Expert Bias and the Judge's Role as Gatekeeper

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"Expert opinion evidence can be a key element in the search for truth, but it may also pose special danger."[1]

A. INTRODUCTION

Expert evidence has long been a staple in medical malpractice and personal injury cases. Expert evidence that lacks impartiality, however, may result in egregious miscarriages of justice. The Legislature and the Court have each progressively tightened the rules and tests regarding the admissibility of expert evidence and enhanced the trial judge's role as gatekeeper.

In the landmark *White Burgess* decision, the Supreme Court of Canada stated:[2]

> Expert witnesses have a special duty to the court to provide fair, objective and non-partisan assistance…
>
> …The expert's opinion must be impartial in the sense that it reflects an objective assessment of the questions at hand. It must be independent in the sense that it is the product of the expert's independent judgment, uninfluenced by who has retained him or her or the outcome of the litigation. It must be unbiased in the sense that it does not unfairly favour one party's position over another. The acid test is whether the expert's opinion would not change regardless of which party retained him or her…

These principles are codified under rule 4.1.01 of the *Rules of Civil Procedure*, which provides:[3]

> (1) It is the duty of every expert engaged by or on behalf of a party to provide evidence in relation to a proceeding under these rules,
>
> (a) to provide opinion evidence that is fair, objective, and non-partisan;
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> (b) to provide opinion evidence that is related only to matters that are within the expert's area of expertise; and
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> (c) to provide such additional assistance as the court may reasonably require to determine a matter in issue.

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[1] *White Burgess Langille Inman v. Abbott and Haliburton Co.*, 2015 SCC 23 at paras. 1, 12, 20 (CanLII), 2015 2 SCR [*White Burgess*].
[2] *Ibid*. at paras. 2, 32.
[3] *Rules of Civil Procedure*, R.R.O. 1990, Reg. 194 at r. 4.1.01 [the *Rules*].

(2) The duty under subrule (1) prevails over any obligation owed by the expert to the party by whom or on whose behalf he or she is engaged.

Judges are responsible for protecting the integrity of the trial process by ensuring that experts do not overstep these boundaries when giving evidence. This gate-keeping responsibility includes ensuring that the expert's testimony continues to be independent in the sense that the expert does not become an advocate for the party by whom the expert was retained.[4] As such, the Court's discretion to exclude prejudicial evidence is an ongoing one that continues throughout trial. The Court retains discretion to exclude expert evidence even after initially admitting it if prejudice emerges in the trial that was not apparent at the time of admission.[5]

For those counsel considering bringing a motion to exclude an opposing party's expert, or for those responding to such a motion, this paper will review: (1) the legal test for the admissibility of expert evidence; (2) the Ontario Court of Appeal's most recent rulings on expert bias; and (3) manifestations of expert bias. By way of a caveat, please note that but for landmark appellate decisions, this paper will focus primarily upon issues of expert bias *in the context of medical malpractice and personal injury cases.*

B. THE TEST FOR THE ADMISSIBILITY OF EXPERT EVIDENCE

i. Basic Requirements for Admissibility

The basic test for the admissibility of expert evidence was established by the Supreme Court of Canada in *R. v. Mohan*. At that time, the Court described a four-prong analysis:[6]

(a) Relevance;

(b) Necessity in assisting the trier of fact;

(c) The absence of any exclusionary rule; and

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4 *Parliament v. Conley*, 2021 ONCA 261 at paras. 45, 47 [*Parliament*].

5 *Bruff-Murphy v. Gunawardena*, 2017 ONCA 502 at para. 66 (CanLII), leave to appeal dis'd 2018 CanLII 11147 (SCC) [*Bruff-Murphy*].

6 *R. v. Mohan*, 1994 CanLII 80 (SCC), [1994] 2 S.C.R. 9 [*Mohan*].

(d) A properly qualified expert.

In *White Burgess*, the Supreme Court expanded in a two-step analysis, whereby: [7]

(1) At the first step, the Court applies the four *Mohan* criteria, otherwise know as the "threshold requirements of admissibility"; and

(2) At the second step, the Court is to balance the probative value and prejudicial effects of admitting the evidence.

The issue of bias is considered at both steps of the analysis.[8]

The Ontario Court of Appeal has explained that in deciding whether a proposed expert is properly qualified, the trial judge is to consider whether the proposed expert is:[9]

(a) Impartial, in the sense that the expert gives only an "objective assessment of the questions at hand;"

(b) Independent, in the sense that the expert's opinions result from an exercise of "independent judgment, uninfluenced by who has retained" the expert or the "outcome of the litigation"; and

(c) Unbiased, in the sense that the expert does not "unfairly favour one party's position over the other."

ii. Timing of the Admissibility Decision

In most cases, the issue of admissibility of expert evidence is decided at the time the evidence is proffered and the expert witness' qualification is required by a party. The Ontario Court of Appeal has confirmed: "To the extent that this is possible, it should be the norm."[10]

During the qualifications stage, the expert is expected to attest to his[11] awareness of and willingness to comply with the duty owed to the Court. As stated by the Supreme Court of Canada:[12]

> Once the expert attests or testifies on oath to this effect, the burden is on the party opposing the admission of the evidence to show that there is a realistic concern that

[7] *White Burgess, supra* note 1 at paras. 23-24.; *R. v. Bingley*, 2017 SCC 12 at para. 14 (CanLII), [2017] 1 S.C.R. 170 [*Bingley*].
[8] *Ibid.* at para. 42.
[9] *R. v. Mills*, 2019 ONCA 940 at para. 39 (CanLII); *R. v. Wong*, 2023 ONCA 118 at para. 62 (CanLII).
[10] *Bruff-Murphy, supra* note 5 at para. 60 leave to (appeal to SCC dis'd).
[11] The pronoun "his" has been arbitrarily chosen for consistency within this paper.
[12] *White Burgess, supra* note 1 at para. 48.

> the expert's evidence should not be received because the expert is unable and/or unwilling to comply with that duty. If the opponent does so, the burden to establish on a balance of probabilities this aspect of the admissibility threshold remains on the party proposing to call the evidence. If this is not done, the evidence, or those parts of it that are tainted by lack of independence or impartiality, should be excluded…

A trial judge "must avoid the temptation to take the path of least resistance and rule the evidence admissible subject only to the weight to be afforded to such evidence."[13]

iii. Weight

In *White Burgess*, the Supreme Court also reviewed whether/when evidence of bias goes to admissibility versus weight:[14]

> In my view, expert witnesses have a duty to the court to give fair, objective and non-partisan opinion evidence. They must be aware of this duty and able and willing to carry it out. If they do not meet this threshold requirement, their evidence should not be admitted. Once this threshold is met, however, concerns about an expert witness's (*sic*) independence or impartiality should be considered as part of the overall weighing of the costs and benefits of admitting the evidence…
>
> …I would hold that an expert's lack of independence and impartiality goes to the admissibility of the evidence in addition to being considered in relation to the weight to be given to the evidence if admitted…

C. THE COURT OF APPEAL'S RECENT RULINGS ON EXPERT BIAS

The standard of review of a Trial Judge's ruling on the admissibility of expert evidence is such that defence will be given, unless the Trial Judge "commits an error of principle, materially misapprehends the evidence, or reaches an unreasonable conclusion."[15]

There are recent cases wherein the Ontario Court of Appeal has put into action the Supreme Court of Canada's mandate that "a proposed expert witness who is unable or unwilling to comply with

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13 *Dulong v. Merrill Lynch Canada Inc.*, 2006 CanLII 9146 (ON SC) at para. 9 (CanLII).

