right?

THE WITNESS: That's basically correct. That was less than a hundred dollars in the year of the survey that was important in these, which was 1987. So it was a hundred dollars in terms of 1987 medical costs. But other than that, that's correct.

THE COURT: Do you know what his rationale was for that?

THE WITNESS: No.

BY MR. KINNER:

Q. Let's see. I think we have not yet talked about the approximately 840 billion in excess cost of treatment. Could you tell the court how that was calculated, please?

A. When a person is treated for one of these diseases during the year, typically, the medical costs are higher during that year, on average.

The person has a disease and for treatments of that

disease or complications of it, medical costs ensue. And when we add up the health care costs related to the excess treatment years of adults, they come through 2050 to $839.8 billion and that figure is expressed in 2001 dollars.

Q. So you testified that the Disease Treatment Years, Treatment Years Per Adult and Costs of Treatment were based on the 13 major diseases that were identified by Dr. Samet.

Were those same page diseases that were identified by Dr. Samet, were those used to calculate the 13.4 million deaths and the 173.5 million years of life lost?

A. No. The three mortality measures in the top half of this chart -- the deaths and years of life lost -- those relate to general adverse health effects as they lead to excess deaths in the youth-addicted population.

In other words, they are not restricted to a specific list of diseases. They do cover the general causes of death among smokers in this population that are attributable to smoking with two exceptions. These are deaths for active smoking? Passive smoking is not included here. And these figures also do not include any smoking-attributable deaths among infants or neonates due to problems arising because of smoking during pregnancy or smoking by parents.

Q. Doctor, you've gone through briefly the opinions you've reached based on your calculations of excess health effects due to smoking and youth-addicted population; correct?

A. Yes.
Q. But we've not yet looked at the characteristics of the population that the calculations are based on; is that right?
A. That's correct.
Q. Let's take a look at the age profile of the adults in the youth-addicted population.

Have you created an animation of the age profile of adults in Dr. Gruber's youth-addicted population to assist the court in visualizing the aging of that adult population as it passes through time?
A. Yes, I have.

MR. KINNER: Mr. Jackson, could we put up U.S. Exhibit 17745, please?
Q. Dr. Wyant, can you explain the characteristics of the youth-addicted population to the court using this animation?
A. Yes, I can.

MR. KINNER: Your Honor, this is only -- there's a static that was used in the written that represented this page of this animation, but this animation is only going to be used in the one-hour live.

THE COURT: I see. Because I don't have a copy of that.

MR. KINNER: You have a copy, but you need to put it into a computer and run it.

THE COURT: I see.

MR. KINNER: It's one of the CDs.

BY MR. KINNER:

Q. Dr. Wyant, could you explain for the court this visualization of the age characteristics of the youth-addicted population?

A. Yes. This is the first frame of an animation. The animation will show what happens through 2050, but this first frame shows the situation today in 2005.

The red bars show the age profile of the youth-addicted population as it is today.

For example, the bar on the far right, that shows the number of adults today in the youth-addicted population who are age 71 and who are alive in 2005. The ages for each bar can be seen at the scales at the top and the bottom of this chart.

THE COURT: Why are there spikes, do you believe, in about age 27 and then maybe five or seven years -- well, maybe 10 years -- I guess seven or eight years later there's a spike? In other words, can you explain why the spikes in deaths occur at what seem to be irregular intervals?

THE WITNESS: Yes, I can, and I can move this forward. But to be clear, these are simply counts at this point, not of deaths, but of just how many people there are in the youth-addicted population today; how the 57 million people distribute in terms of how old they are and how many there are at each age. That's what these red bars show. So this is

simply the population from within which the smoking-attributable premature deaths are calculated.

And if we can hit the 2020 button at the bottom, the animation moved forward because this is one youth-addicted population that was basically defined by youth smoking in 1954 to 2001, and -- excuse me -- 2000, and after it was defined by youth smoking in that period, no new members can come in or go out. So it's just one group of people.

And what will happen over time is that they will get older, which means that these red bars move to the right as they gradually get older, and they will die from various reasons, not just due to smoking, and the number that have died by 2020, as shown here are now represented in the black bars that extend the below the midline.

So the red lines show the number of people at each age in the youth-addicted population who will still be alive in 2020 and, for example, on the far right, the black bar indicates the number who would have been 86 in 2020 but we anticipate will have died before then.

As far as the spikes. The basic profile at the top and the pattern, that can be explained in large part by some of the buttons that I've added at the bottom.

So if we press, for example, a youth 1990s button. That, I think, is the first spike that you asked about. Of course, now they've moved forward in time in 2020 and they are

15 years older, but one of the drivers of this profile is youth smoking rates at different times during the period 1954 to 2000.

So if there were certain periods where youths were smoking more cigarettes, there was a greater percentage of youths who were smoking, that kind of pattern will persist into the future. That will create a spike of additional people who smoked as youths and that spike will continue over time.

And right here is a spike that relates to an increase in youth smoking in the early '90s. That was subject of considerable attention in the public health community and considerable concern, and that was remarked on frequently in journal articles and other publications, and it persists today and in the future in our calculations by there simply being more smokers in certain age ranges because there were more youths that smoked in the early 1990s. There was an increase.

Similarly, if we could hit the button on baby boomers, there is a rather large increase in the number of people, and that is the other main determinant from back in the period 1954 to 2000 when this population was formed.

There were certain periods when there were simply more youths than in other periods, and when the baby boom generation came through, that was a period when -- you know, when schools, they were putting trailers in parking lots to accommodate all the kids and extra classrooms. And again that additional number of youths who were available to smoke generated more smokers in

certain age range -- age ranges in the youth-addicted population that again persists going forward in a time.

And, as this chart here shows, in 2020 that elevated number of smokers in these age ranges from 57 to 73, those are basically the baby boomers born between 1947 and 1963.

So those are the kinds of factors that generate the sort of youth profile, the age profile that we see in the youth-addicted population in this frame and in the other frames of the animation.

BY MR. KINNER:

Q. Could we also talk about youth in the '80s, Doctor? It's a button under the 40-year-olds.

A. Excuse me a second here.

This is 1975 -- excuse me, 1969 to 1975. There is a period of relatively stable youth smoking rates in the 1980s. And, although there are fluctuations, it's not perfectly flat, generally after the baby boom there is a period when the number of youths stabilized, the youth smoking rates stabilized, and that's represented by this more or less level section of the age profile here.

Q. Okay. Now, if we can illuminate the whole screen again to show all of the -- I think you have to push --

A. If you just hit Youth 1980s again, that will be fine.

Q. Now there are black lines that extend below the midline. Is that smoking-attributable deaths or some other group of deaths?

A. No. At this point I'm simply describing the youth-addicted population, so these are not just smoking-attributable deaths. They are recording where people who started out in this population are likely to be in 2020, and some of them have died for reasons due to smoking, but others will have died for the other reasons for which people die.

And, for example, in the oldest age group at the far right, those are the oldest smokers in the population; those are people who smoked as youths at age 20 in 1954.

And the length of the black bar that extends below the midline, looking over at the scale on the left, there's approximately a half million of those members who we anticipate would have been 86 in 2020 had they lived but, in fact, by the age of 86, many of them will have died, and that's what's represented by the black line at the far right there.

Q. There is a trailing edge on the left-hand side of the age profile of the youth-addicted population. What does that represent?

A. I believe you're referring to the shorter bars that appear on the left side of this age profile. Those are the youngest members of the youth-addicted population and in 2020 those youngest members are 32.

That bar represents people who were smoking more than five cigarettes a day at the age of 12 in 2000. Those are the youngest members of this population, and by age 12 not many

youths smoked that many cigarettes and that's the reason that bar is so short.

As we go further to the right from the left-hand side, we are looking at people who smoked more than five cigarettes a day as 13-year-olds in 2000, or as 14-year-olds or 15-year-olds, and the older they get, the more time they have to smoke at that level. And so the number of people in 2020 in the youth-addicted population reflecting those older ages in 2000, get higher and higher. There simply are more smokers at the ages, in this case from 33, to 34, to 35.

Q. If we could run the age profile forward to 2050, would you explain to the court what the slide at 2050 represents, please?

A. That represents our calculation of what the youth-addicted population will look like in 2050.

By 2050 the majority of them will have died. Again, some for smoking-attributable reasons and some for other reasons.

And the fact that the majority of them will have died is indicated by the relative areas of the black bars here, now being greater than the areas of the red bars which shows show the youth-addicted population members who are still likely to be alive in 2050 as the box at the bottom shows.

We anticipate about 17 million, 16.9 million members of this population will still be alive in 2050, and the average will be 78, although some will be at young as 62 years old.

Q. Well, Doctor, have you created an animation of the age profile that will assist the court in visualizing the accumulation of the 13.4 million smoking-attributable deaths over time?

A. Yes, I have.

MR. KINNER: Mr. Jackson, could we put up 17746, please?

