Exhibit 586

1 IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF NORTH CAROLINA
2 SOUTHERN DIVISION
NO. 7:23-CV-897
3
IN RE:)
4)
CAMP LEJEUNE WATER LITIGATION)
5)
)
6 This Document Relates to:)
ALL CASES)
7 _____)
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9
10
11 VIDEOTAPED DEPOSITION OF
12 MAX KATES, M.D.,
13 a witness herein, called by the Plaintiffs for
14 examination, taken by and before Ann Medis, RPR,
15 CLR, CSR-WA, and Notary Public in and for the
16 Commonwealth of Pennsylvania, via Zoom
17 Videoconference, at 36 South Charles Street,
18 Baltimore, Maryland, on Friday, July 11, 2025,
19 commencing at 9:24 a.m.
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A P P E A R A N C E S

On behalf of the PLG

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P R O C E E D I N G S

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THE VIDEOGRAPHER: Here begins the video recorded deposition of Dr. Max Kates taken in the matter In Re: Camp Lejeune Water Litigation, in the U.S. District Court for the Eastern District of North Carolina, Case No. 7:23-cv-897. Today's date is July 11, 2025. The time is 9:24 a.m.

This deposition is being held at 36 South Charles Street, Baltimore, Maryland. The court reporter is Ann Medis. The video camera operator is Kim Johnson, both on behalf of Golkow.

Will counsel please introduce yourself and state whom you represent.

MR. RUZICKA: Ted Ruzicka for the PLG.

MR. MALONE: J.T. Malone, PLG.

MR. ANWAR: Haroon Anwar for the United States.

MS. KONSTANTOPOULOS: Melanie Konstantopoulos for the United States.

THE VIDEOGRAPHER: Is there anybody on Zoom?

MR. RUZICKA: There will be people jumping on and off. I don't think you need their appearances.

THE VIDEOGRAPHER: Thank you. Will the court reporter please swear in the witness.

MAX KATES, M.D.,

having been first duly sworn, was examined and testified as follows:

EXAMINATION

BY MR. RUZICKA:

Q. Good morning, Dr. Kates.

A. Good morning.

Q. My name is Ted Ruzicka. I'm an attorney for the Plaintiffs Leadership Group in this case. I'm here to ask you some questions about the six reports you intend to offer. Is that okay?

A. Yes.

Q. And it is my understanding that you provided deposition testimony in the past; is that correct?

A. Yes.

Q. So you understand that you were just sworn in and are testifying under oath as if you were in court?

A. Yes.

Q. If I ask you a question that you don't understand, please let me know, and I'll try to rephrase it. Is that okay?

A. Yes.
Q. If you don't tell me that you don't understand my question and you answer it, I'm going to assume that you understood it. Is that okay?
A. Yes.
Q. I understand you may need a break from the time for calls that may come in. Please just let me know. The only thing that I ask is that you answer the question that's pending before we take that break. Okay?
A. Yeah.
Q. And please wait to -- allow me to finish my question before responding. Okay?
A. Yes.
Q. Additionally, I want you to understand that I do not mean any disrespect in any of the questions I'm asking. My clients are suffering from bladder cancer and want these questions answered. Okay?
A. Yes.
Q. Is there any reason you can't provide truthful and complete answers to my questions today?
A. No.

Q. What did you do to prepare for this deposition today?

A. I reviewed several records. I met with the DOJ legal team.

Q. How many times did you meet with the DOJ legal team in preparation for this deposition?

A. Twice.

Q. When did you have those meetings?

A. One was yesterday, and the other was in June, several weeks ago.

Q. And approximately how long were those meetings?

A. Several hours each.

Q. Were there any other experts involved in those meetings, or was it just you and the DOJ attorneys?

A. It was just DOJ attorneys.

Q. No other retained experts in this case?

A. I don't believe so.

Q. You seem to question that. Is there some confusion that you have between --

A. Everyone I met with was a DOJ attorney. I didn't ask for everybody's documentation. That's why I'm...

Q. Understood. What documents did you

review?
A. I reviewed several of the reports of other both DOJ and PLG -- am I saying that right -- PLG experts. I reviewed --
Q. Which reports from the DOJ? Sorry to interrupt.
A. The reports of Dr. Goodman, Bailey and LaKind.
Q. And which reports from the plaintiffs' experts do you recall reviewing?
A. Dr. Sfakianos, Dr. Longo.
Q. Any others?
A. Dr. Bivins, and the reports, the general causation reports. I think there were five for -- that sort of matched Dr. Goodman's report on the epidemiological analysis. And then there were two reports that more spoke to the toxicity assessments, exposure assessments. I don't remember the lead authors of those reports.
Q. So those five general causation reports, you're referring to the plaintiffs' general causation expert reports regarding general causation?
A. Yes.
Q. Then you said two toxicological reports

that were also from the plaintiffs' experts; is that correct?

A. Yes.

Q. Do you recall if those toxicological reports that you reviewed were specific to individual plaintiffs, or were they covering more the general causation aspects of this case?

A. They were -- I don't recall exactly. I believe they were -- I don't recall.

Q. And so you reviewed all these records in preparation for your deposition. So that means you would have reviewed them within the last 30 days or so?

A. I would say the last 60 days.

Q. Prior to the last 60 days, had you reviewed those reports before?

A. Yes.

Q. And you understand that you're here testifying as an expert in this case; correct?

A. Yes.

Q. And would you agree that your role in this case is to be an objective doctor and scientist?

A. Yes.

Q. And why is that important?

A. My role is as an expert in bladder cancer, something I trained to do, and to give my truthful, honest opinion about something that is my profession, and I hold that to be very important in this context and all contexts.

Q. So your testimony today must be fair, honest and accurate as possible; is that fair?

A. Yes.

Q. And that you should not be influenced by bias for the government?

A. I agree.

Q. And that you should be an advocate for one side or the other?

A. I agree.

Q. You should not intentionally misstate any facts?

A. I agree.

Q. You also agree that you should not provide any opinions outside your expertise as if they were within your expertise; is that correct?

A. I agree.

Q. And you're here testifying today about your expertise in urological oncology; correct?

A. Yes.

(Kates Exhibit 1 was marked.)

BY MR. RUZICKA:

Q. I'm going to hand you what's been marked Deposition Exhibit -- what I will mark as Deposition Exhibit 1, which I'll represent to you is the Plaintiffs' Amended Notice of Deposition and Request for Production of Documents.

Have you seen that document before?

A. I can't recall. It may have been in some of the documents that I reviewed.

Q. I'll represent to you that the fourth page is a subpoena that is commanding you to come testify at this location and time.

Is it your testimony that you don't recall receiving this subpoena?

A. I probably did, yeah.

Q. And going to the seventh page of Exhibit 1, there's a document that starts with the title Schedule A. Just beyond that. This Schedule A is the request for production of documents that were made of you prior to this deposition.

Do you recall discussing these requests for production of documents with your attorneys?

A. Yes.

Q. Did you attempt to search and comply and

provide all the documents that were requested in this Schedule A?

A. Yes.

Q. And specifically, I'm going to direct your attention to number 6, which requests all written communications except with attorneys for the defendant, the United States, and retained experts in this litigation regarding the water contamination at Camp Lejeune.

Did you do a search for any of those communications?

A. Yes.

Q. And did you find any responsive documents?

A. No.

Q. What did your search entail?

A. Only communications pertaining to this case with DOJ attorneys.

Q. The request is actually for all communications regarding water contamination at Camp Lejeune.

Is your testimony that you have not had any written communications with anyone else regarding the water at Camp Lejeune other than the DOJ attorneys and retained experts in this case?

A. Yes.
Q. I'm going to direct your attention to number 9 on the last page of Exhibit 1, which requests all presentations, lectures, publications, articles, transcripts of public statements or other public comments made by you regarding the water contamination at Camp Lejeune.
Did I read that right?
A. Yes.
Q. Same question. Did you do a search for any responsive documents to this request?
A. Yes.
Q. And you were unable to locate any communications -- any presentations, lectures, publications, articles, transcripts of public statements or other public comments you have made regarding the water contamination at Camp Lejeune?
A. Yes.
Q. What all did you search?
A. I searched in my communications for the requested communications regarding the water in Camp Lejeune and all of my -- everything I got back was communications with DOJ lawyers.
Q. So is it your testimony that you've never made any public comments regarding the water

contamination at Camp Lejeune prior to this litigation?

A. Yes.

Q. So that would also mean that you never communicated with any other urologic oncologist regarding the water contamination at Camp Lejeune prior to this litigation; is that correct?

A. Yes.

Q. I'm going to direct your attention back to the subpoena on page 6 of Exhibit 1. In the bottom right-hand corner, under the subtitle (g), Contempt, do you see that section? One more page, sir. One more. Bottom right-hand corner.

A. Yeah.

Q. It states, "The court for this district where compliance is required, and also after a motion is transferred to the issuing court, may hold in contempt a person who, having been served, fails without adequate excuse to obey the subpoena or an order related to it."

Did I read that correctly?

A. Yes.

Q. So do you understand that you could be held in contempt for failing to obey the subpoena that was issued in this case to you?

A. Yes.
Q. Do you believe you are obligated to follow the court's rules in this case?
A. Yes.
Q. I'll represent to you that on Wednesday, responsive documents to the request that we made for documents were produced by your counsel, and they included invoices and contracts for your work in this case.
Was there anything other than invoices and contracts that you produced to your attorneys responsive to these document requests that were made to you?
A. No.
Q. So the only documents that are responsive that you provided were invoices and contracts regarding your work in this case; correct?
A. Well, I believe an updated CV was requested. And I couldn't tell you the date I last -- I sent the CV multiple times during the last couple of years. So I couldn't tell you the last -- the most recent date of CV you have.
(Kates Exhibit 2 was marked.)

BY MR. RUZICKA:

Q. I'm going to hand you what I'm going to mark as Deposition Exhibit 2. There you are.

Dr. Kates, I just handed you what I've marked as Deposition Exhibit 2, which are the invoices that you provided in response to our request for production of documents; is that correct?

A. Correct.

Q. And there are -- on the top of each invoice there's a numerical value starting with number 1 going to invoice number 18; is that correct?

A. Correct.

Q. Are these all the invoices that you have billed to the government in this case?

A. To date, yes.

Q. And I'll represent to you that I did the math. I think I'm fairly close. But you would have billed around $137,000 from February 2023 to June of 2025 in this case?

A. I have not done the math myself, but I have no reason to disagree with your math.

Q. Does that sound about right?

A. Yes.

Q. And have you received that compensation already?

A. Some of it, not all of it.

Q. Looking at the first invoice on page 1 of Exhibit 2, the first item is a call on 2/9/2023.

Who was that call with?

A. I can't recall.

Q. But is it your recollection that the very first time that you were contacted regarding this litigation was in February 2023?

A. I can't recall.

Q. You don't recall who it was that first made contact with you about becoming an expert in this case?

A. No.

Q. Then the second line item is review document 2/12/2023.

Do you recall what that document was?

A. No.

Q. So if you look at invoice number 2, the next billing that you have in this case is in September of 2023; is that correct?

A. Yes.

Q. So when you say you can't recall who it

was that you first spoke to regarding your involvement in this case, would it have been a DOJ attorney?

A. Yes.

Q. Or would it have been a DOJ retained expert in this litigation?

A. It would have been a DOJ attorney.

Q. And do you recall how that DOJ attorney became aware of your potential desire to work in this case?

A. I can't recall.

Q. You don't recall any reason why they attempted to contact you in this case?

A. I get contacted quite often about issues related to being an expert specifically on bladder cancer. So this was two and a half years ago. I don't want to tell you something that's not true. That's why I'm saying I don't recall.

Q. That's fair. And is it either of these attorneys in this office?

A. My recollection is that was Mr. Anwar, but I can't recall if that was February or later on in September. But at some point, that was the attorney that I spoke with.

Q. What do you recall about the scope of

work that you were being asked to perform in this case for the government?

MR. ANWAR: I'm just going to instruct you, Dr. Kates, you can answer that question to the extent it doesn't divulge our communications, which are privileged. With that caveat, you can answer the question.

THE WITNESS: Can you repeat the question?

BY MR. RUZICKA:

Q. Prior to you becoming retained in this case, what was the scope of work that you were informed you were to be an expert in in this case?

A. I was informed I was to be an expert in helping the -- in providing, I'll say, my opinions on how bladder cancer should be evaluated within the context of the Camp Lejeune litigation.

Q. And at that time, had you heard of the Camp Lejeune water contamination?

A. I may have heard of it just in the periphery. There was a lot of advertisements at the time. But it certainly was not really on my radar at that point.

Q. Other than the advertisement, was there anything else that you may have reviewed that

would have formed the foundation of what the Camp Lejeune water contamination case might have been about?

A. No.

Q. So prior to February of 2023, other than the advertisements you spoke of, there was no literature that you reviewed or conversations you had with any experts or other foundation about the Camp Lejeune water contamination that you had in this case prior to this case?

A. No.

Q. Have you ever worked for the DOJ or been a government contractor before?

A. Yes.

Q. In what type of case would that have been? As a legal expert?

A. As a legal expert.

Q. And what other types of legal expert work have you done for the DOJ?

A. I was an expert witness on a medical malpractice litigation.

Q. Where was that medical malpractice litigation?

A. May I see my report?

Q. Is it the one you referenced?

A. It's the one I referenced in my report, yeah.

Q. That was one that you actually went to trial and testified at?

A. It did not go to trial, but I was deposed.

Q. I believe that was in New York. Does that sound right?

A. Yes.

Q. And was Mr. Anwar involved in that case?

A. No.

Q. Who was the DOJ attorney involved in that case?

A. I couldn't say.

Q. Did you write an expert report in that case, a written one?

A. I did.

Q. Other than the litigation in New York involving a medical malpractice claim, have you worked with the DOJ?

A. No. I want to correct the record. I have reviewed documents for another -- for a DOJ medical malpractice case. I've reviewed records.

Q. And starting with the case in New York, the medical malpractice claim, just generally,

what was that malpractice claim about?
A. It was about a patient who was diagnosed with bladder cancer, and the claim was that it was a delayed fashion due to a number of issues.
Q. And were you testifying for the plaintiff or the defendant in that case?
A. I was an expert witness for the DOJ in that case.
Q. So were you testifying that the alleged delayed diagnosis was, in fact, not delayed? Is that essentially what you were testifying to?
A. Essentially.
Q. In that case, did you offer your opinions to meet the burden of proof of more likely than not?
A. I did.
Q. And then the other DOJ case that you reviewed records for, was that another medical malpractice type of claim?
A. It was.
Q. What was the context of that?
A. I can't recall. It was sometime ago, and it didn't go very far.
Q. You didn't have to offer a report, testify or have a deposition?

A. No.
Q. Was that the same or a different DOJ attorney that you reviewed the records for?
A. Different.
Q. Other than those two cases, any other work that you performed for the DOJ or that you've been a government contractor for?
A. No.
Q. Did you have any personal connections with any other expert in this case?
A. I have personal connections with one of the experts for the PLG.
Q. Is that Dr. Sfakianos?
A. Yes. I don't know if personal is the right word. I would say professional is the correct word.
Q. But no other personal connections with any other experts?
A. No.
Q. Did you have any personal connections with any other attorney in this case?
A. No.
Q. Did you understand when you were engaged to be an expert in this case that you would be providing testimony against people that were

diagnosed with bladder cancer?
A. That's not my perspective.
Q. But you're a retained expert for the defendant in this case; right?
A. Yes.
Q. And the plaintiffs are individuals that are diagnosed with bladder cancer?
A. Yes.
Q. So your perspective is that you are not testifying in defense of the defendant in this case?
A. My perspective is that I'm not testifying against patients. That's not my perspective.
Q. And why is that?
A. Because I'm an advocate for patients. I'm an advocate for bladder cancer patients in particular. I'm an advocate for the truth. And my perspective is that speaking my scientific opinion about bladder cancer is in defense of patients with bladder cancer everywhere because it holds as sacred evidence, evidence-based medicine and truth.
Q. So you're a big proponent of the truth in this case; correct?

A. Scientific evidence.
Q. Did you need to seek permission from anyone in order to testify in this case?
A. No.
Q. You didn't have to speak to anyone at John Hopkins?
A. No.
Q. What interested you in this case, in this work? Why did you take it on?
A. I routinely take on work where I feel like I have an expertise. So really I only at this point take on expert witness work that is related to urothelial cancer. So if it's within my expertise, then I'll assess it.
Q. So going back to your invoices, on invoice number 2, the third line item from December 20, 2023 says worksheet review and development.
What is the worksheet that you reviewed?
MR. ANWAR: You can answer.
THE WITNESS: So the worksheet was an intake worksheet to attempt to really understand the bladder cancer development, staging, basic facts of patients who claim to experience bladder cancer and put forth -- I don't know what the

1 right word is, but like a claim for the Camp
2 Lejeune litigation to try to kind of have like a
3 one sheeter to easily be able to sort of glean the
4 basic facts of their bladder cancer.
5 BY MR. RUZICKA:
6 Q. And is this a worksheet that you
7 created?
8 A. This is a worksheet that I created in
9 collaboration with -- it went through some edits,
10 but, yeah, I mean, I created it.
11 Q. So you were asked to create a worksheet,
12 and in conjunction with others, you created this
13 worksheet; correct?
14 A. Yes.
15 Q. And is your worksheet a part of your
16 reports in this case?
17 A. It is not.
18 Q. And is that a worksheet involving any of
19 the plaintiffs that you're offering opinions on in
20 any of your reports?
21 A. I don't know.
22 Q. Was it a worksheet for a number of
23 bladder cancer plaintiffs in this case?
24 A. I don't know.
25 Q. Can you tell me a little bit more about

this worksheet?

A. I don't know what ended up happening after it was produced.

Q. Is it a spreadsheet? Is that what you mean?

A. No. It's basically a one, maybe two-page document that asks basic questions, demographic questions and specifically, you know, cancer-specific questions, what was the stage of the bladder cancer, what was the histology. I can't recall everything in it, but it was sort of like a basic fact sheet.

Q. You helped input some of that data into the worksheet?

A. No. I didn't help input the data. I helped create what the -- what information would be input it into it.

Q. I understand. Would that have been the plaintiff profile sheet to your recollection?

A. I can't recall.

Q. And then under there, the next four items are what appears to be plaintiffs' names, is that correct, Buckley, Cooper, Grandchamp, Larkins?

A. Yes.

Q. Are those bladder cancer plaintiffs in this case?

A. I don't -- none of these names are any of the names that I'm -- I've written a report about. So, you know, I want to answer your question directly.

Can you kind of rephrase that?

Q. Yes. You answered my question.

So these are plaintiffs that you reviewed their documents but did not provide any formal written opinions on; is that correct?

A. Correct.

Q. What was the purpose of your reviewing those cases?

A. To provide my opinions on the risk factors for bladder cancer development in those patients.

Q. Are all these invoices trying to capture all the work that you performed in this case?

A. Yes. The invoices speak to the hours spent on -- as it relates to my role as an expert witness in the DOJ litigation.

Q. And you tried to be accurate in your billing on what you were reviewing and what work you were performing?

A. Yes.
Q. I'll ask you to go to invoice number 5 of Deposition Exhibit 2. The second lined item from February 12, 2024 says Green doc review. What is a Green doc?
A. April 12, 2024 just to correct the record.
Q. Sorry.
A. I don't recall.
Q. Is Green the last name of a plaintiff?
A. Typically that's how I would have put it.
Q. Then going to invoice number 12, the fifth line item from December 15, 2024 states Goodman report review; is that correct?
A. Yes.
Q. Are you referring to Dr. Goodman, the DOJ retained expert in this case?
A. Yes.
Q. And is that the first time that you reviewed her report?
A. I can't recall.
Q. If you had reviewed it, you would have identified it in your billing; is that correct?
A. Not necessarily.

Q. And why is that?
A. I wouldn't -- sometimes if I review a report, it was general. So, you know, there's other just general doc review I did. It may not be fully reflected in the invoicing. So I can't be certain whether that's the first time I reviewed Goodman's report or not. I just don't know.
Q. Every time you mentioned, Doctor, reviewing these invoices, you have some notation of what you were reviewing, whether it was a plaintiff's name or a retained expert's name; is that correct?
A. Not necessarily. Sometimes it's labeled, but that doesn't mean that it's solely those documents.
Q. So it's your testimony that if you put down Goodman report review, that may have included other documents?
A. Yes.
Q. Based on your invoices, the document review that wasn't identified for a specific plaintiff, meaning it was identified for either a DOJ retained expert or other expert report, you billed about 9 hours in this case for those report

reviews.

Does that sound about accurate?

A. Can you show me where you're looking?

Q. Sure. If you look at Exhibit Number 2, invoice number 12, the fifth line item that we were just talking about says Goodman report review, December 17, 2024, Goodman report review. Collectively that's 3.5 hours, you'd agree, for those two line items?

A. Yeah.

Q. Then the second to last line item is Doc review (ATSDR/Goodman/other). That's another 2.5 hours; is that correct?

A. Correct.

Q. And then you have on invoice 13 1/29/2025 doc review DOJ experts, another 2 hours?

A. Yes.

Q. Then if you turn to Exhibit 16 -- sorry -- invoice number 16, the last line item says DOJ export review for 1 hour; is that correct?

A. Correct.

Q. And do you see anywhere else in your invoices where you reference an expert report review?

A. So there's points -- I'll just point out to you one example. I think this speaks to the generality of the invoicing. For example, invoice 13, 1/5/2025, where it says doc review Criswell reports, you know, that is not necessarily only Criswell reports. It's also general doc review.

I don't know -- I can't tell you right now sitting here today what I reviewed on that day by Criswell reports. Was it specific reports just to Criswell, to the DOJ experts or PLG experts? I can't say.

So I agree with the individual hours that you've said, but I disagree with the cumulative only because the documentation is more general than you're alluding to in this discussion.

Q. So it's your position that when you have a line item that mentions a specific plaintiff's name, that could include more general nonspecific plaintiff documents that you reviewed?

A. As it relates to the plaintiff, yes.

Q. If you look at your most recent invoice, the last -- invoice number 18 on Exhibit Number 2, it's that last page. It's not stapled on there.

A. Got it.

Q. Exhibit 18. It references a line item of your review of the Bailey and LaKind reports; is that correct?

A. Bailey, LaKind, Goodman.

Q. Correct. Is that the first time you reviewed the Bailey and LaKind reports?

A. No.

(Kates Exhibit 3 was marked.)

BY MR. RUZICKA:

Q. I'll hand you what we will mark as Exhibit 3. I'll represent to you this is one of the contracts that was provided in response to the request for production of documents to you in this case. The title of Exhibit 3 is an Amendment of Solicitation/Modification of Contract.

Do you see that?

A. Yes.

Q. Is this an amendment to the contract that you have as a government contractor in this case?

A. Yes.

Q. I'll direct your attention to the second to last page of Exhibit 3. And it talks about -- there's a section called the Schedule of Supplies/Services; is that correct?

A. Yes.
Q. And it's referencing expert witness services. Are those the expert witness services you are providing in this case?
A. Yes.
Q. And it appears to be an amendment of an original contract that was setting forth the scope of work of $150,000; is that correct?
A. Yes.
Q. And that was subsequently changed to $249,600; is that correct?
A. I'm reading the contract differently.
Q. Let me ask it this way. Is your current scope of work as a government contractor according to this amendment of solicitation/modification of contract a total of $339,600?
A. Yes.
Q. And that is your anticipated billing through the end of this year; is that correct?
MR. ANWAR: Object to form.
THE WITNESS: No.
BY MR. RUZICKA:
Q. If you look at the Schedule of Services/Supply Section on page 3, the line period of performance is from 2/3/2023 to 1/31/2025; is

that correct?
A. Yes.
Q. So this contract states that the line period of performance is up until 12/31/2025; correct?
A. Yes.
Q. Is it your anticipation that your billing may reach or exceed $399,000 in this case?
A. No.
Q. And why is that?
A. Well, I've been working on this case for almost two and a half years. And initially I was reviewing I think it was -- it was many cases. And the scope of work is a bit more narrow now. So that's why.
Q. But in any event, you have a contract with the government that allows you to bill upwards of $399,000; right?
A. Yes, I believe so. I've not thought about it that way.
(Kates Exhibit 4 was marked.)
BY MR. RUZICKA:
Q. I'm going to hand you what I'll mark as Deposition Exhibit 4. Is this your list of materials considered list from April 15, 2025?

A. Yes.
Q. Is this a document you've seen before?
A. Yes.
Q. So you helped create this and identifying all the materials that you considered in authoring your opinions in this case?
A. Yes.
Q. So it's your testimony that you've reviewed every document that's listed on this materials considered list?
A. Yes.
Q. And that your billing that you incurred to date encompasses all the documents that you reviewed on Exhibit 4?
A. Yes.
Q. Did you review water modeling expert reports in this case?
A. Can you be more specific?
Q. You identify that you read several water modeling expert reports including Dr. Hennet, Dr. Kelman, Dr. Spilotopoulos. I can't pronounce that one. If you look at the second page, Defense Expert Reports Offered By, is it your recollection that you reviewed water modeling expert reports in this case?

A. Yes.
Q. What purpose did the water modeling reports serve in your opinions about these plaintiffs' bladder cancers?
A. Well, I specifically was interested in comparing the models, and I believe the ones I most recently reviewed were Bailey and LaKind. And I also reviewed the models in the -- what's the word. It's not retort. It's when --
Q. Rebuttal?
A. Rebuttal, thank you. The rebuttal. And so I -- what was the reason I reviewed that?
Q. Yes.
A. For important background regarding -- helping rely on Dr. Bailey and LaKind regarding the issue of exposure as it relates to development of bladder cancer.
Q. Isn't it true that you're relying on Dr. Goodman and Dr. Bailey for the position that the contaminants in the water at Camp Lejeune are incapable of causing bladder cancer?
A. I'm relying on the opinion of Dr. Goodman as it relates to the development and the assessment of whether the water in Camp Lejeune was a risk factor for the development of

1 the specific patient's bladder cancer.
2 As it relates to Dr. LaKind and Bailey,
3 that's a little different. That's under the
4 supposition that if there had been a relationship
5 between the water and the specific four chemicals
6 involved and the development of bladder cancer,
7 would that threshold have met the exposure to be
8 high enough to lead or give them a risk of bladder
9 cancer development. So it's kind of a little
10 different.
11 Q. I agree. Let me ask that question
12 differently.
13 You're relying on the opinions of
14 Dr. Goodman and Dr. Shields that the water at Camp
15 Lejeune is not a risk factor for developing
16 bladder cancer; correct?
17 A. Yes. And specifically I'm relying on
18 the report of Dr. Goodman, which was an incredibly
19 thorough report reviewing, from what I can tell,
20 the vast majority of pieces of literature on this
21 topic to form my opinion that the water in Camp
22 Lejeune is unlikely to have caused each of these
23 patients' bladder cancer.
24 Q. Isn't it Dr. Goodman's position in this
25 case that there was no level of chemical exposure

at Camp Lejeune that could have reached to the point where these plaintiffs were at a risk for developing bladder cancer?

A. I believe that is Dr. Goodman's position.

Q. Is that your position as well?

A. That is my position.

Q. So why then are you looking at the individual exposure levels of the individual plaintiffs?

A. Because I think the modeling and the exposure is, first of all, indicative of the overall case. So even if -- I want more information. I don't want less. I'm always wanting to read and make sure I understand all sides of a story. That's why I looked at both Dr. Goodman's reports, and that's why I looked at the five reports that were meant to make up for what was her report.

All five of those reports really paled in comparison to her report, in my opinion, in terms of the thoroughness with which she evaluated all the literature. But having said that, I'm not here to offer an opinion on one side or another. I'm here to offer my opinion as it relate to

bladder cancer. And I felt the need to read all reports in order to do that.

Q. Even though Dr. Goodman expressed an opinion that regardless of what the levels of the contaminants were in the water, there is no chance that there was a risk for development of bladder cancer for these patients, you still decided to go thorough and look at these exposure reports and bill for that time?

MR. ANWAR: Object to form.

THE WITNESS: While I found Dr. Goodman's report to be incredibly thorough, she went through -- I don't want to paraphrase everything she did, but she went through both, whether the water in Camp Lejeune could have caused bladder cancer, and then she went from you PCE, TCE, vinyl chloride and benzene as to whether each of those could have caused bladder cancer.

She went through the animal experiments. She went through the retrospective data. She went through the case control cohorts. It was incredibly thorough.

I absolutely wanted to get other opinions on this topic, which is why I reviewed the five reports from the PLG group. And I also

1 wanted to understand all sides of this situation.
2 This is affecting patients. These are patients
3 that deserve somebody looking at their cases with
4 honesty and truthfulness. And I felt that the
5 best way to do that was to review all of these
6 documents. And I was asked to review the
7 documents.
8 BY MR. RUZICKA:
9 Q. Did you have anyone assist you in your
10 review of any documents or otherwise assist in
11 your authoring of your reports?
12 A. No.
13 Q. Did you use any sort of artificial
14 intelligence to review or summarize any of the
15 documents that you have on your materials
16 considered list?
17 A. No.
18 Q. Is there anyone else that shares in the
19 income that you are receiving in this case for
20 Camp Lejeune?
21 A. No.
22 Q. How many times have you been an expert
23 witness in litigation?
24 A. Can you clarify what you mean by expert
25 witness?

Q. How many times have you been retained to provide expert testimony in a civil lawsuit?

A. I cannot count the number of times I've been retained to perform doc review. Not that it's so many. It's just I can't recall. But I have provided testimony as an expert witness one other time, which we talked about.

Q. So you've done a lot of doc review in terms of cases for medical malpractice claims?

A. Primarily.

Q. Are those doc reviews for anyone outside of the Department of Justice or as a government contractor?

A. Yes.

Q. And do you recall what law firms or lawyers that you were working with on those doc reviews?

A. No.

Q. Were you looking at them for -- from the perspective of a doc review for an individual plaintiff's claim, or were you looking at them from the perspective of a defendant's position?

A. Both.

Q. Do you have any idea what percentage of the doc reviews you did for plaintiffs versus

defendants?
A. About 50/50.
Q. What was the outcome of the case that you had recently in New York?
A. It settled.
Q. There was no --
A. I honestly don't know.
Q. There was no jury verdict or no trial?
A. No.
Q. So if you testified in that case --
A. No. I was deposed. I was not testifying at trial.
Q. Have you ever testified at trial?
A. No.
Q. Have you ever offered opinions in a legal case regarding causation of bladder cancer?
A. No.
Q. Have you ever offered opinions in a legal case involving an environmental exposure and whether or not it was the cause of a person's cancer?
A. No.
Q. Ever offered any opinions about PCE, TCE, vinyl chloride or benzene?
A. No.

Q. Ever authored any publications about PCE, TCE, vinyl chloride or benzene and its association with bladder cancer?

A. No.

Q. So this is the first time you're offering an opinion regarding causation of bladder cancer?

A. Yes.

Q. Are you aware of the Camp Lejeune Justice Act?

A. I'm aware of it.

Q. Have you read it?

A. I believe I read it, but it was sometime ago.

Q. I don't believe it's listed on your materials considered list.

Did you consider it in your opinions that you are offering in this case?

A. Consider it how?

Q. Did it play any role in your opinions that you are providing in this case?

A. Not particularly.

Q. Why not?

A. I found my role in this case to be really specific to the patient's bladder cancer or

in other cases, upper tract urothelial carcinoma, which is different. But regardless, I found my role to be -- to look at those patients' bladder cancer risk profiles and assess whether the water in Camp Lejeune denoted a risk factor for their bladder cancer development.