14 *White Burgess*, *supra* note 1 at paras. 10, 45.

15 *R. v. Whatcott*, 2023 ONCA 536 at para. 34 (CanLII).

[the duty to the Court] is not qualified to give expert opinion evidence and **should not be permitted to do so**."[16]

In the 2017 *Bruff-Murphy* decision, the Ontario Court of Appeal ordered a new trial following the dismissal of a personal injury action. At the outset of the trial, Plaintiff's counsel had raised a number of concerns about one of the Defence experts ("Dr. Bail"), suggesting bias. The trial judge restricted Dr. Bail's testimony, but otherwise permitted him to testify. Regarding that decision, the Ontario Court of Appeal stated:[17]

> In my view, on a proper balancing, the potential risks of admitting Dr. Bail's evidence far outweighed the potential benefit of the testimony. It was evident from a review of Dr. Bail's report that there was a high probability that he would prove to be a troublesome expert witness, one who was intent on advocating for the defence and unwilling to properly fulfill his duties to the court.
> …
> To be fair to the trial judge, he attempted to ameliorate these concerns by specifically instructing the witness not to testify regarding certain issues, such as his criticism of other doctors. However, as the trial judge essentially acknowledged in his threshold motion ruling, had he undertaken the cost-benefit analysis he would not have permitted Dr. Bail to testify.
> …
> I have had the opportunity to consider in detail Dr. Bail's evidence and I concur with the trial judge that it is most troubling…
>
> Where, as here, the expert's eventual testimony removes any doubt about her independence, the trial judge must not act as if she were *functus*. The trial judge must continue to exercise her gatekeeper function. After all, the concerns about the impact of a non-independent expert witness on the jury have not been eliminated. To the contrary, they have come to fruition. At that stage, when the trial judge recognizes the acute risk to trial fairness, she must take action.
> …
> As mentioned above, the cost-benefit analysis under the second component of the framework for admitting expert evidence is a specific application of the court's general residual discretion to exclude evidence whose prejudicial effect is greater than its probative value. This general residual discretion is always available to the court, not just when determining whether to admit an item of evidence, but after the admission stage if the evidence's prejudicial effect is only revealed in the course of its presentation to the trier of fact.
> …

[16] *White Burgess, supra* note 1 at para. 2.
[17] *Bruff-Murphy, supra* note 5 at paras. 42, 48, 50, 63, 65, 67-68, 71.

> Given this ongoing gatekeeper discretion, the question remains of what, as a practical matter, the trial judge could or should have done in this case. His first option would have been to advise counsel that he was going to give either a mid-trial or final instruction that Dr. Bail's testimony would be excluded in [page602] whole or in part from the evidence. Had he taken that route, he would have received submissions from counsel in the absence of the jury and proceeded as he saw fit. Alternately, he could have asked for submissions from counsel on a mistrial, again in the absence of the jury, and ruled accordingly. In the event that he had to interrupt Dr. Bail's testimony mid-trial, he would have had to consider carefully how best to minimize the potential prejudicial effect of the interruption from the respondent's perspective.
>
> The point is that the trial judge was not powerless and should have taken action. The dangers of admitting expert evidence suggest a need for a trial judge to exercise prudence in excluding the testimony of an expert who lacks impartiality before those dangers manifest.
> …
> I would go further and state that, given the importance of a trial judge's ongoing gatekeeper role, the absence of an objection or the lack of a request for a specific instruction does not impair a trial judge's ability to exercise her residual discretion to exclude evidence whose probative value is outweighed by its prejudicial effect.

In the 2021 *Parliament* decision, the Ontario Court of Appeal ordered a new trial following the dismissal of a medical malpractice action. At trial, the impartiality of two experts retained by the Defendant physicians had been called into question.

The impartiality of the first expert ("Dr. Fleming") was addressed at the outset of trial, when the trial judge precluded Dr. Fleming from testifying. That ruling was not appealed but was acknowledged by the Ontario Court of Appeal:[18]

> …Dr. Fleming accepted the evidence of the respondent doctors and rejected the evidence of the appellants without explanation, and she was unwilling or unable to recognize or acknowledge this preference. She made improper fact-finding and credibility assessments and acted as both judge and jury…The trial judge concluded that Dr. Fleming lacked independence, rendering her incapable of providing an impartial opinion and refused to admit her evidence.

The impartiality of the second expert ("Dr. Bruce") was not addressed until after Dr. Bruce had testified. It was argued that during his testimony, Dr. Bruce strayed from impartiality. The trial judge not only permitted Dr. Bruce's evidence to stand, but also declined to provide any caution

[18] *Parliament,* *supra* note 4 at para. 28.

to the jury about the problems inherent with his testimony. The Ontario Court of Appeal concluded that in doing so, the trial judge failed to exercise her gatekeeping role:[19]

> …The credibility and reliability of Ms. York and the two doctors were central issues for the jury to decide.
>
> …Dr. Bruce exceeded his role as an expert when he opined on the credibility and reliability of the doctors and Ms. York, for example observing that Ms. York was untruthful and could not remember accurately….
>
> Second, the expression of an opinion as to the credibility of witnesses is also a breach of the expert's duty to be independent. Dr. Bruce acknowledged in his evidence that in rendering his opinion on standard of care, he disregarded Ms. York's evidence and assumed that the doctors' evidence was credible and reliable. I do not accept the respondents' argument that all Dr. Bruce was doing was making assumptions as the questions put to him asked him to do. As the extracts above indicate -- particularly "it's conceivable because that's what happened" -- it is clear that in some critical instances he was giving evidence about what actually happened, based on his view of the credibility of the witnesses. His testimony extended well beyond expressing opinions based on hypothetical facts he was asked to assume. For these reasons, this evidence was not admissible and **to the extent his testimony opined on the credibility of the witnesses, it should have been excluded.** These circumstances called for the trial judge to exercise her gatekeeping role and her residual discretion to exclude this evidence.

Most recently, in the matter of *Denman v. Radovanovich*, the Ontario Court Appeal dismissed an appeal of a Trial Judge's decision to preclude a Defence expert from testifying.[20] Denman was an informed consent medical malpractice trial completed in 2022. The Trial Judge ruled that the three Defendant physicians all failed to obtain Mr. Denman's informed consent to an elective multi-step course of medical intervention for the treatment of his brain arteriovenous malformation ("AVM").[21]

During the trial, the Defendants sought to qualify a neurosurgery and interventional radiology expert ("Dr. Redekop"). Following cross-examination on Dr. Redekop's qualifications in the *voir dire*, the Plaintiffs moved for the exclusion of Dr. Redekop's evidence on the basis of bias. The

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[19] *Ibid*. at paras. 49, 51-52.
[20] As of the date of authoring this paper, the Court of Appeal's decision has not yet been posted to CanLII but is available on the Ontario Court of Appeal website at: https://coadecisions.ontariocourts.ca/coa/coa/en/item/22261/index.do [*Denman* Appeal].
[21] 2023 ONSC 1160 (CanLII) [*Denman*].

motion was granted verbally and a written Endorsement followed, in which the Trial Judge relied upon many of the cases referred to hereinabove.[22]

Some of the specific factors which the Plaintiffs submitted were indicative of bias, and which may be more likely to arise in other cases, will be referred to in Section D to follow. A *sampling* of other factors alleged by the Plaintiffs, which may have been more unique to the *Denman* case, included:

- Dr. Redekop had testified in a prior AVM case (on behalf of the Defence) regarding certain advice that he gives to AVM patients, which evidence would have been supportive of Mr. Denman's case, but which opinion Dr. Redekop neglected to include in his report in Mr. Denman's case (i.e. it was alleged he will only give that evidence when it will serve the benefit of the Defence);[23]

- Similarly, Dr. Redekop gave different evidence in a prior AVM case concerning an important statistical risk than what he provided in the Denman case (i.e. it was alleged he was willing to change his evidence on this issue to help the Defence);[24]

- Dr. Redekop admitted that he has often testified that physicians have met the standard of care and, conversely, that he does not testify on behalf of Plaintiffs in standard of care cases;[25]

- In fact, in this very case, Dr. Redekop had initially been asked to review the case on behalf of the Plaintiffs to which request he simply replied by email "No", yet he later agreed to review the case on behalf of the Defence.[26]

Notably, within her Endorsement, Her Honour stated: "…Candidly, I tried to initially defer [my ruling] to the closing submissions but was convinced otherwise by the caselaw and submissions provided by Mr. Mandel. The trial judge must avoid the temptation to take the path of least resistance and rule the evidence admissible, subject only to wait."[27]

On November 29, 2023, the Ontario Court of Appeal heard the Defendants' appeal from the trial, which grounds included an allegation that the Trial Judge had improperly excluded Dr. Redekop's evidence. More specifically, the Defendants argued that the Trial Judge had relied upon *Wise*,

[22] 2022 ONSC 4401 (CanLII).
[23] *Ibid.* at para. 33(xi).
[24] *Ibid.* at para. 33(xvii)
[25] *Ibid.* at paras. 33(xii), 34(v).
[26] *Ibid.* at para. 33(xxii).
[27] *Ibid.* at para. 34.

rather than *White Burgess*, as the appropriate test for the admission of expert evidence. In its decision released on April 16, 2024, the Honourable Mr. Justice Rouleau, writing for a unanimous panel, stated:[28]

> The trial judge understood and applied the correct legal test. Contrary to the appellants' submission, the trial judge was well aware of her role when exercising her gate-keeping function as it concerns the testimony of expert witnesses. She expressly and repeatedly referred to *White Burgess*. She understood that, at the threshold stage, an expert will be prevented from testifying only if the expert is unable or unwilling to discharge the duty to provide a fair and non-partisan opinion.
>
> The trial judge also referred to other case law, including *Wise*. She appropriately considered the *Wise* decision as setting out a non-exhaustive list of factors that "may be considered when ascertaining bias or impartiality" of an expert witness.
> …
> As explained in *White Burgess*, at para. 50, whether an expert should be permitted to give evidence despite having an interest or connection with the litigation "is a matter of fact and degree." While another judge might have reached a different conclusion, I see no reason to interfere.

Attached, respectively, as **Appendixes A & B** to this paper are the trial transcripts from the cross-examination of Dr. Redekop on his qualifications and the submissions by counsel on the motion to preclude Dr. Redekop from testifying together with the Trial Judge's oral ruling.

D. MANIFESTATIONS OF EXPERT BIAS

The mere fact that an expert has executed a Form 53 "does nothing to assist the trier of fact in wrestling to the ground the impartiality and acceptability of the yet to be tendered evidence."[29]

A resource upon which judges have relied to better understand ways in which bias may be manifested is a 2009 article authored by Professor David Paciocco entitled *Taking a 'Goudge' out of Bluster and Blarney: an 'Evidence-Based Approach' to Expert*. As stated in *R. v. France*:[30]

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[28] *Denman* Appeal, *supra* note 20 at paras. 125-126, 130.

[29] *Boutcher v. Cha*, 2020 ONSC 7694 at para. 37 (CanLII) [*Boucher*].

[30] *R. v. France*, 2017 ONSC 2040 at paras. 15-17 (CanLII) [*France*]; *British Columbia (Director of Civil Forfeiture) v. Angel Acres Recreation and Festival Property Ltd.*, 2019 BCSC 275 at paras. 137-140 (CanLII) [*Angel Acres*].

> Professor Paciocco stresses the importance of the expert maintaining an "open mind to a broad range of possibilities" and notes that bias can often be unconscious. He refers to a number of forms of bias: lack of independence (because of a connection to the party calling the expert); "adversarial" or "selection" bias (where the witness has been selected to fit the needs of the litigant); "association bias" (the natural bias to do something serviceable for those who employ or remunerate you); professional credibility bias (where an expert has a professional interest in maintaining their own credibility after having taken a position); "noble cause distortion" (the belief that a particular outcome is the right one to achieve); and, a related form of bias, "confirmation bias" (the phenomenon that when a person is attracted to a particular outcome, there is a tendency to search for evidence that supports the desired conclusion or to interpret the evidence in a way that supports it)….

In *Wise v. Abbott Laboratories, Limited*, the Court cited a list of 14 factors that may be considered when ascertaining bias and impartiality.[31] The *Wise* factors are not meant to be a "test" whereby any or all the factors must be shown for bias to be established, but rather examples of ways in which bias *could* be flushed out. The list of factors includes:

> (a) the nature of the stated expertise or special knowledge;
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> (b) statements publicly or in publications regarding the prosecution itself or evidencing philosophical hostility toward particular subjects;
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> (c) a history of retainer exclusively or nearly so by the prosecution or the defence;
>
> (d) long association with one lawyer or party;
>
> (e) personal involvement or association with a party;
>
> (f) whether a significant percentage of the expert's income is derived from court appearances;
>
> (g) the size of the fee for work performed or a fee contingent on the result in the case;

31 *Wise v. Abbott Laboratories, Limited*, 2016 ONSC 7275 at para. 70 (CanLII) [*Wise*].

(h) lack of a report, a grossly incomplete report, modification or withdrawal of a report without reasonable explanation, a report replete with advocacy and argument;

(i) performance in other cases indicating lack of objectivity and impartiality;

(j) a history of successful attacks on the witness's (*sic*) evidence;

(k) unexplained differing opinions on near identical subject matter in various court appearances or reports;

(l) departure from, as opposed to adherence to, any governing ethical guidelines, codes or protocols respecting the expert witness's (*sic*) field of expertise;

(m) inaccessibility prior to trial to the opposing party, follow through on instructions designed to achieve a desired result, shoddy experimental work, persistent failure to recognize other explanations or a range of opinion, lack of disclosure respecting the basis for the opinion or procedures undertaken, operating beyond the field of stated expertise, unstated assumptions, work or searches not performed reasonably related to the issue at hand, unsubstantiated opinions, improperly unqualified statements, unclear or no demarcation between fact and opinion, unauthorized breach of the spirit of a witness exclusion order; and

(n) expressed conclusions or opinions which do not remotely relate to the available factual foundation or prevailing special knowledge.