A. The bottom half of this exhibit is simply a compressed version of what we were just looking at. It simply shows the youth-addicted population, the age profile, and the number of people alive at each age before going on to calculate smoking-attributable adverse health effects.

So as we run this animation forward -- and again here, this particular frame is looking at today 2005. As we run the animation forward to 2050 in the bottom right, the red bars will move to the right because the population is going to get older, and the population, the bars tend to move below the midline as the population dies off.

Now if you bring it back to 2005. This is the situation today and the top half of this exhibit is devoted to smoking-attributable aspects of this population. In particular, smoking-attributable premature deaths. As of today of 2005 we've calculated based on the black bar and the leading age at about 700,000 premature deaths due to smoking have already accumulated. And that's also seen in the ticker at the upper

right, .7 million, or again 700,000.

So we can run forward in time from that 700,000 another ten years, for example. And by 2050 we calculate that 2.8 million smoking-attributable premature deaths will have occurred. And subtracting the 700,000 today, that leaves about 2.1 million occurring over the next decade, or a little more than 200,000 smoking-attributable premature deaths per year.

Which can go forward another ten years to 2025 and the calculations are then showing 5.7 million smoking-attributable deaths. We can go again to 2035, 9.1 million.

Now, subtracting the 9.1 million in 2035 from the -- excuse me -- subtracting from that figure the 5.7 million from a decade earlier yields about 3.4 million smoking-attributable premature deaths occurring in that decade around 2030 or approximately 340,000 a year in that decade.

Go back to 2030, those are the peak years at which we anticipate deaths to be occurring in this population due to smoking. And the reason you get a peak there has to do with an age profile of the youth-addicted population.

There are two factors that go into making those peak years and those are described in the box at the bottom. First of all, there are still many adults alive, 38.4 million in 2030. So there are many adults still around to be getting sick, dying for reasons due to smoking. There are many of them there, and that simple larger number by itself tends to lead to more

smoking-attributable adverse health effects each year.

In addition, the average age will now be 65. Smoking doesn't kill you right away. It takes years for the effects of smoking to accumulate. But not only in 2030 are there a lot of adults, many of them are concentrated in the ages where the full impact of smoking is beginning to take its full effect, and so those two effects combined result in the more than 300,000 deaths a year occurring during this time period.

THE COURT: Do you have a slide or demonstrative that shades in the number of attributable deaths below the line? Do you know what I mean? Am I being clear?

THE WITNESS: I think I know exactly what you mean.

If we can run forward to 2050, and the deaths accumulate up to the 13.4 million we've been talking about, and now down in the bottom right it's still a chart I've been talking about that has the deaths for all reasons and all causes, but if we could hit the smoking-attributable chart button.

Now we've changed the shading. It's the heavy black portion of the bars at the bottom. Those are the people who died, by our calculations, premature deaths due to smoking. And the lighter gray portion of the bars represent people who died for any other reason.

BY MR. KINNER:

Q. Doctor, did you create an exhibit that shows a comparison of

your calculations of deaths and years of life lost to other calculations in the peer-reviewed literature?

A. Yes, I did.

MR. KINNER: And, Mr. Jackson --

THE COURT: Had you finished, by the way, in your presentation on this slide?

THE WITNESS: Well, there are a couple of other remarks that could be made here.

One is I have shaded in the premature deaths, which I think was the subject of your question, but to be clear, some of those, for example, are age 110.

Now, I'm not suggesting that if they hadn't smoked they'd still be alive at 110. What these calculations are showing is that when these people did die -- 20 years, 30 years, 40 years earlier -- the deaths, on average, were premature by about 12.9 years. On average, the deaths in the black bars here occurred almost 13 years sooner than one might have expected if never smoker death rates had applied.

The other point that's worth making here -- if we could hit the button Smoking Attributable chart again -- is that we stopped our calculations in 2050, but there are still people alive, 16.9 million, and some of them are only 62 years old. So if we had extended our calculations beyond 2050 we would have accumulated additional smoking-attributable premature deaths beyond the 13.4 million that's shown here.

BY MR. KINNER:

Q. Okay. Could we move now to United States Exhibit 18239, please?

Dr. Wyant, starting with the percentage of smoking-attributable deaths reported in the middle column, how does this exhibit assist the court's understanding of your calculations?

A. This exhibit compares the results of our calculation of smoking-attributable premature deaths in the youth-addicted population to similar calculations that have been made and published in the peer-reviewed literature.

Our calculations appear in the middle row, the one where the text is in red, and the results from the peer-reviewed literature articles appear in the top row and the bottom row in black.

The middle column to which you referred looks at smoking-attributable deaths but, because these studies look at different numbers of smokers to more easily compare them, I've expressed that number of attributable deaths as a percent rather than a total. So the 13.4 million deaths in the youth-addicted population here are translated to the 24 percent of those smokers in the population dying prematurely due to smoking.

When you calculate a similar percentage from the peer-reviewed literature or look at similar percentages that are reported in the peer-reviewed literature, such as in the top

row, there there's a figure of 32 percent.

So these figures are both in the ballpark of say one-quarter to one-third of smokers dying prematurely due to smoking with our figure a little bit lower than the one reported in the peer-reviewed literature.

The other measure of the impact of smoking attributable mortality is in the right column, Years of Life Lost For Every Death. And again our calculation was 12.9 years of life lost on average for each premature death. And looking up and down that column, the figures generally reported are in the range of 12 to 14 years on average lost for every smoking-attributable premature death, with ours essentially in the middle.

Q. And using the comparison of your calculation of smoking attributable deaths and years of life lost with the calculations in the peer-reviewed literature in this exhibit, how does stopping your calculation at 2030 affect the comparison?

A. There are technical differences in approach between different studies that have some effects, but when you track and project a population into the future to calculate the mortality burden, the number of smoking-attributable premature deaths that are likely to occur, the amount of time that you track that population does have, in general, an important effect.

This first study at the top row published in 1996 did project forward in time, just as we did. They looked at people who were age from just born to 17 in 1995 and projected over

their lifetimes how many smoking-attributable premature deaths will occur. And as they were starting with newborns -- if we assume that most people die by hundred, age a hundred -- that means that approximately this study was tracking through 2095 compared to our 2050.

So here is a study that projected forward in time but considerably further than we did and tracked through essentially the full lifetime of the smokers instead of cutting off at 2050 like we did.

If you go beyond, the further out you go to older ages and further years, as I mentioned a minute ago, you're going to accumulate more smoking-attributable deaths because people keep dying until the population has disappeared.

So, if we had tracked further in time than 2050, that 24 percent figure of ours would have moved closer to the 32 percent reported in the 1996 article.

But the further you go in time, although you are accumulating additional smoking-attributable deaths, those deaths more and more are occurring among older people. They are deaths, for example, that are occurring among 85-year-olds and 90-year-olds, and the average number of years of life lost at those ages when a premature death occurs is simply lower than if a premature death occurs at age 30.

So though you're adding more deaths by running a projection further out in time, those deaths on average involve

fewer and fewer years of life lost for each death. So the further out you go, the lower, in general, the average years of life lost you calculate is going to be, and that again appears here in that right column. Where our figure is 12.9 years, had we projected on beyond 2050, that figure would have declined and moved closer to the 12-year figure from the peer-reviewed journal article.

Q. Dr. Wyant, have you prepared an exhibit that provides an illustration for the court of the magnitude of the 13.4 million premature deaths?

A. Yes, I have.

MR. KINNER: Mr. Jackson, could we have U.S. Exhibit 17429, please?

Q. Dr. Wyant, please explain how this exhibit assists the court in visualizing the magnitude of the 13.4 million deaths that you calculated?

A. Our figure for the youth-addicted population, the 13.4 million, appears at the upper right. For comparison, we went to the United States Department of Defense figures that they have calculated and published for.

For the U.S. military deaths and what the Department of Defense calls all the principal wars of the United States, beginning with the Revolutionary War in 1776, almost 230 years ago, and coming forward in time through, and including, the Civil War, the World Wars, Korea, Vietnam, and when you add up

all of the military deaths and all those wars over 230 years, the total comes to what's shown in the lower right here: 1.16 million military deaths.

So comparing that to the figure in the first bar, the smoking-attributable premature deaths that we calculate to occur in the youth-addicted population over the next 45 years, through 2050, is more than ten times greater than the total figure from the 230 years of United States wars.

Q. Doctor, in addition to calculating the excess deaths and years of life lost due to smoking among adults in Dr. Gruber's youth-addicted population, you and your colleagues also calculated 839.8 billion in excess treatment costs in that population; is that correct?

A. That's correct.

Q. Have you prepared an exhibit illustrating similar excess cost calculations from the recent peer-reviewed literature?

A. Yes, I have.

MR. KINNER: Mr. Jackson, could you put up U.S. Exhibit 17738, please.

Q. Doctor, can you explain to the court what this exhibit illustrates?

A. This exhibit summarizes some recent studies that were published in the peer-reviewed literature of United States' health care costs. So this is the United States as a whole, the annual health care cost, and these studies looked at the

percentage of health care costs in the United States that are attributable to smoking.