Q. Are you aware that the Camp Lejeune Justice Act was a law enacted by Congress that forms the basis this lawsuit?

A. I'm aware that there was a law or that there was legislation by Congress as it relates to this. But to be honest with you, I don't know a lot of the details around that.

Q. Did you apply the burden of proof that was set forth in the Camp Lejeune Justice Act in authoring your opinions in this case?

MR. ANWAR: Object to form.

THE WITNESS: Can you be more specific?

BY MR. RUZICKA:

Q. Yes. Earlier you testified that in your medical malpractice cases, you apply the burden of proof of more likely than not; is that correct?

A. Correct.

Q. In this case, the Camp Lejeune Justice Act sets forth burdens of proof that apply to this

1 litigation. Are you aware of that?
2 A. I'm aware that there's differences of
3 opinion about the language around the burden of
4 proof. So can you quote what -- do you have it in
5 front of you that I can see, the Camp Lejeune
6 Justice Act? Can we look at it together? Then I
7 can kind of answer your question.
8 MR. RUZICKA: I found a good spot to
9 stick this once I -- Exhibit 5; correct?
10 MR. ANWAR: Yes.
11 (Kates Exhibit 5 was marked.)
12 BY MR. RUZICKA:
13 Q. I'm going to hand you what's been marked
14 as Deposition Exhibit 5, which is a copy of the
15 Federal Cause of Action Relating to the Water at
16 Camp Lejeune, North Carolina. I'll direct your
17 attention to subparagraph (c) where it states
18 Burdens and Standard of Proof.
19 Do you see that?
20 A. Yes.
21 Q. I'll direct you to the second paragraph
22 there where it states Standards.
23 Do you see that?
24 A. Yes.
25 Q. It says, "To meet the burden of proof

described in paragraph 1, a party shall produce evidence showing that the relationship between exposure to the water at Camp Lejeune and the harm is (A) sufficient to conclude that a causal relationship exists, or (B), sufficient to conclude that a causal relationship is at least as likely as not."

Did I read that correctly?

A. Yes.

Q. So the Camp Lejeune Justice Act sets forth the burden of proof in this case; is that correct?

MR. ANWAR: Object to form.

THE WITNESS: I'm not a legal scholar. I can't answer that question.

BY MR. RUZICKA:

Q. But you testified earlier that the burden of proof that you applied in medical malpractice cases was more likely than not.

A. I would testify that I was asked to provide an opinion about whether it was more likely or not. I would say whether -- what the burden of proof is that I'm asked to give an opinion on is a legal question.

Q. So you were not asked to provide the

burden of proof as described in the Camp Lejeune Justice Act; is that correct?

MR. ANWAR: Object to form.

THE WITNESS: I was asked to provide an opinion about whether a risk factor was more likely than not to cause bladder cancer.

BY MR. RUZICKA:

Q. But you weren't asked whether or not there was a causal relationship at least as likely as not; is that correct?

A. That's correct.

Q. But you were aware of the Camp Lejeune Justice Act, and you had reviewed it prior to offering your opinions; correct?

A. I can't say one way or the other.

Q. I believe you testified earlier that you reviewed it.

A. I said I thought I had reviewed it. Again, this would have been two and a half years ago. If it's not listed on the list of documents, then I can't say one way or the other whether I reviewed it or not.

(Kates Exhibit 6 was marked.)

BY MR. RUZICKA:

Q. I'm going to hand you what's been marked

Deposition Exhibit 6, which is a document that is on your materials considered list. It is the first page of the Master Complaint. You have on your materials considered list that you reviewed the Master Complaint; correct?

A. Give me one second. Yes. It says here on page 2 of materials listed, Exhibit 4, Master Complaint.

Q. So Deposition Exhibit 6 that's in front of you, I'll have you read the first paragraph, please.

A. "This Complaint arises under Camp Lejeune Justice Act of 2022 and is filed pursuant to the provisions of Section 6 of the September 26, 2023 Case Management Order No. 2 for adoption by reference to individual CLJA actions and in conjunction with the court approved short form Complaint."

Q. So you're aware that in the Master Complaint, the very first allegation was that this arises under the Camp Lejeune Justice Act with a citation directly to the Camp Lejeune Justice Act; is that correct?

A. I will testify that I just read what you asked me to read. How to interpret it I leave to

the lawyers.

Q. So you read the Master Complaint. And in the Master Complaint, it identifies Camp Lejeune Justice Act; correct?

A. Again, yes, I mean.

Q. But it's your testimony --

A. It describes -- the document that you gave me again, to be honest with you, is a lot of legalese. So I'm really not comfortable parsing out what it's trying to say. You would probably know that better than me.

Q. I'm just trying to get at whether or not you looked at the Camp Lejeune Justice Act before you offered your opinions in this case.

A. Again, I would tell you that I reviewed a number of documents. The documents that I reviewed should be in my list of reviewed documents. But some of these documents I reviewed more than two and a half years ago or two years ago. So I can't recall the specifics of everything I reviewed.

Q. So you don't know whether you're following the law that's set forth in the Camp Lejeune Justice Act in this case?

MR. ANWAR: Object to form.

THE WITNESS: Can you explain to me a little bit more what you mean by following the law?

BY MR. RUZICKA:

Q. Well, you understand that the law in this case is the Camp Lejeune Justice Act; correct?

A. Actually, I do not follow this line of questioning.

Q. So you don't know what the standards were that were set forth by Congress that are applicable to your opinions provided in this case?

MR. ANWAR: Object to form.

THE WITNESS: I was asked to provide opinions on whether a risk factor was more likely than not related to the development of bladder cancer.

BY MR. RUZICKA:

Q. Do you believe it's important to know what the standards are that were set forth by Congress and that are the law of this case?

MR. ANWAR: Object to form.

THE WITNESS: I believe it's up to the attorneys to decide and then ask me questions related to it. My job is to provide expert

opinion about bladder cancer, and that's where I would leave it.

BY MR. RUZICKA:

Q. So the opinions that you provide in this case were all to a burden of proof of more likely than not?

A. Yes.

Q. I believe I asked you this earlier. When did you first become aware of the Camp Lejeune water contamination case? Was it when you were retained?

A. Yeah. I think I said this. I think I was aware -- there was a lot of advertisements on the television. So I may have kind of had it in my periphery knowledge that something was going on, but it really wasn't on my radar until I was retained.

Q. Did any of your patients ever mention Camp Lejeune water contamination to you?

A. I don't believe so.

Q. So you don't recall any communications with any patient about Camp Lejeune water contamination?

A. No.

Q. You never provided an opinion regarding

the Camp Lejeune water contamination and its possible connection with a patient's bladder cancer?

A. Not that I recall.

Q. Do you know what a nexus letter is?

A. No.

Q. Have you ever provided any sort of medical opinion in support of a VA disability claim?

A. Not that I recall.

Q. So you don't recall whether you ever authored a medical opinion in support of a Camp Lejeune veteran for his or her determination of their VA disability benefits relating to bladder cancer?

A. I don't recall. And I'll tell you I treat -- I have over a thousand bladder cancer patients in my practice, and it's very common to help them fill out disability forms and different types of forms. I have a team that helps me. It's kind of a success.

So that's why I'm answering not that I recall, because the shear volume of my patients is such that remembering something from three or four years ago is not always as easy as I would like.

Q. But you'd recall if you reviewed Camp Lejeune literature and came to a conclusion that it was related to bladder cancer; right?

A. I would hope I would have remembered that, but again, I don't recall anything related specifically to Camp Lejeune. But I do see a large volume of different types of disability claims in my large cancer practice.

Q. Are you aware that bladder cancer is one of the presumptive conditions within the VA disability claims?

MR. ANWAR: Object to form.

THE WITNESS: No.

BY MR. RUZICKA:

Q. You're not aware of that?

A. I'm not really aware of the VA -- well, I'll say it like this. Can you show me the VA disability claims?

Q. We'll talk about it later.

But sitting here right now without reviewing any documents, you don't recall ever looking at the VA disability presumptive condition for Camp Lejeune?

A. No. In answering that, looking through the materials reviewed, I do not see it listed.

Q. But you don't recall sitting here whether you ever looked at what the VA presumptive conditions were for VA disability benefits related to Camp Lejeune?

A. If it's listed on the materials reviewed, then again I looked at it. If it's not listed, I may have looked at it. But again, this would have been two and a half years ago, two years ago. But I don't recall sitting here.

Q. Do you recall ever having any communications with any other urologist that were of the opinion that Camp Lejeune water put veterans at risk for developing bladder cancer?

MR. ANWAR: Object to form.

THE WITNESS: No.

BY MR. RUZICKA:

Q. Have you ever publicly agreed that the statements of other -- have you ever publicly agreed that the water contamination at Camp Lejeune is associated with bladder cancer?

A. No.

Q. I'm going to hand you -- I'll just ask you. Your CV lists that you're John Quale Travel Fellow with The Bladder Cancer Advocacy Network, is that correct, or were?

A. I was, yeah.
Q. And when was that to your recollection?
A. If you give me a copy of the CV, I can kind of go through it with you. I do a lot for The Bladder Cancer Advocacy Network. So I have a lot of roles in that. The Quale Fellow I believe was 2015, but let's look at it on my CV to be sure that year is right.
Q. Let me just ask you: What is The Bladder Cancer Advocacy Network?
A. It's an organization that supports bladder cancer patients and is the leading scientific research community in the United States for bladder cancer-specific research and thinking.
Q. So it's a reputable organization?
A. Yes.
Q. You said it was the leading scientific research thinking association in the United States.
A. For bladder cancer research, in my opinion, yeah.
Q. And it's a nonprofit; correct?
A. I believe so, yeah.
Q. And there are experts that make up -- well, does The Bladder Cancer Advocacy Network

have a scientific advisory board?

A. I think it may. I'm not sure about the organization's structure and what it is. I have a role on it as do many of my colleagues.

Q. Are there urologists and oncologists and radiologists and pathologists that all work within that association?

A. Yes.

Q. Your CV also lists that you were a part of the Think Tank Steering Committee.

A. Yes.

Q. What is the Think Tank Steering Committee for The Bladder Cancer Advocacy Network?

A. It's a -- essentially, it's a specialty bladder cancer conference. It's the leading, in my opinion, specialty bladder cancer conference that exists in which a multidisciplinary group of clinicians, patients, patient's advocates, come together for the benefit of our bladder cancer patients.

Q. Is the Bladder Cancer Advocacy Network a place where newly diagnosed patients are regularly turning to for guidance and information?

A. Yes.

Q. And do you give out Bladder Cancer

Advocacy Network materials to patients that are newly diagnosed or that are patients in your practice?

A. Yes.

Q. Is the information that the Bladder Cancer Advocacy Network puts out generally accepted by the bladder cancer community of scientists and doctors?

A. It depends.

Q. What's it depend on?

A. I would have to see what information specifically you're talking about. The pamphlet -- you're talking about the booklet that's given to new patients. It's a very good booklet. It has a lot of great information. Does it mean every single page in that booklet is something that I would stand by? No. But no bladder cancer booklet is going to have a hundred percent information that I would agree with.

The field of cancer is dynamic, so it's constantly changing. The moment it's printed, there's something that's likely already changed in the field. So that's why I answered like that.

Q. You may not know, but are you aware that there's a scientific advisory board that reviews

the materials before they are put forth?
A. I'm not familiar with the process of how and whether all materials are reviewed. My role within BCAN as it's called -- it's not beacon. It's like BCAN like a beacon of light -- is really around the think tank. So I don't know the process around the scientific advisory board.
Q. Are you aware that some of your colleagues are on the BCAN advisory board?
A. No.
Q. I'm not going to butcher his name, but P.J. Bivalacqua that you co-authored the urology textbook with?
A. Trinity.
Q. Trinity. I thought he went by -- maybe that's just his initials. Trinity. And how do you pronounce the last name?
A. Bivalacqua.
Q. I was close.
A. Yeah. You're pretty good.
Q. He's one of your colleagues; correct?
A. Yes.
Q. James McKiernan, is he one of your mentors?
A. Yes.

Q. I'm going to hand you what I'm going to mark as --

A. I'm fine to keep going for a little bit, but like in the next 10, 15 minutes, can we take a break?

Q. Sure, sure, sure.

Dr. Kates, do you have a Twitter account, now X account?

A. Yes.

Q. Is it a professional account that you -- it's not like a private account for you personally. It's an account that you use in your role as a urologic oncologist in Johns Hopkins; right?

A. No. It's a personal account.

(Kates Exhibit 7 was marked.)

BY MR. RUZICKA:

Q. I'm going to hand you what's been marked as Deposition Exhibit 7. Is that your -- is that a printout of your X account?

A. Yes.

Q. So that's you?

A. Yes.

Q. And it says underneath your name associate professor of urology and oncology,

director division of urologic oncology@Brady Urology; correct?

A. Yes.

Q. And then underneath there, it has a link to your Johns Hopkins Medicine bio page; is that correct?

A. Yes.

Q. Do you regularly post on this account about urologic oncology issues?

A. Yes.

Q. This is a public page meaning that others can review it and look at it?

A. Yes.

(Kates Exhibit 8 was marked.)

BY MR. RUZICKA:

Q. I'll hand you what's been marked as Deposition Exhibit 7; is that correct?

MR. ANWAR: Eight.

MR. RUZICKA: Eight. I'm sorry. Look like an 8.

BY MR. RUZICKA:

Q. Do you recall making public comments about Camp Lejeune contaminated water in February of 2021?

A. No.

Q. But this is a post that you made on February 2, 2021; correct?

A. Yes.

Q. Can you please read your post from February 2, 2021?

A. "Patient taught me about Camp Lejeune Marine Corps base with contaminated drinking water exposed many veterans to bladder cancer. Now he has 100 percent disability benefits." And I @MattMossanen @BladderCancerUS with links to BCAN and va.gov.

Q. Do you agree with the statement that you made on February 2, 2021?

A. That a patient taught -- let's see the statement, and I'll try to parse out whether I currently agree with it.

"Patient taught me about Camp Lejeune Marine Corps base with contaminated drinking water" I no longer view -- well, contaminated, do I still agree with that word?

I do not believe that the chemicals in the drinking water were sufficient to have caused bladder cancer as a risk factor now that I delved into this. So, no, I wouldn't agree with that particular statement. But again, patients teach

me all the time about things. And so that part of it and then giving links I wouldn't have any further comment on.

Q. Dr. Kates, we talked about how important it is to be a credible witness and to be honest; correct?

A. Yes.

Q. I've asked you a number of times throughout this deposition whether you made any public comments about Camp Lejeune water contamination prior to involvement in this case; correct?

A. Yes.

Q. And you have answered that you had not; is that correct?

A. Correct.

Q. And that would not be an honest answer to my questions; correct?

MR. ANWAR: Object to form.

THE WITNESS: I believe I answered that I don't recall. Maybe I didn't. But if I could change the answer, I would have changed it to I don't recall because I do not recall making any of these comments. But obviously, I did four and a half years ago. If I could change that answer, I

1 would change it to I don't recall because the
2 honest answer is I don't recall.
3 BY MR. RUZICKA:
4 Q. I also asked you to provide all the
5 documents about public communications regarding
6 water contamination, be provided pursuant to the
7 subpoena in this case where the ramifications for
8 not obeying that order is contempt.
9 Do you understand that?
10 A. Yes.
11 Q. And you said that you performed a search
12 of all your communications and that you didn't
13 have any public comments about the water
14 contamination at Camp Lejeune; correct?
15 A. Correct.
16 Q. You did not produce this post in
17 response to the request for production that is
18 made pursuant to the subpoena in this case;
19 correct?
20 A. Correct.
21 Q. Are you trying to hide this post that
22 you made back prior to this litigation?
23 A. No.
24 MR. ANWAR: Object to form.
25

BY MR. RUZICKA:
Q. Who is Matt Mossanen?
A. He's a urologic oncologist.
Q. Do you know why you tagged him in this post?
A. I have no idea.
Q. And who is @BladderCancerUS?
A. That's the Bladder Cancer Advocacy Network.
Q. Do you recall your citations on this post?
A. No.
(Kates Exhibit 9 was marked.)
BY MR. RUZICKA:
Q. I'm going to hand you what's been marked as Deposition Exhibit Number 9, which is an article from the BCAN website that's titled "Bladder Cancer in the Brave: Camp Lejeune."
Is that correct?
A. Yes.
Q. Looking this document, do you recall reviewing this article that was on BCAN's website back February of 2021?
A. No.
Q. If I represent to you that the first

citation on your post on Deposition Exhibit 8 is to this link, would you disagree with me?

A. No.

Q. Would you have reviewed this prior to citing it on your public post on X?

A. I don't know.

Q. Do you think that you just randomly chose a link and put it as a citation without reviewing it before posting it?

A. Again, I have no recollection of whether I reviewed it or not. So I'm not going to posit to you whether I did or not.

Q. But you would agree with me that it is more likely that you did review it before you posted it as a citation on the Twitter account; right?

A. Again, I'm going to repeat the comment I just made about not positing to you whether I reviewed something four and a half years ago.

Q. But looking at your Twitter post, that doesn't refresh your recollection of reviewing this article?

A. Not at all.

Q. Not at all. Okay. In this article I'll just direct your attention to a few paragraphs

within it. The second paragraph -- do you know who Dr. Clapp is?

A. No.

Q. Is he a -- so you're not aware he's an epidemiologist?

A. I'm not aware.

Q. Never worked with him in the past?

A. No.

Q. You're not aware that he holds a doctor of science in epidemiology from Boston University Public School of Health?

A. No.

Q. You're not aware that he also has a master's in public health from Harvard?

A. No.

Q. Dr. Mossanen, he's as uro-oncologist at Harvard, is that what you said?

A. I didn't say where he was practicing. I'm not a hundred percent where he's practicing.

Q. But you can't recall sitting here today why you cited him on that post?

A. No. Of course, now that you've shown me the article with him his name on it, it's likely that that's why I cited him. But I don't remember any of this.

Q. So reading the second sentence of the second paragraph on the first page of the Deposition Exhibit 9, it states, "First is Camp Lejeune, North Carolina and the exposures that veterans there had or servicemen there had while stationed at Camp Lejeune and were drinking contaminated water, water contaminated with two chemical solvents that have been associated with bladder cancer."

Did I read that correctly?

A. Yes.

Q. Reading that sentence, does that refresh your recollection of the contents or discussion within this bladder cancer and the brave at Camp Lejeune article?

A. No.

Q. I'm going to direct your attention to the second page where it says Dr. Clapp. It states, "The Camp Lejeune drinking water contamination, as I mentioned, was primarily due to two chemicals that were in the drinking water for different parts of the base."

Did I read that correctly?

A. Can you show me? Make sure I'm...

Q. Sure. Page 2, the orange -- I don't

1 know, is yours color coded?
2 A. It's color coded.
3 Q. So the orange Dr. Clapp, I just read
4 that first sentence. "The Camp Lejeune drinking
5 water contamination" --
6 A. It's not color coded. Oh, yeah. Sorry.
7 Keep going.
8 Q. Do you see where I am?
9 A. Yes.
10 Q. "The Camp Lejeune drinking water
11 contamination, as I mentioned, was primarily due
12 to two chemicals that were in the drinking water
13 for different parts of the base."
14 Did I read that correctly?
15 A. Yes.
16 Q. Then skipping ahead a little bit to the
17 fourth sentence where it starts, "The dry cleaning
18 solvent," do you see that?
19 A. I see that in the text box.
20 Q. "The dry cleaning solvent called
21 perchlorethylene that was detected in the drinking
22 water was from both sources."
23 Did I read that correctly?
24 A. Yes.
25 Q. Then I'm going to direct your attention

to the first sentence of the next paragraph down where it starts, "The second important exposure was the chemical called trichloroethylene."

Did I read that correctly?

A. Yes.

Q. Then going further down in that paragraph, the fifth sentence down states, "There was additional exposure to benzene from a different source, but I'm going to talk primarily because of the interest in bladder cancer with these two solvents, perchlorethylene and trichloroethylene."

Is that correct?

A. Yes.

Q. This article is talking about the contamination at Camp Lejeune with trichloroethylene and perchlorethylene; is that correct?

MR. ANWAR: Object to form.

THE WITNESS: It looks like, yeah, the paragraph you mentioned, I'll just quote, "There was additional exposure to benzene from a different source, but I'm going to talk primarily because of the interest in bladder cancer with these two solvents perchlorethylene and the

trichloroethylene."

So, yes, those two are mentioned.

BY MR. RUZICKA:

Q. So Dr. Clapp and Dr. Mossanen are trying to educate members of BCAN about the association between the water at Camp Lejeune and bladder cancer, more specifically the association with PCE and TCE; is that correct?

MR. ANWAR: Object to form.

THE WITNESS: I don't know exactly what the intent is of this article, but I wouldn't have any reason to disagree that that's the intent.

BY MR. RUZICKA:

Q. So the members of BCAN, the largest organization of bladder cancer advocacy in the United States, presented an association between bladder cancer and exposure to the water at Camp Lejeune; is that correct?

MR. ANWAR: Object to form.

THE WITNESS: I would say they presented a story, not a study. And I would posit that there's a difference between the two.

BY MR. RUZICKA:

Q. But this article was cited in your Twitter post back in February of 2021; right?

A. Yes.
Q. And that Twitter post talks about how the contaminated water, the contaminated drinking water exposed many veterans to bladder cancer; correct?
MR. ANWAR: Object to form.
THE WITNESS: I would say that the Twitter post is exactly -- it's Exhibit 8. So, yeah, I mean, I'm happy to read it again.
BY MR. RUZICKA:
Q. My question was that you on February 2, 2021, after reviewing this article, cited in support of your statement that the contaminated drinking water exposed many veterans to bladder cancer?
A. I disagree with that statement.
Q. Why do you disagree with that statement?
A. You had a number of leading parts of the question that I can't verify.
Q. Let's break it down. Your post cites to this article, Deposition Exhibit 9; correct?
A. My post to this article cites Exhibit 9; correct.
Q. And your statement to the public in February of 2021 was that Camp Lejeune Marine

Corps Base with contaminated drinking water exposed many veterans to bladder cancer; correct?

A. My post is that a patient taught me about Camp Lejeune and taught me that contaminated drinking water exposed many veterans to bladder cancer. So I want to focus on that part, because obviously, this was from a conversation with a patient that I never verified with the scholarly literature.

I think this post shows -- maybe it's a learning point for me -- that, you know, my conversations with my patients maybe should be private. That's what I'm learning from this.

Q. But you did verify by providing these citations on Deposition Exhibit 8; correct?

A. Again, these are not scholarly citations. So the word "citations" is loose. I'll say it cited a story, but in my world, a citation is a scholarly article. These are not scholarly articles.

MR. RUZICKA: Let's take a break.

THE VIDEOGRAPHER: Off the record at 10:56.

(Recess from 10:56 a.m. to 11:07 a.m.)

THE VIDEOGRAPHER: Back on the record at

11:07.
BY MR. RUZICKA:
Q. Dr. Kates, we just took a short break. Did you have any discussions with your counsel?
A. No.
Q. Going back to Deposition Exhibit 8 that refers to a patient receiving a hundred percent disability benefits for his exposure to the water at Camp Lejeune, did you assist or otherwise help him in achieving getting those disability benefits through the VA?
A. I have no recollection of this interaction from four and a half years ago beyond what you're telling me.
Q. But I think you testified earlier that your team sometimes helps and facilitates patients get those disability benefits.
A. My team helps with a number of different types of stability benefits. I can't say whether it's VA. There's many different types of benefits that we're asked to fill out forms for. FMLA would be like it isn't really a benefit, but that would be an example.
Q. But sitting here today, you can't recall whether or not you provided any sort of opinion to

1 the Veterans Administration about this patient's
2 bladder cancer being related to his exposure at
3 Camp Lejeune?
4 A. I can't recall.
5 Q. We talked about this citation number one
6 to the BCAN, the Brave article, Deposition
7 Exhibit 9.
8 (Kates Exhibit 10 was marked.)
9 BY MR. RUZICKA:
10 Q. Next I'm going to show you what I'll
11 mark as Deposition Exhibit 10. I'll represent to
12 you that is the link that you provided in your
13 post on Deposition Exhibit 8 as cited number 2.
14 MR. ANWAR: Do you have a copy of that?
15 MR. RUZICKA: I'm sorry.
16 MR. ANWAR: That's okay. Thank you.
17 BY MR. RUZICKA:
18 Q. Do you recall reviewing this Resources
19 for Veterans page from BCAN prior to making your
20 post in February of 2021?
21 A. No.
22 Q. You would agree with me that the second
23 page of this exhibit identifies Camp Lejeune past
24 water contamination in the second half of the
25 page; is that correct?

A. Yes, sir.

Q. And it states that "Between 1957 and 1987, people serving or living at the U.S. Marine Corps Base Camp Lejeune, North Carolina were potentially exposed to drinking water contaminated with industrial solvents, benzene and other chemicals. This chemical exposure may have led to adverse health conditions. The Veterans Administration released this information sheet in July 2015. To read the Camp Lejeune past water contamination page, click here."

Did I read that correctly?

A. Yes.

Q. But you don't remember reviewing this section of the BCAN website for Resources for Veterans?

A. I don't recall doing that in 2021, no.

Q. So you don't recall whether you reviewed the information sheet from July of 2025 provided by the Veterans Administration regarding the Camp Lejeune water contamination?

A. Can you repeat your question?

Q. Sure. What I just read on page 2 is that the Veterans Administration released this information sheet in July of 2015 with a link to

1 click here; is that correct?
2 A. Yes.
3 Q. But you don't recall sitting here
4 whether you reviewed that information sheet or
5 clicked that link and looked at the document?
6 A. Correct.
7 Q. And then the last sentence says, "To
8 read the Institute of Medicine: VA Clinical
9 Guidance for Health Conditions Identified by the
10 Camp Lejeune legislation (2015) full report, click
11 here."
12 Did I read that correctly?
13 A. Yes.
14 Q. Do you recall reviewing the VA Clinical
15 Guidance for the Health Conditions Identified by
16 the Camp Lejeune Legislation 2015 full report?
17 A. I don't recall whether I read this
18 report. And one layer deeper, I don't recall
19 whether within this report I clicked on this link.
20 Q. But according to the link that you cited
21 in your X post from February 2021, there was a
22 resource for veterans from BCAN regarding the Camp
23 Lejeune water contamination; is that correct?
24 A. In the Twitter post that you're giving
25 me as Exhibit 8, there are links to the story from

1 BCAN and then the resources to BCAN, yes.
2 Q. In looking at your Deposition Exhibit 8,
3 there's a third citation that is
4 "VA.gov/disability/eli..."; correct?
5 A. Correct.
6 Q. And you don't recall sitting here today
7 what that citation was to?
8 A. No.
9 (Kates Exhibit 11 was marked.)
10 BY MR. RUZICKA:
11 Q. I'm going to hand you what I'm going to
12 mark as Deposition Exhibit number 11. I'll
13 represent to you that that is a copy of what was
14 contained in the link in February of 2021 that you
15 provided in your Twitter post.
16 Do you recall reviewing this website
17 from the U.S. Department of Veteran Affairs?
18 A. No.
19 Q. And is the title of this website Camp
20 Lejeune Water Contamination Health Issues?
21 A. That's the title of the third link, yes.
22 Q. And the first sentence on the first page
23 states, "If you served at Marine Corps Camp
24 Lejeune or Marine Corps Air Station (MCAS) New
25 River in North Carolina, you may have had contact

with contaminants in the drinking water there."

Did I read that correctly?

A. Yes.

Q. The second sentence says, "Scientific and medical evidence has shown that an association between exposure to these contaminants during military service and development of certain diseases later on."

Did I read that correctly?

A. Yes.

Q. So do you recall reviewing the science and medical evidence showing an association between exposure of the contaminants at Camp Lejeune to the development of certain cancers back in February of 2021?

MR. ANWAR: Object to form.

THE WITNESS: No.

BY MR. RUZICKA:

Q. I'll direct your attention to the second page of this Exhibit 11. There's a blue box that starts with "Am I eligible for disability benefits from the VA."

Did I read that correctly? The second page.

A. Thank you. Yes.

Q. Under there it says, "And you must have a diagnosis of one or more of these presumptive conditions." And the third bullet point is bladder cancer; is that correct?

A. Yes.

Q. In February 2021, you posted on your X account this article that cites to science and medical evidence showing an association between exposure to the contaminants at Camp Lejeune with a presumptive condition of bladder cancer; is that correct?

MR. ANWAR: Object to form.

THE WITNESS: I disagree with that summary.

BY MR. RUZICKA:

Q. What do you disagree with?

A. I would say I posted, and, obviously, I have no memory of posting this, but I view myself as an advocate for my patients. I had not done the rigorous review that I've done since. And I wanted to give my patients resources. I still think patients should have -- my patients should have the resources every other patient has for any benefit.

It wasn't my job at that time to assess

the risk profile of those patients in a legal setting. It was my job to make my patients aware of resources through the VA. So that's how I view that summary.

Q. But prior to being retained in this case and being compensated for the opinions you're providing, you provided your patients and anyone else on X with various resources that all support the science and medical evidence of an association between bladder cancer and the water at Camp Lejeune; is that fair?

MR. ANWAR: Object to form.

THE WITNESS: I disagree with that statement as well.

BY MR. RUZICKA:

Q. Which of these three articles that were cited on your Twitter post don't have an association with the water at Camp Lejeune and bladder cancer?

MR. ANWAR: Object to form.

THE WITNESS: None of these articles that I've cited are scholarly articles and speak to evidence around whether the water in Camp Lejeune caused bladder cancer.

BY MR. RUZICKA:
Q. But is it fair to say that your opinion in February of 2021 based on your review of materials, that you had the opinion that the water at Camp Lejeune was associated with the development of this patient's bladder cancer?
MR. ANWAR: Object to form.
THE WITNESS: No.
MR. ANWAR: Doctor, if you can pause for a second to allow me to make my objection. Thank you.
BY MR. RUZICKA:
Q. Do you believe that your patient that you referenced in this Twitter post should still get a hundred percent VA disability benefits for his bladder cancer?
MR. ANWAR: Same objection.
THE WITNESS: It's not my job to decide that for my patient.
BY MR. RUZICKA:
Q. Would you agree with me that if you didn't believe in February of 2021 that your review of the citations in your Twitter post were supportive of water contamination at Camp Lejeune being associated with bladder cancer, that you

1 wouldn't have posted that?
2 MR. ANWAR: Object to form.
3 THE WITNESS: I disagree with that
4 comment. And the reason -- I'll take it one step
5 forward -- is that as a physician, we're advocates
6 for our patients, our individual patients. So my
7 job as a physician is to treat their bladder
8 cancer and provide them resources for their
9 treatment. So I view those roles as important.
10 And my job today is to take a scholarly
11 approach to the literature to assess risk as it
12 relates to the development of bladder cancer.
13 BY MR. RUZICKA:
14 Q. Back in February of 2021, why would you
15 provide these citations if you disagree with the
16 contents in those citations?
17 MR. ANWAR: Object to form.
18 THE WITNESS: Again, back in 2021 I
19 wasn't assessing the validity of Camp Lejeune as
20 it relates to development of bladder cancer. I
21 was providing resources for my veterans and my
22 veteran patients. And if it had been any other
23 resource available to them that they could apply
24 for, I would be offering that, again, not related
25 to whether I believe them receiving the benefits

is valid. As a physician, part of my role is to be an advocate for my patient.