Other factors that have given rise to a concern for expert bias by the Court (in *Denman* and otherwise) include:

(a) argument with opposing counsel during cross-examination, including asking questions of counsel rather than answering those posed by counsel;[32]

(b) evidence that substantially changes on re-examination, seemingly to repair damage that had been done to the case of the party by whom the expert had been retain;[33]

(c) the failure to readily disclose a quasi professional-personal relationship with the party by whom the expert has been retained, which relationship was

[32] *Leckie v. Chaiton*, 2021 ONSC 7770 at paras. 70, 74. (CanLII) [*Leckie*].
[33] *Ibid.* at paras. 72, 74.

marked by friendship, a teacher-student dynamic, and co-collaboration on medical presentations and research papers;[34] and

(d) findings of credibility made by the expert;[35]

(e) circular and conclusory reasoning;[36]

(f) the use of inflammatory language;[37]

(g) selective use of information (i.e. "cherry-picking");[38]

(h) a revised opinion at trial as compared with a prior written report, despite the absence of any new information;[39]

(i) exclusive reliance upon information sent by counsel (e.g. a chronology) without review of source documents or the complete file;[40]

(j) departure from the expert's own standard practice respecting the expert's methodology or approach to rendering an opinion;[41]

(k) the failure to give the Plaintiff an opportunity to explain alleged inconsistencies; [42]

(l) the torquing of testing results to produce results that support the expert's conclusion;[43] and/or

(m) an approach whereby the expert's primary role is treated as exposing the Plaintiff's inconsistencies as opposed to providing a truly independent assessment;[44]

(n) making unnecessary references to insurance fraud.[45]

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[34] Denman, *supra* note. 21.
[35] *Ibid* at para. 33; *Parliament*, *supra* note 4 at paras. 28, 51-52; *Moustakis v. Agbuya* (17 October 2023), Toronto CV-17-00588805-0000 (Ont.Sup.Ct.) Ruling on Voir Dire at 4.
[36] *Thornhill v. Chong*, 2016 ONSC 6353 at paras. 279-280, 283 (CanLII) [*Thornhill*].
[37] *Lane v. Kock*, 2015 ONSC 28 at para. 12 (CanLII) [*Lane*].
[38] *Ibid*. at para. 19.
[39] *Boone v. O'Kelly*, 2020 ONSC 6932 at paras. 28-29 (CanLII) [*Boone*]
[40] *Ibid*. at paras. 32-33, 41, 43.
[41] *Ibid*. at para. 92.
[42] *Bruff-Murphy*, *supra* note 5 at para. 51.
[43] *Ibid*. at paras. 52-55.
[44] *Ibid*. at para. 56.
[45] *Moustakis*, *supra* note 33 at 8.

E. CONCLUSION

In conclusion, the Court is to consider the issue of expert bias at both stages of the *White Burgess* test. There is no single factor or factors that must be present for a finding of bias to be made; however, the more or the stronger the indications, the more likely that the Trial Judge will be required to exclude the expert entirely as opposed to simply affording his evidence less weight. Finally, counsel ought to remember that while the best practice would suggest that a motion to exclude the expert ought to be brought at the conclusion of his *voir dire* before the expert has testified, given the Trial Judge's ongoing role as gatekeeper, should it become more obvious that the expert is biased as he testifies, a motion can be brought anytime.

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APPENDIX A

virtually, it is an - this is because of an order that Your Honour made.

THE COURT: Right, which is now in keeping I gather with Justice Wagner who has come out of the Supreme Court saying anything that can be virtual, should be virtual, so - okay. So, go ahead.

CROSS-EXAMINATION ON QUALIFICATION BY MR. MANDEL:

Q. Dr. Redekop, my name is Sloan Mandel. Can you hear me?

A. Yes, I can, thank you.

Q. Okay.

THE COURT: He - he is fine sitting, I think he's got a number of papers and in order to keep them organized - he means no disrespect by sitting, it is just he's got a lot of papers.

MR. MANDEL: Q. I am sitting down. Sometimes people stand at a podium when they ask you questions, doctor, as you know, and I am sitting at a desk in part because we are virtual, and you are not here and so I am seated. Is that okay with you?

A. Yeah, I appreciate that the accommodation that the court has made to allow me to attend virtually.

THE COURT: No worries.

MR. MANDEL: Q. Are you ready for my questions?

A. Yes.

Q. Given your extensive experience providing expert opinion, 75 to 100 perhaps according to your estimate, you are abundantly aware that your obligation and a precondition to your even testifying in these matters, is that you have to provide opinion that is fair, objective and nonpartisan, correct?

A. Yes.

Q. You have an obligation to be impartial, right?

A. Yes.

Q. And by impartial it means that you don't make credibility findings, that is the function of the judge, right?

A. Yes.

Q. And if you make credibility findings, then you are not being impartial, you are going outside the scope of what is permissible expert opinion, right?

A. Well, I view my role as providing information that will assist the court in making fair determination about credibility and findings in the matter.

Q. Sure, you see your role as helping the court make credibility findings?

A. No, to address whatever the questions are in relation to the - to the matter at hand. I am not here to make credibility statements...

Q. Right.

A. ...or opinions.

Q. Right. And to the extent that you make credibility findings, you understand that you've gone outside the scope and role of your professional duty as an expert witness, right?

A. Well, I think that there may be some things that arise for example in the literature, ah and I know that there have been a number of exhibits that have been put forward, and credibility may not be the right word but I think that I would be within the scope of my - my duty to help the court to understand which - which of the literature ah is relevant and how credible it is and how - how appropriate it is and what aspect of it should be considered. So, if you are talking about credibility of - of evidence as it relates to literature, I - I think I could make an opinion about that. If you are talking about credibility about - about individuals, then, no.

Q. Right. You are actually obligated to provide your opinion in matters where there is a divergence of opinion, that is actually part of the role and scope of what you are supposed to do as an expert, right?

5 A. Yes.

Q. What you are not supposed to do is to make credibility findings in favour of any of the parties, that is the function of the judge, right?

A. Yes.

10 Q. And if you make credibility findings about any of the parties, you have gone outside the scope and role and function, permissible function, of an expert witness, true or false?

A. Well, that's not - that's not part of the role.

15 Q. Right, it's....

A. It's perceived.

Q. So, is the answer to my statement true?

A. And, sorry, the statement is?

THE COURT: Just repeat it.

20 MR. MANDEL: Q. If - if you have made credibility findings in favour of one party or the other, credibility findings about that party, then you have gone beyond the scope of permissible expert testimony, true or false?

A. I am thinking about that carefully because of
25 course I don't want to go outside of the scope of my responsibility as an expert, ah and of course I - I don't want to make any statements that reflect bias or impartiality, and I won't so that. Um if in the course of my providing an opinion um - yeah, I - I will - it is not my duty to make findings or opinions
30 of credibility with respect to any of the parties, I agree with that.

Q. I don't know what you agree with because it

wasn't in answer to my question. Do you remember what my question was?

A. Your question was whether - whether if I made a - if I expressed an opinion of credibility about any of the parties, that that was going outside of the scope of being an expert witness.

Q. Yeah, and do you agree that if you made findings of credibility in favour or against any of the parties, that you went outside the permissible scope of expert opinion, yes?

A. Yes.

Q. And these obligations about which we speak to be fair, objective, nonpartisan, impartial, that obligation not only extends to the evidence that you hope to give in this trial, but it extends to the way in which you have approached the three reports that you have authored, correct?

A. Yes.

Q. You do a good deal of clinical research, Doctor, we have seen that on the resumé that we have marked as Exhibit 78, right?

A. Yes.

Q. And when you do your research, your standard practice is to disclose potential biases that may exist and that may impact upon the conclusions of that research, true?

A. Yes.

Q. Right. You put that type of disclosure in your research papers because you want the reader to be fully aware of the potential limitations of what your research purports to show, true?

A. Ah yes. h yes.

Q. To the extent that there is a potential conflict of interest in your involvement in a particular study or research paper, then that is too - that is too something that you would

disclose in the research paper, right?