Each symbol represents the results of one study. So, for example, there's a symbol marked with an "A" and that's from the American Journal of Public Health as indicated in the box at the bottom.

You can see the results of this study by looking at the scale that runs up and down the vertical.

This study estimated that something in excess of 8 percent of all United States' health care costs during the year are attributable to the one cause of smoking.

The year of publication of this study is represented down at the bottom. This was a study from 2002.

There are six studies here from 19 separate authors. The Surgeon General in 2004 summarized the general results of these studies, and that summary is represented by the green bar, the green zone that runs across the middle of the chart.

And the Surgeon General said that costs attributable to smoking comprised 6 to 9 percent of the total national health care budget, but elsewhere this that report the Surgeon General also allowed for the possibility that the percentage could be as high as 14 percent which would exceed the 12 percent reported in the highest study here.

There is one study that gives a lower estimate than the others, but that's not surprising. That study deliberately

restricted itself to the major diseases due to smoking, the same major diseases that I discussed that we obtained from Dr. Samet.

So, it was looking at a more restrictive view of health care costs attributable to smoking in the United States, only those associated with people being treated for one of those major diseases, but that study still came out at about 4.6 percent of United States' health care costs.

Dr. Zeger from Johns Hopkins University, one of the people that worked with me in the calculations for the youth-addicted population, was an author of that study, and Dr. Miller of the University of California at Berkeley, who also worked with us on the youth-addicted population calculations, was an author on the study -- two studies in the earlier years on this chart.

Q. Doctor, did you prepare an exhibit comparing the calculations in the peer-reviewed literature, the recent peer-reviewed literature, to the calculations you and your colleagues made in this case?

A. Yes, I did.

MR. KINNER: Mr. Jackson, could we have U.S. Exhibit 17740, please?

Q. Doctor, how does this exhibit assist the court?

A. One way that statisticians check and assist their calculation is to take their formulas -- for example, the formulas that we applied to the youth-addicted population -- and

apply them to a standard population that's been the subject of study by numerous experts and different peer-reviewed articles. And that's what we have done here.

I've added red circles at the left that indicate results of applying our formulas that we used for the youth-addicted population to the United States as a whole so that we could compare the results of using those formulas to the results obtained by other experts who have published their results in the peer-reviewed literature.

The red circle at the far left shows the results of applying the same formulas that led to the $839.8 billion estimate of smoking-attributable health care costs in the youth-addicted population, and that calculation yields for the United States about 4.6 percent, essentially the same as the study on the far right.

And that's not a coincidence. We used essentially the same formulas in looking at the youth-addicted population that were used in that 2003 study.

As an additional means of checking our estimates and assessing them, we also did an estimate for the youth-addicted population that included not only the major diseases, but also one of the manifestations of general diminished health that Dr. Samet mentioned in his testimony. And that manifestation is the increased tendency of smokers to report that they are in poor health or fair health instead of good health or excellent

health.

And when we included that one manifestation of diminished health in our calculations and applied those formulas here, we got an estimate for the U.S -- that's right about at the bottom of the green zone here -- the typical values as seen either from looking directly at the studies shown in the symbols or in the Surgeon General's summary statement.

THE COURT: Is that 5.8 percent or 6 percent?

THE WITNESS: About 6 percent.

THE COURT: Do you consider your percentages in the middle of your little red balls or at the end of your black boxes?

THE WITNESS: I'm sorry. End of the black boxes?

THE COURT: I shouldn't say black boxes. Those little black marks.

THE WITNESS: Well, the center of the red ball is the estimate.

THE COURT: Okay.

THE WITNESS: And I think that the center here on that one (indicating) is approximately at 6 percent.

BY MR. KINNER:

Q. Doctor, did defendants put forward an applied mathematician who criticized the 839.8 billion excess cost calculation?

A. Yes, they did.

Q. Who was that?

A. Dr. William Wecker.
Q. Do you have a table from Dr. Wecker's materials that memorializes his criticisms?
A. Yes, I do.
MR. KINNER: Mr. Jackson, could we have U.S. Exhibit 17737, please?
Q. Dr. Wyant, can you briefly explain what this exhibit illustrates for the court?
A. Yes. This exhibit shows a printout that was provided by Dr. Wecker.
THE COURT: I'm going to tell you, Dr. Wyant, I didn't understand these particular demonstratives. You had several throughout your presentation.
And maybe you were just following certain steps that you described differently in your written direct, but I'd like you to go through one of them carefully because obviously by going through one, that will explain all of them.
THE WITNESS: Sure. This printout here -- in other words, the white box in the middle -- that's a printout that was prepared by Dr. Wecker and provided to us with his materials. It's the most -- it was the last thing, I think, we received from him. The most recent, originally in December of 2003, and this is a corrected version that we got in February of this year.
And what this printout shows -- I should say before I

say that, there's three figures highlighted here over on the right. That highlighting is mine to help explain my understanding of this printout, those are not Dr. Wecker's highlights.

THE COURT: The first line is your figure that you've arrived at, and the fifth line is his figure after all of his calculations and adjustments; right?

THE WITNESS: That's correct.

He made several adjustments to our health care cost figure, which is in the first line, 839.8 billion with all the digits appearing here. And he made his adjustments in four steps and each line shows an additional adjustment being made.

And so the first adjustment step, which actually over at the left it's line two, but then he's got in parenthesis the one, which indicates that this is his first adjustment.

His first adjustment related to the youth-addicted population. And his proposition was that Dr. Gruber had overstated the size of this population; that there are really not 57 million adults, but somewhat fewer.

And, in fact, according to Dr. Wecker -- if I can point at this -- he said that by his adjusted calculation, that population should have been only 72 percent of the size calculated by Dr. Gruber, or 72 percent times 57 million adults, basically.

And if he reduced the size of that population and made

no other changes, looking at the number at the right-hand side of that row right next to the 72 percent, that one adjustment would have lowered our assessment of the total smoking attributable adverse -- excuse me -- total smoking-attributable health care costs to about 601.6 billion instead of the 839.8 that he showed he could replicate in the first row.

And then each additional step applies some other adjustments, and each step results in a lower value, ending up with an adjusted estimate of about $273 billion for the youth-addicted population.

THE COURT: How far are you along in your presentation?

MR. KINNER: Your Honor, I was planning on truncating it to just the next exhibit.

THE COURT: All right.

BY MR. KINNER:

Q. Did you create an exhibit, Dr. Wyant, that compares Dr. Wecker's adjusted calculation to calculations in the peer-reviewed literature?

A. Yes, I did.

MR. KINNER: Mr. Jackson, can we put up U.S. Exhibit 17808, please?

Q. Dr. Wyant, can you please explain how this exhibit illustrates for the court the application of Dr. Wecker's analysis to your analysis and how that compares to the recent peer-reviewed literature?

A. This is the same chart that we looked at a few minutes ago with one addition, and that addition is in the lower left, a white circle representing Dr. Wecker's adjustment to our estimate.

At least in the materials I'm familiar with, Dr. Wecker did not make an assessment of this estimate in the way that we did and compare it to the results from other investigators in the peer-reviewed literature.

But in the previous chart we could see that his adjusted estimate comes to about 32 percent of ours. And so when we apply that 32 percent adjustment factor to our additional calculation here, our application of our formula to the United States' health care costs as a whole, the result is displayed in that white circle.

So Dr. Wecker's adjusted calculation yields a percentage for the U.S. of about 1.5 percent, and that estimate, as shown in this chart where the different authors of the peer-reviewed studies came out and the Surgeon General's summary, Dr. Wecker's adjusted estimate is somewhat, and perhaps considerably, below the estimates produced in the other studies.

Q. Doctor, did you calculate the results by applying these percentages to illustrate for the court how they applied if they were applied to the whole U.S. population as opposed to simply the segment that's the youth-addicted population?

A. Well, this chart shows -- this chart here, to be clear, does

show the application of the whole U.S. population.
Q. Okay.
A. You can also take these numbers, or a subset of these numbers, and apply the same process in a sense of taking different formulas from different experts in the peer-reviewed literature as well as our own formulas and applying them all to the youth-addicted population, not to the United States as a whole, which is what's the subject of this chart. And the results of doing that can be seen if we press the arrow at the lower right.

Now, in the box here is a comparison of the application of different methods to the youth-addicted population. No longer looking at the United States as a whole, this is the youth-addicted population, with Dr. Wecker's adjusted estimate of 272.7 billion at the bottom, and our estimate related to the major diseases, such as lung cancer and emphysema and coronary heart disease and stroke, as the 839.8 billion.

If we add the one manifestation of general diminished health to those major diseases, our calculations yield about $1 trillion in smoking-attributable health care costs.

And then we were able to obtain sufficient from the formulas from the article published in the peer-reviewed literature in 2002 in the American Journal of Public Health, and applying those formulas, which took a somewhat more inclusive view, it did not try to limit itself to just single

manifestations of diminished health, for example, those formulas yielded for the youth-addicted population a total smoking-attributable health care cost figure of about 1.4 trillion.