BY MR. RUZICKA:

Q. But the first citation that you have is to the BCAN article the Brave, which has nothing to do with VA disability benefits. It's a review of epidemiologic literature by an epidemiologist in which he states that there's an association between PCE and TCE and bladder cancer.

MR. ANWAR: Object to form.

BY MR. RUZICKA:

Q. Is that correct?

A. I would disagree with that summary of the article.

Q. And why is that?

A. Well, let's look at the article. So this article is by the Bladder Cancer Advocacy Network to educate patients and their families, specifically veterans, to allow them within the context of -- I mean, this is how I interpret it -- to allow them to have the resources, you know, to receive benefits.

Q. This article doesn't anything to do with veterans' disability benefits, does it?

A. I wouldn't say that. I would say it's

all within the context of providing -- let's look at page 4. If you look at the slide in page 4, it specifically talks about -- I'm reading out loud here. So we would need to verify this. But it's talking about the legislation. Let me read it first. Then I'll talk out loud.

Yeah. So it specifically discusses compensation to veterans, which I would certainly say is a resource available to them.

Q. Let me read out loud what you just read or at least a portion of it. Do you see towards the middle of that paragraph that starts with "The Act"?

"The Act that was passed by Congress was basically to take recognition of the fact that Janey, Jerry Ensminger's daughter, had lost her life from an apparent exposure to chemical contaminants that she had while she was living there. The Act actually extends compensations for veterans and their families who were exposed during the years between 1953 to 1987. Those are the years for which the contaminated drinking water had been documented, up to the time of these studies."

Is that correct?

A. That's correct. But that's what you read. That's not what I was reading, just for the record. I was reading Marines got Congress to pass the Janey Ensminger Act of 2012, establishes presumptive compensation for veterans and family members for specific diseases. This current list includes bladder cancer, kidney cancer and 13 other diseases.

Q. The very last sentence on page 4 of this article, the third to last sentence says, "The work is still going on."

Do you see that?

A. Yes.

Q. "There's an ongoing cancer incident study that will look at not just the deaths due to cancer, but diagnoses of cancers, and that's a much larger number. A lot more get diagnosed of cancer that actually die of it. That study will take another three years to complete."

Did I read that correctly?

A. Yes.

Q. So Dr. Clapp, an epidemiologist, was reviewing the studies associated with the Camp Lejeune water contamination and discussing it in this BCAN article, Deposition Exhibit 9; is that

correct?

A. I have no way of knowing whether that's the case or not. I don't have -- in that article -- let's look at this article. I do not see any scholarly citations. So actually, we have no way to know what articles were reviewed from this story.

Q. But this is the citation that you provided in your X post from February 2021; correct?

A. I would say this. I'm going to correct the record that I don't believe this is a citation. I view a citation as a scholarly citation. This is the link that I provided in my X post that I have no recollection of posting four and a half years ago.

Q. Do you believe that the information you provided to plaintiffs should be less rigorously reviewed?

A. Can you clarify the question?

Q. In this Twitter post, you are referring to these three articles we just discussed, and you're saying that you are in this case providing an opinion based on more scholarly research.

Are you stating that the information

that you provide to your patients is subjected to a less rigorous research?

MR. ANWAR: Object to form.

THE WITNESS: That's an interesting question. I don't view the Twitter post as an opinion. I think that's really important to clarify based on the conversation we're having. I view the Twitter post as giving my patients a resource to apply for benefits as their patient advocate.

BY MR. RUZICKA:

Q. Moving on, have you coordinated with any other expert witnesses in this case in providing your opinions?

MR. ANWAR: Object to form.

THE WITNESS: Can you clarify the word "coordinated"?

BY MR. RUZICKA:

Q. Have you had any discussions in which the contents of your report were addressed with any experts in this case?

A. I have had discussions with other experts in this case about some of the patients, but I would not characterize it as coordination.

Q. Which experts have you discussed your

report with?
A. I can't say whether I discussed my report with other experts, but I had other meetings with other experts.
Q. How many meetings did you have?
A. I had a meeting with the lifecare planner. I had a meeting with a psychiatrist. I had a meeting with Dr. Goodman. Those are the meetings I can recall with other experts.
Q. Were those three separate meetings or one meeting with all three present?
A. Those were -- Dr. Goodman was a separate meeting. The psychiatrist was a separate meeting. I'm forgetting the third person.
Q. Lifecare planner?
A. Lifecare planner was a separate meeting.
Q. Do you recall when you had your meeting with Dr. Goodman?
A. I do not.
Q. Was it prior to your report being produced in this litigation?
A. I can't recall the exact timing.
Q. So your report was produced in April of this year. Do you recall whether or not that meeting occurred before April of this year?

A. I can't recall the exact timing of it sitting here today.
Q. Was it an in-person meeting?
A. No.
Q. It was via Zoom?
A. Yes.
Q. Did you all review documents together?
A. No.
Q. Do you recall how long that meeting was?
A. No.
Q. Were there any other members of Dr. Goodman's team on that call?
A. No.
Q. Were there any DOJ attorneys on that call?
A. Yes.
Q. The meeting with the psychiatrist, do you recall when that meeting was?
A. No.
Q. Was it in person?
A. No.
Q. Was it via Zoom?
A. Yes.
Q. Were there any other members from his team on that call?

A. No.
Q. Did you take any notes on that call?
A. No.
Q. What about the call with Dr. Goodman, any notes?
A. No.
Q. Were either of those recorded and transcribed?
A. No.
Q. You don't recall when you met with the psychiatrist?
A. No.
Q. The lifecare planner, was that in person?
A. No.
Q. Was it via Zoom?
A. Yes.
Q. And do you recall when that Zoom took place?
A. No.
Q. What facts or data were provided to you by the DOJ that you assumed in forming your opinions in this case?
MR. ANWAR: Object to form.
THE WITNESS: The list of materials

provided is what I used to form my opinions on the case.

BY MR. RUZICKA:

Q. Did they provide you with any assumptions about -- that you relied upon in forming your opinions?

A. No.

Q. Did you know Dr. Goodman prior to this litigation?

A. No.

Q. Did you know anything about her background, her reliability or credibility before this litigation?

A. No.

Q. Have you looked into her reliability, credibility since meeting with her?

A. I have not looked into the reliability or credibility of any experts on either side, PLG or defense or DOJ I'm sorry to say.

Q. Is it fair to say that you are more familiar with Dr. Mossanen than you are with Dr. Goodman?

A. Dr. Mossanen is a urologic oncologist. I'm more familiar with him than Dr. Goodman. Yes, that's fair to say.

Q. Is Dr. Goodman an oncologist?
A. I don't believe so.
Q. Is she a urologist?
A. No.
Q. What -- strike that.
Beyond your meetings with these three retained experts, did you also have any email exchanges or other forms of communication?
A. Not that I recall.
Q. Do you recall providing Dr. Goodman with a copy of your report prior to you signing off on it on April 8, 2025?
A. I don't recall.
Q. You may have?
A. I don't recall whether or not that happened. I don't believe it happened, but I don't have a memory of that.
Q. Did you make any changes to your report after a review by Dr. Goodman?
MR. ANWAR: Object to form.
THE WITNESS: No.
BY MR. RUZICKA:
Q. Did you review Dr. Goodman's or Dr. Shields' full reports prior to their final submission?

A. I don't recall whether I reviewed it before or after their final submission.

Q. I think you testified earlier that you reviewed Dr. Goodman's and Dr. Shields' reports prior to your submission of your report.

A. That's correct.

Q. Dr. LaKind and Dr. Bailey, I think you testified that you're not familiar with them; correct?

A. I'm not familiar with them. You mean personally?

Q. Personally.

A. No.

Q. You didn't know them prior to this litigation?

A. No.

Q. The first time you've met them was as a retained expert in this case?

A. I've never met Dr. Bailey or Dr. LaKind.

Q. No communications with either of them?

A. No.

Q. No idea on their background, training, experience or credibility?

A. No.

Q. Do you know if you provided them with a

copy of your report prior your final submission?
A. I don't know.
Q. Is there anyone else that we haven't discussed that you met with or communicated with prior to you submitting your testimony in this case?
A. Outside of the attorneys, obviously.
Q. Yeah.
A. No.
Q. In your prior -- in the case that you had in New York for medical malpractice, were you coordinating with any other experts in that case?
MR. ANWAR: Object to form.
THE WITNESS: No.
BY MR. RUZICKA:
Q. So you provided your own independent opinions in that case?
A. Yes.
Q. So this is the first time you've had to rely on others' opinions in conjunction with your report?
A. Can you clarify the question?
Q. Have you ever been asked to rely on other expert opinions before reaching your own conclusions?

A. No.
Q. You wrote an article in a urology textbook Campbell/Walsh/ -- is it Wein?
A. Yes.
(Kates Exhibit 12 was marked.)
BY MR. RUZICKA:
Q. I'll hand you what I'll mark as Deposition Exhibit 12.
A. Which edition are you giving me?
Q. Both.
A. What year is that?
Q. It's 2022. Did you author any others?
A. I've authored, I think, three. This is the main urology textbook in our field. It goes through a new edition every few years. I think I'd done the last three editions, so that's why I asked.
Q. There's a 13th edition; correct?
A. There's an edition within the last year, I believe. I don't know whether it's available to the public yet. That's why I'm not a hundred percent sure whether we would even have access to it.
Q. So this is the 12th edition. So it would be the edition prior to the one that's just

been released. I believe this is the one that you cite to in your report; is that correct?

A. Yeah.

Q. So you are a co-author on this; is that correct?

A. Yes.

Q. When you wrote this chapter, you were not trying to be an advocate; correct?

A. Correct.

Q. And you were stating as accurately as possible the state of the urologic science pertaining to the tumors of the bladder?

A. Yes.

Q. There are two authors, but you take responsibility for all the opinions expressed in this chapter; correct?

A. I do.

Q. In fact, you adapted your epidemiological section from your reports from this chapter, Deposition Exhibit 12?

A. Parts of it.

Q. Are you saying that you are not adapting the entire epidemiological section from your textbook into your reports?

A. I'm saying that my report is in many

ways a unique product that's separate and distinct from the chapter, but the chapter was -- the report was certainly informed by the chapter.

Q. I think you state that this is one of the most widely used and the only comprehensive urology textbook in your field.

A. That's correct.

Q. So at least in whatever year the 12th edition come out, this is the state of the evidence regarding tumors of bladder as you saw it; is that correct?

A. Yes.

Q. Do you agree that bladder cancer typically arises from chronic constant insults to the urinary tract over time?

A. Yes. That's one way of bladder cancer development.

Q. Do you agree that bladder cancer is a disease of aging and environmental exposures?

A. Yes.

Q. Do you agree that drinking water with carcinogens is a form of environmental exposure?

MR. ANWAR: Object to form.

THE WITNESS: Can you show me where that is?

BY MR. RUZICKA:
Q. I'm just asking. Do you agree that drinking water with carcinogens is a form of environmental exposure?
MR. ANWAR: Same objection.
THE WITNESS: Can you be specific to the carcinogens you're referring to?
BY MR. RUZICKA:
Q. I'm just saying in general.
A. What do you mean by carcinogen?
Q. Well, for example, arsenic.
A. Arsenic in drinking water, there is a compendium of evidence to support -- there's some controversy about arsenic because the level of evidence is not as substantial as, for example, smoking. But there is some evidence that links it to bladder cancer. The strength of the evidence is debated, I think, in the literature and in scholarship.
Q. My question was a little more general than that.
Do you agree that drinking water with carcinogens is a form of environmental exposures?
MR. ANWAR: Object to form.
THE WITNESS: Again, I think it's really

important not to speak in generalities because the statement you just made, I would need to see evidence to support the statement or if you're saying I wrote it, I would like to see where I wrote it so I can see the context of where it's written, if that's what you'd like to show me.

BY MR. RUZICKA:

Q. If you want to look at page 3077 of Deposition Exhibit 12, the right-hand column, it says Environmental Pollution.

Do you see that?

A. Yes.

Q. Underneath there it talks about exposure to arsenic and drinking water has been associated with the development of urothelial bladder cancer; is that correct?

A. Yes.

Q. So would exposures to carcinogens like arsenic in water be a form of environmental exposure?

MR. ANWAR: Object to form.

THE WITNESS: I would say exactly what I said in the textbook and which is what I'm kind of saying right now, which is there's a level of evidence -- the strength of the evidence we can

talk about, but there's some evidence to support arsenic as potentially being a risk factor for bladder cancer development.

But I would be careful not to speak in generalities because when we talk about carcinogens, I would want to know what do you mean by a carcinogen when we talk about -- so that's why I asked to be specific in that context.

BY MR. RUZICKA:

Q. So what's your definition of an environmental exposure?

A. An environmental exposure, I would basically define it as an exposure that is not due to either a spontaneous genetic mutation or a germline mutation. So everything else, if it's not -- if it's not familial, if it's not germline, it's the environment.

Now, whether that environment is radiation, for example, or smoking, you know, that kind of encompasses the rest of it. That's not kind of spontaneous mutations or germline mutations.

Q. Carcinogens in the water would be a form of environmental exposure pursuant to your definition?

MR. ANWAR: Object to form.

THE WITNESS: Again, we need to clarify what we mean by carcinogen, which carcinogens we're talking about and like how we define what a carcinogen is. So we can do that if you'd like.

BY MR. RUZICKA:

Q. It's really not that difficult of a question. You just said that anything that's not familial or hereditary is a form of an environmental exposure for development of bladder cancer.

A. Yeah.

Q. I'm not saying any particular carcinogen. I'm just saying so drinking water with carcinogens is a type of environmental exposure. Whether or not it is associated with bladder cancer is not my question.

A. I apologize for interrupting you.

Q. I'm not saying any association. I'm just trying to define environmental exposures, and I believe you just defined it as anything that doesn't have to do with hereditary conditions.

A. Spontaneous mutations. Sorry. I didn't mean to interrupt you again, but I want to make sure.

Q. I just want to clarify this because it's not that difficult of a question. I'm just trying to understand that drinking water with carcinogens is a form of an environmental exposure.

A. I would say if there's carcinogens, like arsenic -- we can use arsenic maybe as an example because that's in here -- if there's a carcinogen which there's a level of evidence that we agree on, you and me agree on, supports a risk factor development for bladder cancer in drinking water, that would be definitely a form of an environmental exposure.

Q. Again, I'm not asking if the carcinogen has anything to do with the development of bladder cancer.

I'm just saying: Is carcinogens in water a form of an environmental exposure?

MR. ANWAR: Object to form.

THE WITNESS: Again, I'm trying to answer your question as authentically as I can, which why I just stated it the way I stated it, which is if we deem that a chemical in the water causes cancer, so that would be a carcinogen in the water, then I would view that as a form of environmental exposure.

BY MR. RUZICKA:
Q. Do you agree that like the skin and lungs, the bladder is an organ that comes in constant contact with the environment and is, therefore, sensitive to environmental carcinogens and inflammation?
A. Yes.
Q. Do you agree that the bladder is a storage vessel for toxins being excreted from the body?
A. It looks like you're reading from somewhere. Can you point to where I've written that?
Q. I'm just asking you the question.
Do you agree that the bladder is storage vessel for toxins being excreted from the body?
A. Are you citing my work or are you not?
Q. I'm just asking you a question, Doctor.
Do you agree that the bladder is a storage vessel for toxins being excreted from the body?
A. I believe that when there are carcinogens such as smoking that come into contact with the bladder, it can lead to formation of bladder cancer.

Q. My question is just a little different.
Do you agree that the bladder is a storage vessel for toxins being excreted from the body?
A. I would characterize it -- sitting here right now, I would characterize it the way I just said. The language is pretty important when we are talking about this. That's why I wanted to rephrase it the way I would say it.
Q. So in your phrasing, cigarette toxins are stored in the bladder before they're excreted from the body?
A. That's not what I said. I don't believe that's what I said.
Q. Do you agree with that statement?
A. Cigarette toxins come in through the lungs and at some point, those aromatic ambients come into contact with the bladder. The idea of storage of toxins I don't know. That's why I'm hanging on to this word you're using, this sequence of words you're using of storage of toxins.
I don't know the mechanism by which cigarette smoke creates or -- creates an environment in which cancer cells thrive. I don't

1 know the mechanism of that. And that's why I'm
2 having trouble answering your phraseology.
3 Q. You've read Dr. Goodman's report; right?
4 A. Yes.
5 Q. So you would agree that TCE is excreted
6 through the urine in the body; correct?
7 A. Can you rephrase the question?
8 Q. Do you agree that TCE exposures are
9 excreted through the urine?
10 A. Can we look at the report where she said
11 that?
12 Q. Do you recall reading that from her
13 report?
14 A. I don't recall reading that sentence,
15 no.
16 Q. You disagree with that statement?
17 A. I have no way to agree or disagree.
18 That's not my field of expertise.
19 Q. Do urothelial cells help protect the
20 bladder from toxins in the urine?
21 A. There's some limited data on this topic,
22 so much so that I wouldn't be able to give you a
23 summary answer for the protective effects of
24 urothelium as it relates to bladder cancer
25 carcinogenesis and development. I think that's a

very understudied area.

Q. Do you agree that urothelial cells of the bladder make up the lining of the bladder?

A. Yes.

Q. So would you agree that to the extent that any toxins that get filtered through the kidney and end up in the urine would come into direct contact with the urothelial cells of the bladder?

A. Again, I don't know that we know how toxins mediate bladder cancer carcinogenesis, whether it's as you're assuming through sort of a storage mechanism in the urine itself, or whether it's through some other mechanism.

But I think we can certainly agree that smoking, for example, causes carcinogenesis likely through aromatic ambients, and that gets into the bladder. Now, whether it's through the urine or not, I can't say. That's why I'm having trouble agreeing with you on that question.

Q. You agree that over 90 percent of all bladder cancers are urothelial carcinomas which originate from the urothelial cells?

A. Yes.

Q. And you agree that all six plaintiffs

that you reviewed had a type of urothelial carcinoma?

A. Yes.

Q. And do you agree that PCE is a likely human carcinogen as determined by the U.S. EPA and IARC?

MR. ANWAR: Object to form.

THE WITNESS: I know that there's reports and viewpoints that PCE is a carcinogen at large, but I think again when we discuss carcinogens, it's really important to be specific to the disease organ. So I'm certainly not an expert on whether PCE is associated with, for example, liver cancer or lung cancer or some other cancer. That's not my expertise.

I'm here to provide an opinion about bladder cancer. So I would say I do not believe that PCE is a carcinogen as it relates to the development of bladder cancer.

BY MR. RUZICKA:

Q. My question was: Do you agree that PCE has been termed a likely human carcinogen by the U.S. EPA and IARC?

MR. ANWAR: Object to form.

THE WITNESS: I would like to see where

the IARC and EPA say that. Then I can verify that that's true that it's been said.

BY MR. RUZICKA:

Q. So you're not aware that epidemiological studies have shown associations between PCE exposure and increased risk of bladder cancer?

MR. ANWAR: Object to form.

THE WITNESS: I'm aware that there are a multitude of studies that have evaluated PCE and bladder cancer, and the compendium of data does not provide the threshold of evidence to support a link between PCE and bladder cancer.

BY MR. RUZICKA:

Q. Are you aware that IARC classified PCE as a likely human carcinogen due to the epidemiological showing an association between PCE exposure and increased risk of bladder cancer?

A. I'm happy to review anything that you'd like to present to me and verify that that's the case.

Q. But sitting here today, you don't recall reading anything that told you that IARC has found that PCE is a likely human carcinogen?

A. Once again, I'm aware that there are reports that PCE is a human carcinogen, but it's

my job today to speak to bladder cancer. I'm not an expert in the other malignancies that may be referenced. When we talk about carcinogen, usually it's organ specific. It's not an at-large statement.

Q. You read Dr. Sfakianos' report in this case?

A. Correct.

(Kates Exhibit 13 was marked.)

BY MR. RUZICKA:

Q. You read it. I'm going to hand you what I'll mark as Deposition Exhibit 13 and direct your attention to page 9.

Under his general causation section, the second paragraph starts with, "Numerous regulatory and scientific bodies have recognized that these four chemicals are toxic and capable of causing cancer. IARC recognizes PCE, vinyl chloride and benzene as having sufficient evidence for carcinogenicity in humans and that PCE is probably carcinogenic to humans."

Did I read that correctly?

A. Yes.

Q. And there are citations to the various reports provided by IARC and the U.S. EPA in

support of those statements; is that correct?
A. Yes.
Q. So would you agree that TCE, vinyl chloride and benzene have been found by IARC to be a carcinogen to humans?
MR. ANWAR: Object to form.
THE WITNESS: Again, I would want the primary sources to verify that, not use of a secondary source. So I'm happy to agree with you, but we'd have to review the IARC and the EPA report together.
BY MR. RUZICKA:
Q. So sitting here today, you're not going to agree with me that TCE, vinyl chloride and benzene have been identified by IARC as a carcinogen to human?
A. Again, I'm going to agree with you that I know there are reports out there, but if you're going to ask me to agree with a specific report, I would want it in front of me so we could look at it together and agree.
Q. So you would also agree that sitting here today, you will not agree with me that IARC has found PCE to be a likely human carcinogen?
A. Again, sitting here today, I'm willing

to make agreements with you if we have documents and exhibits in front of us to review.

Q. I just showed you the citations in Dr. Sfakianos' report; correct?

A. Again, I would say that's a secondary source, not a primary.

Q. So you're just not going to agree with me that IARC has made these statements about these chemicals being carcinogens?

MR. ANWAR: Object to form.

THE WITNESS: I would certainly be willing to agree with you if we had the exhibit in front of us.

BY MR. RUZICKA:

Q. Do you agree with Dr. Goodman's assessment that TCE is excreted through the urine?

A. Can we see where she says that?

Q. Sure. I will do that after a break actually.

Do you agree that environmental exposures can lead to oxidative stress, epigenic effects and alterations in DNA repair which can lead to the development of bladder cancer?

MR. ANWAR: Object to form.

THE WITNESS: Can you repeat the

question?
BY MR. RUZICKA:
Q. Do you agree that environmental exposures can lead to oxidative stress, epigenic effects and alterations in DNA repair which can lead to the development of bladder cancer?
A. Yes.
Q. Do you agree that hereditary bladder cancer does not seem to be associated with a Mendelian inheritance pattern making classical family tree linkage studies unhelpful?
MR. ANWAR: Object to form.
THE WITNESS: I think this is an area of a lot of current activity. I may have written that in an earlier edition. I may still write that in the newer editions of the textbook because that could be the state of the literature.
But there are some germline studies that are being done to basically take a closer look at familial and hereditary bladder cancer. So I think there's still a lot we don't know. And so whether -- I think basically when I wrote that -- I'm assuming I wrote that -- that's the state of play currently. But again, this is an area of a lot of ongoing work.

BY MR. RUZICKA:

Q. But at least when you wrote this textbook, it sounds like you also had the same statement in the current edition, the state of the science is that hereditary bladder cancer does not seem to be associated with a Mendelian inheritance pattern making classical family tree linkage studies unhelpful.

A. I would disagree because I believe that there may be more in the current edition on germline mutations than in this edition. So without -- I don't know that this sentence is in the current edition. I would need that in front of me to know that for sure.

Q. But the state of the science is that hereditary bladder cancer does not seem to be associated with a classical family tree linkage?

A. I would say the state of the science is that hereditary bladder cancer is something we're learning more about every day, and I can't make a definitive statement on that specific topic.

A lot of that is because we're having improved technologies, more patients, for example, having germline testing. So as more patients get germline testing, we're able to identify more

hereditary bladder cancer, for example. Germline testing used to be incredibly expensive, not routinely done. Now it's being done more and more.

That's why I'm having trouble answering the specific question you're stating in terms of whether there's a Mendelian inheritance. I think there's a lot we don't know about the inheritance of familial bladder cancer.

Q. Is it fair to say that the state of the science regarding hereditary connections to bladder cancer is evolving?

A. Yes.

Q. And that the state of the science at least when you wrote this article was that there was not an association?

A. Yes. When I wrote that, I think that was a fair statement.

Q. Do you agree that it is more likely that genes magnify environmental exposures?

MR. ANWAR: Object to form.

THE WITNESS: I've never heard that statement said like that. So I think we'll need to talk about it. Did I say that?

BY MR. RUZICKA:

Q. Very next sentence in your hereditary section on -- the page number is missing, but it's 3076, which is the fourth page of the deposition exhibit.

A. Is it the chapter?

Q. Yes.

A. I see, yeah, page 4.

Q. It says, "More likely, the cause is multifactorial in which certain genes magnify environmental exposures."

Is that correct?

A. That sentence I would certainly agree with.

Q. What's the difference?

A. If the sentence started with bladder cancer development is multifactorial, which I think is an incredibly important point to make at the beginning of the sentence, that would be the difference between what you asked me and what I answered.

Q. But it does say that genes magnify environmental exposures; correct?

A. Yes, but that's obviously half of the sentence, for the record.

Q. So would you agree that environmental exposures are more causative of bladder cancer than genetics?

MR. ANWAR: Object to form.

THE WITNESS: No.

BY MR. RUZICKA:

Q. Why not?

A. Because I don't know any data that supports that. It's not that I don't know any data that supports that theory. I guess I don't understand what you mean by the sentence.

Q. In the sentence we just read, you talk about how genes magnify environmental exposures.

So wouldn't it also be true that the environmental exposures are more the causative than genetics?

A. No, but we can break this down if you'd like.

Q. Sure.

A. Let's say you have a hundred patients. You're basically asking me to break down of those hundred patients with bladder cancer how many are due to environmental exposures versus genetic exposures.

Q. Let me stop you there because I think

it's a little bit different of a question that I'm asking. I'm not talking about a cumulative count of patients that have more genetic factors versus environmental factors.

Your statement in your report or your chapter is that genes magnify environmental exposures. So wouldn't it be true that it's the environmental exposures that are more causative than those genes pursuant to that statement you made?

A. No. And again, that statement is half of the sentence that starts with bladder cancer is multifactorial. Actually, I would say that first half is the more important part of the sentence in that chapter and what aspect -- so now you're not asking a hundred patients. You're asking one patient, and in that one patient you're asking what risk factor -- how is a risk factor weighted. Is that your question?

Q. My question is that genetics play a lesser role than environmental exposures, is that fair, in the development of bladder cancer?

A. Again, I don't agree.

Q. Do you agree that bladder cancer is the most expensive cancer to treat per patient over a

patient's lifetime?
A. There is literature to support that.
Q. Do you agree that the lifetime treatment cost per patient is between 129,000 to 251,000?
A. I would have to look at the source. That source may be my own writing, which we can review. But without reviewing the source, it's hard for me. That's a very specific number you're giving me.
Q. So look at page 3075 of your chapter, Deposition Exhibit 12, the second sentence under the Economic Impact section. I'm just going to read it. "The lifetime treatment cost per patient is between 129,000 and $252,000." Is that correct?
A. Yes.
Q. So you wrote that in this chapter and that was the state of the science as you interpreted it when you wrote this book?
A. Yes.
Q. Do you agree that men lose 20 percent -- strike that.
Do you agree that men lose 26 percent of their remaining life expectancy to bladder cancer and women lose 36 percent?

A. That's such a specific question that it's probably from somewhere in this chapter. Can we look at it together?

Q. You are correct. If you look at page 3074 on the left-hand side at the bottom, the first sentence, you can see them highlighted for you, it says, "Although men lose 26 percent of their remaining life expectancy to bladder cancer, women lose 36 percent."

Did I read that correctly?

A. Yes.

Q. So that was the state of the science as you interpreted it when you wrote this chapter?

A. Yes.

Q. I want you to keep that available, Deposition Exhibit 12, because I'm going to refer to it in conjunction with the next exhibits, which I'm going to go ahead and mark all your reports in this case.

(Kates Exhibit 14 was marked.)

BY MR. RUZICKA:

Q. I'll hand you what I'll mark as Deposition Exhibit 14, which is the report you authored on Cagiano; is that correct?

A. Yes.

(Kates Exhibit 15 was marked.)
BY MR. RUZICKA:
Q. And then I'll hand you what we will mark as Deposition Exhibit 15, which is your report regarding Criswell; is that correct?
A. Yes.
(Kates Exhibit 16 was marked.)
BY MR. RUZICKA:
Q. I'll hand you what we'll mark as Deposition Exhibit 16, which is your report on Terry Dyer; is that correct?
A. Yes.
(Kates Exhibit 17 was marked.)
BY MR. RUZICKA:
Q. I'll hand you what I'll mark as Deposition Exhibit 17, which is your report on Jimmy Laramore; is that correct?
A. Yeah.
(Kates Exhibit 18 was marked.)
BY MR. RUZICKA:
Q. I'll hand you what I'll mark as Deposition Exhibit 18, which is Edward Raymond's report?
A. Yes.
(Kates Exhibit 19 was marked.)

BY MR. RUZICKA:

Q. I'm going to hand you Fiolek's report that you authored as Deposition Exhibit 19. You have a lot of paperwork in front of you.

Are those the six reports you authored in this case?

A. Yes.

Q. And these reports are a complete statement of your opinions you intend to express in this case?

A. Yes.

Q. And the bases and reasons for your --

A. Yes, with the exception that I've reviewed -- I don't mean to interrupt you. I just wanted to clarify that I have reviewed the depositions of Dr. Sfakianos, Longo and Bivins and did not have, obviously, those depositions at the time I wrote this report.

Q. And the bases and reasons for your opinions are contained in these reports?

A. Yes.

Q. Including all the facts and data you are considering in forming these opinions including the depositions you just referenced?

A. Yes.

Q. You did not have any new opinions that you have not disclosed in these new reports; correct?

A. With the exception of any responses or opinions I may have based on the depositions that were just referenced.

Q. Are you planning on authoring another report in response to the depositions that you reviewed?

A. That has not been asked of me.

Q. These are all on Johns Hopkins letterhead; correct?

A. Yes.

Q. Are they endorsed by Johns Hopkins?

A. No.

Q. They weren't reviewed by anyone at Johns Hopkins, were they?

A. No.

Q. And you drafted all these reports?

A. Yes.

Q. Did anyone help you?

A. No.

Q. How long did it take you to draft these reports?

A. Many hours.

Q. Do you review the reports before you sign them?
A. Yes.
Q. You reviewed them before signing them because you wanted to make sure that they expressed all your opinions; right?
A. Yes.
Q. And you were thorough in drafting this report so you didn't leave anything out; right?
A. That would be my hope.
Q. So anyone that wants to know what your thoughts are in this case can read these reports; right?
A. Yes.
Q. After you signed these reports, did you look at them again to prepare for this deposition?
A. Yes.
Q. Did you have any corrections that you wanted to make after reviewing them before the deposition?
A. No.
Q. I'm going to help you just because I don't want you to... The general epidemiological section of these reports is largely similar in all six reports; is that fair?

A. I think it's roughly similar. It may not be exactly the same, but the main thesis runs through everything.

Q. So I'm just going to refer to the Cagiano report. If you recall having any different statement in another report, please let me know, but I believe they're very similar.

A. The one I'm not a hundred percent sure about with Cagiano, he's the UTUC patient; correct?

Q. Yes.

A. So there may be an additional section. I don't know. That would be the one thing about that specific report.

Q. I'm going to direct your attention to page 4 of the Cagiano report, which is Deposition Exhibit 14. At the second heading, there is Summary of Bladder Cancer Risk Factors, Diagnosis and Management. And there's a footnote that references the section you "adapted from the chapter that I co-authored titled 'Tumors of the Bladder' in Campbell/Walsh/Wein Urology 12th Edition." Correct?