A. Yes, we disclose anything that would be a - a conflict of interest.

5 Q. Right, or a potential conflict of interest, right?

A. Yes.

Q. And you voluntarily disclose potential conflicts of interest or potential biases, because it is the right thing to do, right?

10 A. Yes.

Q. If you....

A. Not only is it the right thing to do, it is a requirement.

15 Q. It is a requirement, right, that's a requirement, right. I have to get you to say yes or no.

A. Yes.

Q. Yeah, okay. And not only is it - it is a requirement because in part you don't want to mislead the reader, right?

20 A. Yes.

Q. And you want to maintain your credibility, right?

A. Yes.

25 Q. And you would owe this court and the parties to this litigation including the Denman's, that same type of transparency, true?

A. Yes.

Q. Right. You should voluntarily disclose in your reports any potential conflict of interest that you may have, right?

30 A. Yes.

Q. And you should also expressly disclose in your reports any potential biases that you may have, right?

A. Yes, I mean I think if there was a bias, I wouldn't - I wouldn't act as a - as an expert on that matter, but yes, I agree with - I agree with the statement, yes.

Q. You would also voluntarily disclose in your reports, just like you do in your literature, any assumptions upon which your opinion is based, right?

A. Yes.

Q. So, let's talk a little bit about your prior relationship with Dr. TerBrugge, okay. Is that okay with you?

A. Yes.

Q. My friend put to you that Dr. TerBrugge testified during the course of the trial that you and he were friends, are you aware of that?

A. I am now, yes.

Q. Okay. In fairness to you I am going to pull up the very exchange that I had with Dr. TerBrugge during the course of trial where he described the relationship that you and he had, okay, I am going to take you to page 139 of the cross-examination of Dr. TerBrugge from April 1, and we are going to scroll down to some portion of a transcript that is in red. Do you see - I can't tell what you see on your screenshare, Doctor.

A. I can see what you have highlighted there.

Q. Okay. So, this is from Dr. TerBrugge's cross-examination on April 1 at page 139. I ask him, question, "You know Dr. Redekop, correct", answer, "I am sorry". "You know him personally", answer, "yes, yes, yes, I do". Question, "He was a student of yours", answer, "He was the first neurosurgeon we trained in Canada". Question, "Right, and you would call him a friend", "Yes, I call him a friend". You agree with how Dr. TerBrugge has described your relationship, right?

A. Yeah, in the sense of a professional colleague and friend, absolutely. As a personal friend, no.

Q. We have professional friendships all the time, um he described you as a friend, he didn't attach that designation to his interpretation of your relationship. Do you suggest that the friendship that you had with him is something different than what he described?

A. Well you didn't qualify the term "friend", um I will tell you how I would view it. Um obviously I spent a year training at the Toronto Western Hospital where Dr. TerBrugge was one of the staff interventional neuroradiologists, and a supervisor during that period of time, and over the years I have crossed paths with him at - I couldn't tell you the number, but a number of professional meetings. I have never had a - a personal visit with him outside of a professional context or exchanged you know personal communications or calls on matters not related to professional things, and so you know I guess how you describe a friendship is up to interpretation, but if you are asking would I be biased in favour of him or would my professional relationship with him influence my ability to provide an impartial opinion, I think the answer - I know that the answer is no. Um if you ask the question is there - do I have something to gain or lose, is there a conflict of interest, um that I would have related to this matter because of that relationship, the answer is no. The way that I approach it is we talked about credibility; you have seen from my CV I have had a number of leadership positions nationally, ah and I have spent a long time building up my reputation and credibility and the only thing that I have to gain or lose by my participation in this matter is my credibility, and you know I will conduct myself in such a way as to maintain it.

Q. What was my question?

A. How would I regard my relationship or do I agree with your ah - ah - ah statement that Dr. TerBrugge is my friend.

Q. During the course of your answer to my question

you said that you have never had, never, had a conversation with Dr. TerBrugge outside a professional context, is that a true statement, Doctor?

A. Ah do you know what, I am sure that at the course of - of professional meetings and interactions I have had you know conversation over coffee or a wine and cheese or something like that but have I - have I had a - a visit with him or something like that outside of - of professional um circumstances, I have no recollection.

Q. Where in any of your reports or even in your CV that we have marked at - as Exhibit 78, did you disclose that you had a friendship, professional or otherwise, with Dr. TerBrugge, emanating from your time at the Toronto Western Hospital in 1997, more than 25 years ago? Where did you identify that in any of your reports or in your CV?

A. Well it is actually in my CV, it is contained in the material itself, you can see that Dr. TerBrugge's name is included among authors that I published papers with. So, it is - it is - it is embedded within the document.

Q. Embedded within your CV that you mention at page one of your CV for instance that you did a fellowship at the University of Toronto, right, you didn't indicate that you worked with Dr. TerBrugge at the Toronto Western Hospital and that he was one of your teachers, right, that's something that we have had to discover on our own or after having notified my friends that I would be objecting to your opinion on bias that you sought to disclose for the first time during qualifications by the questions of my friend. That is the first time you have expressly disclosed that he was your teacher in 1997, some 25 years ago, right?

A. Well, I - I - that may be the first time that a formal explicit disclosure was made, however ah if you look at the - at the letter that describes my fellowship at the University of

Toronto, at that time, and the CV, the information is embedded within it, it is pretty clear, Dr. TerBrugge was - was one of the interventional neuroradiologists. I did my fellowship there and he was one of several international interventional neuroradiology faculty, and he is listed as a coauthor on a number of publications that relate to the research projects that I did during my time there.

Q. Right. I like the choice of word you use, "embedded", "embedded" within this 25-page CV, in small type, is the fact that you had a prior relationship with Dr. TerBrugge, that is not something that you expressly included in any of the three reports that you authored, correct?

A. Correct.

Q. Okay. And so when my friend put to you in chief that Dr. TerBrugge had described you as a "friend", your response was well I find that to be "a compliment", right?

A. Yes.

Q. Right. That is one way to describe it when you are giving expert evidence on behalf of your friend and former teacher, that it is a "compliment" that he called you "friend", but you are also aware that Dr. Roy testified in this matter, right?

A. Yes.

Q. Let's see how he described it when you testify on behalf of a friend as an expert witness. I am going to take you to Dr. Roy's June 15, 2022, cross-examination, page 46. And just before I continue, Doctor, Your Honour, did you want copies of this hard copy, these documents that I am referring to on the screenshot to mark as lettered exhibits, or no, I am in your hands?

THE COURT: Um maybe we should make them lettered exhibits probably, to keep track of them.

MR. MANDEL: Okay.

THE COURT: Because we have been keeping track of everything else I think.

MR. MANDEL: Okay. One moment, Doctor, I have to um....

THE COURT: Just going to pass, or you can do them after, I don't care.

MR. MANDEL: We'll do it now. So, Your Honour, I propose to mark page 139 of Dr. TerBrugge's April 1, 2022, cross-examination as the next lettered exhibit.

THE COURT: Do we know what we are up to?

MADAM CLERK: Yes, Your Honour, we are at SS.

EXHIBIT NO. SS: Page 139 of Dr. TerBrugge's April 1, 2022, cross-examination, produced and marked

MR. MANDEL: Q. And so, Doctor, I was about to take you through Dr. Roy's description of how he might respond to being identified as a "friend" of a co-defendant. At line 25 of page 46 - sorry let's start above that, let's start just above what has been highlighted, let's start at question, "Now I see that one of the questions", do you see that reference in the transcript?