Q. Dr. Wyant, have you created an animation of the age profile that will assist the court in visualizing the accumulation of the 839.8 billion in excess treatment costs over time?

A. Yes, I have.

MR. KINNER: Your Honor, I'm probably a minute or two over already. We can show the animation if you think --

THE COURT: Is this truly your last one?

MR. KINNER: Yes, this would be the last one.

THE COURT: All right. Let's at least finish the direct, please.

MR. KINNER: Mr. Jackson, could we have U.S. Exhibit 17749, please?

BY MR. KINNER:

Q. And, Dr. Wyant, could you explain to the court how this exhibit assists her in visualizing the accumulation of the excess health care costs attributable to smoking?

A. Yes. This is very similar to the previous animation, with the youth-addicted population, just its characteristics, again appearing in the bottom half, and smoking attributable adverse health effects in the top half.

And this time I've added to smoking-attributable premature deaths also smoking attributable health care costs,

such as we were just discussing. Those are shown in the green bar. And as the green bar shows, as of today in 2005 we calculate that about $200 billion of those costs have already accumulated.

We can go forward 10 years and going either by the green bar or the figure at the upper right, we calculate an accumulation of 353.5 billion, and going again further to 2025, a figure of 517.4 billion. We can run it all the way through 2050, which is the limit of our projections, and there's the $839.8 billion figure.

THE COURT: That includes, I believe, only the particular smoking-related conditions that Dr. Samet laid out rather than general lack of well-being? Is that accurate?

THE WITNESS: That's essentially correct, yes.

A. And, finally, if we just press the button for Exhibit 17406 at the bottom, that simply relates those two adverse health effects from the animation as they've accumulated in 2050. Those were the first and last of the adverse health effects from the summary chart with the other ones appearing in between.

MR. KINNER: Thank you, Dr. Wyant.

Your Honor, that concludes our presentation of the direct testimony.

THE COURT: All right. We will take our 15-minute recess at this time, everybody.

(Recess began at 11:15 a.m.)

(Recess ended at 11:31 a.m.)

THE COURT: Mr. Biersteker, please.

MR. BIERSTEKER: Thank you, Your Honor.

CROSS-EXAMINATION

BY MR. BIERSTEKER:

Q. Dr. Wyant, as you know, I'm Peter Biersteker. I'm from Jones, Day and I represent R.J. Reynolds.

In your written direct examination and throughout your oral direct this morning you referred to your various estimates as estimates of various end points, mortality, years of life lost, health care costs attributable to smoking. Is that right?

A. That's correct.

Q. For example, your $839.8 billion estimate of the health care costs attributable to smoking is not -- is not -- an estimate of the health care costs caused by the defendants alleged RICO violations; correct?

MR. KINNER: Objection, Your Honor. Two objections.

One is it calls for a legal conclusion, and the second objection is that we're now in the remedies phase of this case, and that question clearly goes to the evidence that was established during the liability phase. And indeed, I believe the question ended with a question concerning RICO violations. It also lacks foundation as to what RICO violations Mr. Biersteker wishes to address to Dr. Wyant.

THE COURT: Mr. Biersteker, why don't you address the

first objection?

As to the second one that was raised -- and I think there was a third, those are overruled. But as to the first.

MR. BIERSTEKER: The first objection, I'm sorry, Your Honor, was what?

THE COURT: Was to your use of the word "caused."

MR. BIERSTEKER: Cost?

THE COURT: C-a-u-s-e-d.

MR. BIERSTEKER: Oh, yes. Well --

THE COURT: Am I right, Mr. Kinner?

MR. KINNER: Yes, Your Honor, and RICO violations.

THE COURT: But I've ruled on that already.

MR. BIERSTEKER: I simply wish to inquire of the witness whether or not any of the estimates are estimates of the effects of the defendants' conduct, are these health care cost caused in any way by the alleged RICO violations?

THE COURT: Why don't ask you it that way? I think that will be clearer.

MR. BIERSTEKER: Fine. I will be happy to do it that way.

BY MR. BIERSTEKER:

Q. Dr. Wyant, your estimate of the $839 billion in smoking-attributable health care costs is not, is it, an estimate of health care costs that were caused by the alleged RICO violations?

A. It simply estimates the health care costs that occurred basically given whatever conducts -- patterns of conduct were in place by the tobacco companies. There was no attempt to partition it any further to any other specific subset of patterns of conduct.

Q. In fact, you were asked in your deposition whether or not your estimates of smoking attributable to health care costs would be any different if the defendants had committed none of the alleged RICO violations, and you said you didn't know; correct?

A. I believe that is a correct characterization of what I said.

Q. Nor do you know of any expert for the United States who has presented a quantitative estimate of the causal effects of the defendants' alleged RICO violations on youth smoking; correct?

A. I don't personally know of any, no.

Q. And, in fact, I think you noted on page 91 of your written direct that you do know that Dr. Gruber did not do that; correct?

A. I think -- I think my comments about Dr. Gruber were restricted to his calculations of the youth-addicted population. I'm not sure it went any further than that.

Q. That's fine. Thank you.

And if I asked you the same questions about smoking-attributable deaths or your estimate of years potential lives lost or Disease Treatment Years, the answer would be the

same as it was for health care costs; correct?
A. Yes. There was no further restriction beyond calculating this simple smoking-attributable health care costs in that population.
Q. In your written direct at page 22, lines 15 through 23 -- maybe I can get that up -- there's a question and answer, and you basically say that "caused by smoking and attributable to smoking" -- I'm looking at lines 22 -- "are essentially synonymous." Do you see that?
A. Yes.
Q. They are not in fact synonymous, are they?
A. Well, as I said, I think in the subsequent paragraph, or very close here, as with most terms in the English language there's some connotations which may be important in some circumstances and I distinguished attributable from the others in that sense.
Q. Well, let me just ask you.
To have a causal estimate, one must compare the health care costs or mortality or whatever else you want to look at among a population of smokers to what their health care costs or death or disease treatment years would be in a world in which they had never smoked; right?
A. No, I would disagree with that, and the source of that disagreement is here in this part of the testimony.
When you look at the recent peer-reviewed literature,

and I've given a number of examples, applications of essentially the same methods from epidemiology that we used are described in these ways: responsible for, caused by, resulting in and attributable, and none of them, to my knowledge, do precisely what you just said.

Q. Why don't we take a look at the Surgeon General's Report from 2004. That was one of the things you examined; right?

A. That's correct.

Q. You talk about that in your written direct, don't you?

A. Yes, I did.

Q. It's U.S. Exhibit 88847. And if we could go to page 19, please.

And in the 2004 Surgeon General's Report, the report notes that the definition of cause that is used is, quote, based on the notions of a counterfactual state. Do you see that?

A. Yes.

Q. And it goes on to talk about how it's been developed by a number of statisticians, philosophers, epidemiologists, and then the last sentence says, "A counterfactual definition holds that something is a cause of a given outcome if, when the same person is observed with and without a purported cause and without changing any other characteristic, a different outcome would be observed."

Do you see that?

A. Yes.

Q. Do you disagree with the definition of cause as set forth in the 2004 Surgeon General's Report at page 19?
A. No. I note that this definition is applying to a person and that is one way in which this is distinguished from the situation that we were addressing.
Q. Do you know whether or not the Rubin mentioned in this particular excerpt is the defense expert, Professor Donald Rubin?
A. I don't know that, but it wouldn't surprise me.
Q. Professor Zeger was a co-author, was he not, of your expert reports in this case and you referred to him; correct?
A. That's correct.
Q. And Professor Zeger was a pupil of Professor Rubin's, wasn't he?
A. I think at one time in a summer course or something like that.
Q. Well, Professor Zeger specifically authored, did he not, among others, those sections of your expert reports that dealt with causal issues?
A. I guess I would characterize it as he was the author of certain sections that focused on causal issues.
Q. All right. So he authored sections of the report that focused on causal issues; right?
A. Some sections, yes.
Q. All right. And Professor Zeger has characterized the view

expressed in the 2004 Surgeon General's Report with respect to, as you say, a person.

And the views expressed by Professor Rubin with respect to a population as the medical care costs caused by smoking in a population are properly determined by comparing two worlds: one in which smoking occurred and another in which it did not.

Are you familiar with that characterization of Professor Rubin's views?

A. I don't remember that specific characterization, no.

MR. BIERSTEKER: If I could JD, please, 067891.

Q. Did you review this paper, Doctor?

A. No.

Q. If you would turn, please, to page 14 and just above the highlighted bit on the screen. Are you with me?

I want to go to the second to last paragraph on that page. Can you see it all right, Doctor?

A. Yes. I'm reading it here.

Q. Professor Zeger and his coauthors say in this paper, "For example, Don Rubin, an early exponent and key researcher on formal causal inference, is also the statistical expert for the tobacco industry in their suits against the state and the United States Justice Department."