A. Yes.

Q. And that's the chapter that we just

reviewed, Deposition Exhibit 12; correct?
A. Correct.
Q. You agree that cherry picking is not sound science; right?
MR. ANWAR: Object to form.
THE WITNESS: So I want to -- yes. I agree that cherry picking in the sense of, for example, a meta-analysis is not sound science. The methods, for example, a rigorous epidemiological study should include a thorough review of the literature.
BY MR. RUZICKA:
Q. So a scientist should not purposely exclude relevant information; right?
A. I agree with that.
Q. I'm going to direct you to page 5 of the Cagiano report, the first full paragraph, the first sentence. It states, "Bladder cancer is typically a disease of aging with age adjusted incident rates increasing with each decade of life."
Is that correct?
A. Yes.
Q. I'm going to direct you back to your textbook, Exhibit 12, the second sentence under

Gender, Racial and Age Differences on the right-hand side. That sentence reads, "Urothelial cancer is a disease of aging and environmental exposures."

Correct?

A. Correct.

Q. So this statement that you have in your Cagiano report left out the environmental exposures from your textbook; is that correct?

A. Incorrect.

Q. Where in your report do you state that urothelial cancer is a disease of environmental exposures in your report?

A. I don't.

Q. We talked about earlier your statement in your textbook that bladder cancer typically arises from chronic constant insults to the urinary tract over time.

Did you put that anywhere within your reports in this case?

A. Yes. Page 13 there's a section on chronic inflammation and infections. And I think most urologists would agree that chronic inflammation and infections is chronic insults to the urinary bladder over time. They're

1 essentially similar concepts.
2 Q. So your statement in your textbook
3 that's the very first sentence of the Gender,
4 Racial and Age Differences section that "Bladder
5 cancer typically arises from chronic constant
6 insults to the urinary tract over time" is solely
7 directed at the chronic inflammation caused by
8 catheters?
9 MR. ANWAR: Object to form.
10 THE WITNESS: I didn't say that.
11 BY MR. RUZICKA:
12 Q. So your section that's chronic
13 inflammation or infections, does it reference any
14 environmental exposures?
15 A. It depends on how you define
16 environmental exposures.
17 Q. Using your definition of an
18 environmental exposure.
19 A. Yes.
20 Q. Outside of the use of a physical object
21 as a chronic inflammation or infection, does this
22 section involve any other types of environmental
23 exposures?
24 A. Yes.
25 Q. What environmental exposures?

A. Schistosomiasis.
Q. Which is?
A. Which is an infection in the water in Egypt and sort of the Nile River Valley.
Q. So outside of those two environmental exposures, are there any other environmental exposures you discuss in your chronic inflammation or infection section?
A. Yes. So bladder outlet obstruction is discussed, which is a form of chronic inflammation.
Q. Would you agree that exposure to water that has carcinogens would be a chronic constant insult to the urinary tract?
MR. ANWAR: Object to form.
THE WITNESS: I have no way to validate that very general claim.
BY MR. RUZICKA:
Q. I'm going to direct your attention to page 3078, the left-hand side, the Key Points section which is before you go into the Detection of Urothelial Carcinoma.
Do you see that?
A. I do.
Q. The very first key point is that bladder

cancer is related to age and exposure to environmental carcinogens; is that correct?

A. Yes.

Q. Nowhere in the report do you state that urothelial carcinoma is a disease of environmental exposures.

A. No, but I think that paraphrasing loses sight of the fact that I discuss many environmental exposures in my report.

Q. Is there a reason that on page 5 of your reports where you state that cancer is typically a disease of aging you left out what you have from your textbook?

A. I would say --

Q. And exposures to environmental carcinogens?

A. I apologize for interrupting. I didn't know that you had two parts to that question.

So the first part was that I used the word left out. I would posit I did not leave it out of the report, and I did not leave it out of the sentence because it's a completely different sentence from the one written in the textbook. They're two different sentences that maybe share three words out of 14. I don't know. We can

1 count the words.
2 So I would disagree with the first part
3 of your question. It was a two-part question. I
4 apologize. I missed the second part.
5 Q. I'm just wondering. In your report you
6 state bladder cancer is typically a disease of
7 aging, but you leave out what is in your Key Point
8 section from the textbook that it is -- bladder
9 cancer is related to aging and environmental
10 exposures; is that correct?
11 A. Again, that's incorrect. I understand
12 that you're stating that I've left it out of a
13 sentence, but again, those two sentences you've
14 cited are completely different sentences. If we
15 read one next to the other, maybe they share a few
16 words.
17 I discuss environmental exposures I
18 would say in multiple areas of the report. And
19 I'm happy to go through the environmental
20 exposures I discuss in my report.
21 Q. Yeah, but you already agreed that you
22 did not specifically state urothelial cancer is a
23 disease of environmental exposures in your
24 reports; correct?
25 A. I agree that -- well, I would need to do

a text search to make sure that specific phrase was not in my report. But let's say it was not. That specific phrase I agree to, but the contents of my report go over environmental exposures in great detail.

MR. RUZICKA: Break.

THE VIDEOGRAPHER: Off the record at 12:18.

(Recess from 12:19 p.m. to 1:17 p.m.)

THE VIDEOGRAPHER: Back on the record at 1:17.

BY MR. RUZICKA:

Q. Dr. Kates, we're back from lunch. I'm going to continue with some questions, if that's okay.

A. Yes.

Q. You're not a toxicologist, are you?

A. No.

Q. And not a risk assessor?

A. No.

Q. And not an exposure assessor?

A. No.

Q. You're not an epidemiologist?

A. I'm not.

Q. Your opinions in this case are limited

to only as a medical doctor and a urologic oncologist regarding the specific causation of the plaintiffs in this case; is that correct?

A. That my understanding.

Q. More than your understanding, that's what you actually say in your reports; right?

A. Yes.

Q. And you are not independently offering any opinions about whether the exposure to the water at Camp Lejeune could cause any of the plaintiffs' particular cancer; correct?

A. As it pertains to exposure of water at Camp Lejeune, I'm relying on the expert opinion of Dr. Goodman, LaKind and Bailey.

Q. Are you also relying on Dr. Shields?

A. The Goodman, LaKind and Bailey is who I'm drawing, you know, my opinion from.

Dr. Shields, I've read his report. It informs it. But really for the aspect of the specific question you asked, which is Camp Lejeune and water, it's really Dr. Goodman. And then for the question of or the exposure assessment and water modeling, it would be LaKind and Bailey.

Q. So let me try and clean that up real quick because I kind of got two parts to this.

1 You're not independently offering any
2 opinions about whether the exposure to the water
3 at Camp Lejeune could cause any plaintiff's
4 particular cancer; correct? You're relying on
5 Dr. Goodman and -- well, Dr. Goodman for that
6 opinion?
7 MR. ANWAR: Object to form.
8 THE WITNESS: For the general causation
9 opinion about whether the water at Camp Lejeune is
10 associated with bladder cancer, I'm relying -- I'm
11 relying on the opinion of Dr. Goodman or I'm
12 agreeing with the opinion of Dr. Goodman to form
13 that basis based on her role as an epidemiologist
14 and an expert in that specific question.
15 BY MR. RUZICKA:
16 Q. You're not offering any opinions about
17 any plaintiffs' individual exposure to the water
18 at Camp Lejeune not being substantial enough to
19 cause any particular outcome of interest; correct?
20 MR. ANWAR: Object to form.
21 THE WITNESS: So for that specific
22 question, I'm relying on the opinion of Dr. Bailey
23 and LaKind for the water exposure and water
24 modeling. I'm not -- the way they did those
25 assessments as well as the way that PLG experts

1 did the assessments is not in my scope of
2 expertise.
3 BY MR. RUZICKA:
4 Q. So you don't have any independent
5 opinion on whether or not the water at Camp
6 Lejeune can cause any particular outcome?
7 A. I would say for the opinion about -- I
8 have my own opinion, but it's drawn from the
9 report of Dr. Goodman specifically. I also drew
10 my opinion from the reports of the PLG experts.
11 So that's how I'd answer your question.
12 Q. In your reports, you state in
13 considering whether any relationship exists
14 between bladder cancer and the exposure to the
15 water at Camp Lejeune, you are relying on U.S.
16 toxicologists and epidemiological experts.
17 Do you recall having that in your
18 report?
19 A. Can you show me?
20 Q. Page 11 of Cagiano, which I think is in
21 front of you, Deposition Exhibit 14.
22 A. Yes. I see that written in my report.
23 Q. So again, you're just not independently
24 offering any -- planning on offering any opinions
25 outside of the reliance that you have on Dr. -- on

1 the U.S. toxicologist and epidemiological experts?
2 A. Correct. I'm not a toxicologist or an
3 epidemiologist. So I'm not drawing my opinion
4 from that expertise.
5 Q. And you did not include the Camp Lejeune
6 water as a risk factor for any plaintiff based on
7 your reliance of these other experts; is that
8 correct?
9 A. Based on my assessment of the reports of
10 Dr. Goodman as well as the PLG expert reports, I
11 found Dr. Goodman's report to be more compelling
12 and more thorough and thus agreed with the finding
13 of the Goodman report.
14 Q. Sir, are you telling me that you waited
15 to form your opinion on whether or not Camp
16 Lejeune is a risk factor until after you reviewed
17 all of the plaintiffs' retained expert reports as
18 well as the DOJ expert reports?
19 A. I would say that the plaintiffs' expert
20 reports certainly informed my opinion. As we've
21 discussed earlier in this deposition, I view my
22 role as to be an independent authentic expert in
23 bladder cancer and thus assessed the reports of
24 plaintiff experts as well as DOJ experts.
25 Q. So you didn't come to your conclusion

until after you had evaluated all the evidence?
MR. ANWAR: Object to form.
THE WITNESS: I would say that my conclusions written in the report take into account all the evidence. So insofar as you're asking that question, that's true.
BY MR. RUZICKA:
Q. So just to be clear, you waited until you had the PLG retained experts' opinions before you came to your conclusion to not include bladder cancer as a risk or Camp Lejeune water as a risk factor for bladder cancer?
MR. ANWAR: Object to form.
THE WITNESS: I would say I reviewed the PLG expert reports. My final report as written was after I reviewed the PLG expert reports.
BY MR. RUZICKA:
Q. So you state that, The chemicals at issue with respect to Camp Lejeune are not ones that treating urologists typically consider having a causal association with bladder cancer.
Is that correct?
A. That's correct.
Q. Prior to this case, did you consider the water at Camp Lejeune as having a causal

connection with bladder cancer?
A. I had formed no opinion on that question.
Q. But you had considered it because we've looked at that post before; correct?
A. Again, I don't view that as I considered the question you're asking me. I view that post as being a patient advocate.
Q. Did you ever consider PCE exposure as a risk factor for developing bladder cancer before being retained in this case?
A. No.
Q. Did you ever consider dry cleaning workers as being at risk for developing bladder cancer before being retained in this case?
A. That's not a question I typically ask. So insofar as when I take history, do I ask if they're a dry cleaning worker? No.
Q. But prior to this litigation, did you ever consider dry cleaning workers as being at risk for developing bladder cancer?
A. I don't recall.
Q. Going back to when you reached your conclusion that the water at Camp Lejeune is not associated with the development of bladder cancer,

can you give us a date in which you reached that opinion?

A. No.

Q. But it's fair to say it would have had to have been after you reviewed the plaintiffs' expert reports as well as the DOJ expert reports?

A. Yes.

Q. In full as they were published in this case?

A. Yeah. When they were made available to me, I read the reports.

Q. Again, you don't plan on offering any sort opinions that the level of exposure was too low or that PCE is not associated with bladder cancer, correct, you personally?

MR. ANWAR: Object to form.

THE WITNESS: I do not.

BY MR. RUZICKA:

Q. So your reports would be inaccurate to the extent that you state you have an independent opinion that the water at Camp Lejeune was unlikely to be a cause; is that correct?

MR. ANWAR: Object to form.

THE WITNESS: That's incorrect.

BY MR. RUZICKA:
Q. Why is that?
A. Because I can form my own opinion utilizing secondary resources. My point is in order to have -- in order to do a general causation opinion, I believe a primary literature search should have been performed. I actually don't believe that the PLG experts performed it, reading those reports thoroughly. Dr. Goodman did. I did not do that.
So I'm relying on secondary sources to form my opinion that that was what was meant by that report. By that statement I should say.
Q. Dr. Shields is a medical oncologist and epidemiologist; is that correct?
A. I would need to review his report to verify that.
Q. Sitting here today, you don't know whether or not Dr. Shields is a medical oncologist and epidemiologist?
A. I don't recall Dr. Shields' background.
Q. But you're relying on Dr. Shields for some of the opinions in this case?
A. I would say I'm primarily relying on Dr. Goodman, that report. We may look at both

reports and see if there's a small part of Dr. Shields' report that I may be relying on, but I would need to look at the report.

Q. So sitting here today, you're testifying as an expert witness in this case. You can't tell me what profession or what background Dr. Shields has?

MR. ANWAR: Object to form.

THE WITNESS: I don't recall. I would need to look at the report to be able to verify.

BY MR. RUZICKA:

Q. Do you agree that idiopathy is the result when no identifiable exogenous risk factor exists?

MR. ANWAR: Object to form.

THE WITNESS: I don't understand your question.

(Kates Exhibit 20 was marked.)

BY MR. RUZICKA:

Q. Let me show you Dr. Shields' report. I'm going to hand you Dr. Shields report as it pertains to bladder cancer.

You reviewed Dr. Shields' report prior to offering your opinions in this case?

A. Yes.

Q. In fact, you rely on portions of his report in your opinions.

A. I may be relying on a small amount. The majority of my opinion regarding specifically general causation, I'm relying on the epidemiologic review of Dr. Goodman.

Q. What about Dr. Shields' evaluation of risk factors for the development of bladder cancer, do you rely on those?

A. No.

Q. I want to direct your attention to your Deposition Exhibit 14, which is your report on Cagiano. Bottom of page 12, you state, "I would agree with Dr. Shields' assessment that being overweight and obese and with metabolic syndrome have been reported to increase the risk of bladder cancer, which may be more pronounced for never smokers."

Do you see that citation to Dr. Shields in your report?

A. What page are we on?

Q. Page 12. You're on the wrong report. Exhibit 14.

A. Cagiano?

Q. Your Cagiano report.

A. I said 14.
Q. It's the deposition exhibit. It's page 12. Sorry. I'm on the section for body max index, BMI, second paragraph in which you cite to the Dr. Shields and his assessment for the risk factor for BMI.
A. Yes. I see that.
Q. So in your report, you rely on Dr. Shields for his interpretation of risk factors for bladder cancer; correct?
A. I disagree.
Q. Why is that?
A. I don't rely on his interpretation. I agree with his interpretation. There's a difference.
Q. So you agree with his interpretation on the risk factor for BMI?
A. Yes, from the specific quoted statement, yes.
Q. And so I'm going to have you look back at Dr. Shields' report. On the second page of Deposition Exhibit 20, Dr. Shields' report, the second sentence says, "Many patients, however, have no identifiable exogenous risk factor considered to be idiopathic, estimated by some

authors as about 20 percent of cases."
Do you see that?
A. Yes.
Q. Do you agree with that statement?
A. No.
Q. What portion do you not agree with?
A. I disagree with basically two aspects of it. Number one, the idea that the exact percent of idiopathy, idiopathic cases, I view to be higher than 20 percent. And I also view somebody can have -- somebody's risk factor -- somebody has risk factors for developing bladder cancer and still idiopathy can be the most likely cause of their bladder cancer. Those two things can both be true.
So I wouldn't -- I don't know if that's what Dr. Shields meant, to be honest with you, but if that is what he meant, I wouldn't agree with that supposition. But again, just from reading this, it's hard to know if that was what was meant.
Q. So you would disagree with Dr. Shields' statement we just reviewed?
A. Yes.
Q. Are you saying that you can't discern

from his writing how he defines idiopathy?

A. No. I just really want to clarify how I view idiopathy. I don't know how he views idiopathy. From the way he's written it, it may be the way I view it. But I'd prefer to make my own definition rather than agree with somebody else's definition.

Q. What do you think is meant by no identifiable exogenous risk factors?

MR. ANWAR: Object to form.

THE WITNESS: I don't know.

BY MR. RUZICKA:

Q. Dr. Shields you relied on -- strike that.

There's no discussion or mention of idiopathy or idiopathic in your textbook chapter; is that correct?

A. That's correct. From what I can review, I don't see any discussion of idiopathy in the textbook chapter.

Q. Are you aware of any discussion of idiopathic or idiopathy in the entire three volumes of the Campbell/Walsh/Wein Urology textbook?

A. I would need to review the entire three

volumes of the textbook to be able to answer that question.

Q. You're here to testify as a urologic oncologist; right?

A. Correct.

Q. And you're prepared to testify and provide opinions in urology; correct?

A. Correct.

Q. You're saying that you can't recall today whether or not idiopathy appears in the textbook that you are you a co-author in?

MR. ANWAR: Object to form.

THE WITNESS: I'm more than happy to discuss idiopathy, but I have not reviewed the three volumes of Campbell/Walsh doing a text word search for idiopathy; that's correct.

BY MR. RUZICKA:

Q. But sitting here today, you don't know of any chapter within that volume or within that textbook that talks about idiopathy?

A. I have no reason to believe there are chapters that discuss idiopathy.

Q. In your chapter on tumors of the bladder, there's no mention of bladder cancers being spontaneous; is that correct? I'll

represent to you that the word "spontaneous" does not appear in your chapter.

Do you have any reason to disagree with me?

A. No.

Q. You'd agree that the word "spontaneous" is defined as acting on its own accord?

MR. ANWAR: Object to form.

THE WITNESS: I would define "spontaneous" as occurring randomly.

BY MR. RUZICKA:

Q. Is there any peer-reviewed literature that you cite in your report in support of the statement that bladder cancer can be spontaneous?

A. There's very little peer-reviewed literature on the questions we're asking in general related to idiopathy.

Q. So is your answer no, there are no peer-reviewed literature cites in support of your statement that bladder cancer is spontaneous?

A. My answer is no, and there's also no literature on this entire subject in the field or very little literature I would say and almost no quality literature.

Q. Did you review Dr. Sfakianos' report

rebuttal report?
A. Sfakianos.
Q. Thanks for correcting me.
A. I did review that.
Q. Did you see that he states that your sole citation in your report does not address the topic that you're claiming in your report?
A. Can we go to the report where that citation is made?
Q. Absolutely. Look at Cagiano, page 13. You state right under Idiopathy, "Despite all that is all known about bladder cancer risk factors, it is estimated that approximately 40 percent of bladder cancer cases cannot be attributed a known risk factor." And you cite 41.
A. Yeah.
Q. And if you look at 41 in your materials, which is on page 31 of this report, it cites to the Berger study.
A. Okay. So the way I would answer that question is the way Dr. Sfakianos cites in that statement you just made. I did read that statement. Dr. Sfakianos cites a study that is itself bogus. So I think this just speaks to the fact that there are no quality pieces of

1 literature. There's no quality evidence to
2 determine idiopathy.
3 So in the absence of quality literature,
4 what do we need to go on? Well, we need to go on
5 experience. And so what is experience? It's
6 seeing a hundred bladder cancer patients per month
7 in my practice, typically six to eight new
8 patients each week, in which I'm taking a history
9 and I'm identifying risk factors.
10 And so I think the point to be made is
11 just there's not high quality estimates of
12 idiopathy in bladder cancer.
13 Q. So you agree with me that this study
14 that you cite in support of your statement is not
15 a supportive cite?
16 A. I neither agree or disagree. I need to
17 relook at that. I'll take the citation.
18 Q. Did you not relook at that when you were
19 directly addressed on it being not a correct cite?
20 A. You know, I reviewed the report. That
21 40 percent idiopathy I strongly believe in. It
22 may come from my personal experience in treating
23 bladder cancer patients as one of the few urologic
24 oncologists in the country that treats primarily
25 bladder cancer.

Q. So my question was: Did you go back and look at your cite after you addressed that it was an incorrect cite to determine if there's any support for your statement that you're claiming the cite supports?

MR. ANWAR: Object to form.

BY MR. RUZICKA:

Q. Did you go back and review this Berger study to see if, in fact, it supports what you put in your report?

A. I did not verify that the Berger study cites 40 percent, if that's your question.

Q. That is.

A. Yeah.

Q. Why not?

A. Because the 40 percent is -- because again, my view is there is no quality literature that estimates idiopathy in our field. I'm happy to discuss the citation as you referred to that sentence in Dr. Sfakianos, but I think before or after we can review that together, he cites a paper that is completely bogus.

Q. What I'm wondering is you've just testified a couple of times that there is no evidence in support of your statement of

40 percent. But you cite a study.

MR. ANWAR: Object to form.

THE WITNESS: Actually, that's not a fair characterize of my opinion.

BY MR. RUZICKA:

Q. But you cite to a study that has nothing to do with your statement that 40 percent of bladder cancer cases cannot be attributed to known risk factors; is that fair?

A. That's not fair.

(Kates Exhibit 21 was marked.)

BY MR. RUZICKA:

Q. Look at what I'll hand you as Deposition Exhibit 21. I'd like you to find where in that study it states that 40 of bladder cancer cases cannot be attributed to known risk factors.

A. I don't see a 40 percent.

Q. So you agree with me that this study that you just reviewed does not support your citation of 40 percent of bladder cancer cases cannot be attributed to a known risk factor; is that fair?

A. That's fair.

Q. Is it a little misleading to provide a cite in support of an argument when the cite

doesn't support that argument?
MR. ANWAR: Object to form.
THE WITNESS: I wouldn't use the word misleading.
BY MR. RUZICKA:
Q. What word would you use?
A. I would use the word error.
Q. But you addressed your error by a rebuttal report, and you didn't seem to correct your error; correct?
MR. ANWAR: Object to form.
THE WITNESS: Well, I mean, the rebuttal report had many incorrections that I would love the opportunity to discuss. Aren't we doing that right now?
MR. RUZICKA: Move to strike as nonresponsive.
BY MR. RUZICKA:
Q. You were addressed of your error by another expert. You had the opportunity to correct your report prior to this deposition, but you did not correct it; correct?
MR. ANWAR: Object to form.
THE WITNESS: Again, that's not my understanding of the sequence of events.

BY MR. RUZICKA:

Q. Anyway, 41 on page 13 is an incorrect cite and should not be there; is that correct?

A. It shouldn't be there for 40 percent. I would say it does -- the article does speak to some very interesting risk factors which we can go over. I don't know if I cite it anywhere else in the report, but I'm happy to discuss the article.

Q. I'm not aware of any other cites to this study in your report, but I will direct your attention to first page 236, 3.2, the Risk Factor section of the Berger study.

A. Okay.

Q. It states in the third sentence of that section, "As most bladder tumors are associated with an acquired carcinogenic exposure, avoidance of carcinogens could decrease the incident of the disease significantly."

Did I read that correctly?

A. Yes.

Q. You've read other urology expert reports including the PLG experts; correct?

A. Correct.

Q. Did you see that they all cite to or they all state that idiopathy is closer to

20 percent?

A. No.

Q. You don't recall that?

A. No. I recall that some did and some did not.

Q. Which ones did not state that 20 percent?

A. Do you have the depositions that we can review?

Q. No. I'm talking about the reports.

A. I was referring to the depositions, which estimated a higher number.

Q. But in the reports, all of them state 20 percent.

A. Yes, but it's confusing because that was then negated in their depositions.

Q. Then in Dr. Shields, the DOJ's expert in epidemiology, he also states 20 percent as we just went over; right?

A. Also, I would disagree with the word -- the usage of the word "also" in that statement because I would say that the PLG experts agree with my assessment.

Q. Let me ask it this way. Dr. Shields puts in his report that idiopathy is at

20 percent. True or false?

A. Can we review the way he says that in, the language?

Q. I'll read it exactly. Page 2 of Dr. Shields' report, Deposition Exhibit 20 states, "Many patients, however, have no identifiable exogenous risk factors (considered to be idiopathic) estimated by some authors as about 20 percent of cases."

Did I read that correctly?

A. Yes. And that's different from the question you asked me.

Q. Are you asking the court to take your word over what's in the medical literature?

MR. ANWAR: Object to form.

THE WITNESS: No. I'm stating that there is no quality medical literature on this question.

BY MR. RUZICKA:

Q. You're stating that the 40 percent idiopathic -- strike that.

Your opinion that idiopathy is the result of 43 percent of the cases you reviewed is based on your clinical practice?

A. Can you restate the question, please?

Q. Would you say that you're relying on your clinical practice for the statement that idiopathy is in approximately 40 percent of the cases?

A. Yes. I'm stating that idiopathy is approximately 40 percent because in the absence of quality medical literature, I would fall back on my extensive experience treating bladder cancer patients every day and assessing risk.

Q. Do you have a report that you reviewed that provided you with that statistic?

A. No.

Q. Is there any data that you provided in your materials list that supports that number?

A. No, but I'll say, you know, I've been thinking about this question a lot over the recent timeframe in which I've been to asked to think about idiopathy, which is -- as we talked about, assessing risk factors prior to two and a half years ago is not something that I've done as a bladder cancer expert in litigation.

And I'm reinforced in that experience that, say, 10 patients come into the door with a new diagnosis of bladder cancer and I take a thorough history. There are no identifiable risk

factors in four out of every ten. So I've confirmed that in my own practice.

Q. Is there any that we can test your -- is there any way that we can test your opinion -- strike that.

Is there any way that we can confirm that four out of the ten patients that you see are presenting with no identifiable risk factor?

A. I'm testifying to it right now.

Q. Is there any document that we can review?

A. No, I don't believe so. I believe all this would be patient protected.

Q. Is there any way -- has your opinion of 40 percent ever been subject to peer review?

A. No.

Q. Is it in any peer-reviewed literature?

A. No. Again, there's no quality peer-reviewed literature on this topic.

Q. And the 40 percent is not in your textbook as we discussed earlier?

A. Again, there's no quality peer-reviewed literature on this topic.

Q. I think you stated that you see about six to eight new bladder cancer patients each week

and manage more than a thousand bladder cancer survivors; correct?

A. I think it depends on the week. So a typical week, I have ten new spots and two add-ons. Sometimes all of those are bladder cancer patients. That's a very busy week for new patients. I also see prostate cancer, so maybe sometimes three patients a week prostate cancer and six will be bladder cancer. But it's some range in that sort of four to five to 12.

Q. In that four to five to 12 patients, are they all -- I'm trying to think of a good way to address this. How many of them are newly diagnosed, that you're diagnosing that day versus how many are you treating?

A. Well, that's a tough question because some come in with an undiagnosed bladder mass, and some come in with a new diagnosis of bladder cancer made by a urologist that then I see as a second opinion. So I don't know if that helps clarify what question you're asking me.

Q. No, that helps.

Are you performing a differential diagnosis or a differential etiology on every one of those patients that you see?

A. So most patients, especially with the bladder cancer, I'm not performing a differential diagnosis. They have the diagnosis of bladder cancer. I'm relying on the pathologist.

To be honest with you, I'm performing a differential diagnosis on my patients with bladder masses, although 90 percent plus of known bladder masses will turn out to be bladder cancer. So it's a fairly limited differential. There are some very rare things that can cause a bladder mass that's not cancer. But I perform a differential etiology on all my patients.

Q. So every patient that you see you perform a differential etiology on?

A. I think it's important what I mean by differential etiology.

Q. Sure, if you can explain it.

A. Sure. So I take a thorough history and physical in which I assess risk factors for bladder cancer and specifically both modifiable but also nonmodifiable. Obviously, modifiable risk factors are particularly important, but there's also nonmodifiable risk factors that are particularly important. And I'll do that on all my patients.

Q. And just to clarify, on all your patients, all your patients that are newly diagnosed or that they're coming to you after they had just recently been diagnosed?

A. All my patients that have a new -- that are seeing me for the first time. I do ask SEER questions of follow-up patients just to make sure nothing has changed. But a lot of the questions I would ask particularly, for example, family history, occupational history, usually don't change, especially in my retirees.

Q. I think that's a better way of clarifying this. So each week how many new patients are you seeing?

A. 10 to 12.

Q. And so your testimony is that for those 10 to 12 new patients you see, you perform a differential etiology on?

A. Yes. And remember it's not like 10 to 12 -- it's not necessarily 10 to 12 bladder cancer patients. It's more like five to 12. No matter what they're coming in with, I will perform a differential etiology.

Q. Do you have a questionnaire or checklist or document that you use?

A. We have like a very generic, a general questionnaire in our department that's used, but I'll ask more questions than that. That's more specific to bladder cancer.

Q. What is on your generic that would be pertaining to your differential etiology?

A. Family history of cancer. I'm thinking of the questionnaire. Smoking history, other medical problems. So, for example, if somebody has had a history of prostate cancer treated with radiation, that will be on the intake form. Occupation, but occupational history is not so. It's only current occupation. There may be others that I might remember as we talk more.

Q. In terms of the occupation question, is it a: What is at your current occupation, blank, or is there a list of occupations that they check?

A. I can't recall. I believe it's blank. Again, you know, I would need to look at it.

Q. Is your differential etiology contained in any medical records of your patients?

A. In my medical records of my patients, I typically will document risk factors, yeah.

Q. So we've gone through what was on your generic form, which is smoking, prior cancers,

occupation and current health issues.

Outside of those, what questions or risk factors do you consider in your daily practice when performing a differential etiology of your patients?

A. So they'll have -- in the history and physical, I'll have their BMI. That will be available to me.

Q. Are you looking at your report? You don't recall off the top of your head?

MR. ANWAR: Object to form.

THE WITNESS: No. I recall some of the things, but a concern that I'm going to say everything and you're going to say, oh, what about in your report you left this out. So I'm like I'm trying to make sure that I say everything.

BY MR. RUZICKA:

Q. You said you do this five to ten times a week.

A. I do.

Q. That's a lot.

A. Let's test me. Let's test me. I'm looking at the report. Test me and let's see if I get it right.

So in addition to what's on the report,

I ask about radiation, chronic catheterizations, history of like congenital anomalies that would lead to chronic catheter, like spine bifida or bladder exstrophy or the like. Then occupational history, so just not just the occupations the patient currently has, but the prior occupations.

And then cigarette smoking. Sometimes what's documented like on the written paper, I'll ask follow-up questions. So I'll want to know -- the thing that we're all taught in medical school, how many packs per day did you smoke, how long have you been smoking, have you quit, when did you quit. And if they're current smokers, then we'll try to set them up with a smoking cessation clinic.

Family history, not just sort of what's written, but I'll ask follow-up questions. Hopefully, this is pretty thorough. It may not be exhaustive, but that's basically the questions I ask.

Q. Anything else that you can think of?

A. Potentially as we talk more, but those are the main points.

Q. When you're asking about occupational history, what occupations are you concerned about

or trying to discern?

A. Well, I mean, there are certain ones that we're taught in medical school, so silica and aniliene dyes would be like the two. Chimney sweeps. There are not a lot of chimney sweeps in America, but those are ones. I don't really ask -- I try to ask open-ended questions like you're doing right now. I don't say, were an aniliene dye worker, that's. Not how we're taught, but what has been your prior occupations.

Q. Any other professions that you're looking at?

A. Those would be three that are common. If somebody says they're a truck driver or a petroleum worker, those have some implications. I may ask follow-up questions. Any type of factory work, I need to understand sort of what their role was, things like that. But those are the basics.