A. Yes.

Q. Okay, question, "Now I see that one of the questions my friend has asked you is whether you had a social relationship with Dr. Pereira, Dr. TerBrugge or Dr. Radovanovic, right", answer, "Yes", "And you said you didn't", answer, "No", "and you said you understood your duty was over and above anything else that shouldn't be clouded or polluted by any relationship that you would have with the co-defence, right", "yes". "And certainly if you had a relationship with the co-defendants and you were a friend, that is something that would have caused you to say, 'I have a conflict of interest, I am not testifying', right", answer, "Yes". I read that correctly, right, Doctor?

A. Yes.

Q. And so if you are friends with Dr. TerBrugge, why didn't you identify that potential conflict of interest in any of your reports?

A. Well, I think the term "friend" has - has a broad variety of - of meaning and interpretation, and I would interpret the word "friend" to mean that we have a - a collegial professional relationship as I would like to think that I do with all of my colleagues in this discipline in Canada, all of whom I would refer to as "friends", and specifically ah you know is there an aspect to that that would prevent me from being able to provide a fair or impartial opinion, the answer is no.

Q. You keep answering questions that um I am not asking; I am just asking why you didn't include in your report reference to the fact that you had a professional relationship with one of the co-defendants spanning a quarter century?

A. Well, I - I don't think that professional relationship is different than - than my professional relationship with any other member of our subspeciality community, ah over the last quarter century, it is true as you noted, I did spend a year in Toronto at that time, um I don't think that since the year that I was in Toronto my relationship with Dr. TerBrugge has been different from any other member of the cerebrovascular practitioner community in Canada.

Q. Not only is Dr. TerBrugge a long-time friend and former teacher, but as you indicated in chief, you have also collaborated with him professionally and that you have coauthored a number of research papers with him, right?

A. Yes.

Q. Nowhere in the body of any of your reports did you identify having worked collaboratively with your long-time friend and former teacher to publish papers, you embedded that

information in a CV, a lengthy CV of 25 some pages, right?

A. It is included in my CV, yes.

Q. But you didn't voluntarily disclose it as you would in a research paper, you put it in the fine print.

A. I disagree with that, it is not fine print, and it is included as - as it should be in the curriculum vitae, which was sent to - with my report and - and the presumption is that - that people would read it. And so, I think that it is apparent, there is no effort to hide it, it was not explicitly pointed out, but the information was included and available for anyone who could read it, and it was not in fine print.

Q. Not only are you testifying on behalf of your long-time friend and former teacher and collaborator in terms of papers, research papers that you have jointly authored, you have also co-presented at various locations around North America with him as a joint presenter, true or false?

A. False. When I presented it was by myself. His name was included as a coauthor because as in the publications, he was a coauthor. At none of those presentations was he even present at the meeting.

Q. Okay, you say that as if you have a distinct and specific recollection from 25 years ago, and in fairness I am going to tell you where I am going to go with this, in - in his CV he has identified having part of these same presentations. Are you saying he was putting in his CV being a presenter somewhere in North America and he was doing it despite the fact he wasn't participating at all?

A. The inclusion of those presentations in a CV um doesn't mean that the person was the one doing the presenting, ah but it means that they were a contributor to the - to the material that is being presented, and if you look through anyone's CV, that is the same thing. There is - typically for a conference

presentation there are multiple authors, usually it is the first author that is doing the presentation and the other authors aren't - certainly are not part of the presentation and I would say very often are not even at the meeting, but it is absolutely academically appropriate to include work that is presented at a meeting that you have contributed to as part of your CV.

Q. So, it is okay in your CV to indicate that you were involved in presentations at which you have never attended, that is part of what you and your community does when putting together these very impressive resumés, to include items in your resumé in which you did not have direct involvement, and again you don't describe that limitation anywhere in the CV, is that what you are telling me, Sir?

A. Ah well doctor - Sir, the - the - the direct involvement refers to the um contribution to the work, not the actual participation in its presentation. So, it is not misleading and that is standard practice at very academic institution, and you can look through any - any CV of an academic faculty member at any of the faculties of medicine in Canada, and that is how it will be presented. It is not - it is not misleading, and it is totally appropriate, it represents the - the ah dissemination of - of scholarship that you have contributed to.

Q. To the extent that we are concerned about proper disclosure in a CV and accuracy, in your CV you speak about presenting in Florida, two in Montreal and one in Seattle. Right, we see that at page 11 of Exhibit 78, correct, items 15, 17, 18 and 19, right?

A. Yes.

Q. Florida, Montreal, Montreal and Seattle, right?

A. Yes.

Q. I can take you to Dr. TerBrugge's CV if you wish, I am happy to do it, but he talks about co-presenting with you

twice in Florida and one time in B.C., and you haven't included that in your CV, so I am wondering how many other joint presentations did you guys perhaps make that aren't listed in either of your CV's given the discrepancy between them, or do you not know?

A. Ah well I try to be comprehensive in my CV in tracking where my work is presented. I - I don't know what you are referring to with respect to a joint presentation in British Columbia. Dr. TerBrugge has - has presented at - at rounds here in the past, I can't remember when, but that was not a joint presentation.

Q. Well, let's go to Exhibit 34. And if we go to page 36 we see at items 139, 140 and 141 three presentations that are identified within Dr. TerBrugge's CV. Do you see that reference, Doctor?

A. Yes.

Q. And he is making reference to - at 139 to a presentation in Florida, that is one of them that you have listed in your reports, right?

A. Yeah.

Q. Or your CV rather. And 140 he is making reference - Dr. TerBrugge is making reference to the same conference in Florida, a second time, right?

A. Yes.

Q. And then he is talking about at 141, his presentation at the 21st Annual BC Neurosciences Academic Day, right, where you are listed again but this is just one of those that you have inadvertently omitted from your CV, right?

A. Yeah, so - so the - the - the context would be the same, um in that this is work that I - I would presented. Our Annual BC Neurosciences Academic Day is a - is our ah - basically our neurosurgery rounds, we have a highlight day, so this would be

included ah perhaps in my teaching dossier, but this - this is like a - this is not a - a professional society meeting, this is our - our - one of our neurosurgery ah - our local division of neurosurgery research rounds. It is the same um material that has been published and presented in - in - listed in my CV, but I generally don't list all of my rounds presentations in ah - in - ah - in the same kind of way as - as um professional society platform presentations, because it is the same material that - that has already been referred to.

Q. The same material but a different event where there would be more involvement between you and Dr. TerBrugge that wasn't disclosed in your CV, right?

A. No, I don't think it reflects any further involvement. The contribution to the work would be exactly as it was described for the others; it is the same material and the same - the same context.

Q. It is the same material, but it is on a different day, in a different province, that is more involvement, true or false?

A. False. It is not more involvement, um...

Q. Okay.

A. ...it is - it is - there is - you know I could - if I presented the same material personally without Dr. TerBrugge being present, and I presented at - at grand rounds here and grand rounds at the University of Calgary, or some place, um and his name was - was on the - the ah authorship as a contributing person. I don't think that the number of times that it is presented um reflects an increasing degree of relationship.

MR. MANDEL: Okay. Your Honour, before we move onto a different area, I think we should mark Dr. Roy's June 15, 2022, transcript, pages 46 and 47 as the next lettered exhibit, TT.

THE COURT: Sure.