Do you disagree with Dr. Zeger's characterization of Professor Rubin as an early exponent and key researcher on the formal causal inference?

A. I'm sorry. What did you ask?
Q. Do you disagree with Dr. Professor Zeger's characterization of Professor Rubin as an early exponent and key researcher on formal causal inference?
A. No, I would not disagree with that.
Q. And this is the characterization I asked you about.
"Professor Zeger and his colleagues say that he has testified that the medical cost caused by smoking in a population are properly determined by comparing two worlds: one in which smoking occurred, and the other in which it did not."
Do you see that characterization?
A. Yes, I do.
Q. And if we go down to the last paragraph on the page, Professor Zeger goes on to say, "It is hard to argue in the abstract with these causal targets for inference whether in a randomized controlled trial, an epidemiologic study or an assessment of a complex industrial behavior."
Do you disagree with Dr. Zeger's remarks that it is hard to argue with Professor Rubin's causal formulation?
A. Well, I would add to your restatement that Dr. Zeger says that it's hard to argue in the abstract here.
Q. Sure. Do you agree on the basis of first principles that for a population, such as one found in a randomized control trial, an epidemiologic study or an assessment of complex industrial behavior, and specifically that as applied to the

health care costs caused by smoking, in principle they are determined by comparing two worlds: one in which the population in which smoking occurred and the other in which it did not?

MR. KINNER: Objection, Your Honor. I believe Dr. Wyant hadn't finished his prior answer before Mr. Biersteker interjected yet a second question, of rather considerable length.

THE COURT: Sustained.

You may finish your prior answer.

THE WITNESS: I confess that I have now forgotten exactly what's transpiring there, so at this point I don't have anything to add to the answer.

MR. KINNER: Then my second point is Mr. Biersteker asked Dr. Wyant if he had reviewed the article and I believe the answer was no. I wasn't sure whether that gave Dr. Wyant sufficient time to review the article and familiarize himself with it.

THE COURT: I don't think the questions are about the article as a whole. They are pretty well focused at this point.

Go ahead, please.

BY MR. BIERSTEKER:

Q. Let me rephrase my question?

Do you disagree with Professor Zeger's comments that it is hard to argue in the abstract with Professor Rubin's testimony that medical costs caused by smoking in a population

are properly determined by comparing two worlds: one in which smoking occurred and the other in which it did not?
A. I think the question went to did I agree with this statement? Was that it? I'm sorry.
Q. Yes. It's do you agree.
A. This is an area in which Dr. Zeger has focused far more than I. I don't see anything here that I disagree with. Again, pointing out that this is a statement about in the abstract.
Q. So, let me just -- you do not disagree that in the abstract medical care costs caused by smoking in a population are properly determined by comparing two worlds: one in which smoking occurred and the other in which it did not; correct?
MR. KINNER: Objection, asked and answered. Can we move on?
THE COURT: He did answer that question.
MR. BIERSTEKER: Fair enough.
BY MR. BIERSTEKER:
Q. Let me ask you this. Your smoking attributable estimates in this case, of all costs -- health care cost, mortality, et cetera -- were not derived by comparing the health care costs and the mortality and the morbidity of smokers in the world in which they smoked to what their health care costs -- mortality and morbidity -- would have been had they never smoked, correct?
MR. KINNER: Objection. Asked and answered again. That's where we started this line of questioning.

THE COURT: No. Overruled.

A. Dr. Zeger's investigation and contribution in this regard, and I think consistent with the other articles I've stated, discussed the practical aspects of estimating the results of some causal factor like smoking. And he has said in our testimony in this case that while in the abstract some of these are worthwhile ideals; in practice, they are achievable only in certain limited ways in many situations.

And in our situation what is commonly done to study the causal impact is to apply the attributable risk methods that we used, and they in effect deal with what's sometimes called population causation where what we compare are the smokers as they appear today with never smokers who are similar as they appear today. And that is the closest you can get in practice.

And it is a suitable manner for assessing smokers with never smokers, given the realities of the world in which these estimates are commonly made.

Q. But to answer what I thought was a pretty focused question.

Your estimates in this case of smoking attributable did not compare the smokers, the so-called youth-addicted population, did not compare their experience for mortality, morbidity, health care costs, et cetera, to what it would have been in a world in which they had not smoked; correct?

A. We did not go back and try to reconstruct the world today as it would look as if no one had ever smoked, no.

Q. Thank you.

In fact, you have recognized, have you not, the difference between a causal estimate and an attributable estimate in at least one of your publications?

A. My publications?

Q. On which I think you're a co-author, yes.

A. I don't recall the extent to which that was discussed.

Q. Well, in your written direct examination you discuss a chapter in a book, the Gatsworth book, that you wrote with Professor Zeger as the lead author. Do you remember that?

A. I do remember that.

Q. And in that chapter you discussed the work in a case that was brought against many of these same defendants by the State of Minnesota and Blue Cross & Blue Shield of Minnesota; right?

A. That's correct.

Q. And your estimates in that case, like your estimates in this case, were estimates of health care costs attributable to smoking; correct?

A. That's correct.

Q. Okay. And in that chapter you described your smoking attributable estimates, did you not?

A. Yes, we did.

Q. Okay. And do you remember whether or not you went on to discuss and to distinguish them from estimates of the causal effects of smoking?

A. No, I don't recall.
Q. Why don't we take a look? It's JD 067827. If we could go to -- if we could just blow up the yellow there.
In the first sentence you describe basically what you did in the State of Minnesota; right? That's your attributable estimates.
A. I'm sorry?
Q. In the first sentence of that paragraph that's highlighted you were discussing your smoking attributable estimates; correct?
A. That's correct.
Q. And then you go on in the very next sentence and you say, "Another method one might consider to -- using to assess damages would be to estimate the medical expenditures by Minnesota that would have occurred in the absence of smoking, or perhaps in the absence of the alleged misconduct by the defendants, and to assess damages as the difference between those estimated expenditures and those that actually occurred in the presence of smoking. This is the causal inference approach."
Do you see that?
A. I do see that.
Q. Okay. And so in this chapter Professor Zeger and you characterized a causal analysis as another method different from your attributable analysis; correct?
A. I think the proper distinction here is that there are two

methods of assessing smoking-attributable health care costs and their extent that are caused by smoking.

There is one methodology that generally goes under the term "formal causal inference" and the other methodology is the one that was used which is to apply the method of attributable attraction. And I believe that's the distinction being made here is different methods to examine the causal impacts of something like smoking.

Q. Well, in fact, Professor Zeger has written about this subject some more, hasn't he?

A. Yes, he has.

Q. An article that you cite in your written direct examination, U.S. Exhibit 17416, is an article by Dr. Zeger and his colleagues that was written in 2003.

In fact, it was one of the little dots on your chart of estimates of smoking-attributable health care costs from the literature. Do you remember that?

A. Yes, I do.

Q. Why don't we take a look at that exhibit. U.S. Exhibit -- I may have had the Exhibit Number wrong. I think it's 74081.

And I misspoke earlier. It was my mistake.

Do you have a copy of the article?

A. Yes, I do.

Q. And if we could turn to page 139 of this article.

Dr. Zeger -- by the way, when you were testifying

earlier today, I wrote this down, the analysis described in this article is using essentially the same formulas that you looked at, that you used in your analysis in this case for health care costs; correct?

A. Essentially. There was one addition we made, but it's not important.

Q. And so Professor Zeger, in describing the estimates obtained by the essentially same formulas in this article, talks about, in the bottom of the paper, in this paper we estimate quantities from them NMES survey, blah, blah, blah, but they are attributable. Do you see that?

A. Yes. And directly above that, he describes what he's talking about. That this population attributable fraction that he used is commonly use in epidemiology to describe the proportion of disease that is due to a particular causal factor.

Q. Have you ever read Levin?

A. I may have read him a long time ago.

Q. Do you know whether or not Levin describes the smoking attributable fraction as the maximum proportion that could be causally related to a particular causal factor?

A. In older epidemiology texts that phrase sometimes appeared, so he might have described it that way.

Q. Do you know whether it's still described that way today by the Centers for Disease Control and --

A. Sometimes in my experience with working with them, it's used

in particular situations, but I don't know how common it is or how recent it is in their publications.

Q. All right. So here, Professor Zeger in describing estimates derived -- attributable estimates derived from a model using essentially the same formulas as that which you used in this case, he goes on to say what he means by attributable, and it's in the highlighted sentence. He said, "By attributable, we imply a comparison of smokers to otherwise similar nonsmokers." Right?

A. I'm not sure I would characterize that by what he means so much as in the context here saying or describing the nature of the calculation.

Q. Do you disagree that by attributable -- an attributable calculation, essentially the same as the one you did here, implies a comparison of smokers to otherwise similar nonsmokers?

A. We certainly did do. Here, Dr. Zeger is talking about what he and his coauthors imply. I don't want to necessarily say that I have any insight into exactly what he was thinking with that word here.