Q. And if you are with a patient that has one of these occupations that you're concerned, do you advise them to cease that profession?

A. That's an interesting question and a great question. I don't believe I've ever been in a scenario in which somebody has been actively doing that profession.

I have been in the situation in which somebody has been retired from that profession. But I would need to know a little bit more information.

Q. So it's your testimony sitting here today that you can't recall any patient with an active occupation that you were concerned with counseling them to cease that profession?

A. That's correct.

Q. How do you determine which risk factors you apply in your differential etiology on your daily basis?

A. Based on the compendium of evidence, based on peer-reviewed literature.

Q. When you are looking at peer-reviewed literature or epidemiological studies to determine which risk factors to apply in your daily differential etiology, what are you -- what relative risk are you looking for in those studies?

A. I wouldn't say that there's a specific number. I would say that I look at the quality of the evidence, so what's the level of evidence that is supporting this, how much evidence is there, has it met the level that it's common in the

urologic community to view it as a risk factor, is it something which is routinely thought to be a risk factor in our peer-reviewed meta-analyses, reviews, book chapters, et cetera.

So I think it's a number of factors that go into deciding whether something is a risk factor or not. And to your point about relative risk, I'm also grading the -- I am taking into account the degree of relative risk in this process.

Q. So would you determine a risk factor if there was a relative risk greater than one with an association of bladder cancer? Do you include that in your differential etiology?

MR. ANWAR: Object to form.

THE WITNESS: Again, I don't really view this as like a cut-off of a relative risk. I think I just stated how I view it.

BY MR. RUZICKA:

Q. So in the studies that you cite in support of silica dust, for example, the relative risk is 1.14. Would that be sufficient for you?

A. Can we take a look at it?

Q. I'll talk about that later as it pertains to the specific plaintiff.

How long do these interviews typically take with your patients when you're performing these differential etiologies?

A. It varies patient to patient.

Q. Do you think it's five minutes?

A. Longer.

Q. Longer than 10 minutes?

A. Depends.

Q. Can you give me a guesstimate on what you typically --

A. Let me think about it this way. If a patient filled out nothing on their form, has never smoked, has no family history, has no history of radiation exposure, has no occupational exposures, there's not as many follow-up questions. So it's going to be a shorter conversation. So maybe that's 10 minutes. I don't know. Maybe longer if they have follow-up questions.

Q. And if you're presented with a patient that has two known risk factors, do you counsel the patient on which is as likely as not the cause?

MR. ANWAR: Object to form.

THE WITNESS: That's not how I talk to

patients about risk factors.
BY MR. RUZICKA:
Q. When you're talking to a patient after you've done a differential etiology, do you tell them what you believe the cause of their bladder cancer is if there's a known risk factor?
A. Absolutely I'll talk to them if it's a modifiable risk factor. Probably if it's a modifiable -- if it's a nonmodifiable risk factor, we'll discuss it as well. The best example would be what we've talked about, which is smoking, which I absolutely will say to them -- I'll look them in the eye and I say, I believe this bladder cancer is caused by your smoking, and I need to you to consider quitting.
Q. What if there's a patient that has two modifiable risk factors that you identify, what do you tell those patients?
A. Can we talk about the risk factors.
Q. Sure. What if you have a patient that had a modifiable risk factor of smoking as well as an occupational exposure?
A. How long did they smoke?
Q. So you would weigh it based on their exposures?

A. Yes.
Q. What if the exposures are equal?
A. Can you give me an example?
Q. What if the length in the occupational profession is the same length as them smoking?
A. I don't know of evidence that supports that assumption.
Q. I'm asking you if there's a patient that has one year of smoking history and one year of chimney sweeping occupational exposure, what do you counsel those patients on what their cause is?
A. So there's more high quality evidence with regard to smoking. If there's a chimney sweep -- personally I've never had a patient who is chimney sweep. I would need to understand like were they climbing up chimneys every -- like I would need to know a little bit, like were they climbing up chimneys every day, what was the extent of their exposure.
Q. Let me give you a different one. What if you have a patient with a high BMI and is also a smoker?
A. So in that situation, I view BMI as -- there is evidence to support a relationship between BMI and bladder cancer development, but

it's a relatively weak association. With smoking there's a much more reproducible clear body of evidence.

And so in that situation, I would say the smoking is the more likely cause in a heavy smoker and a longtime smoker.

Q. So are you -- so is it always the case that you're able -- strike that.

When a patient presents with known risk factors, is it always the case that you can identify which one is more likely to be the cause?

A. No.

Q. So are there certain circumstances where you can't identify which one is more likely to be the cause?

A. Yes.

Q. And in those situations, it is either one or the other. You can't tell?

A. Correct.

Q. Just talking about BMI, do you agree that BMI tends to fluctuate over time?

A. That's a very general statement. I think it fluctuates in some people and in not others.

Q. Do you agree that most studies use a

single measure of BMI as a baseline?

MR. ANWAR: Object to form.

THE WITNESS: I don't know that that's true. No, I wouldn't agree with that. I would need to kind of look at the evidence pertaining to that specific question. I think some actually do use averages of BMI. Some do single cross-sectional periods of BMI. So I think it depends on the study, yeah.

BY MR. RUZICKA:

Q. Do you agree that the epidemiological studies report inconsistent associations between BMI and bladder cancer risk?

A. The way I think of BMI is there is a fairly large body of literature that is of varying quality. The compendium of the literature points in a positive association, but it's pretty weak.

Q. In your report on -- in your Cagiano report, Deposition Exhibit 14, you identify BMI as a risk factor. And we talked about it earlier, your reference to "I would agree with Dr. Shields' assessment "-- strike that.

Page 12 of your Cagiano report, at the bottom of the page, it states, "IARC considers there to be sufficient human evidence for obesity

as a cause of bladder cancer."

And you are relying on Shields for that opinion; correct?

MR. ANWAR: Object to form.

THE WITNESS: Incorrect. I would restate the sentence as I'm agreeing with Dr. Shields' assessment and quoting something from his report.

BY MR. RUZICKA:

Q. What is IARC?

MR. ANWAR: Object to form.

THE WITNESS: I don't recall the full name of it from the abbreviation.

BY MR. RUZICKA:

Q. Do you find IARC to be a reputable source?

A. I can't answer that question without being reminded of what IARC stands for.

Q. International Agency for Research on Cancer. Does that refresh your recollection of what IARC stands for?

A. Sure.

Q. So do you find IARC to be a reputable source?

A. I have not done an independent review of

IARC.

Q. But you cited to Dr. Shields' statement in your report and reliance on this IARC study in support of your inclusion of BMI as a risk factor for these urothelial cancer cases; correct?

A. I quoted the abbreviation in my report, yes.

Q. So you're relying on IARC's interpretation of the BMI evidence for support of it being a risk factor for bladder cancer?

MR. ANWAR: Object to form.

THE WITNESS: That's very attenuated.

BY MR. RUZICKA:

Q. So let's figure this out.

A. I would agree with his assessment that being overweight and obese have been reported to increase the risk of bladder cancer.

Q. And you understand that the -- going further, you cite at the bottom of page 12 Dr. Shields, and then it says General Causation Report at the top of page 13, page 209, citations omitted.

Do you see that?

A. Yes.

Q. Now, if you want to look at the actual

citations that you're referring to, you can go to Dr. Shields' report, which is Deposition Exhibit 20.

MR. ANWAR: There are no page numbers though. There are at the top actually.

BY MR. RUZICKA:

Q. There they are.

A. So what page are we on?

Q. Yeah, it's up there. On page 209, the first full paragraph, the second sentence states, "IARC considers there are to be sufficient human ever for obesity as a cause of bladder cancer," and it cites to 342; is that correct?

Do you see that?

A. Yeah, I see that.

Q. So the Dr. Shields' statement that you have in your Cagiano report is referring to this IARC study about there being sufficient human evidence for obesity as a cause of bladder cancer; is that fair?

A. Yes.

MR. ANWAR: Whenever you're at a good breaking spot, we've been going a little over the an hour.

MR. RUZICKA: Let me just ask a few questions on this study and then let's take a break.

BY MR. RUZICKA:

Q. So would you agree that if IARC finds an association, it is a reliable source and that's why Dr. Shields cites to it and then you cite to Dr. Shields?

MR. ANWAR: Object to form.

THE WITNESS: I would not agree.

BY MR. RUZICKA:

Q. Well, you cited to Dr. Shields in support of your argument on BMI; correct?

A. Correct.

Q. And Dr. Shields cites the IARC studies in support of his argument on BMI; is that correct?

A. Correct. That's why I'm telling you it's a very attenuated question. You're asking one thing, then another, then another, and then you're asking me, well, because you said one thing, is it like the third or fourth thing. That's just like an incredibly attenuated question. That's why I answered that way.

Q. So are you relying on the IARC study

cited by Dr. Shields in support of your conclusion that BMI is associated with bladder cancer?

A. I think I'm essentially -- I have a number of direct citations for BMI and bladder cancer that I can definitively say I'm relying on. I took into -- I took Dr. Shields' report into account. But did I independently verify and review the IARC study you're referring to?

I can't say for sure that I independently reviewed and looked at that particular study in my own assessment of BMI as a risk factor.

Q. So when you reviewed Dr. Shields' report, you didn't check his citations?

MR. ANWAR: Object to form.

THE WITNESS: So when I reviewed Dr. Shields' report, did I read every citation in -- did I read every paper he cited, is that your question?

BY MR. RUZICKA:

Q. Yes.

A. No.

Q. Is that true also for Dr. Goodman's report, did you read all the citations in her report?

A. No. I read some of them, but I was certainly not as comprehensive as she was.

(Kates Exhibit 22 was marked.)

BY MR. RUZICKA:

Q. I'm going to hand you what's been marked as Deposition Exhibit 21. I'll represent to you that this is the study that Dr. Shields cites regarding his statement.

MR. ANWAR: I think it should be 22.

MR. RUZICKA: I apologize.

BY MR. RUZICKA:

Q. I'll hand you what I've marked as Exhibit 22, which is the IARC study that Dr. Shields cites in support of his statement that IARC considers there to be sufficient human evidence for obesity as a cause of blood bladder cancer.

Do you have that report, that study?

A. Yes.

Q. I'm going to direct your attention to the -- well, first, the first page, on page 21 -- let me ask you this: Have you reviewed this study before?

A. I honestly don't recall.

Q. Under the Epidemiological Study section

of the first page, Exhibit 22, the first sentence says, "For the current reassessment, most of the more than 1000 epidemiological studies that we reviewed were observational studies on cancer risk and excess body fatness because studies, including clinical trials of weight loss or weight control interventions were sparse."

So is it your understanding that this review by IARC was encompassing of over 1000 epidemiological studies?

A. That's what you just read.

Q. I'm going to direct your attention to the second page, 795, of the document, and I'm going to ask you to read the third paragraph on the right-hand side. If you could just read that sentence for multiple myeloma, "We reviewed studies of eight other cancers."

A. "We reviewed studies of eight other cancers for which evidence for an association was considered inaccurate, owing to limited data, inconsistent results, or no data suggesting an association: cancers of the lung, esophagus, gastric noncardia, extrahepatic biliary tract, skin, testis, urinary bladder and brain or spinal cord."

Q. So IARC's conclusion is that there was -- that they considered evidence of an association was inadequate or inconsistent results or no data as it pertains to bladder cancer; is that correct?

A. That's what I just read.

Q. And then I'll have you look at page 796, the next page.

A. We assessed reviews?

Q. The one with the chart at the top. It should be page 796 of the document.

A. Yes.

Q. So Table 2 states, "Strength of the evidence for a cancer preventative effect of the absence of excess body fatness, according to cancer site or type."

Is that correct?

A. Correct.

Q. If you look at the strength of evidence in humans for urinary bladder, what does it say?

A. Inadequate.

Q. If you look at gallbladder, what it's say?

A. Sufficient.

Q. Does the gallbladder have anything to do

with the urinary bladder?

A. No.

Q. So in looking at this, Dr. Shields' citation to this IARC study is not supportive of his position that IARC concluded there was sufficient evidence for BMI and bladder cancer; is that fair?

A. I would say that this is the first time I'm reading this study that you're giving me. So I would say based on what we've read together, I don't see evidence in this specific study to say that IARC has found an association in this study from 2016, August of 2016.

I don't know if there's other studies or other things that you're not showing me, but I have to assume that what you're showing me is the only IARC study. Is that correct?

Q. Yes. Do you know which ones with citations in Goodman and Shields that you eventually did look up and review?

A. I can say I read the four studies as it relates to the Camp Lejeune water and bladder cancer. I read many of the other studies in Goodman's report. I was not assessing it with the methods of an epidemiologist, and I would want to

be upfront with that. But I did review those studies or read those studies.

Q. So for the ones that you didn't review, you would agree that you can't state that those cites support the opinions in which they were relied upon?

A. As it pertains to the relationship of the water at Camp Lejeune and the development of bladder cancer, I'm relying on the reports of Dr. Goodman and to another extent Dr. Bailey and Dr. LaKind as it relates to it as a risk factor for development of bladder cancer, which is what I was tasked to do for this specific causation question.

Q. But you and review all the citations for Dr. Goodman or Dr. Shields; fair?

A. That's correct. I did personally do the general causation analysis nor did I review the reports of the PLG experts. Sorry. Nor did I review all of the studies cited by the PLG experts.

Q. This is a good time. We can take a break.

THE VIDEOGRAPHER: We are off the record at 2:28.

(Recess from 2:28 p.m. to 2:36 p.m.)

THE VIDEOGRAPHER: We are back on the record at 2:36.

BY MR. RUZICKA:

Q. Let's look at your report on Cagiano, Deposition Exhibit 14. On page 11 of Exhibit 14, the second paragraph, second sentence states, "In considering whether any relationship exists between bladder cancer and the exposure to the water at Camp Lejeune, I am relying on the opinions of the United States toxicological and epidemiological experts Dr. Goodman and Dr. Peter Shields."

Did I read that correctly?

A. Yes.

Q. So you're relying on both of those reports?

A. Yes. As I stated, the majority of what I'm relying on specific for the general causation as it relates to the risk of water at Camp Lejeune is based on Dr. Goodman's report in which she thoroughly reviews the basically compendium of literature on the relationship between water at Camp Lejeune and bladder cancer.

I also reviewed the PLG expert opinions

that correlated to her report. There were five that correlated to her one report.

Q. You were testifying earlier that in reviewing Dr. Goodman's report, you reviewed some citations, but not all; true?

A. I read some citations, but I did do the methodological review that she did. That was comprehensive and thorough.

Q. So the citations regarding bladder cancer as an outcome, did you review all those citations?

A. The citations regarding the relationship of the water at Camp Lejeune to bladder cancer, is that your question?

Q. No. Any study that looked at bladder cancer as an outcome, did you review all those studies?

MR. ANWAR: Object to form.

THE WITNESS: I don't understand your question.

BY MR. RUZICKA:

Q. So there were studies cited by Dr. Goodman that related to ATSDR and Dr. Bove in the Camp Lejeune; correct?

A. I think we need to look at the report to

go over it together.

Q. Sitting here today testifying about your opinions, you can't recall if you reviewed all the citations about bladder cancer as an outcome by Dr. Goodman?

MR. ANWAR: Object to form.

THE WITNESS: Again I want to be responsive to your question, but I don't understand the use of the word bladder cancer as an outcome. I don't know if that was a section in her report. And that's what I'd like to review with you.

BY MR. RUZICKA:

Q. Let me ask you a different question before we go into Dr. Goodman's report. The second the last sentence in the paragraph we were just reading from in Exhibit 14, Cagiano's report, page 11, states, "Dr. Goodman and Dr. Shields have concluded to a reasonable degree of scientific certainty that the currently available scientific evidence does not support a causal association between TCE, PCE, benzene or vinyl chloride exposure in bladder cancer."

Did I read that correctly?

A. Yes.

Q. Based on what you wrote in your report, you concluded or you relied on those opinions to exclude the water at Camp Lejeune as a potential risk factor for any of the plaintiffs in this case; correct?

A. Can you restate your question? I want to make sure I agree with it.

Q. Based on your review of Dr. Goodman and Dr. Shields, you excluded the water at Camp Lejeune as a potential risk factor -- strike that.

Based on your review of Dr. Goodman and Dr. Shields' reports, you did not consider the water at Camp Lejeune as a risk factor for any of the plaintiffs in this case?

MR. ANWAR: Object to form.

THE WITNESS: For the questions specifically regarding the water at Camp Lejeune as it relates to development of bladder cancer, I relied on Dr. Goodman's report to help form my own opinion. I also relied on the five -- I also read and took into account the five reports of the PLG experts, which again in my opinion, paled in comparison to Dr. Goodman's thorough epidemiological review.

BY MR. RUZICKA:
Q. My question is: You did not consider the water at Camp Lejeune as a risk factor for any of the plaintiffs in this case?
MR. ANWAR: Object to form.
THE WITNESS: Correct.
BY MR. RUZICKA:
Q. So when performing your differential etiology, it was not even on your review as a potential risk factor?
A. It was not -- I did not view it as a potential risk factor for forming bladder cancer.
Q. In the Conclusion of your report for Mr. Cagiano, you state on page 26 that "Mr. Cagiano's UTUC was most likely caused by the idiopathic nature of UTUC with increased BMI playing a lesser role, and unlikely caused by the exposure to the water at Camp Lejeune."
Did I read that correctly?
A. Yes.
Q. That final portion of the Conclusion, "and unlikely caused by exposure to the water at Camp Lejeune," suggests that you considered the exposure at the water at Camp Lejeune as a potential risk factor for Mr. Cagiano; is that

fair?

A. You asked -- I think we're kind of running around this one word here. That's "potential." And I ruled it out as a potential risk factor just like I would rule out anything that -- other things that are not risk factors.

Q. Just trying to get this clear. You did consider it, and then you ruled it out?

A. Well, specifically within the context of this litigation, I certainly considered the water at Camp Lejeune, and that's why to form that opinion I read the reports of Dr. Goodman, Dr. LaKind, Dr. Bailey as well as the PLG experts. Otherwise, how would I assess whether the water at Camp Lejeune was a risk factor.

Q. That's what I'm getting at.

A. I want to make sure I answer your question.

Q. So you concluded after review of your evidence that the Camp Lejeune water was not a risk factor?

A. I concluded that for Mr. Cagiano exactly what I said, the Camp Lejeune water -- that his UTUC -- it's important we distinguish UTUC from bladder cancer because they're two different

1 cancers -- that UTUC was unlikely caused by
2 exposure to water at Camp Lejeune.
3 Q. But what I'm wondering is if it is not a
4 risk factor, why are you weighing it against other
5 risk factors?
6 MR. ANWAR: I'll just say object to
7 form.
8 THE WITNESS: Because I was specifically
9 asked to do that as part of this litigation.
10 BY MR. RUZICKA:
11 Q. So you did weigh the exposure at Camp
12 Lejeune against other risk factors of these
13 plaintiffs?
14 A. I assessed whether exposure to Camp
15 Lejeune -- exposure of water in Camp Lejeune was a
16 risk factor for bladder cancer within the context
17 of each patient.
18 Q. And for Mr. Cagiano, the only risk
19 factors that you identified as potential causes,
20 his UTUC were idiopathic nature and increased BMI;
21 is that true?
22 A. Yes. And I'll state that even increased
23 BMI was a weak risk factor because of the relative
24 lack of evidence in this entire field as it
25 relates to UTUC.

Q. So is it fair to say you're just speculating that the BMI studies would apply for upper tract urothelial carcinomas?

MR. ANWAR: Object to form.

THE WITNESS: I really wouldn't use the word speculating, but I would describe UTUC as a distant cousin of bladder cancer. There is limited crossover in terms of risk factors between bladder cancer and UTUC. The only one that I believe there is a substantial amount of evidence for is smoking.

There is some -- because there is evidence for BMI in bladder cancer. That's why I kind of basically said I can't rule out BMI. It's just that it's a cousin of bladder cancer, not the same thing. So I'm not ruling it out. It may have played a lesser role.

BY MR. RUZICKA:

Q. But didn't you testify earlier that in order to include a risk factor in your differential etiology, you look at the peer-reviewed literature?

A. Yes.

Q. And the peer-reviewed literature for BMI and upper tract urothelial carcinoma, do you cite

it in your report?

A. We can talk about UTUC. It has very limited literature regarding risk factors. Use Camp Lejeune as an example. There's very limited data at all on UTUC. So the part of the exercise here is in trying to take an area in which there is a great deal of no data bladder cancer and extrapolate it to a rare diagnosis like UTUC. And it's a challenging task.

It's the reason why I stated in the summary most likely caused by the idiopathic nature of UTUC because I think it's more likely that it's due to idiopathy and increased BMI playing a lesser role. So I'm acknowledging BMI based on the fact that there's a relationship to bladder cancer. But I would also certainly acknowledge that the level of evidence for UTUC with BMI not the same as for bladder cancer.

MR. RUZICKA: Move to strike as responsive.

BY MR. RUZICKA:

Q. My question was: Did you cite all the studies that you rely upon in support of BMI being associated with upper tract urothelial carcinoma in your report?

MR. ANWAR: Object to form.

THE WITNESS: The only statement in my report that I can see currently -- maybe you have others highlighted, but what I'm seeing is data regarding UTUC and BMI is even more limited as it is with all risk factors typically associated with bladder cancer. What I meant by that was between bladder cancer and UTUC.

BY MR. RUZICKA:

Q. If you look at page 23 of the Cagiano report, you state midway through that paragraph, "As previously discussed, it appears that there is a dose-response relationship where a relative risk of developing bladder cancer increases as BMI increases."

Then you cite 32 and the 33; is that correct?

A. Correct.

Q. So are those the only two citations that you are relying upon in support of your argument that Mr. Cagiano's BMI played a role in his development of bladder cancer?

A. Yes. And I would say that the sentence you just quoted was followed by a direct discussion of that in which I state, "Whether this

1 risk translates to a risk factor for UTUC is
2 currently unknown because UTUC is far rarer and
3 less studied. As I posit throughout this report,
4 I do not believe there to be a broad overlap
5 between risk factors for bladder cancer and risk
6 factors for UTUC. I believe the literature to
7 support this view by identifying very specific
8 factors that increase one's risk for UTUC, such as
9 Lynch syndrome and Balkan nephropathy. Therefore,
10 I cannot completely rule out BMI as a risk
11 factor."
12 Q. So you agree with me that the
13 association with BMI and UTUC is currently
14 unknown?
15 A. My testimony is exactly what I just
16 stated, which I would agree that there's limited
17 data with UTUC as I believe there's limited data
18 with UTUC and all risk factors with mainly the
19 exception of smoking.
20 Q. But in your report, you say, "Whether
21 this risk translates to a risk factor for UTUC is
22 currently unknown because UTUC is far rarer and
23 less studied."
24 My question is: Do you agree that BMI
25 as a risk factor for UTUC is currently unknown as

you put in your report?
A. I believe that the level of evidence to directly link BMI as a risk factor for developing UTUC is not to the level enough that would allow me to rule it in as a risk factor. But because it's a rare cancer unlikely to ever be able to be studied in that rigorous manner because of the low numbers, I'm left with the data I have, which is that it's a cousin of bladder cancer, and, therefore, I cannot rule it out.
Q. So your ruling in BMI as a potential risk for Mr. Cagiano's development of bladder cancer even though you state in your report whether this risk translates as a risk factor is currently unknown; is that fair?
A. No. That is not what I said.
Q. But you can't point to any study that identifies UTUC and its association with BMI; is that fair?
A. As I've stated, there are limited studies in UTUC in general due to it being a rare cancer and low numbers. So we're unlikely to ever be able to have an epidemiological study to address that question.
Q. So you're just speculating that that

1 would correlate from the bladder cancer studies to
2 UTUC. You're not relying on any particular study;
3 is that fair?
4 MR. ANWAR: Object to form.
5 THE WITNESS: I disagree with that
6 summary of my opinion.
7 BY MR. RUZICKA:
8 Q. You cite the Choi study in support for
9 BMI and its association with UTUC in your report
10 for Mr. Cagiano on page 12. Look at cite 32 if
11 you want to confirm it.
12 A. What page are you?
13 Q. The reference is on page 12, and the
14 cite is on page 30, 33.
15 A. I'm looking at my CV citations. Yep. I
16 see the citation you're referring in this sentence
17 in my report.
18 (Kates Exhibit 23 was marked.)
19 BY MR. RUZICKA:
20 Q. We'll mark Deposition Exhibit 23.
21 That's a copy of the Choi study. I'm going to go
22 ahead and just direct your attention to the second
23 page, the first full sentence of the second
24 paragraph that states, "In this study, age, sex
25 and diagnostic codes based on the International

Classification of Diseases, Tenth Revision, Clinical Modification (ICDD-10-CM) were retrieved. Bladder cancer was coded as C67."

Did I read that correctly?

A. Yes.

Q. So this study used ICD codes in order to define the population that it was reviewing?

A. Yes.

Q. And you agree that the ICD codes between bladder cancer and UTUC are different?

A. I'm not a hundred percent sure.

(Kates Exhibit 24 was marked.)

BY MR. RUZICKA:

Q. I'm going to hand you what we'll mark as Deposition Exhibit 24, which is the ICD codes from the National Center for Health Services as it pertains to renal pelvis.

Do you see that?

A. Yes.

Q. And what is the ICD code for renal pelvis?

A. So this table I don't -- I'm not sure what I'm looking at. Are they all ICD 9 codes? You may have to walk me through this table. It's just like a printout of a website. I'm not sure.

Q. So you would you agree with me that the ICD code for neoplasm, neoplastic pelvis, pelvic renal, which is fifth from the bottom, is C67?

A. C under malignancy primary, is that the table heading -- is that the row, the column?

Q. Yes, yes.

A. Yes. C76?

Q. Yep.

A. Okay. But like C65 probably would also be UTUC. Yeah. I don't know. We can see what they cited in the study.

Q. In the study they cited C67 for bladder cancer; correct?

A. For bladder cancer -- bladder cancer is not on this list.

Q. Yes.

A. But for UTUC, I mean, this gets into sort of some of the problems with UTUC, to be quite honest with you. I don't see ureter on here.

Q. So you would agree that relying on an epidemiological study that is based on diagnostic codes is problematic for relating it to a specific cancer diagnosis like UTUC?

A. I would agree that the quality of

evidence is not that of other types of studies.

Q. You can set that aside.

So you believe it's appropriate to include BMI as a potential risk for Mr. Cagiano even though some of the scientific evidence is currently insufficient?

MR. ANWAR: Object to form.

THE WITNESS: Again, I think it's really important to again go back to what I actually said and talk about it, because I think this really speaks to the problem with UTUC in general in this case. But the limited -- because it's a rare cancer, you just spoke to the quality. Say you try to do ICD-9 review in upper tract, and I've done SEER studies, and the numbers are small. You're extrapolating. So the quality of evidence can be challenging.

So that's why, to go back to my report, I said, "Mr. Cagiano's UTUC was most likely caused by the idiopathic nature of UTUC with increased BMI playing a lesser role." So again, not really ruling it in because I have a certain threshold for quality of evidence sort of I need to be able to rule in risk factors, but I'm acknowledging that -- I'm not sure that we'll have that. And so

because it's a distant cousin, you know, I'm positing that I'm not able to rule it out.

BY MR. RUZICKA:

Q. But you ruled it in even though it doesn't meet your level of quality of evidence in determining what is a risk factor?

A. Again, I go back to the statement I just made. We're kind of going in circles on this because you're paraphrasing me in a way that's not written in my report.

Q. Well, I'm just trying to figure out. What you just said was that the quality of evidence is challenging for UTUC and its association with BMI; is that fair?

A. I'm saying that the quality of evidence is challenging with regards to UTUC and BMI, yes, that's fair.

Q. And despite that the quality of evidence is challenging, you still decided to include it as a risk for Mr. Cagiano; is that true?

A. I'm acknowledging it as potentially playing a lesser role, but I don't -- that's because it is related to -- of its relationship to bladder cancer again where there's more of a role.

I don't view the evidence as we've

discussed such that I would view it as certainly a strong risk factor or even rule it in as a risk factor, but I can't rule it out because of the similarities that we've discussed between UTUC and bladder cancer.

Q. Let me just be clear on this. Are you ruling in BMI and as a risk factor for Mr. Cagiano?

A. No.

Q. You're not?

A. I'm not ruling it in. I'm not ruling it out.

Q. Then why did you say with an increased BMI playing a lesser role? When you use the term lesser role, that implies that you're ruling it in; fair?

A. I would say that I view it as -- I'm acknowledging that if we are extrapolating from bladder cancer which, by the way, all parties are doing in this case, then I'm relying on the literature for bladder cancer to inform my opinion about UTUC because I don't believe this rare cancer will ever have the studies that will definitively prove it as a strong risk factor.

And so because of that, I'm

1 acknowledging that it's reasonable to -- it's not
2 up to the standards, in my opinion, to rule it in.
3 But again, I can't rule it out because of its
4 association with bladder cancer. I think this
5 really speaks to the differences between UTUC and
6 bladder cancer and the challenges of taking a risk
7 factor for bladder cancer to UTUC in a rare
8 disease. So that's really what that statement
9 encompasses just to try -- but I would agree it's
10 not the primary risk factor.
11 Q. But you agree that there are challenges
12 with the quality of evidence regarding BMI and
13 UTUC?
14 A. Yes.
15 Q. Despite those challenges, you still
16 consider it as a risk and you can't rule it out?
17 A. Yes.
18 Q. Is that true with other risk factors
19 that have challenging quality of evidence, you
20 would do the same?
21 A. That's true with risk factors in which
22 there's quality evidence to support its
23 relationship to bladder cancer in which there's
24 limited evidence in UTUC.
25 Q. But I'm just talking about when you have

1 challenging quality of evidence in the studies,
2 for Mr. Cagiano, you included BMI as a risk.
3 Would that be true of other risk factors that have
4 challenging quality of evidence?
5 MR. ANWAR: Object to form.
6 THE WITNESS: I would answer yes, it's
7 true in the context of bladder cancer when it
8 relates to UTUC specifically within this exact
9 conversation because UTUC encompasses maybe
10 5 percent of all urothelial cancers. We just
11 aren't going to be able to have the same quality
12 of evidence for UTUC that we're able to have for
13 bladder cancer. And to some degree, we need to
14 extrapolate.
15 So to answer your question, when it
16 comes to -- if you're asking occupational
17 exposures it relates to UTUC, which is a
18 similar -- we can go down that similar road as
19 BMI, I would answer probably we need to consider
20 occupation exposures even though there's certainly
21 no data with regards to occupational exposures and
22 UTUC.
23 And that data will be very difficult for
24 the community to do. It will be a very difficult
25 study to do. So, yes, I would say I would do a

similar exercise between risk factors for bladder cancer. I would extrapolate them to UTUC, but I would acknowledge the weakness of that evidence in doing that exercise.

MR. RUZICKA: I'm going to object as nonresponsive.

BY MR. RUZICKA:

Q. As a result of Mr. Cagiano's diagnosis of UTUC, he had a kidney removed; is that fair?

A. He had a -- I believe he had a nephroureterectomy for his upper tract. But let's review it. Yes. On March 13, 2018, Mr. Cagiano underwent at robot-assisted nephroureterectomy.