EXHIBIT NO. TT: Dr. Roy's June 15, 2022, transcript, pages 46 and 47 produced and marked

MR. MANDEL: Q. Doctor, this isn't your first rodeo, you have mentioned you have testified before in other litigation matters, right?

A. I have a small number of times.

Q. Yeah. And the degree to which you have refused to testify on behalf of plaintiffs in medical malpractice proceedings has received some prior judicial scrutiny, right?

A. I am not aware of judicial scrutiny.

Q. In *O'Connor*, are you familiar with the *O'Connor* case in B.C., you are familiar with that case?

A. Yes.

Q. Yeah, you testified on behalf of a number of defendant physicians in that case, right?

A. Yes.

Q. And in that case plaintiff's counsel objected to your testifying because you refused to do ah expert opinions for plaintiffs in medical malpractice cases, do you remember that?

A. I don't remember what the specific um allegation was, but I can address it if it helps the court.

Q. Well, it certainly came up in the *O'Connor* case, right? Right, Doctor? Right, it came up, you are aware of it?

A. The - I can't recall the specific question or allegation that was made, um in the *O'Connor* matter.

Q. Before I take you to this case, and its contents, Doctor, you mentioned that you had done about 75 to 100 expert opinions during my friend's questions of your qualifications, do you remember that?

A. Yes.

Q. And you made reference to the fact that that

encompasses the entirety of your medical/legal work, that would also be reporting on disability and car crash cases, right?

A. Yeah, that - disability and car crash cases is not - not ah - not a very common thing, but that would I guess be included in that.

Q. Right. So, let's try to limit this further and how many times have you testified in medical malpractice proceedings against physicians?

A. In terms of providing an expert opinion or testifying in court?

Q. In terms of testifying in court, how many times have you testified against a physician colleague?

A. I don't know the answer to that.

Q. You have never done it? You have never done it, true?

A. I actually can't recall, I certainly have um testified on behalf of plaintiffs ah where there was a neurosurgical - I provide expert opinion for plaintiffs when there were neurosurgical aspects to the case, ah and so it is not correct to say that I have never um....

Q. When have you ever testified that a physician colleague failed to meet the standard of care, if ever, and I put to you you never have.

A. Yes, I agree with that.

Q. Right, but you have often testified about physicians meeting the standard of care, right?

A. I have testified about physicians meeting the standard of care, yes.

Q. Right. And your evidence should be consistent in the proceedings where you are testifying about standards, right?

A. Yes.

Q. If you are testifying for a physician who is

recommending treatment, your evidence should be the same in a case where somebody is suggesting no treatment, right, I mean there's certain basic principles that should be the same in both matters, right?

5 A. Yes.

Q. Now, and how often are you consulted by the CMPA, how many active cases do you have on the go right now for the CMPA?

A. I can tell you....

10 Q. 20 did you say, sorry?

A. No, no I'll tell you.

Q. Oh sorry.

A. Ah it looks like four.

Q. Four active cases for the...

15 A. Four active cases.

Q. ...for the CMPA right now. How many active cases do you have on behalf of plaintiffs suing their physicians?

A. I believe one.

Q. And are you providing a standard of care opinion

20 in that case?

A. No.

Q. Right. Okay. So, let's go to Page 52 of the *O'Connor* case, Paragraph 202. Do you see it on the screen, Doctor?

25 A. Yes.

Q. It reads, "The Plaintiff argued that because Dr. Redekop is unwilling to offer opinions to those who bring malpractice claims against physicians, his evidence should be rejected on the basis that it's inherently biased. I've not

30 ignored this submission but having heard the evidence from all the experts and carefully considering that of Dr. Redekop which I find to be based on facts consistent with those that I have accepted,

such a criticism of him is unwarranted." You, does that jog your memory about what happened in the *O'Connor* case? The lawyer said you shouldn't be able to testify because you don't offer opinions for those who bring claims against physicians, but the judge
5 permitted you to testify because the judge found your opinion to be based upon facts consistent with those that the judge accepted, right? Does that jog your memory?

A. Yes. It does.

Q. Okay. Now, I recognize that each case is
10 different, and facts can change. I'm going to take you through some of the facts in *O'Connor*, and I'm going to take you through some of the facts in Mr. Denman. And then we're also going to talk about some of the statements of positive principle you put in the *O'Connor* case that you have not included, or you've rejected,
15 on behalf of Mr. Denman. So let's go to Paragraph 1, just so we can talk about facts. Paragraph 1 reads, "On July 25, 2010 the Plaintiff, Gwendolyn Vivian Spalding O'Connor, suffered a hemorrhagic stroke believed to be from a bleeding, from the bleeding of an AVM which has left her with brain damage and
20 partial paralysis." Paragraph 3, "Her AVM was not diagnosed prior to July 25, 2010." I read those entries correctly, right, Doctor?

A. Yes.

Q. Okay. And although Ms. O'Connor's matter was the failure to investigate and diagnose an AVM, some of the issues
25 that you were asked to address in that case was whether or not medical intervention, whether treatment would have been recommended and whether a patient in her circumstances would have undertaken the intervention, right? You recall that?

A. Yes.

30
Q. And those are the issues that we're dealing with in this case for Mr. Denman, right?

A. Yes.

Q. So, let's go to Paragraph 7 on Page 3, and it identifies the issues - sorry, yeah, Paragraph 7 on Page - yeah, the issues, "The issues to be resolved by the judge are a) the appropriate standard of care required of the Defendant physician; b) whether imaging would have revealed the AVM; and, c) the intervention that would have been undertaken, if any, if the Plaintiff's AVM had been recognized before her bleed", right?

A. Yes, that's what it says.

Q. Right. And so, Item C is similar to what you've been asked to address in this case on behalf of Mr. Denman, right?

A. I, I - in a broad sense, yes, the circumstances of, the *O'Connor* matter are actually completely different.

Q. Right.

A. So, it's a very different context.

Q. There's some...

A. But...

Q. There's some differences, I agree, and, and we can talk about those differences. But I want to talk about some of the facts that are similar, and then I want to talk about some of the basic principles that you've identified as part of your expert opinion about four years ago in the Court of B.C., okay.

A. Yes.

Q. Paragraph 10, "The Plaintiff was born on March 1, 1994", do you see that?

A. Yes.

Q. Right? So, she was diagnosed with this bleed at the age of sixteen, right? Correct?

A. I can't remember the exact date, but I'll... Q. Sorry, in, in...

A. I'll accept that.

Q. In Paragraph 3 it said, "Her AVM was not diagnosed prior to July 25, 2010", and she was born on March 1,

1994, she'd be sixteen years of age. Does that make sense?

A. Yes.

Q. And so one of the things that we consider when figuring out whether to treat or not treat an AVM is what's the lifetime risk of a bleed, right? That's one of the things that's central to the decision-making process, right?

A. Yes.

Q. And the longer someone's life expectancy, the greater the risk of a spontaneous bleed in the future, all other things being equal, right?

A. Yes.

Q. Okay. Mr. Denman had a shorter life expectancy than the sixteen-year-old Ms. O'Connor, right?

A. Yes.

Q. Okay. So, if we can go to Paragraph 173, we're going to talk a little bit about the size of Ms. O'Connor's AVM because size is also relevant in terms of the decision to treat or not treat, right?

A. Yes.

Q. Generally speaking, smaller AVMs are less risky to surgically resect than large AVMs, right?

A. Not necessarily. In addition...

Q. Not necessarily, but generally.

A. I would disagree with that because the, the primary determinant is not just size, but also location and which part of the brain the AVM is located in.