But certainly what he did do there and what we did do for the youth-addicted population is what he described here: compared smokers to otherwise similar nonsmokers.

Q. And, fair enough. If we turn to page 140, and we go to the first full paragraph on the page, he says, "Other investigators, e.g., Rubin 2001, have discussed estimation of the causal

effects of smoking, namely the difference in disease rates or expenditures for a population of smokers compared to what would have occurred had they never smoked."

Then he goes on to say, "These counterfactual quantities are not directly observable. Their estimation or extrapolation, is beyond the scope of this paper."

Do you see that, first of all?

A. Yes, I do.

Q. Do you disagree that the estimation of causal effects as defined by Professor Rubin, and at least Professor Zeger in this paper, and by the 2004 Surgeon General's Report, is beyond the scope of a paper that only estimates smoking attributable quantities?

A. That was a very complicated question with several parts. I don't think I could agree with it as it was stated.

Q. You know, Professor Zeger, as you noted, worked with you; right?

A. Dr. Zeger has worked with me, yes.

Q. In this case; right?

A. Yes, that's correct.

Q. He signed the expert report; right?

A. I believe so.

Q. He is a chairman of the biostatistics department at Johns Hopkins; correct?

A. That's correct.

Q. You are not now a Professor at any university, are you?
A. No.
Q. Have you ever been?
A. No.
Q. Professor Zeger has published hundreds of peer-reviewed books and articles; right? You note that, in fact, I think in your written direct.
A. That's correct. Well, my memory -- I won't dispute the hundreds. I'd have to look in the testimony to check that figure.
Q. And, as we discussed, Professor Zeger at least wrote some portions of the expert report that dealt with causal issues; correct?
A. That's correct.
Q. You haven't published any books, have you?
A. No.
Q. And you published only a handful of peer-reviewed articles; correct?
A. That's correct.
Q. And isn't it true that, at least based upon my review, your peer-reviewed articles that you have published don't specifically deal with formal causal inference. Is that fair?
A. That's fair in the sense that it's being discussed in these kinds of articles you're talking about.
Q. Do you know why the government opted to call you instead of

Professor Zeger to testify about this issue?

MR. KINNER: Objection, Your Honor.

THE COURT: I couldn't hear you.

MR. BIERSTEKER: I asked why --

THE COURT: I heard you.

MR. KINNER: Objection, Your Honor. How is that possibly relevant?

THE COURT: The witness may answer the question if he knows the answer.

A. I don't know what all went into that choice.

MR. BIERSTEKER: Your Honor, in light of the testimony about how the estimates presented are not estimates of causal effects of either the defendants' alleged wrongdoing or even of smoking, I would move to strike his testimony.

THE COURT: Because he used one methodology rather than another one?

MR. BIERSTEKER: Well, they are qualitative different methodologies, Your Honor.

THE COURT: Well, I understand that they are and probably your experts will tell us why one is superior than the other, but that's not a basis for striking the testimony. It may be a basis ultimately for discrediting the testimony. That's a speculation --

MR. BIERSTEKER: It's not so much discrediting, Your Honor, as it is whether it's legally relevant.

THE COURT: I'm sorry. It's not so much what?

MR. BIERSTEKER: A matter of discrediting the testimony. The estimates are what the estimates are and we can go into the estimates if that's appropriate. But it is a question of legal relevance.

I don't see how this quantity of smoking attributable, since it is not causally related either to the alleged RICO violations or to smoking itself, is relevant to an issue that we face in this case.

THE COURT: But, again, at best, that's a legal argument to be made, not -- I do not think that justifies striking the testimony at all. So the motion is denied.

And I should say more for clarification than anything else, it is a legal argument to be made in terms of the final arguments on the merits rather than during the course of testimony.

So go ahead, please.

MR. BIERSTEKER: Thank you.

BY MR. BIERSTEKER:

Q. I wanted to touch on one aspect of your estimates that you present in your written direct and that you also discussed here this morning in your live direct.

And you talked about how your estimates were lower in part because you focused on major smoking-related diseases; right?

A. That's essentially correct.
Q. And, in fact, Dr. Wecker in the analysis he turned over in this case estimated your same model, not changing anything else, on all of the diseases that the Surgeon General has concluded are caused by smoking as well as some of the additional diseases that Dr. Samet had you include.

And isn't it true that when you include all of the smoking-related diseases your estimates actually go down?
A. I think Dr. Wecker made a calculation that was not, as you characterize it, our method, but he made a calculation in which he could cause that to happen.
Q. All right. Is that yes, because I'm not understanding what you said beyond yes?
A. Well, I think you had a predicate in your question about "used our methods" and I would take issue with that assumption.
Q. Let's pursue this a little more.

One of the exhibits I think you put up this morning was U.S. Exhibit 17741. Do we have that? Actually, we can use this one. That's fine.

It's up there, great.

And just to recap. The left-most bar with the red dot around the 4.6 percent is the estimate that you are presenting to the court in this case. That's the equivalent of your $839 billion estimate; right?
A. That's the one that corresponds to that, yes.

Q. All right. Fine.

And the other estimate on this chart that's specifically addressed, smoking-related diseases as opposed to all diseases and conditions, is "E"; right? E as in egg.

A. Yes. That's the study on the right-hand side of the chart.

Q. And that's the article that was published by Professor Zeger that you said used essentially the same formulas that you folks used in this case; right?

A. That's correct.

Q. So it's not surprising that you get a number that's pretty much the same; right?

A. No.

Q. All of the other estimates that you include in this exhibit looked at all diseases and conditions; correct?

A. That's pretty much correct, yes.

Q. And one of them that you chose to highlight on your interactive exhibit was the one with the letter "A", as in apple, which is the second from the right. Do you remember that one?

A. Yes.

Q. Okay. And that was an article that was published in the literature by a Dr. Harrison, right? Perhaps other authors, but Dr. Harrison.

A. Yes, he was one of the authors.

Q. And Dr. Harrison has been an expert for plaintiffs in

litigation with these defendants over health care cost issues; right?

A. That's correct.

Q. Let's take a look at his estimate in a case in West Virginia, that instead of addressing health care costs from all diseases and conditions, looked at health care costs from smoking-related diseases specifically, and that affidavit is JD 068053.

Do you have it, Doctor?

A. Yes, I do.

MR. KINNER: Objection, Your Honor. I don't understand how it's proper cross-examination to use an affidavit from a completely different witness.

THE COURT: This is an affidavit from an expert witness in another case who wrote an article on which this witness, not relied, but to which this witness compared his work. Is that right?

MR. BIERSTEKER: Yes, but the point is, Your Honor, that in the course -- in this affidavit he presents, the tables at the end that do it, an estimate of health care costs focusing only on smoking-related disease and conditions, and in fact his estimate is lower than the one Dr. Wecker would present in this indication. And I just want to establish that this is in fact -- and it's the same model as was used in the article that Dr. Wyant presented to the court in summary form and refers to

in this table.

MR. KINNER: Is Mr. Biersteker representing that in West Virginia they were concerned with calculating the total health care costs for the U.S. population?

And why am I standing here asking that question in a case that has nothing to do with -- and it's pure hearsay from Dr. Harrison.

MR. BIERSTEKER: It's no more hearsay than the published article, Your Honor.

THE COURT: You're going to have to establish that the example given in this affidavit is the same as -- let me state it differently -- that the method used in this affidavit is the same as the method used in the article that Dr. Wyant refers to in his written direct.

MR. BIERSTEKER: I think I can do that.

THE COURT: That's the only way it's going to come in, Mr. Biersteker.

MR. BIERSTEKER: Okay. I'm saying I think I can do it.

BY MR. BIERSTEKER:

Q. If he turn to page 3 of the affidavit, Doctor, paragraph 5.

And if you look up in the very first sentence, he says, "I calculate the smoking attributable fraction of medical expenditures using statistical procedures and data that have been employed in previous tobacco litigation and in peer-reviewed academic publications, citation," that's the

article you cite in your chart, isn't it?
A. Yes, it is.
Q. If you go down to the next highlighted bit on this page, he says there, "I calculate one set of SAFs for total medical expenditures and another SAF is smoking attributable fraction." Right?
A. Yes, as he describes up above there, that's the fraction of expenditures that would have been avoided but for exposure to smoke.
Q. He said, "I calculate one set of SAFs for total medical expenditures, and another SAF for medical expenditures or smoking-related diseases" parens. He's got SRs is how he abbreviates it; right?
A. That's correct.
Q. If we want to, he refers to a list of smoking-related diseases in the next sentence that is provided in an earlier affidavit. We can pull that out. And, in fact, why don't we do that? JD 068054.
MR. KINNER: Your Honor, I think we are getting deeper and deeper into hearsay and we're not going to have a chance to cross-examine Dr. Harrison about his affidavits.
THE COURT: I'm going to sustain the objection.
You can ask him about matters that are in the article itself. That's what he referred to repeatedly in his testimony. But these affidavits are too far afield.