Q. So he no longer has a left kidney; is that fair?

A. Left kidney and ureter typically with a bladder cuff. That would be his left nephroureterectomy.

Q. He will now suffers from chronic kidney disease; is that correct? Go to page 21.

A. Yes.

Q. Stage 3 chronic kidney disease; is that correct?

A. Yes.

Q. And do you believe that that stage 3

1 chronic kidney disease is related to his upper
2 tract urothelial carcinoma diagnosis?
3 A. So I speak to this on page 25.
4 Mr. Cagiano did not have evidence of chronic
5 kidney disease prior to his left nephrectomy. It
6 should be left nephroureterectomy. There may have
7 been some underlying dysfunction of his left
8 kidney after his left pyeloplasty in 1978 and
9 pyelolithotomy in 1980 resulting in chronic
10 hydronephrosis some years. After left
11 nephroureterectomy in 2018, he developed stage 3
12 CKD.
13 So this is typical of patients
14 undergoing nephroureterectomy, yeah.
15 Q. Moving on, do you have Mr. Criswell's
16 report in front of you, Deposition Exhibit 15?
17 A. Yeah.
18 Q. For Mr. Criswell, you performed a
19 differential etiology and concluded that his
20 occupational history was not a factor in his
21 development of bladder cancer; correct? Page 25.
22 A. Yes, that's correct.
23 Q. And you also concluded that his family
24 history was not a risk factor?
25 A. Yes.

Q. And you concluded that inflammation was not a risk factor?
A. Correct.
Q. The only risk factors you have identified for Mr. Criswell were his smoking history, obesity and idiopathic nature; is that correct?
A. Yes.
Q. Mr. Criswell diagnosed when he was 42 years old; is that correct?
A. Yes.
Q. What's the average age of someone being diagnosed with bladder cancer?
A. Mid 70s.
Q. This is almost 30 years prior to the average age in bladder diagnoses?
A. Yes.
Q. Is it less than 10 percent are diagnosed before 55?
A. Probably around that number.
Q. And the percent is probably even lower for individuals diagnosed before 45?
A. I'm certain there's like a bell curve. This may be in my chapter. Yeah. I would say it's most likely less than 10 percent, that's

fair.

Q. For Mr. Criswell you assumed that he smoked one cigarette per day for one year, which you termed a generous assumption given the conflicting medical records.

Do you recall that?

A. I'm in the smoking section on page 24. Can you point me to where I say that? I'm on the smoking section. I'm happy to read it.

Q. No, that's okay. For Mr. Criswell you acknowledge -- well, strike that.

Did you read Mr. Criswell's deposition?

A. I believe so. I'm going to just doublecheck -- I forget which exhibit is my materials -- to be sure I answer that question.

Q. I'll represent it's on your materials considered list.

A. Then yes.

Q. In his deposition, did you review testimony that he smoked very little as a teenager?

A. I would need the deposition in front of me to verify that claim.

(Kates Exhibit 26 was marked.)

BY MR. RUZICKA:

Q. I am handing you what has been marked as Deposition Exhibit 26, which is a portion of Mr. Criswell's deposition testimony that you reviewed. I'm going to direct your attention to page 172, the third page.

A. Yes.

Q. At the bottom of page 172, starting with line 25, it states, in the answer, "My memory of smoking was as a young teenager. I had hair all the way down to here and, you know, it was a social type thing. I didn't really smoke or -- because I didn't like it. I didn't like the smoke. I didn't like the way it smelled. So I just didn't do it, you know, but that's what I remember."

Did I read that correctly?

A. Yes.

Q. Then it goes further. There's a question that says, "Okay. And I'm just -- so" --

Then the answer is: "Then when I told -- I told the doctors, you know, that I smoked at an early teen, they started putting do down never smoked. You know, they just -- never smoked, check never smoked. You know, because --

1 and some of it, I started saying okay. That was
2 so long, you know, they just considered I never
3 smoked."
4 Do you see that?
5 A. Yes.
6 Q. And you would agree with me that his
7 medical records, as you state in your report on
8 page 24, also deny ever smoking or that he also
9 denied ever smoking in multiple medical records;
10 is that correct?
11 A. Yes.
12 (Kates Exhibit 27 was marked.)
13 BY MR. RUZICKA:
14 Q. Now, you also read according to your
15 materials considered list, the treating urologist
16 for Mr. Criswell, Dr. Shelfo. Do you recall
17 reading that deposition?
18 A. It's on my materials reviewed list?
19 Q. Yes, it is.
20 A. Yes.
21 Q. In that deposition, do you recall
22 Dr. Shelfo being asked about Mr. Criswell's
23 smoking history?
24 A. What page are we on?
25 Q. I'm just asking if you recall.

A. Not that particular back and forth.

Q. On line 5 on page 104 of this deposition, the question is -- I guess I'll read the whole question for the record.

Going back to page 103, line 22, "I think you were asked from Mr. Capece a good number of questions about smoking being a risk factor. Did I hear you say in Mr. Criswell's case you did not consider smoking to be a risk factor for bladder cancer because of his smoking -- and I'm going to try to get words here that you use -- I want to make sure I get these perfect. I guess, generally speaking, was it your testimony in Mr. Criswell's case, his smoking was not a risk factor because he was not a heavy smoker and a long-term smoker?"

The answer from the treating urologist on line 9 is: "Yes. That is the gist of it, yes. It was very short period of time, and he was considered a very young age and not continued. So the risk, personally, I don't think the risk isn't there."

Going further, the next question, "And so is that within a reasonable degree of medical probability?"

1 And the Dr. Shelfo states on line 16,
2 his answer is, "It might be, yes."
3 So Mr. Criswell's treating urologist
4 doesn't consider Mr. Criswell's smoking history to
5 be a risk factor for his development of bladder
6 cancer; is that fair?
7 A. That's fair. That's a fair summary from
8 the back and forth from this deposition.
9 Q. And you've never met Mr. Criswell, have
10 you?
11 A. No.
12 Q. Why are you including smoking history as
13 a risk factor for Mr. Criswell?
14 A. Well, I mean, let's talk about this
15 exhibit that we're talking right now, Exhibit 27.
16 I want to make sure I get this perfect, to restate
17 the phrase I guess. "Generally speaking, was it
18 your testimony that in Mr. Criswell's case, his
19 smoking was not a risk factor because he was not a
20 heavy smoker and a long-term smoker?"
21 First of all, that question is pretty
22 leading. But let's ignore that side of it and say
23 just because somebody is not a heavy smoker and a
24 long-term smoker does not unfortunately mean that
25 they are not at risk for developing bladder cancer

because of their smoking history.

Q. My question is: What was your reasoning for including smoking as a risk factor for Mr. Criswell?

A. I'm sorry. It's thought that was asked and answered. I'll address it again.

Because somebody has a smoking history, and I discuss this in my report as there being conflicting evidence in the literature, but it's in the medical record medical records that he smoked half a pack a day for two years at one point and he quit in 1974, which makes you believe he was smoking up until 1974, then restarted in 1977 and quit 1978. He smoked two or three cigarettes per day when he did smoke.

Let's take that at its worth. That's very specific. So I have no idea why a physician would incorrectly write at statement like that. But let's say it was just two or three cigarettes per day for two years. Two cigarettes, let's be conservative and say it wasn't three. It was two.

Two times 360 is 720 cigarettes. Is that right, 720, and then times two again, two years, would be 1,140 cigarettes. I view that as a meaningful smoking history. Is it a low smoking

history? It is. But going back to Exhibit 27, I disagree with this idea posited that -- again, I think leading question -- but posited to the treating urologist that he was not a heavy smoker and a long-term smoker meaning that he doesn't have a risk for bladder cancer. Even a short span smoking history increases one's risk of bladder cancer.

Q. You are not a toxicologist, are you?

A. I'm not.

Q. And you're just guesstimating his tobacco exposure is based off of various medical records?

MR. ANWAR: Object to form.

THE WITNESS: Can you clarify what you mean by guesstimating?

BY MR. RUZICKA:

Q. Sure. You don't know how many cigarettes Mr. Criswell smoked, do you?

A. I do not know.

Q. You're just gathering the information from medical records and from deposition testimony.

A. I'm doing what I do on a daily basis, which is review medical records of a patient.

Many times there's inaccuracies and there's differing statements about something in a medical record. And I'm trying to put it together to come to the most likely reasonable assessment of a history.

Q. And you weren't provided with a toxicological opinion that Mr. Criswell was exposed to enough cigarettes to increase his risk of developing bladder cancer, were you?

MR. ANWAR: Object to form.

THE WITNESS: I don't believe so.

BY MR. RUZICKA:

Q. So for Mr. Criswell you are just considering his duration of exposure and applying it to the epidemiological studies to determine that he was at risk for having smoking as a risk factor for developing bladder cancer?

A. Yes.

Q. So the amount of exposure to a specific compound is not necessary in your opinion.

MR. ANWAR: Object to form.

THE WITNESS: There is a dose-response relationship to cigarette something. I don't know if that's your question.

BY MR. RUZICKA:
Q. What I'm wondering is you're just basing it off of duration. You're not basing it off of the level of the actual carcinogen in the cigarettes; correct?
MR. ANWAR: Object to form.
THE WITNESS: I believe that in the studies that I cite, it's not based off of carcinogen exposure but the based off of dose-response being like cigarettes and that there's a known quantity of exposure based on the cigarettes.
So I think it's fair to view a dose-response relationship of cigarette smoking based on the number of the cigarettes you smoke in a day, yes.
BY MR. RUZICKA:
Q. So that's based on not the number of cigarettes, but the number of duration of years in which someone smokes; correct?
A. It would be both.
Q. And you agree that Mr. Criswell quit smoking 20 years prior to his bladder cancer diagnosis?
A. So it looks like he was smoking up until

1974, quit, restarted in 1977 and quit in 1978. And then his diagnosis I believe was in 1997. So, yes, roughly 20 years.

Q. In your report, you cite to a study by Boffetta from 2008. Do you recall that study?

A. I'd love to look at it with you.

Q. Before I give it to you, you don't recall it?

A. I don't recall exactly which study you're referring to. But probably will when we review it together.

(Kates Exhibit 28 was marked.)

BY MR. RUZICKA:

Q. I'm handing you what's been marked as Deposition Exhibit 28, which is "Tobacco Smoking and the Risk of the Bladder Cancer," which is a study that you cited in your report for Mr. Criswell.

A. Can we look at where I cited it in my report?

Q. Sure, on page 24.

A. The context.

Q. You cite the second to last sentence Mr. Criswell smoked primarily as a teenager, age 13 and 14 increases his risk compared with smoking

later in life, numbered cite 19. If you go to page 31 of your report, the top cite is this Boffetta article; correct?

A. Yes.

Q. So in this study that you cite for the proposition that smoking earlier in life increases the risk when compared with smoking later in life, do you know if Mr. Boffetta took into consideration the duration of the individuals in relationship to the year they started smoking?

A. Can you clarify your question?

Q. Sure. Boffetta just looked at the year in which an individual started smoking; correct?

A. You have to look at the method.

Q. I'm going to direct your attention to page 49 of Deposition 28, Table 4, which states results of case controlled studies on age starting smoking and the risk of urinary bladder cancer. In that table, it just states that the age started smoking in years; is that correct?

Do you see that?

A. Yes.

Q. But there's no reference to duration of smoking?

A. In that table, you're correct. This is

age. But I believe this article also discusses duration. So we would kind of need to dig into this article a little bit more to understand how they discuss both.

Q. Sure. And would you agree with me that if it didn't -- strike that.

Would you agree with me that someone that starts smoking earlier in life and continues to smoke up until their diagnosis would have a higher risk of developing bladder cancer?

A. Compared to?

Q. Compared to someone that smoked at a young age for a very short period of time.

A. Yes.

Q. So duration is important when you're looking at the age at which someone started smoking?

MR. ANWAR: Object to form.

THE WITNESS: There's a few aspects of smoking, all of which are important. So age that you start smoking, duration that you're smoking, latency, so time from quitting, and pack years, total pack years. So intensity of smoking and the duration of smoking, all of those things independently increase one's risk of bladder

cancer.

So to answer your question, because it's another variable -- so you're asking about age that somebody starts smoking. I would say yes, that is a risk factor for development of bladder cancer. That increases once risk, but also somebody you that's smoking for 40 years is at a higher risk than somebody that's smoking for two years.

BY MR. RUZICKA:

Q. In the Boffetta study, it also looks at the effect of cessation of smoking; is that true?

A. Can you show me what table you're looking at?

Q. Sure. Table 5.

A. Yes.

Q. If you look at the first reference, 37 for USA men, time since quitting smoking years 16 plus, the relative risk is 1.1; is that correct?

A. In that specific study?

Q. Yes.

A. Yes.

Q. You don't cite this study in your textbook, do you?

A. The Boffetta study?

Q. Correct.
A. I honestly am not sure.
Q. It's a 2008 study, so it would have been available to you when you authored your textbook chapter; correct?
A. Correct.
Q. I'll represent to you that your references in that textbook do not include this Boffetta study. Did someone give you this Boffetta study in this litigation?
A. No.
Q. On page 10 of your report for Mr. Criswell, you state that unlike lung cancer -- sorry -- look the second full sentence.
A. Which page?
Q. On page 10 of your Criswell report. "Unlike lung cancer where one study estimates that more than 80 percent of the cases are diagnosed within 20 years of guitting cigarette smoking, bladder cancer has a longer lag time with only 50 percent diagnosed in the first 20-year period."
Did I read that correctly?
A. Yes.
Q. You go on to state that "In that study, approximately 15 percent were diagnosed 20 to 29

years after quitting; 15 percent 30 to 39 years after quitting; 13 percent 40 to 49 years and 7 percent or more after 50 years quitting smoking."

A. Yes.

Q. So is it your opinion that the latency period for developing bladder cancer has been shown to be up to 50 years?

A. I would say that there is no set latency period, no known ceiling on the latency.

Q. Then Boffetta 2008, that study we were just looking at, talks about involuntary exposure to tobacco smoke. I'm going to have you -- on page 52 of Deposition Exhibit 28, it states that under the section Involuntary Exposure to Tobacco Smoke, "Two case control studies and one cohorted study have investigated the risk of bladder cancer with involuntary exposure to tobacco smoke. The results are summarized in Table 9. Overall, there is no evidence of increased risk, but the results are fairly imprecise."

Did I read that correctly?

A. Yes.

Q. You agree with that statement?

A. Yes.

Q. You would agree secondhand smoke doesn't

have an association with bladder cancer?
A. No.
Q. According to the peer-reviewed literature?
A. No.
Q. Why not?
A. I should be as specific about which aspect of the statement I agree with. I'd say the results are imprecise. There's not enough studies quality. The compendium of evidence hasn't met the threshold necessary to tip it to being a risk factor. So that's how I would view it. I just don't view there being enough studies and that the evidence does not support.
Q. You would agree then that the evidence in support of secondhand smoke being an association with bladder cancer is insufficient to include it as a risk factor?
A. Yes. Insufficient is the word I would use.
Q. On page 20 of your Criswell report, you reference Mr. Criswell's diagnosis being on October 20, 1997.
Do you see that?
A. Yes.

Q. Do you know what his BMI was at that time?

A. I would need to review the records. Let me see if I state it in my report.

Q. In your report on page 25, you go through the risk factor for body mass index for Mr. Criswell, and you cite BMIs from June 2, 2015 and the fact that Mr. Criswell's BMI was consistently elevated between 2008 and the time of his last bladder cancer recurrence in 2016.

Did I summarize that correctly?

A. Yes.

Q. So you did not reference his BMI in October of 1997?

A. No.

Q. According to this report, since at least you don't cite it, you don't know what his BMI was in October 1997?

A. No.

Q. Do you know what his BMI was in the 10 years leading up to his diagnosis in 1997?

A. No.

Q. And the BMI results you cite in your report are over 10 years after his initial diagnosis of bladder cancer; correct?

A. Correct.
Q. Yet you concluded that his history of elevated BMI 10 years after his diagnosis put him at risk for developing bladder cancer; is that correct?
A. Correct.
Q. How is that possible?
A. I was given certain records. I did not come across a BMI estimation in the earlier records. So I went off of the BMI data that I have available.
Q. But you would agree that the BMI that is relative to the risk of developing bladder cancer is at the time of the diagnosis; fair?
A. Correct.
Q. So you're just speculating as to what his BMI may have been?
MR. ANWAR: Object to form.
BY MR. RUZICKA:
Q. Is that fair?
A. I'm not speculating.
Q. Well, let's put it this way. You have no idea what his BMI was?
A. I don't know what his BMI was sitting here right now at the time of his diagnosis.

Q. Do you think it's fair to Mr. Criswell to include BMI as a potential risk factor despite not knowing his BMI?

MR. ANWAR: Object to form.

THE WITNESS: Well, I have his BMI. I don't see anything in the records stating that he's had any weight gains. You'd think if somebody's BMI goes from 38 -- goes from nonobese to 38 it would be stated somewhere in the medical records that I came across. I didn't see that either. So that's how I would answer that question.

BY MR. RUZICKA:

Q. So you have no evidence of his BMI, yet you put it as a risk factor because his BMI after being diagnosed with bladder cancer was -- 10 years after he was diagnosed with bladder cancer was elevated?

A. I have no reason to think that his BMI increased by -- I'm not sure what the exact number of pounds would be, but 50 pounds or so. To go from nonobese to obese, hopefully that would be in the records I reviewed. I did not see that either.

Q. He was 42 when he was diagnosed.

A. He was in his 40s.
Q. You already testified to it. That's fine.
A. 42, yes. He was 42 when he was diagnosed.
MR. ANWAR: Ted, whenever you're at a good spot.
MR. RUZICKA: Yeah. We can break right now.
THE VIDEOGRAPHER: Off the record at 3:40.
(Recess from 3:40 p.m. to 3:52 p.m.)
THE VIDEOGRAPHER: Back on the record at 3:52.
BY MR. RUZICKA:
Q. Dr. Kates, during our last session before the break, I moved to strike one of your answers and you made a comment to your counsel. What comment was that?
A. "What does that mean?"
Q. That's what you said?
A. I didn't know what you said, so I was looking at -- I was trying to understand, yeah.
Q. Fair enough. On page 26 of your Criswell reporting, Deposition Exhibit 15, you

1 state that Mr. Criswell had muscular invasive
2 bladder cancer and the standard of care would be a
3 radical cystectomy, removal of the bladder; is
4 that correct?
5 A. Can you go to the area. Sorry.
6 Q. On page 26 under B, Prognosis?
7 A. Yes.
8 Q. It states, "Mr. Criswell was offered a
9 radical cystectomy for his muscular invasive
10 bladder cancer in 1997, which at the time was a
11 standard of care approach to treating that stage
12 of bladder cancer."
13 Are you taking any issue with the
14 treatment that Mr. Criswell received?
15 A. The way I would answer that question is
16 I'm not taking issue with the fact he chose not to
17 undergo a radical cystectomy. Every patient
18 deserves a choice in their treatment for their
19 cancer. I would be interested to know how he was
20 counseled regarding his treatment options at the
21 time. Because for a 42-year-old gentleman with
22 muscle invasive bladder cancer, it is unusual to
23 choose not to have a radical cystectomy and
24 instead opt for BCG, and it's not standard.
25 Q. So are you going to offer any opinions

in this case that the treatment course that he took was somehow worsened his bladder cancer prognosis?

A. I would say that's true.

Q. So you're going to testify that the treatment that was provided to Mr. Criswell did not meet the standard of care?

A. I did not say that.

Q. I'm just trying to understand. Are you stating that the treaters of Mr. Criswell somehow worsened his prognosis of bladder cancer?

A. Yes.

Q. How did they do that?

A. I want to make the -- you asked two separate questions. That's why I went back and forth. You asked me if the treatment that he chose led to a worse prognosis. The answer to that is clearly yes.

But then you asked me would I testify it was negligent. And for that I would really have to know how he was counseled because even in my practice currently, there are patients with muscle invasive bladder cancer that choose not to undergo surgery and also choose not to undergo chemo-radiation in the form of trimodality

1 therapy, which is also standard of care. But to
2 undergo BCG for muscle invasive bladder cancer is
3 not standard of care and is not associated with
4 the same prognosis.
5 However, that doesn't mean it's
6 negligent on, for example, the treating urologist.
7 The treating urologist could have counseled the
8 patient to undergo surgery and the patient could
9 have stated that actually they did not want
10 surgery understanding that there may be a decrease
11 in overall survival probability from their bladder
12 cancer, and that would be within the standard of
13 care from the standpoint the urologist treating.
14 But in terms of is guideline-based practice for
15 muscle invasive bladder cancer, it's not BCG for
16 muscle invasive bladder cancer.
17 Q. What is the guideline approach?
18 A. The guidelines-based approach for a
19 newly diagnosed patient with muscle invasive
20 bladder cancer, and here we're reviewing the
21 report because I want to make sure. Now that
22 we're getting into each patient specific case,
23 with six reports I want to the make sure I'm
24 getting the facts right for each patient.
25 So this patient was diagnosed on

1 October 20, 1997 muscle invasive bladder cancer.
2 At that time, the main approach would have been
3 radical cystectomy. I was not practicing at that
4 time, so I'm not a hundred percent -- I don't
5 believe certainly the evidence supporting new
6 adjuvant chemotherapy was not standard, but today
7 it would be standard.
8 The data for chemo-radiation I don't
9 believe was robust. It was not in the guidelines.
10 So I don't believe that was standard of care,
11 unlike today when it would be standard of care.
12 So at that time the standard of treatment would
13 have been bladder removal with a urinary
14 diversion.
15 Q. So you're not offering any opinions in
16 this case that any of Mr. Criswell's treaters were
17 medically negligent in his treatment?
18 A. No.
19 Q. Do you take issue with the
20 Mr. Criswell's choice not to have the preferred
21 option at that time of the radical cystectomy?
22 A. I do not, because it's the patient's
23 right to choose however they want to manage their
24 own cancer. I would hope that they would have
25 been counseled that there's a decreased survival

probability at the time of diagnosis by choosing not to have bladder removal and choosing to have BCG for muscle invasive bladder cancer.

Q. On page 26, in your Idiopathy section, you reference a research group at Johns Hopkins that is actively investigating this group of individuals.

What is that research group?

A. This is my research team is evaluating young patients with bladder cancer.

Q. But there's not a research team into idiopathic causes; is that fair? You're researching individuals diagnosed at a young age for bladder cancer?

A. Yes. More stated in the young patients with bladder cancer, yeah.

Q. Not study idiopathy?

A. Correct.

Q. On page 26, you come to the conclusion under your differential etiology that idiopathy, his cigarette smoking history and obesity are the strongest and most likely risk factors for him developing bladder cancer.

Which is the most likely cause for Mr. Criswell?

A. I don't believe there is in this situation.

Q. So it's as likely one as the other; is that fair?

MR. ANWAR: Object to form.

THE WITNESS: I would state that his bladder cancer was multifactorial in this situation and is likely caused either by one of the three or a combination of the three.

BY MR. RUZICKA:

Q. Is either/or different than as likely as not in your opinion?

MR. ANWAR: Object to form.

THE WITNESS: We're getting into -- I'm definitely not a linguist. And this is now getting into the most challenging line of questioning I've faced.

BY MR. RUZICKA:

Q. Do you have an answer?

A. Can you restate the question?

Q. Is either/or different than as likely as not, in your opinion?

MR. ANWAR: Object to form.

THE WITNESS: Is either/or the same as more likely than not?

BY MR. RUZICKA:
Q. I said it a little bit differently. Is either/or different than as likely as not?
MR. ANWAR: Same objection.
THE WITNESS: I would need to think about that more. I think that there is a difference. But I might need some hypotheticals so we could work through that. Sitting here right now, I couldn't tell you one way or another if there's as difference between those two statements.
BY MR. RUZICKA:
Q. On page 23 of Mr. Criswell's report, you state that you do not have any qualifications -- sorry. I'll point you to your statement here. In the second full paragraph, the second sentence, you state, "Neither I nor Dr. Longo I presume have any qualifications or experience in the field of psychiatry to opine on this claim."
Is that still your opinion?
A. Yes.
Q. So you agree that you're not a psychiatrist.
A. I agree.

Q. But you go on to say, "As a general note, my clinical practice it is uncommon for bladder cancer patients to develop clinical depression as a result of their bladder cancer or treatment."

How do you know that?

A. Well, generally speaking, it's uncommon for patients to have clinical depression requiring, for example, medication treatment. Does it happen? Yes. It does happen. Are patients sad when they receive a new diagnosis of bladder cancer? Yes, they're sad.

But is it clinical depression that, for example, I would see requiring medication, which I would know about? Not typically.

Q. Do you have access to your patient's mental health records?

A. I do.

Q. You didn't cite any study. You're referring to just your clinical experience in making that statement; correct?

A. That's right.

Q. Again, you're not a psychiatrist and you are not trying to offer any opinions on individuals' mental health conditions, are you?

A. No.
Q. Did you review the VA determinations for Mr. Criswell and his bladder cancer diagnosis or his depression diagnosis?
A. I would need to see the medical records reviewed. I know that there was some benefits claimed for some of the patient records I reviewed. So as it relates to Mr. Criswell, I would need to...
(Kates Exhibit 29 was marked.)
BY MR. RUZICKA:
Q. I'm just going to show you what I'm going to mark as Deposition Exhibit 29, which is Dr. Longo's expert report on Mr. Criswell, and direct you to the page 8 in which there's screenshots of records from Mr. Criswell's VA determinations.
Do you see that page?
A. Yes.
Q. These would have been medical records you also reviewed based on your materials considered list; right?
A. If it's on the materials considered list, then I reviewed it.
Q. So you are aware that the VA made a

determination for Mr. Criswell that this bladder cancer is at least as likely as not caused by or a result of the veterans exposure to the contaminated water at Camp Lejeune; is that fair?

A. Can you show me where you're reading from?

Q. Sure. If you look at that first screenshot at the top of page 8, the first sentence in the second paragraph I guess is what you call that, it says, "The veteran's bladder cancer is at least as likely as not caused by or a result of the veteran's exposure to contaminated water at Camp Lejeune."

Do you see that?

A. Yes.

Q. So you would have reviewed that record?

A. If it's in the materials reviewed, I would have reviewed it.

Q. Going to the second screenshot on page 8, it states that -- I don't know how to describe that. In the second screenshot about the sixth paragraph in there, it states, "In this writer's opinion, Mr. Criswell's depression is at least as likely as not (50 percent or greater probability) proximately due to or the result of his bladder

cancer." True?

A. I see that's written here.

Q. Were you aware when you read that record that that was the opinion of a clinical psychologist?

A. Reading this report now, I'm reading that it's from Dr. Valerie Vroon Raymond. I have no way to disagree with that. Sounds correct.

Q. How did you determine -- strike that.

Moving on to Ms. Dyer's report, Deposition Exhibit 16, if you look at page 18 of Ms. Dyer's report, it states that she was 52 age at the time of diagnosis; is that correct?

A. Yes.

Q. And that would put her in the less than 10 percent bladder cancer diagnosis category?

A. I would say bottom quarter. As to the exact sort of percentage, you know, I'd have to look at my chapter again.

Q. Well, your textbook states that the average age of diagnosis is 73 in the United States with approximately 9 of 10 patients diagnosed after the age of 55. Is that correct?

A. Yeah.

Q. So that would mean that it's less than

10 percent, not a quarter; correct; correct?
A. Yes.
Q. She's also a female which means she's three times less likely to develop bladder cancer than a man?
A. Correct.
Q. And in your report, you reference her marijuana use, but you don't mention any studies or any other opinion regarding marijuana use.
Why do you have that in there?
A. Can you point me to the area?
Q. Do you see that on page 19?
A. Yes.
Q. Why do you have that in there?
A. So when evaluating risk factors, the marijuana discussion is similar to the licensed nail technician. These are things that are thought about, particularly the lake community, as causing bladder cancer. Some studies support it. So I want to show that I'm thinking about it as a risk factor, but I'm ruling it out.
I'm considering it in the history, similar to I would say the way I talk about her occupational history and some of the other things in the report. I want to be as thorough as

possible.

While we don't have evidence that smoking marijuana causes bladder cancer, there's a lot of controversy surrounding it. So that position may evolve with more studies. And I wanted to acknowledge I thought about it and ruled it out.

Q. So you would agree you wouldn't consider the evidence sufficient to establish marijuana as a potential cause of bladder cancer at this time?

A. I would describe it that way similar to what we've been talking about secondhand smoke.

Q. Why did you choose to use the medical records versus Mrs. Dyer's testimony regarding her smoking history?

A. So I think it's important to take a patient's testimony into account. Also, the medical records should be an accurate representation of a patient's history. Again, it's very unusual for a doctor to say somebody smoked in a medical record and they didn't. Usually it's -- I would think it would be the opposite. But when I ask somebody if they smoke and they say no, I've never gone into a medical record and said they smoked.

So in my opinion, the medical record is an accurate representation of a patient's history over time. And also it should be said patients, even when they need to accurately represent their histories as possible oftentimes don't remember or misremember things in their social history. We see had all the time as treating clinicians to no fault of their own.

Q. But both Ms. Dyer and her husband, Mr. Dyer, both testified to a shorter and more limited smoking history than what you ultimately assumed in providing your opinion; is that fair?

MR. ANWAR: Object to form.

THE WITNESS: Yes.

BY MR. RUZICKA:

Q. You reference on page 24 the amount of smoke inhalation. But you're not a toxicologist; right?

A. Is your question am I a toxicologist?

Q. Correct.

A. The answer is no.

Q. And you provide this calculation of the amount of smoking inhalation per cigarette, but you don't provide a cite; is that fair?

A. That's fair.

Q. Where do you get this five to six-minute smoking amount?

A. I can't say sitting here that I have the citation ready for you.

Q. And you understand it's important to put all your bases for your opinions in your expert report; right?

A. Yes.

Q. And no toxicologist provided you with an opinion that Ms. Dyer's smoking history would place her at increased risk for develop bladder cancer; true?

MR. ANWAR: Object to form.

THE WITNESS: No. I came to that opinion without a toxicologist.

BY MR. RUZICKA:

Q. Going to your BMI section for Ms. Dyer, she was diagnosed in May of 2009; correct?

A. Correct.

Q. On page 21 you reference her BMI from October 19, 2021; correct?

A. Correct.

Q. That's over 12 years after her initial bladder cancer diagnosis, May of 2009 to May October 2021?

A. Yes.
Q. And you doo not cite any record for her BMI preceding her diagnosis in May of 2009?
A. The BMI I have cited in the report is from 2021.
Q. So you're just again speculating as to what her BMI may have been when she was diagnosed in May of 2009 because you have no document to actually establish what her BMI is; correct?
MR. ANWAR: Object to form.
THE WITNESS: Again, I have no document to establish her BMI at the time, and I also have no documentation that she had a sudden weight gain to suggest that her BMI was lower.
BY MR. RUZICKA:
Q. On page 8 of Ms. Dryer's report under the Bladder Cancer Risk Factor section, the second sentence states, "The risk factors identified below have the most evidence in peer-reviewed studies demonstrating risk."
Did I read that correctly?
A. Yes.
Q. You testified earlier that you used peer-reviewed studies to establish which risk factors are associated with bladder cancer;

correct?

A. I think my testimony was that basically what I do to establish risk is I take the compendium of evidence, and that evidence is primarily peer-reviewed studies, but which include both primary sources and secondary cites, like meta-analysis, which is the majority of what we've looked at today to determine whether a given risk factor has enough quality evidence to rule it in as a risk factor for developing bladder cancer.

Q. Going back to page 8, the sentence I just read said, "The risk factors identified below have the most evidence in peer-reviewed studies demonstrating risk." Correct?

A. That's what's written in the report.

Q. So that would imply that all these risk factors would have evidence in peer-reviewed studies demonstrating risk; true?

MR. ANWAR: Object to form.

THE WITNESS: I think again I would state it as I've just stated the answer.

MR. RUZICKA: Strike as nonresponsive.

BY MR. RUZICKA:

Q. The sentence says, "The risk factors identified below have the most evidence in

peer-reviewed studies demonstrating risk."
Correct?
A. I'm agreeing with that.
Q. So the risk factors identifying below this statement would have evidence in peer-reviewed literature demonstrating risk; true? That's what you're implying.
A. I see what you're saying, yes.
Q. On page 13, you identify idiopathy. Again you cite to that Berger study; true?
A. True.
Q. We established the Berger study does not support your statement that approximately 40 percent of bladder cancer cases cannot be attributed to a known risk factor; true?
A. True.
Q. So this idiopathy section of your report shouldn't belong under this section that talks about studies that have been -- risk factors that have been identified in the most -- strike that.
So this section Idiopathy should not be under this statement that risk factors identified below have the most evidence in peer-reviewed studies demonstrating risk because this risk factor is not based on peer-reviewed literature;

1 true?
2 MR. ANWAR: Object to form.
3 THE WITNESS: To say it differently,
4 you're basically stating that it should not be
5 B11, but should kind of be like D.
6 BY MR. RUZICKA:
7 Q. Sure.
8 A. I agree with that.
9 Q. On page 27 you state that Dr. Inman
10 testified in his deposition that Ms. Dyer did not
11 receive standard of care bladder cancer management
12 at several junctions and you concur with
13 Dr. Inman's testimony.
14 Do you recall that statement in your
15 report?
16 A. I agree with that, but I'd like to see
17 where I actually say that.
18 Q. Page 27, under Prognosis the last
19 sentence in the first paragraph.
20 A. Yeah, I see that.
21 Q. Are you stating that Ms. Dyer's treaters
22 breached the standard of care in her treatment of
23 her bladder cancer?
24 A. Yes.
25 Q. What are you basing your concurrence on

that Ms. Dyer did not receive the standard of care bladder cancer management at several junctions of her treatment?

A. I'm basing that based on document review of the malpractice litigation surrounding this question. So there was her deposition that I reviewed. It's in the materials reviewed, but Dr. Inman's deposition as well as the primary sources, so the medical records, as well as some of the operative reports, specifically pathology notes. I may be forgetting other documents.

Q. My question is a little bit different, not the documents you reviewed. What is your actual opinion on why you concur that the standard of care for bladder cancer management was not met at several junctions?

A. I believe I go through them in my report. There's a few junctures which I disagree. I believe that it did not meet standard of care.

Q. Let me just ask you it this way. I'll let you answer. I'm going to hopefully sort circuit this for you.

Are all your opinions on the reasons why you believe Ms. Dyer's treaters breached the standard of care contained within your report?

A. Yes, I believe so.

Q. If Dr. Inman testified in his deposition that he cannot testify or give an opinion as to what happened or did not happen because he wasn't there, would you agree with that statement?

A. You need to be more specific with the scenario.

Q. If Dr. Inman testified in his deposition that he cannot testify or give an opinion as to what happened or did not happen because he wasn't there, would you agree with that statement?

A. That statement alone is pretty vague. I mean, I think there are things that we can glean from the medical records alone. For example, we know she went or BCG plus INH at one point which is not standard of care. So we wouldn't need to have been there to know that that happened. It's in the medical records.

There are certain things in the medical records that I can't know because I wasn't involved in the discussion with the patient, and it may not be documented. So we may rely on other testimony. So that's why it's a very vague general question.

Q. You were not there when Ms. Dyer was

diagnosed; right?
A. No.
Q. Were you practicing medicine in 2009?
A. I was in the medical school in 2009.
Q. You were not there for her medical visits; correct?
A. Correct.
Q. And you have never spoken to Ms. Dyer; correct?
A. I've never spoken to Ms. Drier.
Q. Have you ever spoken to Dr. Inman?
A. Yes.
Q. About Ms. Dyer's care?
A. No.
Q. To Dr. Lovett?
A. No.
Q. What have you spoken to Dr. Inman about?
A. Dr. Inman is a well known urologic oncologist in the field of bladder cancer similar to Dr. Sfakianos I see in meetings.
Q. Did you talk to Dr. Inman after you were retained in this case?
A. No.
Q. So you haven't talked to him about the treatment course similar to what Ms. Dyer received

and his opinions regarding that treatment course?
A. No.
Q. Did you talk any other treating physicians or medical providers of Ms. Dyer?
A. No.
Q. On page 28 of your Dyer report, you state that "As a result of this overtreatment, she underwent at radical cystectomy." And that's in the second or in the first full paragraph. The third sentence says, "As a result of this overtreatment, she underwent a radical cystectomy."
Do you see that?
A. Yes.
Q. Which was ultimately complicated 13 years later by a parastomal hernia requiring repair; is that fair?
A. Yeah.
Q. Are you rendering the opinion that Ms. Dyer never would have had a radical cystectomy if Dr. Lovett had not provided the treatment she received?
A. I would state it's more likely than not that she would not have had a cystectomy.
Q. What are you basing that opinion on?

A. She had a CR, a complete response, that looked durable till around after a year after BCG. The reason she underwent -- also I believe she was PT0 at the time of her cystectomy. So what that means is -- so she was -- I'm going to the take a step back to answer your question completely.

She was diagnosed initially on May 20, 2009. Her restaging TURBT, which was the last time she had cancer, was July 20, 2009. She ended up undergoing surgery. And I'm coming to something. She ended up undergoing surgery on December 6, 2010. So that was over a year and a half later. The pathology revealed no evidence of cancer.

So she had a durable response to her BCG of a year and a half. So from a cancer standpoint, she was highly unlikely to have a recurrence requiring a cystectomy. If she had had a recurrence, typically we would put her on a second line treatment. So from a cancer standpoint, she was unlikely.

The reason she underwent surgery was because she was mismanaged in terms of her BCG cystitis, which we see all the time but do not treat the way she was treated. So that's why I

1 come to that conclusion.
2 Q. On page 28, you also state that
3 "Mrs. Dyer's complications could have been avoided
4 if her urologist had allowed time for her bladder
5 to heal between TURBTs."
6 Are you saying to reasonable degree of
7 reasonable certainty that Ms. Dyer's bladder would
8 have healed if her urologist had allowed time
9 between her TURBTs?
10 A. Yes.
11 Q. What are you basing that on?
12 A. That's based on the fact that this
13 woman, unfortunately, underwent six transurethral
14 scrapings, transurethral resections, which to the
15 layperson is basically scraping pieces of the
16 bladder. She underwent that six times in a year.
17 I cannot think of a patient that I have
18 taken to the operating room six times in a year
19 for a TURBT. The bladder cannot handle that. And
20 this will be the result if one does that,
21 especially if one continues BCG during those
22 resections and especially if one gives -- tries to
23 treat BCG cystitis with INH while still giving
24 BCG. So that's why I came to that viewpoint.
25 Q. On page 28 you state that Ms. Dyer's

1 cystectomy was not the result of her bladder
2 cancer but was due to a complication of her cancer
3 treatments that could have and would have been
4 avoided had Dr. Lovett stopped Ms. Dyer's BCG
5 treatments in November or December 2009.
6 Do you see that in your report?
7 A. Yes.
8 Q. What is the basis of that opinion?
9 A. Again, that's based on the fact that her
10 treatment course was highly unusual and not
11 standard of care, particularly the fact that she
12 never had cancer during these resections. So
13 normal inflamed tissue that was trying to heal was
14 then rescraped several times over the course of a
15 year exacerbating her symptoms.
16 Q. So are you saying that you would never
17 have offered the option of a radical cystectomy if
18 you had been Ms. Dryer's treating physician?
19 A. No. That is not my opinion.
20 Q. So there would be circumstances in which
21 you would offer her a radical cystectomy?
22 A. Yes.
23 Q. And what are those?
24 A. If she had a cancer recurrence or if she
25 had debilitating symptoms that persisted.

Q. Ms. Dyer was initially diagnosed with 5 millimeter right anterior wall bilateral wall tumor; correct?

A. Yes.

Q. Is the removal of the bladder a treatment option for a 5 millimeter right anterior wall tumor?

A. I can't answer that because we would need to stage the cancer first before knowing whether cystectomy is a standard of care option.

Q. Ms. Dyer returned to her physician two months after her initial cystectomy, and a second resection revealed a high grade T1 tumor and carcinoma; is that correct?

A. Yes.

Q. Would you agree that a high grade cancer is more aggressive than a low grade cancer?

A. Yes.

Q. Would you agree that a T1 indicates that the cancer has invaded into the lamina propria, a layer just above the muscle layer?

A. Yes.

Q. You agree that carcinoma in situ has the potential to become metastatic?

A. High grade cancers and carcinoma in situ

have the chance to progress. Typically they would progress to muscle invasive bladder cancer and then become metastatic.

Q. So would you agree that there is a 50 percent risk of upstaging to T2 or higher?

MR. ANWAR: Object to form.

THE WITNESS: No.

BY MR. RUZICKA:

Q. And a 33 percent risk of being upstaged to another organ having it metastasize?

MR. ANWAR: Object to form.

THE WITNESS: No.

BY MR. RUZICKA:

Q. I'm going to show you your textbook.

A. We can look at the data around staging. That's fine. This data I would say is in flux.

Q. But in your textbook on page 3084 -- go to that page for me -- you see the staging section?

A. Yes.

Q. And you see the last two sentences there?

A. Yes.

Q. Can you read those please.

A. "In addition, the 2017 AJCC recommends

subcategorization of T1 urothelial carcinoma into T1a, superficial, and T1b, deep lamina propria invasion, to help stratify the heterogenous group of T1 tumors which are at a 50 risk of upstaging to T2 or higher and a 33 percent risk of being upstaged to nonorgan confined disease. These stratifications suggest that deeper tumor invades the lamina propria, the worst survival."

Q. So you wrote that when you published this textbook?

A. Yes. That's different from the context we're talking, just so we're clear. It's different from that.

Q. You agree that a recurrence at less than three months is an important predictor of progression?

A. In a very specific context of BCG unresponsive high grade disease, I would agree with that statement.

Q. Do you agree that removal of Ms. Dyer's bladder was a reasonable treatment option at that time?

A. I would say it was a reasonable treatment option that few patients at that time would have chosen. And, in fact, very few

patients choose to have their bladder removed at that diagnostic juncture.

Q. Were you asked in this case to provide an opinion for the standard of care as a urologist practicing in North Carolina?

A. No, I was not.

Q. So you're not offering any opinion on the standard of care as a urologist in North Carolina in this case?

MR. ANWAR: Object to form.

THE WITNESS: I'm certainly not a urologist in North Carolina. So I cannot answer that question in the affirmative.

BY MR. RUZICKA:

Q. But you're --

A. I'm a urologist in Maryland, and I'm commenting on the standard of care in my report. So that's why I'm having difficulty answering the question.

Q. Were you asked to provide opinion on the standard of care Ms. Dyer received?

A. I was asked to provide an opinion on her prognosis. I think that's the point of the prognosis section. I don't know whether anybody in particular asked my opinion of whether her

1 treatment at that time was negligent or not, but
2 as part of my review, I reviewed her medical
3 malpractice case in which the history was nicely
4 outlined. So that was also helpful there.
5 But also, I was able to review her
6 treatment in detail in that regard and provide an
7 opinion regarding this.
8 Q. You have not reviewed the full trial
9 transcript from that case, have you?
10 A. What's a trial transcript?
11 Q. It's a full trial transcript of every
12 word that was presented at a trial.
13 A. No.
14 Q. So you don't know what evidence was
15 omitted or excluded at the trial of that case, do
16 you?
17 MR. ANWAR: Object to form.
18 THE WITNESS: I don't.
19 BY MR. RUZICKA:
20 Q. And you haven't talked to any of the
21 witnesses in that case?
22 A. I have not.
23 Q. Are you aware that Dr. Inman testified
24 that he could not testify as to what would have
25 happened to Ms. Dyer had she been treated

1 differently?
2 A. Can you show me in the deposition?
3 MR. RUZICKA: Let's go off the record
4 for a moment.
5 THE VIDEOGRAPHER: Off the record at
6 4:38.
7 (Recess from 4:38 p.m. to 4:41 p.m.)
8 THE VIDEOGRAPHER: Back on the record at
9 4:41.
10 (Kates Exhibit 30 was marked.)
11 BY MR. RUZICKA:
12 Q. Doctor, I'm going to hand you what's
13 been marked as Deposition Exhibit 30. I'm going
14 to direct your attention to the third page of this
15 document, which is the deposition of Dr. Inman
16 from the 2013 case.
17 And you read this deposition; correct?
18 A. Yes.
19 Q. Page 37, I'm going to direct you to line
20 7, do you see that, of the transcript?
21 A. Page 37, line 1.
22 Q. Line 7.
23 A. Yes.
24 Q. The question is: "Now, tell me what we
25 have evidence-wise in this case to suggest whether

or not her thickened bladder wall that you observed would or would not have occurred if what she's told you about what happened is true?"

The answer from Dr. Inman is: "The evidence that you're asking is impossible to determine for any medical condition, that you would assume that you would know what would occur in the absence of mismanagement is -- that's not possible to know."

Do you see that?

A. Yes.

Q. So Dr. Inman testified that it was impossible to know what would have happened absent the mismanagement; is that fair?

A. Yes.

Q. Are you testifying that it is not possible to know what would have happened absent the mismanagement?

A. No. I agree it's impossible to know. We can't predict the future. That's why the way I stated it is more likely than not my testimony.

Q. Did you review the verdict sheet in that case that's a part of the documents that you reviewed in your materials considered list?

A. I believe I did, but if you have it in

1 front of you, I know I'd love to review it
2 together.
3 (Kates Exhibit 31 was marked.)
4 BY MR. RUZICKA:
5 Q. I love your enthusiasm.
6 I've handed you what's been marked
7 Deposition Exhibit 31, which is the verdict sheet
8 that was rendered by a jury in North Carolina in
9 Ms. Dyer's case against Dr. Lovett; true?
10 A. Yes.
11 Q. You would agree that the jury in
12 Ms. Dyer's case against Dr. Lovett stated "no" to
13 the question "Was the plaintiff injured by
14 negligence of the defendant?"
15 Do you see that?
16 A. Yes.
17 Q. That's issue one on this document?
18 A. Yes.
19 Q. And it was a unanimous verdict; correct?
20 A. How would I know the answer to that from
21 this document?
22 Q. Directly above issue one, it says, "We,
23 the jury, return as our unanimous verdict the
24 following answer to the issue submitted."
25 Do you see that?

A. Yes.
Q. So it was a unanimous verdict?
A. Yes.
Q. Is it your intent to offer an opinion that is contrary to that of the jury in this case?
MR. ANWAR: Object to form.
THE WITNESS: I'm not trying to go against any jury.
BY MR. RUZICKA:
Q. But you're planning on offering opinions that Dr. Lovett injured Ms. Dyer by the negligence of his treatment?
A. Yes.
Q. That would be directly in contrast to what the jury in her case determined occurred; true?
A. True.
Q. You agree that a breach of the standard of care is subject to opinions?
MR. ANWAR: Object to form.
THE WITNESS: Like is it my opinion that she could have violated the standard of care, but another urologist might come to a different conclusion?

BY MR. RUZICKA:
Q. Sure, yeah.
A. Is that your question?
Q. Yes.
A. Yes. I acknowledge that that could be the case.
Q. And you testify in medical malpractice cases where that's been the situation, where you provide an opinion and another urologist has provided a different opinion; true?
A. True.
Q. When there is a dispute on the standard of care, that issue is generally presented to a court of law; true?
A. True.
Q. Either a judge or a jury will make the final decision on whether or not the standard of care was breached; true?
A. True.
Q. That final decision is what determines whether, in fact, there was a breach of the standard of care in the court of law?
MR. ANWAR: Object to form.
THE WITNESS: In a court of law, yes, but the opinion of a jury does not change my own

opinion.
BY MR. RUZICKA:
Q. Do you put your opinions above the opinions of a jury?
MR. ANWAR: Object to form.
THE WITNESS: I don't rank opinions.
BY MR. RUZICKA:
Q. But if a jury has a different opinion than you, do you believe your opinion is better?
MR. ANWAR: Object to form.
THE WITNESS: Can you give me an exact hypothetical? Is it this case that we're talking about?
BY MR. RUZICKA:
Q. This case. The jury rendered a verdict that Ms. Dyer was not injured by the negligence of Dr. Lovett, and yet you are contradicting that jury verdict and offering an opinion in complete contrast to that jury; true?
MR. ANWAR: Object to form.
THE WITNESS: Unfortunately, I believe that there are times that a patient has, for example, in this case a medical malpractice claim that goes before a jury. The jury might not see the evidence presented. So I have no way knowing,

to your point. I did not review the trial. So I don't know the quality of the evidence.

I don't know the lawyers. Maybe with different lawyers, the outcome would have been different. But clearly it was litigated, and, unfortunately, Ms. Dyer lost. And in my opinion, she was not treated the way she should have been treated.

BY MR. RUZICKA:

Q. By a jury in North Carolina?

A. No. She was not treated the way she should have been treated by a urologist in North Carolina.

Q. And you'd also agree that your testimony is that she was not treated the way she should have been treated by a jury in North Carolina in finding that the negligence of Dr. Lovett injured her?

MR. ANWAR: Object to form.

THE WITNESS: I would strongly disagree with that statement.

BY MR. RUZICKA:

Q. And the jury in that case heard all the evidence?

A. I don't know if that's true.

Q. The jury in that -- strike that.
The injury heard all the evidence that was presented to it; true?
MR. ANWAR: Object to form.
THE WITNESS: I mean, you and I both know that the quality of lawyers can make a difference in how a case is litigated, right.
BY MR. RUZICKA:
Q. So your testimony is that -- well, strike that.
You agree with me that a court of law has already determined that there was no negligence on behalf of Dr. Lovett; true?
A. Yes.
Q. On page 22 of Ms. Dyer's report, you state -- at the very last sentence of page 22 under the Post Bladder Cancer Medical History section, you state, "Such a strong family history as well as a personal history of depression that predated her bladder cancer diagnosis likely explains these conditions."
But in your Criswell report, you testified that you are not qualified to offer any opinions regarding someone's mental health; true?
A. Well, I really want to make a

clarification here. If somebody has a preexisting diagnosis, that's well within the purview of the treating physician to know that they have the diagnosis. So if somebody has a history of hypertension that predates the diagnosis of something and then it's claimed that the hypertension caused bladder cancer, well, I'm not a cardiologist either, but I would document that she had a history of hypertension before the diagnosis.

Q. Yeah, but that's not what you're saying in this sentence. You're offering an opinion. You're saying, "Such a strong family history as well as a personal history of depression that predated her bladder cancer diagnosis likely explains these conditions."

Is it your testimony that you're not offering any opinions as to the cause of Ms. Dyer's mental health issues?

A. I would disagree with your statement that that's not what -- that what I just said is not what I'm offering here. I am stating that she has a preexisting condition. I do believe that I'm qualified as any medical doctor should identify someone's past medical history to note

somebody's past medical history as a preexisting condition.

Q. So is your intention in your report to only to identify prior medical history diagnoses?

A. Yes.

Q. You are not intending to offer any opinions to the effect of those preexisting diagnoses as to her mental health; true?

A. Yes. I would say I'm not trying to understand the origins of her depression. I believe that is under the purview of a psychiatrist. I am trying to speak to her preexisting conditions, which is under the purview of any medical doctor treating her.

Q. Just so I'm clear, you're only going to testify about her preexisting conditions. You're not going to testify about how those preexisting conditions may affect her mental health?

MR. ANWAR: Object to form.

THE WITNESS: Mental health is like a very broad word. But I would say it the way I just said it, which is my job here is not to be her psychiatrist. I'm her urologist. So if she has a preexisting condition of depression, understanding that is important, but if she's

diagnosed with depression afterwards, knowing why she was diagnosed would be under the purview of a psychiatrist.

BY MR. RUZICKA:

Q. So you're saying -- I think we're clear there. You're not saying that you can testify as to what her subsequent diagnosis may have stemmed from. All you can testify is to what her original diagnosis was?

A. Correct.

Q. I thought you testified that you had a conversation with the DOJ's psychiatrist.

A. Yes.

Q. Was that mentioned in your report?

A. No.

Q. Was that pertaining to Ms. Dyer?

A. I can't recall.

Q. I'm trying to understand. You don't treat Ms. Dyer; true?

A. True.

Q. What relevance would there be in you discussing any case with the DOJ's psychiatrist?

MR. ANWAR: Object to form. And I'm going to, Dr. Kates, instruct you not to answer under CMO 17 in this case to the extent you have

1 to divulge any communications either with DOJ
2 lawyers or your conversations in meetings with
3 other experts.
4 But if you can answer that question
5 without divulging those conversations, you can
6 answer the question.
7 THE WITNESS: I'm going to take my --
8 I'm going to take the DOJ lawyer's advice and not
9 answer the question because I cannot answer the
10 question without divulging conversation.
11 BY MR. RUZICKA:
12 Q. Moving on to Mr. Laramore's report,
13 Deposition Exhibit 17, on page 1, you state in
14 this report, which you don't state in any of your
15 other reports, that you are responding to the
16 expert report and opinions of Mr. Laramore's
17 experts as well as certain opinions of Dr. Bird
18 and Hatten.
19 Do you see that?
20 A. Yes.
21 Q. Why in Mr. Laramore's report are you
22 responding to Dr. Bird and Dr. Hatten, but you're
23 not in any other report?
24 A. Well, first of all, the way I generated
25 these reports was I had sort of a general section.

And so I'm not exactly clear that just because I didn't say it in the other reports -- I didn't quote, for example, Dr. Longo and Sfakianos. I can't remember about Bird and Hatten.

But I did reference many of the PLG experts in my general section. So I can't tell you which experts. I would hope my General section was pretty consistent. I think it was in the end. But obviously, this sentence may have been in there in this section and not in others. I can't speak to to that.

Q. Do you know what kind of experts Dr. Bird and Dr. Hatten are?

A. You may need to refresh my memory.

Q. They're not urologists, are they, to your knowledge?

A. Not ones I've heard of.

Q. I couldn't see anywhere else in your report with Laramore where you directly address the opinions of Dr. Bird and Hatten.

Can you sitting here recall what your opinions might be about Dr. Bird or Dr. Hatten?

A. No.

Q. For Mr. Laramore you talked about his occupation as a truck driver.

1 Do you remember that?
2 A. No.
3 Q. I'll refer you to the Occupation section
4 on page 23 of your report. Did Dr. LaKind or
5 Dr. Bailey provide you with any toxicological or
6 risk assessment of Mr. Laramore's driving history?
7 A. No.
8 Q. So you have no evidence of the level of
9 exposure Mr. Laramore had to diesel fumes; is that
10 true?
11 A. That's true.
12 Q. You don't know what type of truck he was
13 driving, the condition of the truck or anything
14 else about his exposure other than that he was a
15 truck driver?
16 A. I have nothing that's not written. We
17 know, for example, the companies and in certain
18 situations the type of trucking that he performed,
19 but the specific trucks that he drove, I don't --
20 it's not in my report, and I don't believe I came
21 across it.
22 Q. So you think there was sufficient data
23 to just know that he was a truck driver to support
24 your conclusion that his truck driving put him at
25 risk for developing bladder cancer? I direct you

to page 44.

A. Yeah. The way I say it is that Dr. Sfakianos agrees with me. And I quote, "In his report, he states that of his occupational exposures, the only jobs where Mr. Laramore would have been exposed to known bladder cancer causing chemicals would be his time as a civil servant and his time as a truck driver. I agree with this view. According to one study, transport workers have a 14 percent increased risk of bladder cancer development. I would thus rule in Mr. Laramore's trucking occupation as one potential risk factor for him developing bladder cancer," in this case agreeing with the opinion -- or Dr. Sfakianos agrees with my opinion.

Q. You just read that according to one study, transport workers have a 14 percent increased risk of developing bladder cancer. Is that true?

A. Yes.

Q. So that would equate to a relative risk of 1.14; is that true?

A. Yes.

Q. And you're relying on one study. You say one study; true?

A. Yeah. That sentence cites that study. However, there are other studies cited earlier. I'm trying to see whether it's the same citation.

Yeah, that is. So that 14 percent is off that study, although there's more data as it relates to petroleum workers. And whether we consider Mr. Laramore a petroleum worker I would say is debated, is debatable. But we have more citations around that. So to summarize, I would disagree with your statement.

Q. You disagree that you are only citing to one study in support of your statement that a 14 percent increased risk of bladder cancer development was found in transportation workers?

A. That statement I would agree with.

Q. So if a study shows -- for Mr. Laramore, a study that showed the relative risk of 1.14 or above was sufficient for you to conclude that his occupation put him at an increased risk of developing bladder cancer; true?

A. Not true.

Q. How is that not true?

A. Because as I just discussed in my earlier section, I discussed more than just one study to support the evidence of truck driving,

his role as truck driving petroleum. There are other studies and analyses for petroleum workers that are cited in my report.

And so it's the compendium of data that allows me to rule it in. For the record, I view the tobacco history as a stronger history, and I don't weight them equally. But I do view his truck driving as a significant occupational risk factor.

Q. So, in your opinion, it's sufficient for you to conclude that an occupation puts a person at risk without looking at an exposure profile or a risk assessment as to the exposures that person may have had in their occupation?

MR. ANWAR: Object to form.

THE WITNESS: I would say as a treating urologist who takes care of bladder cancers every day and does a risk etiology every day, I rule in occupational exposures without personally performing a toxicology assessment on my patients all the time.

BY MR. RUZICKA:

Q. Why would that be different when comparing an individual who was stationed at Camp Lejeune to the Camp Lejeune epidemiological

studies?

A. Because I don't view there being supportive evidence for the water in Camp Lejeune to cause bladder cancer. That's why. It's not routinely asked in our field. So it's not an agreed upon risk factor taught in the medical schools, residencies or fellowships.

So it's not something -- so to answer your question, I don't need to do a toxicology assay for a petroleum worker that I ruled in because I view the occupational exposure as a risk factor. Given the level of evidence outlined by Dr. Goodman, I'm comfortable not viewing the water in Camp Lejeune as a risk factor for bladder cancer development.

BY MR. RUZICKA:

Q. Did Dr. Goodman provide any opinions as to the risk of transportation workers in development of bladder cancer?

MR. ANWAR: Object to form.

THE WITNESS: No.

BY MR. RUZICKA:

Q. So she did not review that evidence?

A. No. I wish she had.

Q. Do you know that Dr. Goodman is a -- one

of her -- strike that.

Do you -- strike that.

Why do you wish that Dr. Goodman reviewed the epidemi literature around truck driving?

A. The meta-analysis that Dr. Goodman did and thoroughness with which she did it was, bar none, one of the most comprehensive analyses on a subject like this I've read. And to have that as a resource to evaluate for every -- was something that I did not see with the PLG experts, of which there were five opinions, all of which were flawed and -- you talk about cherry picking -- cherry picked studies that paled in comparison to what was an exceptionally comprehensive analysis by Dr. Goodman in this regard.

So that's why I state it like that. So I have the available evidence to assess the risk factor, which I used.

Q. Did you read Dr. Goodman's deposition?

A. No.

Q. Were you aware Dr. Goodman's largest client is the Petroleum Association out of Texas?

A. No.

MR. ANWAR: Object to form.

BY MR. RUZICKA:

Q. On page 20 of your Laramore report, you cite -- you note that in June of 2020, Dr. Hitt discussed with Mr. Laramore restaging TURBT and intravesical treatment versus a radical cystectomy.

Do you see that on page 20?

A. Can you point me to...

Q. Sure. It's the line -- third sentence. It's right after, "Mr. Laramore moved to Panama City, Florida where he saw Dr. Warren Hitt on June 4, 2020," fourth line down.

A. Yes, I'm with you.

Q. Dr. Hitt discussed restaging TURBT and intravesical treatment versus a radical cystectomy.

Do you see that?

A. Yes.

Q. Are you taking issues with those treatment options that were provided by Dr. Hitt?

A. No.

Q. Are there pros and cons to each option?

A. Yes.

Q. Are there times when an intravesical treatment does not work and a radical cystectomy

1 becomes necessary?
2 A. Yes.
3 Q. On page 25 of your Laramore report, you
4 note that Mr. Laramore -- I'll direct you to the
5 line. The third line from the bottom, right after
6 10 percent, it states, "Should he recur with
7 NMIBC, his options would be a radical cystectomy
8 and a urinary division or a second line bladder
9 preserving therapy."
10 Do you see that?
11 A. Yes.
12 Q. What are the pros and cons of each of
13 those options?
14 A. So this is a discussion that I have with
15 patients on at least a weekly, more often usually,
16 basis. The pros of a radical cystectomy in this
17 situation are a high likelihood of long-term
18 cancer control.
19 The risks are the risks of a major
20 surgery and the long-term risks of a urinary
21 diversion. With second line bladder preserving
22 therapies of which now we have several FDA
23 approved and which have now entered both our AUA
24 guidelines and CCN guidelines.
25 The benefits -- it's kind of like the

flip side. The benefits are having an alternative to surgery that in certain situations can provide long-term cancer control. The risks are it doesn't work and the cancer comes back or progresses.

Q. In your experience, do patients usually choose one option over the over, or is it patient specific?

A. This is a patient-specific conversation that depends on both tumor characteristics, so what was the stage of the tumor when it comes back, what's the time of the cancer coming back, what's the histology of it coming back, the timeline, so how long do they have a period -- what was the disease-free interval.

And then it's any patient specific thing, what's their appetite for various risk/benefits of the two different approaches.

Q. Would you agree that most patients prefer not to lose their bladder if there are other options that might work?

A. I think in this situation, BCG responsive disease, a generalization that I would not necessarily agree with. I would go back and say this is something that's patient specific.

Probably in my practice, most patients, that's true. If they're clear of disease beyond one to two years in my current practice, knowing what drugs we have available now, we'll go onto a second line therapy in 2025. But it's hard to say without knowing the specifics of a case.

Q. In what percentage of your radical cystectomy cases was another option pursued first?

A. The majority of my radical cystectomy cases are from muscle invasive bladder cancer where there was not another option pursued first. I would say at least maybe upwards of 80 percent, just off the top of my head, there's not another option pursued first because it's for muscle invasive bladder cancer.

Q. And you state a little bit further down under your Prognosis in that third paragraph on page 25, the first sentence, you estimate that his risk for another nonmuscular invasive recurrence would be approximately 35 percent, risk of progression to muscular invasive disease would be approximately 20 percent, and risk of bladder cancer death approximately 10 percent.

Do you see that?

A. Yes.

Q. There's no cite to those percentages, are there?

A. No. This is now getting into something which the evidence is -- it's too specific of a scenario to be able to provide a citation for. It's clinical judgment to be able to provide those numbers.

Q. So these numbers are just based on off your own clinical judgment, not any specific --

A. I mean, I'm using literature for background. So, for example, like we know the five-year survival of all patients that have high grade T1 bladder cancer is somewhere in the low 90s. We know that there's some progression rate. But we also know that there's a longer latency period.

And so taking all these different variables as it pertains to Mr. Laramore as well as my experience with patients like this, because I deal with patients like this on daily basis, allows me to try to make these estimation. But I would acknowledge these are estimates.