MR. BIERSTEKER: Let me ask the question this way.
BY MR. BIERSTEKER:
Q. Do you know -- you got an estimate of 4.6 percent; correct?
A. Yes.
Q. And Dr. Wecker presents an estimate in his report of 1.5 percent?
A. Yes.
Q. Do you know whether or not Dr. Harrison, applying the same method that he used in the article upon which you relied but looking at a list of smoking-related diseases more expansive than the ones you looked at, got an estimate of 1.1 percent lower than Dr. Wecker's?
A. I don't know of any 1.1 percent. I believe -- and I'm going off memory here. My recollection is when he did a calculation of a lower bound, I think he described it related to focusing on particular diseases, it would have been about two-thirds or 65 percent of his overall estimate.
Now, that's the figure that I recall, although I may not be exactly right.
Q. All right. But you don't know whether it's 1.1 percent in this particular application?
A. Well, I think the application to the United States was the application in which he calculated that percentage, so that would have yielded something more like, you know, 6 percent. So I'm not sure where the 1-and-a-half percent comes from. And

again I'm going off recollection here. So, you know, if I looked at the article, it might refresh my memory further.

MR. BIERSTEKER: Fair enough. I have no further questions, Your Honor.

THE COURT: Any redirect for the government?

MR. KINNER: If I could be given a moment, Your Honor, just a couple of questions.

REDIRECT EXAMINATION

BY MR. KINNER:

Q. During the cross you were asked about formal causal inference; is that right?

A. That's correct.

Q. And that was a phrase that has been attributed to Dr. Rubin; is that right?

A. I believe that's correct, yes.

Q. Has Dr. Rubin ever published a peer-reviewed article measuring the impact of smoking on any population by using his method of formal causal inference?

A. Not to my knowledge.

Q. You were also asked questions about Dr. Wecker; is that right?

A. That's correct.

Q. Has Dr. Wecker ever published any peer-reviewed article measuring either the impact of smoking by using Dr. Rubin's method of formal causal inference or a smoking attributable

causal inference, assuming for the moment that they aren't entirely identical?

A. To my knowledge, Dr. Wecker has done neither.

MR. KINNER: Thank you. I have no further questions.

THE COURT: Well, I have a few questions.

EXAMINATION BY THE COURT

BY THE COURT:

Q. Am I correct -- I'm referring now to page 100 of your written direct and certainly pages leading up to that -- but am I correct that you and your colleagues in this testimony, as well as other peer-reviewed articles in this area, have concluded that poverty status as a potential confounder doesn't really change the results of calculating disease treatment costs? Is that correct?

A. I believe.... let me try to state this very carefully.

It doesn't change the fraction that are due to smoking when you basically compare smokers among poor people to never smokers among poor people and smokers among wealthy people to never smokers among wealthy people; when you make the comparison in that sense, smoking generally turns out to be the driving force, not necessarily exclusively, and that's what we meant by adjusting for poverty status there, the income level of the household.

Q. Isn't it true, though, as a general matter, that poor people have worse general health than people who are not in -- of a

poverty status?
A. I think, in general, on average, that's true.
Q. But your conclusion is that that situation does not affect the costs incurred -- the treatment costs -- incurred from smoking by people who are either poor or not poor? Is that correct?
A. Not so much that it doesn't affect the treatment cost, but the extent to which treatment costs go up on a percentage basis when you get a disease caused by smoking.

In other words, there may be different costs as a baseline among poor people as opposed to wealthy people, and I'm oversimplifying here as kind of a hypothetical. But in general when you calculate formulas like this, it appears that if the costs go up by approximately 50 percent in any of these groups with smoking, that there is some consistency there.

But, of course, since that is a percentage that may end up at different absolute dollars, that is 50 percent of a lower base is going to be less than the base, but typically the additional fractions due to smoking seem to be reasonably similar, at least to the extent that when you do the kinds of comparison I was talking about, smokers amongst poor people compared to never smokers among poor people, and similarly for other levels of income, the amount of increase seems to be similar across those different groups.
Q. I have another question. If you will look at page 95 of

your direct testimony, and again I'm focusing on the testimony relating to Disease Treatment Years. And looking at the paragraph that begins at page 15 -- I'm sorry, at line 15, you're talking about the calculations being carried out for each calendar year. And, of course, as you've already testified today, each calendar year in which an individual sees a doctor for specific enumerated diseases counts as a treatment year.

And then you say, If we add the two annual totals together we get what we call the number of Disease Treatment Years. Fine.

It's the next sentence that baffles me. "The number of Disease Treatment Years in this latter example would be the number of people treated just in year one" -- I understand that -- "plus the number of people treated just in year two" -- I understand that -- "plus two times the number of people treated in both years." That truly escapes me.

A. Okay. I think I could probably have articulated this better.

When in this example I'm talking about people treated in the first year, I'm specifically restricting it to people who were treated in that year and that year only.

Q. Right.

A. And so each of those is treated in a calendar year. So since it's that year and that year only, there's only one Disease Treatment Year for each of those. And similarly for the

second year.
Q. Where do you get two times the number of people treated in both years?
A. There are a certain number of people treated in both years and we, in this measure, were capturing not only the number of people treated, but essentially how long they have to be treated in the medical system, because the longer you're being treated year after year, the more burden you're putting on.
So even though it's an individual who is treated in each calendar years, each of those calendar years counts as a Disease Treatment Year.
Q. Is that all you're saying --
A. That's all I'm saying.
Q. -- in the last phrase?
A. It's to draw an analogy to another kind of calculation statisticians make. If you go out to Tyson's Corner Center here they will talk about the number of customers they've had during the course of the year, which is a good measure for them if so many people are coming to the shopping center and that's a standard sort of thing to calculate, but they don't try to identify how many of those people are coming in four times, five times, because in terms of what happens to the shopping center, a person coming back five times is indeed more valuable than five people coming in once, or equally valuable.
And that's what we are doing here, we are counting the

individual calendar years. And so we see exactly -- or we estimate the number of different calendar years all these people are coming in for medical care visits. Sometimes it's the same person more than once, sometimes it's one person and just one year. But every time a person comes in, in a new calendar year --

Q. That I understand.

A. -- that we get.

Q. That's clear. Let me see if I had anything else. I don't think so.

I do have another question, and that's at page 106 of your testimony. And this is the first question at the top of the page.

You give the example that if a person smoked two packs a day beginning at age 15 and they had a heart attack at 35, they continued to smoke two packs a day until age 45 and then had another heart attack, that smoking could have played no role in causing a second heart attack.

And then you say that such an assertion doesn't conform to my -- your -- understanding of how smoking works.

I don't really understand what you're getting at in that paragraph. Are both of those heart attacks attributable to the smoking in your view, or do they count in your calculations, or do they not count in your calculations?

A. The first one doesn't because we have a minimum age

threshold of 40.
Q. That's true.
A. So we don't count anything that happens before age 40.
Above age 40 we look with the attributable fraction method at the extent to which smokers in this instance have more heart attacks than similar never smokers.
Q. And is it correct that you used age 40 as your cut off in order to be exceedingly conservative in your calculations?
A. I think that's fair.
THE COURT: All right. Dr. Wyant, thank you. You may step down at this time.
Let me go back over a couple of scheduling issues with everyone based on what you all have told me and my calendar.
The government believes that Dr. Bazerman will be Wednesday and part of Thursday. Mr. Brody; is that right?
MR. BRODY: Yes, Your Honor, given the 4-hour estimate from defendants and given the 1-hour of live direct that we have, I don't think it's realistic to think we could finish his testimony on Wednesday. I expect it to spill through Thursday morning.
THE COURT: Dr. Eriksen is going to be on Monday, May 9th?
MR. BRODY: That's actually an issue we wanted to raise with Your Honor.
He suffered an eye condition that was fairly serious,

required some treatment. It is being treated, but, as a result, we had to confer with defendants and delay his deposition. It also kept him from doing the work that was needed to be done on the written direct, so we are hoping to push the filing of his testimony -- unfortunately, it was something that could not be avoided -- back to the 9th. He will be deposed on that day at 1:00 o'clock, and his testimony will then be filed at 5:00 that day. He will then testify on Monday, the 16th, followed that week by Dr. Fiore and Mr. Myers.

THE COURT: So he will be on Monday, the 16th.

Dr. Fiore will be on Tuesday, the 17th, do you think?

MR. BRODY: Or possibly even starting the afternoon of the 16th, but it could be the morning of the 17th.

THE COURT: And Matt Myers will be on Wednesday.

MR. BRODY: Presumably, depending on the Fiore cross. But it's my expectation that those three witnesses can all testify that week so that we can, as anticipated, start defendants' remedies case on the 23rd, although there are, of course, discovery issues there.

We have a letter to defendants, in response to their identification of witnesses, indicating the specific persons who we feel we need to depose. In a couple of cases it's a limited deposition. And very small document requests related to the substance of the testimony of two fact witnesses, in particular, as well as a request for some prior transcripts of another

witness that we did not receive in the course of discovery as we feel we should have.

THE COURT: All right. Let me be sure about some other things. Who are you going to have on Monday, May 9th then? Will that be Dr. Gruber?

MR. BRODY: It would be Dr. Gruber, Your Honor, although we would request, if possible -- and this is unfortunate, given the situation with Dr. Eriksen that due to his teaching duties at MIT -- that Dr. Gruber's testimony start on Tuesday. I would expect he will probably extend into Wednesday, and then we will call Dr. Cheryl Healton on Thursday, the 12th. She is not available until the 12th, given some of her professional commitments that simply can't be changed.

THE COURT: So we would be off on Monday?

MR. BRODY: That's correct, Your Honor.

THE COURT: And one other thing. This is really a question for the defendants.

I don't think I have their total list. Monday, May 23rd, I'm not going to be available. Depending upon the needs of defendants, I am more than willing -- and I know this impacts people -- but I'm more than willing to have a full day of testimony on the 27th.

Now, I realize in terms of people's plans -- that's also, I want to warn you all, Memorial Day Weekend. Now I can do that. I can do the morning.

And one other matter I better warn you about and that is on Wednesday, May 25th, unless I can change an appointment which I don't know that I can, we will have to start late that morning at 11:00. But again, I want to accommodate everybody as much as I can, and you may want to think about this. I don't know if you've already planned the order for your people.

MR. BERNICK: No. We are in the process of doing that right now. And, obviously, we will bear in mind the court's schedule and let Your Honor know. I think we've done this a couple of times before if we're going to need the court's flexibility going forward in some particular area, but our planning has not yet gotten to that point. We are in the process of developing our order of witnesses as we speak.

There's only -- I'm sorry. Was there something else, Your Honor?

THE COURT: Well, I know May 27th will probably be hard for everybody because it's the day before a holiday. As I say, it might be worthwhile to sit until 1:00 or even 2:00 that day so you can get out early. I have no problems at all about that. It's all of your people who are from out of town.

MR. BERNICK: We appreciate that, Your Honor.

The only thing I think that's germane to this is that we've obviously seen some slippage in the witnesses who are being called as part of the government's case, Dr. Eriksen being the most significant of them.

Dr. Eriksen has a medical problem. We're not going to get into the details of how much that impairs his ability to do his direct examination, but we've now agreed to shifting his testimony back considerably further than it was originally. And we know and expect that to the extent that that then has impact on the work of our experts --

THE COURT: I wouldn't think so.

MR. BERNICK: Well, I just don't know that we're going to see the same kind of flexibility.

There's also a question about -- we are very much mindful of June 10th.

THE COURT: So are we all. I think it's known informally as Freedom Day, but I don't want to call it.

MR. BERNICK: Freedom Day or the Carved in Stone Day.

THE COURT: Correct.

MR. BERNICK: And again the slippage then tends to impact us because our case has got to be done by that time. So all these things are just concerns that we have. We know the court has the same kinds of concerns. And we will just see how things -- well, how things go, and I think when it comes to situations like the 27th, let us do a little bit more planning on what we think is going to happen with our witnesses and how long they are going to last, and then we will in a timely fashion let Your Honor know whether we do need some more flexibility there.

THE COURT: Should I count, however, on government not going forward on the 16th so that I can move some other matters in that day?

MR. BRODY: I'm sorry. You mean the 9th, Your Honor?

THE COURT: Wait a minute. Did I get my days mixed up? I did. The 9th.

MR. BRODY: That's preferable, Your Honor. We would prefer that Dr. Gruber testify beginning Tuesday morning.

THE COURT: I don't think that that's going to impact defendants in any way at all.

MR. BERNICK: No. In fact, that frees up that day to take discovery from Dr. Eriksen as well, so that's fine.

THE COURT: All right. Now, were counsel going to be prepared to address evidentiary issues this afternoon?

MR. BRODY: Your Honor, we received an e-mail from Ms. Soneji suggesting that we do that tomorrow afternoon. Given the estimate that we received for the cross-examination of Surgeon General Carmona, it's my expectation that his testimony will be concluded in the morning, including redirect, and that we will have the entire --

THE COURT: I don't expect extensive cross on him, everybody.

MR. BERNICK: Dr. Carmona?

THE COURT: Right.

MR. BERNICK: I'm responsible for Dr. Carmona. And

Your Honor is shaking -- all of my examinations, whether I meet the estimates or not, tend to be relatively short. Yes.

(Laughter)

THE COURT: It's 20 pages of testimony, almost all of which repeats several times direct quotations from the Surgeon General's Report.

MR. BERNICK: Well, respectfully, Your Honor, it doesn't make it any more relevant or well-founded or germane to the issues.

THE COURT: That may be, but I'm talking cross-examination, Mr. Bernick.

MR. BERNICK: I understand that. And I took his deposition. We incidentally have substantial matters that we placed before Your Honor in our objections to Dr. Carmona's testimony. Your Honor, we submitted our brief on the issues that we've raised with respect to Dr. Carmona.

THE COURT: I've read your papers. I haven't read the government's. But, quite frankly, if I'm not convinced after reading your papers, the government is not going to convince me to rule in your favor.

MR. BERNICK: Well, the Surgeon General -- well, I understand that, and if that's Your Honor's determination, that's fine.

THE COURT: I'll look over everything again. Also, as I say, I haven't gotten the government papers yet. They may

have been filed over the weekend.

MR. BRODY: Your Honor, those were filed on Wednesday of last week.

THE COURT: Wait a minute now.

MR. BRODY: I can check and make sure we delivered a copy first on Thursday morning. If not --

THE COURT: Maybe I misspoke. I did. I did. I have the government's. I'm sorry. I do have the government's.

MR. BERNICK: But, Your Honor --

THE COURT: So I'll give the government a little bit of credit for perhaps having affected my views on the subject.

MR. BERNICK: That's fine, Your Honor. The one point that I would raise in that regard and I'm prompt to do so from a remark that Your Honor made this morning with regard to the motion that was made to strike the testimony of Dr. Wyant, and then I want to get to the question of cross-examination of Dr. Carmona, which I'll be doing and it will not put us past the noon hour tomorrow. I'll assure Your Honor it -- take an hour and a half.

The concern is that -- and this also relates to the motion, some of the motions that we intend to file. Your Honor, to the extent that a witness's testimony, our view is not relevant to the DC Circuit's standard in this case and the witness is an expert or the witness is a fact witness --

THE COURT: He's a fact witness, meaning Dr. Carmona.

MR. BERNICK: As was Dr. Wyant. We have an obligation, we believe, under the rules to object to the admissibility of the expert's testimony under 702 and the witness's testimony is being irrelevant, and that's not something that is from our point of view something we can afford to defer to argument or to the proposed findings.

We don't believe it's admissible. And when we have a witness like Dr. Carmona, the entirety of his testimony doesn't even address the issue of a remedy that goes to our conduct. Of course, we're going to object on the grounds that it's irrelevant.

THE COURT: Mr. Bernick, you have every right to make your objection to get the record clear and to never be accused of having waived anything.

MR. BERNICK: That's why we are doing it.

THE COURT: I am not going to preclude in a case of this nature in a bench trial, emphasized in capital letters, the Surgeon General of the United States from testifying.

MR. BERNICK: I understand that. But it's precisely because he's the Surgeon General of the United States that our motion become -- our motion and our objections become particularly well-founded.

The government wants to have the Surgeon General of the United States come in and endorse their legal case as opposed to -- that's what they are seeking, apparently, to have him do.

THE COURT: He doesn't speak to liability in any fashion, as I remember his testimony.

MR. BERNICK: That's the whole point. He doesn't speak to liability. He doesn't speak to a remedy that is focused on liability.

THE COURT: That's true also, all of which I take into consideration. Your legal objections are clear, they are on the record and they are preserved, and they are also overruled.

MR. BERNICK: Thank you.

MR. BRODY: Thank you, Your Honor.

THE COURT: All right. Now, I believe, are we done until 9:30 tomorrow morning? I want documents from the government.

Let me look at my notes. Nine documents relating to Dr. Gruber and 12 documents relating to Dr. Fiore.

MR. BRODY: Yes. Your Honor, you already have the nine documents.

THE COURT: I do have the Gruber documents. I do.

MR. BRODY: We will provide the additional documents to you this afternoon.

MS. EUBANKS: Your Honor, of course, we are looking forward to your having the opportunity to review the order that we submitted on Friday because it does go to the production.

THE COURT: I actually -- let me make sure. I just signed that. Right.

MS. EUBANKS: Thank you, Your Honor.

THE COURT: Okay. All right. Everybody is excused.

(Proceedings concluded at.12:39 p.m.)

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CERTIFICATE

I, EDWARD N. HAWKINS, Official Court Reporter, certify that the foregoing pages are a correct transcript from the record of proceedings in the above-entitled matter.

Edward N. Hawkins, RMR