Q. Are you taking issue with any of the treatment that Mr. Laramore received for his bladder cancer diagnosis?

A. Let me just review the treatment so I can refamiliarize myself with Mr. Laramore's treatment history. No.

Q. Moving on --

MR. ANWAR: Do you want to take a short break before the home stretch?

MR. RUZICKA: I've got one more. Yeah. Let's take a short break.

THE VIDEOGRAPHER: Off the record at 5:14.

(Recess from 5:14 p.m. to 5:18 p.m.)

THE VIDEOGRAPHER: Back on the record at 5:18.

BY MR. RUZICKA:

Q. Dr. Kates, before I move on to Mr. Raymond, I want to go back to Ms. Dyer real quick, which is Deposition Exhibit 16. I'm going to direct your attention to page -- you testify or you have in your report that you put Ms. Dyer at risk for her exposure to southeast North Carolina on page 25 of your report.

Do you see that?

A. Can you show me where you're...

Q. Sure. Let's look at your conclusion real quick here. Your conclusion states on page

29, the last portion of your second conclusion states, "Environmental exposure in southwest North Carolina and her bladder cancer was" -- I'll read the full sentence, number two, "Her bladder cancer was most likely caused by a combination of the idiopathic nature of bladder cancer with possible contributing risk factors of a short-term smoking history and elevated BMI and environmental exposure in southeast North Carolina."

Do you see that?

A. Yes.

Q. And you were relying completely on Dr. McCarthy for your opinion that exposures in the southeastern North Carolina portion of the state contribute to bladder cancer; true?

A. For my statement about -- that's in the end of that report, basically Dr. McCarthy had the statement that he's noticed over the last 16 years, many bladder cancer patients, in a high percentage of bladder cancer patients in the area relative to other areas of the general population. And I have no way to -- how do I say it in the report?

Basically, I don't practice neurology in that area, so I have no way to dispute that

1 testimony. So I'm not ruling it out. That's why
2 I say possible contributing factor.
3 Q. Is there no way for you to confirm that
4 that is the case in southeast North Carolina?
5 A. Not that I know of.
6 Q. Have you ever spoken with Dr. McCarthy?
7 A. No.
8 Q. Would you state then that her exposure
9 to the southeast North Carolina area is a risk
10 factor more likely than not?
11 A. No. My opinion to a reasonable degree
12 of medical certainty is that idiopathy is the most
13 likely contributing risk of her bladder cancer.
14 Q. Maybe I should clarify this. In some of
15 your opinions, you state after those statements
16 possible contributing risk factors.
17 When you say possible contributing risk
18 factors, are you saying that those are not more
19 likely than not risk factors?
20 A. So the way I think about this is if you
21 have weak risk factors, that I would describe
22 weak, so let's take this situation out and say you
23 have your grandmother's sister. You're my
24 patient. Your grandmother's sister had bladder
25 cancer. How do I take that risk factor into

account?

Well, I'm going to acknowledge it. I'm going to view it as a weak risk factor, but I'm going to view idiopathy as more likely than your family history of your grandmother's sister being the contributing factor to the bladder cancer development.

So I use that analogy to now talk about Ms. Dyer where she has these weak risk factors, which I go through in my report. And in this situation, it's her cigarette smoking history, her morbid obesity and potentially the environmental exposures. But all those weak risk factors still add up to not being as likely as idiopathy given that they're weak risk factors.

Q. Gotcha. Before this case, have you ever heard of Dr. McCarthy?

A. No.

Q. Do you know what chemicals he was referring to in his deposition?

A. No.

Q. As a physician practicing in southeast North Carolina -- strike that.

(Kates Exhibit 32 was marked.)

BY MR. RUZICKA:

Q. I'm going to hand you what I'll mark as Deposition Exhibit 32. Deposition Exhibit 32 is the transcript of Dr. McCarthy, at least selected portions of Dr. McCarthy deposition.

Do you see that?

A. Yes.

Q. I'm going to ask you to turn to page 96, line 19. Dr. McCarthy states -- sorry.

The question is: "Would you consider exposure over a number of years to PCE to be a risk factor for developing bladder cancer?"

Line 22 is "MS. TINCH: Objection to form and foundation."

Then the answer 24 -- sorry -- question again on line 24: "Your answer, Doctor, was?"

Then his response on line 25 is: "Yes."

Do you see that?

A. Yes.

Q. So did you consider exposure to PCE to be a risk factor for bladder cancer -- so you would consider exposure to -- strike that.

You chose not to credit that portion of this testimony; is that true?

A. That's not true. That's not.

Q. So you took into consideration that Dr. McCarthy believes that PCE is a risk factor for developing bladder cancer?

A. I read that, yes.

Q. But you didn't give any credit to that portion of his testimony, did you?

A. I don't know what you mean by the word "credit."

Q. Well, you took Dr. McCarthy's opinion about exposures in southeast North Carolina to be a potential risk factor, but you didn't take his opinion that PCE to be a risk factor for developing bladder cancer, did you?

A. The way I would answer that is a treating urologist is able to know their own incidence rates of a disease they treat within their community.

If I have a very high rate -- let's say in six months I have a very high rate of a given disease come into my clinic. That's a very credible piece of information. But I don't view myself as an expert in toxicology, nor do I view most any urologist I know of to be an expert in that general causation question.

So that's why I would answer the

question the way you've asked it.

Q. So is it your opinion that urologists can't look at epidemiological studies and draw conclusions on whether or not they are risk factors for developing bladder cancer?

MR. ANWAR: Object to form.

THE WITNESS: It's my opinion that most urologists are not going to do as thorough an epidemiological study themselves as an epidemiologist.

BY MR. RUZICKA:

Q. But is it your testimony that a urologist can't look at an epidemiological study and a draw conclusion that it is a risk factor for developing bladder cancer?

A. No.

Q. So you're saying that they can draw conclusions based on their review of epidemiological studies?

A. Theoretically, yes. Whether they do that thoroughly is up for discussion.

Q. So you don't know whether Dr. McCarthy had reviewed a thorough review of the PCE evidence in connection with his statement that it is a risk factor for developing bladder cancer?

A. You mean in a manner similar to the way, for example, Dr. Goodman did it?

Q. No. In a manner similar to the way that you used his statement for southeast North Carolina as being a potential risk factor.

A. Again, those are two very different pieces of information derived from very different expertise.

Q. I'm also going to have you look at that exhibit, Exhibit 32, and turn to page 98, line 7. I'm going to read the question.

"And in your medical record, I noted that there was a point -- where there are several points where it said she had a smoking history of about five cigarettes a year, about a quarter pack a day for sometime instead of two-year period, and sometimes it said April of 1972 to January of 1974, which would be less than two years. You won't consider that a risk factor for developing bladder cancer, would you?"

The answer was: "No."

Do you see that?

A. Yes.

Q. Dr. McCarthy didn't consider Ms. Dyer's smoking history to put her at risk for developing

bladder cancer; is that fair?

A. That's true.

Q. Now, are you aware that Camp Lejeune is in the southeast portion of North Carolina?

A. I believe that's true. I would need to review some facts about Camp Lejeune to verify it, but I trust if you're saying that, it's true. But I don't believe -- if you're implying that Ms. Dyer lived much of her life in southeast North Carolina, I don't believe that is true.

Q. No. I'm implying that Dr. McCarthy, who you are relying on, stated that there was a higher incidence of bladder cancer in southeast North Carolina, which is the exact region in which Camp Lejeune is located.

A. I have no...

Q. You don't know where Camp Lejeune is actually located, do you?

A. I don't, yeah.

MR. ANWAR: Object to form.

BY MR. RUZICKA:

Q. I'm going to ask you to turn to your report for Mr. Edward Raymond, Deposition Exhibit 18. Do you have that in front of you?

A. Yeah.

Q. What's your understanding of Mr. Raymond's current health condition?

A. My understanding is that as of the last record I have, which in my report, it looks like it's from October 2024. As per my report, a medical oncologist was planning on systemic therapy of efortumab vedotin and pembrolizumab for metastatic bladder cancer.

Q. Would you agree it's more likely than not that Mr. Raymond will die from his bladder cancer diagnosis?

A. So according to the last record I have, he has -- I agree -- first of all, I agree that his prognosis is not good from his bladder cancer. He has these competing risks of COPD and severe emphysema and is on -- I think he's on home 02. I believe he's oxygen dependent. So that's also, to be honest with you, a very poor prognostic sign.

But nevertheless, I would agree his bladder cancer -- his risk of dying from bladder cancer, unfortunately, is high.

Q. You agree it's more likely than not?

A. Yeah. I would agree it's more likely than not.

Q. And in your review of Mr. Raymond's

case, you talk about his work at a plant in New York.

Do you recall that?

A. Yes.

Q. Dr. LaKind and Dr. Bailey didn't provide you with any toxicological assessment of any exposure that Mr. Raymond had to silica dust, did they?

A. No.

Q. And are you aware that Mr. Raymond testified to wearing protective equipment as required by his employer, GE, during his work for that plant?

A. Yes.

Q. Are you aware that he testified to wearing an M95 mask or better respirator?

A. Yes.

Q. Isn't silica dust exposure related to inhalation exposure?

A. Yes.

Q. Is it your opinion that personal protective equipment cannot protect against silica dust?

A. It's my opinion that despite patients trying to protect themselves in these factories to

the best of their ability, there's still an association, unfortunately, with some of these factory exposures and bladder cancer.

Q. Are you basing that on the study that you cite in your report?

A. No.

Q. So are you basing that on any peer-reviewed literature that individuals that wear personal protective equipment when working with silica dust are still at an increased risk of developing bladder cancer?

A. No. I'm basing that opinion on the knowledge that, unfortunately, M95 masks are helpful. But as we all know from our own experiences wearing them, don't protect us from exposures completely.

Q. In the study that you cite regarding silica dust workers, are you aware that they did not in their exposure assessment consider whether any individuals wore personal protective equipment?

A. I would need to review that study.

(Kates Exhibit 33 was marked.)

BY MR. RUZICKA:

Q. I'm going to hand you what's been marked

Exhibit 32. Sorry. It's 33. I'll direct your attention to the third page, page 3 of Exhibit 33, the Exposure Assessment portion.

A. Yeah.

Q. The third sentence states, "For each occupation, the information collected included job title, main task performed, type of industry, vocation, period of employment, and status."

Do you see that sentence?

A. Yes.

Q. Did it state that it requested information about whether or not personal protective equipment was utilized?

A. No.

Q. So on page 19 of your Raymond report, you state that you are aware that the specific silicone plant that Mr. Raymond worked at appears to be the subject of litigation related to toxic exposure. But you don't have a cite for that statement.

Do you see that on page 19?

A. Yes.

Q. So what are you basing that on?

A. I can't recall.

Q. So you don't have any recollection of

where that statement came from?
A. No.
Q. Is that an error?
A. I wouldn't say it's an error.
Q. Is the presence of litigation sufficient to conclude that exposure existed?
MR. ANWAR: Object to form.
THE WITNESS: No.
BY MR. RUZICKA:
Q. So you have nothing to base your opinion on that Mr. Raymond was exposed to silica dust in his employment; is that fair?
MR. ANWAR: Object to form.
THE WITNESS: I would disagree with that statement.
BY MR. RUZICKA:
Q. Well, you testified that you don't have any citations or evidence supporting an M95 is insufficient to protect against silica dust. Is that true?
MR. ANWAR: Object to form.
THE WITNESS: That's true.
BY MR. RUZICKA:
Q. And you were aware that Mr. Raymond testified that he wore an M95 or better respirator

during his entire employment at that factory. Is that true?

A. That's true.

Q. And you can't state any cite that that specific silicon plant had exposed its workers to silica dust; is that true?

A. No. I would say they definitely exposed their workers to silica dust.

Q. What the basis of your opinion?

A. Because there was silica -- can we review the deposition of Mr. Raymond? The reason I'm asking that is because I think he went through in the deposition the dust exposure. There was dust throughout the factory. I think he describes it. But again, I don't want to paraphrase the deposition. I'd like to review it.

Q. He testified that he wore an M95 mask or better; true?

A. Again, I don't want to just take sections from his deposition. He did testify to that, but also testified, I believe -- again, I would love to review it -- that there was silica dust all around the factory and that he like went through it with some of the machinery that he operated.

So if we could go through it, I could clarify it for you.

Q. Page 23 you state that his extensive smoking history likely caused or contributed to -- strike that.

Let's take a quick break. I think I'm almost done.

THE VIDEOGRAPHER: Off the record at 5:41.

(Recess from 5:41 p.m. to 5:46 p.m.)

THE VIDEOGRAPHER: Back on the record at 5:45.

BY MR. RUZICKA:

Q. Dr. Kates, earlier you testified as to your review of the depositions of the PLG's uro-oncologist. Do you recall that?

A. Yes.

Q. I believe you said that you disagreed with some of their or you had some opinions about the some of their depositions.

Can you elaborate on what those opinions are?

A. Sure.

Q. What are they?

A. I disagreed with the characterization --

well, there are some things I agreed with, I'll say that, and there are some things I respectfully I would say professionally just disagreed with acknowledging that these people are my colleagues and I respect them as colleagues.

So, for example, something I disagree with is this idea that smoking does not have a dose-response relationship. I believe smoking does have a dose-response relationship.

Q. Anything else that you disagree with?

A. There may be other things that I would need to review sort of more thoroughly. If we reviewed the depositions, I could point some things out, but I would need to review those depositions again.

Q. What are some of the things that you did agree with?

A. One of the things I agreed with, and again if we had Dr. Bivins' testimony in front of us, I believe he agreed with me regarding idiopathy and the rates of idiopathy he sees in his practice.

Q. Anything else that you agreed with?

A. Again, there may be other things I agree with, but I would need to review the records

thoroughly in order to address that specific question.

Q. Have you ever reviewed the public guidance on the elective option for Camp Lejeune Justice Act claims?

A. Was it in my materials? I think we will need to look at it.

Q. It was not listed in your materials considered list.

A. Then I don't recall if I have reviewed it or not.

Q. Were you aware that there were questions asked of Mr. Cagiano about the public guidance on elective option for Camp Lejeune Justice Act claims in his deposition?

A. I did review Mr. Cagiano's deposition. But I need you to point out to me where he discusses the particular sentences you're describing.

MR. RUZICKA: I don't have any questions at this time. I'll pass the witness. Do you all have any questions?

EXAMINATION

BY MR. ANWAR:

Q. Dr. Kates, I just have a few functions

for you. This shouldn't take long. I know it's been a long day for all of us.

Can you turn back to Exhibit 14, which is the Cagiano report. Can you turn to page 11.

A. Yes.

Q. The second or, I guess, the first full paragraph, but the second paragraph on the page reads, "The chemicals at issue with respect to the Camp Lejeune water are not ones that treating urologists typically consider as having a causal association with bladder cancer."

Do you see that there?

A. Yes.

Q. Can you elaborate on what you meant by that statement?

A. Sure. So when we take a history of a patient, there are established risk factors for bladder cancer that most every urologist will ask about that are taught to medical students, residents and fellows, and none of the chemicals listed are any of those chemicals that are taught or tested in our written exams or oral exams.

Q. If you could turn to page 13 now. The first sentence under Section 7, Idiopathy, reads, "Despite all that is known about bladder cancer

1 risk factors, it's estimated that approximately
2 40 percent of bladder cancer cases cannot be
3 attributed to a known risk factor."
4 Do you see that there?
5 A. Um-hum.
6 Q. Do you recall being asked a number of
7 questions about where you got the 40 percent
8 estimate for number four, idiopathic cases?
9 A. Yes.
10 Q. Can you elaborate on what the basis for
11 that opinion was in your report?
12 A. Sure. So that opinion is based on my
13 experience as a urologist that does this risk
14 factor -- this differential etiology of risk
15 factors regularly every time I have a clinic. And
16 when I have, say, ten patients, new patients with
17 bladder cancer come into my clinic, which happens
18 pretty regularly, how many of them after
19 performing this differential etiology is there no
20 known risk factor. And it's 40 percent.
21 Q. Where do you practice as a urologic
22 oncologist?
23 A. Baltimore, Maryland.
24 Q. What is the institution?
25 A. Johns Hopkins.

Q. What positions do you hold at Johns Hopkins?

A. I'm an associate professor. I have a distinguished or an endowed chair called the Chris Evanson Professorship in Urology and Oncology. I'm the co-director of the Greenberg Bladder Cancer Institute. And I'm director of urologic oncology.

Q. Do you train fellows at Johns Hopkins?

A. I do.

Q. How many fellows do you train a year?

A. I train one fellow in urologic oncology a year. I train three residents. Well, I train one fellow per year. It's two-year fellowship. So there's two fellows present at any given time. I train -- there are three residents a year. It's a six-year residency, so 18 residents at any given time.

Q. When you're training fellows and the residents at Johns Hopkins, does the topic of idiopathy come up?

A. Yes.

Q. Can you elaborate on that?

A. Sure. We discuss differential etiology all the time, especially modifiable risk factors

as it relates to our patients, and we discuss that it's common that there are patients who have no known risk factors. They're not smokers. They have no occupational exposure. They have no history of radiation, et cetera, all the way down the line, and still they have bladder cancer.

We discuss it with those patients. I discuss it with those, I'm sorry, residents and fellows.

Q. Is it a fair characterization to say that idiopathy is part of the training that the fellows and residents receive at Hopkins?

A. Yes. I would say it's part of every medical student and graduate level training that idiopathy is always going to be on a differential. And it's a known term to all physicians.

Q. What is your basis for saying it's something that every medical resident is trained on or med student?

A. Well, because there are certain diseases that we treat in which it's almost entirely idiopathic. The cause is completely unknown. And you know that it's not 40 percent. It's 90 percent. Certain cancers that are not 40 percent, but much higher.

1 So the point is is that this concept
2 that the cause of something is unknown is agreed
3 upon in medicine.
4 Q. You discussed a little bit with
5 Mr. Ruzicka the number of patients that you
6 diagnose each week with bladder cancer.
7 Do you recall that discussion?
8 A. Yes.
9 Q. Can you remind me how many patients on
10 average or typically do you diagnose with bladder
11 cancer each week?
12 A. So each week it's going to be anywhere
13 from five to 12. Well, anywhere from five to 12
14 that I see in clinic. But I'm also diagnosing
15 bladder cancer that same week on surgery, so
16 TURBTs which we've talked about today,
17 cystoscopies which we talked about today. And
18 then to some extent, I'm not really diagnosing
19 bladder cancer on cystectomies, but I'm staging
20 bladder cancer on cystectomies, which again I do
21 every week.
22 Q. This might require doing a little math.
23 About how many patients do you diagnose with
24 bladder cancer per month?
25 A. I perform around 32 TURBTs in a month.

I perform around five to ten cystectomies in a month. I perform 60 to 90 cystoscopies in a month. And then in my clinic, I see anywhere from, I'd say, five to 12 patients in clinic. So 20 to, let's say, 45 patients in clinic with bladder cancer.

So that's roughly -- I'm not diagnosing bladder cancer each time I'm doing all of those, but that's basically the practice.

Q. I'm going to ask you to do some more math, just ballpark. How about per year?

A. So in a given year, I do typically close to, or depending on the year, or over a hundred cystectomies in a year. I do approximately -- I'm trying to do 30 some times 12 -- around 360 TURBTs, give or take, and then around 75 times 12 cystoscopies. Let's just stay like 900 cystoscopies.

Q. Do you have any ballpark on how many patients you've diagnosed with bladder cancer throughout your career as a practicing urologic oncologist?

MR. RUZICKA: Objection. Form.

THE WITNESS: I'm trying to think of a granular way to say many patients. I certainly

1 don't want to overstate it, but I think a
2 conservative estimate would be certainly in the
3 thousands.
4 BY MR. ANWAR:
5 Q. So when you say your opinion on
6 idiopathy is based on your clinical experience,
7 are you referring to the experience we just
8 discussed in treating and diagnosing patients?
9 A. Yes.
10 Q. How would you characterize your urologic
11 oncology practice at Johns Hopkins relative to
12 other institutions? When I say that, I mean in
13 terms of volume of patients.
14 A. Yes. So we have one of the highest
15 volume of bladder cancer clinical practices in the
16 country. There are different metrics to be able
17 to figure that out. We enroll onto more clinical
18 trials than nearly any other center in the
19 country. Although we are not -- I wouldn't say
20 we're the largest. We're certainly towards the
21 largest.
22 And my practice in particular, which is
23 a subspecialized practice in bladder cancer, with
24 the volumes of bladder cancer I have is unique to
25 Maryland, in my opinion, and relatively unique to

my local mid Atlantic region.

Q. Given the profile of Johns Hopkins, would it be fair to say that you do see patients outside of the local Maryland DMV area?

MR. RUZICKA: Objection. Form.

THE WITNESS: Yes. In a given clinic, we'll routinely see patients from outside of the local region, say Florida, California and new York and then outside of the country for second opinions.

BY MR. ANWAR:

Q. Could you turn to page 9 of the Cagiano report, Exhibit 14. I'm just going to flip through with you really quickly and try to make this as quick as possible and streamline.

In that first paragraph under Smoking, you opine, "Tobacco use comprises the largest known risk factor for bladder cancer development and accounts for 30 to 40 percent of all bladder cancer."

Did I read that correctly?

A. Yes.

Q. Is that your opinion in this case?

A. Yes.

Q. If you turn the page to page 10 under

Occupational Exposures at the bottom there, number ii, the first sentence says, Occupational exposures have been linked to 5 to 10 percent of all bladder cancer cases or all bladder cancers.

Did I read that correctly?

A. Yes.

Q. Is that your opinion in this case?

A. Yes.

Q. If you turn to -- let me pause right there. If we're talking smoking and occupational exposures, we're talking roughly, in your opinion -- strike that.

If we're looking at smoking and occupational exposures, is it your opinion that 45 to 50 percent of bladder cancers are related to smoking or an occupational exposure?

MR. RUZICKA: Objection. Form.

THE WITNESS: Yes.

BY MR. ANWAR:

Q. If you turn the page to page 12, under Family History, do you see that?

A. Yes.

Q. In the second to last sentence in that section, it reads, "However, germline testing, which assesses hereditary risk, suggests that 13

to 24 percent of patients with urothelial carcinoma will harbor pathogenic germline variants, most commonly MSH2 and BRCA1/2."

Did I read that correctly?

A. Yes.

Q. Do you have an opinion about what percentage of bladder cancer diagnoses are related to family history?

A. I think that this is an area -- again, the germline testing is something that is coming to the fore just now. So I don't know that we know exactly. Based on the literature, and a lot of this literature is not all done across all bladder cancer stagings, but is kind of specific to the bladder cancer stage, but I would say it's single digits.

Q. So between those three risk factors that we just discussed, smoking, occupational exposures and family history, if I'm understanding your testimony correctly, do those comprise over -- do those risk factors in your opinion comprise over 50 percent of bladder cancer cases?

MR. RUZICKA: Objection. Form.

THE WITNESS: Yes, if you add those up.

BY MR. ANWAR:
Q. When I say comprise, I think what I'm saying are like the primary risk factors for causing bladder cancer.
A. Yes.
Q. What makes up the remaining under 50 percent of bladder cancer cases in terms of the primary causes and risk factors?
A. So I think there's a couple, and I go through this in my report, but there's a couple things that are very low, single-digit percentages, things like radiation, kids who are born with congenital anomalies like spina bifida or bladder exstrophy or things like that, sort of more rare things like, you know, schistosomiasis or chronic infections. So kind of all of that kind of comes together and adds up to maybe 10 percent, 5 to 10 percent.
Q. What makes up the remaining -- what's the risk factor? What is the cause for the remaining percentage bladder cancer cases?
A. We don't know.
Q. Is that what you would characterize as idiopathy?
A. Yes.

Q. It was touched on a little bit with Mr. Ruzicka's questioning. Remind me. In how many of your patients are you typically able to identify a single or multiple causes of a patient's or risk factors of a patient's bladder cancer?

A. In 60 percent or so, I'm able to identify the risk factor.

Q. I think those are all of the questions I have for you for now, Dr. Kates. Thank you for your time.

RE-EXAMINATION

BY MR. RUZICKA:

Q. Dr. Kates, just briefly, when someone comes in and you're diagnosing them, you don't have as much information as you had when reviewing these six patients that you reviewed in this case, do you?

A. The way I'll answer is I certainly don't have as many pages of printed record on the typical patient. But I have my oral history, which I was unable to do in these cases. So there's certain things that I have in this clinic that I was unable to do in these reviews, which is directly sort of question patients the way I would

do when I take a history in my clinic.

Then there were certain things. As you suggest, some of these patients had thousands of pages of records, which, no, that would not be typical of a patient that walks in my door.

Q. So you're not doing as extensive of a workup as the workup that you did in this case with the patients that you see in your practice on a daily basis; is that fair to say?

A. No. I disagree with that. Again, I do an oral history, which in many ways cuts to the chase a little bit easier than doing a doc review.

I can just ask the patient what were your last couple jobs instead of trying to sort through 2,000 pages of documents trying to figure out what were their jobs.

Q. But oral histories are not as reliable, you would agree, as an entire medical record; right?

A. Well, I think we've talked a lot about that today as it relates to smoking. So as it relates to smoking, I would agree that a patient's testimony as it relate to smoking may not in certain situations be as reliable as the written record. I would agree with that statement.

Q. And in these interviews with your patients, you would ignore a dry cleaning exposure history; true?

A. I don't know that I use the word "ignore." I would document -- I would document, you know, all of their occupations if I had that information available. How I would take that into account as it relates to their bladder cancer development, I'd have to know the specific patient case.

Q. You don't know all the exposures that a person has coming in and getting first diagnosed with cancer; is that fair?

A. I feel like usually you can with a good history do a fairly strong differential etiology.

Q. If you think a person is idiopathic, then you could find -- strike that.

If you think a person is idiopathic, then you could find a cause later; is that fair to say?

A. It's fair to say that if I don't find a cause, say, when they come to me initially and then we do an updated history and they mention actually I was -- I misremembered this conversation and I actually did smoke cigarettes,

then, yes, I would certainly, of course, update my differential etiology.

Q. And so when you say when you're looking at a person that you determined is an idiopathic situation, does that mean that you just haven't found the cause yet?

A. I think that's -- the way I would say it is that the community hasn't -- the community of bladder cancer research and evidence has not created the evidence to support it yet. I think that's true in some situations.

Q. So are you hopeful that the urologic community will be able to eventually through research determine all causes of bladder cancer?

A. Yes, but I'm not sure that all bladder cancer will have known causes.

Q. And would you agree that idiopathy is not a cause. It's just you don't know the cause yet?

A. I would say that idiopathy -- yeah, I would define idiopathy as the cause is unknown.

Q. Which means you just haven't found the cause yet; right?

A. Well, as I said, it's either that we haven't found the cause yet, which my hope is is

the case in the majority of the 40 percent mentioned. But it's also not clear to me that there is a cause for all bladder cancer.

Q. It's just not clear to you yet because the science is still evolving; is that fair?

A. Well, I don't know, for example, if spontaneous or random mutations -- the role those have in developing bladder cancer. We know that DNA damage repair breaks and molecular -- mutations at the gene level occur all the time, and now we repair those mutations. And our bodies do an amazing job at that.

So the question is: Is it not doing a good job at that, i.e., forming cancer for a known cause in all patients with bladder cancer? I can't answer that question. I hope it's yes because then we can modify those risks. But that's not something I can confidently say is true.

Q. Since you don't know, you can't base your opinion on that?

MR. ANWAR: Object to form.

THE WITNESS: Correct.

BY MR. RUZICKA:

Q. And is idiopathy something that is

tested on medical boards for bladder cancer?

A. No.

MR. RUZICKA: I don't have any other questions.

MR. ANWAR: I don't have anything.

MR. RUZICKA: Thank you, Dr. Kates.

MR. ANWAR: Thank you.

THE VIDEOGRAPHER: We are off the record at 6:20.

MR. RUZICKA: We have a standing order, Ann. I don't believe I need a rough draft.

(Whereupon, at 6:20 p.m., the taking of the instant deposition ceased.)

COMMONWEALTH OF PENNSYLVANIA)
COUNTY OF ALLEGHENY) SS:

C E R T I F I C A T E

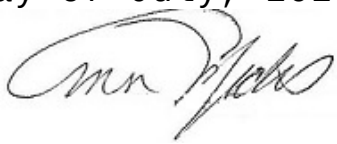
I, Ann Medis, RPR, CLR, CSR-WA and Notary Public within and for the Commonwealth of Pennsylvania, do hereby certify:

That MAX KATES, M.D., the witness whose deposition is hereinbefore set forth, was duly sworn by me and that such deposition is a true record of the testimony given by such witness.

I further certify the inspection, reading and signing of said deposition were not waived by counsel for the respective parties and by the witness.

I further certify that I am not related to any of the parties to this action by blood or marriage and that I am in no way interested in the outcome of this matter.

IN WITNESS WHEREOF, I have hereunto set my hand this 29th day of July, 2025.



_____
Notary Public

1 COMMONWEALTH OF PENNSYLVANIA) E R R A T A
COUNTY OF ALLEGHENY) S H E E T
2
3 I, MAX KATES, M.D., have read the foregoing pages of my deposition given on July 11, 2025, and wish
4 to make the following, if any, amendments, additions, deletions or corrections:
5
6 Page Line Change and reason for change:
7 ____ ____ _____
8 ____ ____ _____
9 ____ ____ _____
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18
In all other respects, the transcript is true and
19 correct.
20
_____
21 MAX KATES, M.D.
22
_____ day of _____, 2025.
23
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24 Notary Public
25

GOLKOW, a Veritext Division
One Liberty Place
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Philadelphia, Pennsylvania 19103
877.370.3377

July 29, 2025

Haroon Anwar, Esquire
U.S. Department of Justice
1100 L Street, NW
Washington, DC 20005
Re: Deposition of MAX KATES, M.D.
Notice of Non-Waiver of Signature

Dear Mr. Anwar:

Please have the deponent read his deposition transcript. All corrections are to be noted on the Errata Sheet.

Upon completion of the above, the Deponent must affix his signature on the Errata Sheet, and it is to then be notarized.

Please forward the signed original of the Errata Sheet to Ted Ruzicka, Esquire for attachment to the original transcript, which is in his possession. Send a copy of same to all counsel. Please return the completed Errata Sheet within 30 days of receipt hereof.

Sincerely,

Ann Medis, RPR, CLR, CSR-WA

cc:

Ted Ruzicka, Esquire

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Federal Rules of Civil Procedure

Rule 30

(e) Review By the Witness; Changes.

(1) Review; Statement of Changes. On request by the deponent or a party before the deposition is completed, the deponent must be allowed 30 days after being notified by the officer that the transcript or recording is available in which:

(A) to review the transcript or recording; and

(B) if there are changes in form or substance, to sign a statement listing the changes and the reasons for making them.

(2) Changes Indicated in the Officer's Certificate. The officer must note in the certificate prescribed by Rule 30(f)(1) whether a review was requested and, if so, must attach any changes the deponent makes during the 30-day period.

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VERITEXT LEGAL SOLUTIONS

COMPANY CERTIFICATE AND DISCLOSURE STATEMENT

Veritext Legal Solutions represents that the foregoing transcript is a true, correct and complete transcript of the colloquies, questions and answers as submitted by the court reporter. Veritext Legal Solutions further represents that the attached exhibits, if any, are true, correct and complete documents as submitted by the court reporter and/or attorneys in relation to this deposition and that the documents were processed in accordance with our litigation support and production standards.

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