Q. Right. The Spetzler-Martin grade doesn't just consider size. It considers a number of criteria, but size is certainly one of those criteria, correct?

A. Size is one of the criteria.

Q. Right. And on behalf - or on behalf of the defendant physicians in the *O'Connor* case, as outlined in

Paragraph 173 of the judgment, you were of the view that Ms. O'Connor's AVM was small, right?

A. Yes.

Q. And Mr. Denman's AVM was not small, right?

5 A. Correct.

Q. Okay. And just to provide some greater clarity, if we go to Paragraph 205...

UNIDENTIFIED VOICE: What page?

MR. MANDEL: Q. 205 at Page 52, you've actually 10 described it as a micro-AVM, right? "Dr. Redekop described it as a micro-AVM around one millimetre in size", right?

A. Yes.

Q. And what to do about this small AVM that was discovered, or theoretically hypothetically to be discovered prior 15 to the bleed, you've addressed a little bit of that in Paragraph 207 of this case in which you testified on behalf of the defendant physicians. At the very end of Paragraph 207, the very end of it, there's reference to your specific testimony. Keep scrolling down, Deanna, please. Do you see the paragraph that begins, "If 20 an angiogram had been obtained"?

A. Yes.

Q. "If an angiogram had been obtained, and if a micro-AVM were identified, it's most likely that the case would have been presented and discussed at a multidisciplinary AVM 25 clinic rounds or team meeting with input from neurology, neurosurgery, and neuroradiology. It's unlikely that a small deeply situated micro-AVM in a, the dominant hemisphere of a neurologically-intact adolescent that was felt to be most likely an incidental finding, would be recommended initially for any type 30 of interventional radiological or neurosurgical treatment or stereotactic radio surgery with gamma knife." I read that correctly, right?

A. You did.

Q. Right. And so, in the *O'Connor* case, you said, "We've got a sixteen-year-old girl with a longer life expectancy than Mr. Denman. It's a smaller AVM. I don't think that anybody would treat this or should treat this." But you also added in a few additional distinguishing factors, one of which is you said the AVM was in the dominant hemisphere of her brain, right?

A. Yes.

Q. That's the distinguishing factor for you, right?

A. That, that was one. The other word that is important to, to bring out here is it said, "would be recommended initially for any type of interventional treatment." So that - that's not a recommendation or a judgment that no treatment would ever be recommended, and I think it might be included in, in this document later on, or but it was certainly in my report that, as I referred to. This is a neurologically-intact adolescent who had a - presumably had a, a micro-AVM in her dominant hemisphere near the, near the dominant hand and language area. And what my report alluded to was that the, the predicted disability associated with treating an AVM which would include loss of dominant hand function and language can be particularly impairing in, in terms of causing disability at that stage of life, and often a decision is made to defer treatment until say a person graduates from high school or something like that, so - so the word initially is an important word, and it is not a - it is not an opinion that treatment would never be recommended.

Q. I promise you I'm going to get there. And your memory's very good, because in *O'Connor* you said specifically, "It's not a decision ever about do you treat it or not treat it. You have to first ask is it necessary to treat now", right? That's what you said, right?

A. Yes.

Q. Right. And you didn't put that in any of your reports in Mr. Denman's case, true?

A. No, I did not.

Q. Right. Before we continue through this case, I'm going to refer you to some of, some of the other evidence of Dr. Roy during my cross-examination of him just to understand how your approach to this case, given your duty of impartiality is to be assessed by this judge when I bring my motion. I'm going to pass - I'm going have my colleague pull up part of Dr. Roy's cross-examination from June 16, 2022, and in particular Pages 170 and 171. If we can scroll down, you're going to see some highlighted areas. Do you see that on your screen, Doctor?

A. Yes.

Q. So, my question begins, "No, no, it doesn't mean you stop. You might have a Spetzler-Martin 1 AVM. It's a minimal to micro-surgical resection. You might have a young patient, right. If you're a younger patient you've got a greater risk of lifetime bleed, right?" Answer, "Right." Question, "And so if you have a small AVM and you're a young patient, those would be circumstances where it's probably more reasonable to have treatment then if you're an older patient with a high-grade AVM, right?" Answer, "Yeah, of course. This is obvious, but...", Question, "It's obvious. I just want to make this point. It's obvious, right? If you're a young patient...?" Answer, "That's generally obvious that the...", Question, "I wanna make this point. It's important. It's obvious that if you're a young patient with a long life expectancy and a small AVM, the indication for a resection for treatment is higher than if you're an older patient with a higher grade Spetzler-Martin AVM, right?" Answer, "No one would contest that." Question, "Nobody would contest that, right? Right?" Answer, "That's correct." Is Dr. Roy right or wrong?

A. Well, you know, every, every patient and their AVM is different, and there are small AVMs that are easily removed without expectation of neurological consequence. And there are small AVMs that can be located in eloquent areas of the brain where predictably their treatment would lead to neurological sequalae of significance. And especially for, for children and adolescents where they're, - they're at a developmentally critical and vulnerable stage, it's very reasonable to defer a, decision-making about treatment until a later time.

Q. Right. There could be lots of reasons why it's appropriate to defer treatment to a later time. For instance, you may only have ten years of work life expectancy and a family who relies upon you to provide for them, right? That, too, could be a reason to defer intervention, right?

A. Yes.

Q. Yeah. You haven't included anything like that in any of your reports, true?

A. I, I didn't make a statement about that, but I made statements about the, the discussion and decision-making that took place with respect to Mr. Denman.

Q. Right. Given the microscopic size of Ms. O'Connor's AVM, did you identify what her Spetzler-Martin grade would have been?

A. Well technically she - it wouldn't actually qualify, because the circumstances of that case were that, that there was no pre-operative imaging that, that conclusively showed an AVM, and that was a presumption. And the, the patient ended up having a hemorrhage and having had a craniotomy and some tissue cauterized and sent to the Pathology Department and an AVM wasn't conclusively diagnosed. So in, in – it's most likely that this probably was what you would call a micro-AVM, so very small and very eloquent. So, it would have been – you could argue whether

it's a 1 or 2, but it would have been a low-grade Spetzler-Martin Grade AVM, but in a very eloquent area, yes.

Q. Right. Okay. And if you have a - for - it's in a very eloquent area. That's part of the Spetzler-Martin criteria, right?

A. It is, but even within - within the range of eloquent there are - there are ranges of potential impact. So, for example, a lesion in the part of the brain say that's involved say with partial visual field where there, where what is at risk is the ability to see a complete visual field, and compare that to the ability to say have paralysis of your dominant hand or loss of the ability to speak, all of those technically fall under the category of eloquent, but from the impact on the patient they're very different.

Q. Ms. O'Connor's AVM would have been a Spetzler-Martin 1 or 2, that's what you said, right?

A. Yes.

Q. Okay. I don't think this is controversial, but in any of these AVM cases where there's to be a decision to treat or not to treat, the physician and the patient have to consider the risk of intervention, and weigh that risk against the risk of conservative management, right?

A. Yes.

Q. And when we go through that decision analysis, we have to consider whether a bleed is likely to result in significant disability or not, right? That's really an extension of what you were just talking about, right?

A. Yes.

Q. Right. Because bleeds from which you fully recover are less concerning than bleeds from which you suffer significant permanent neurological deficit or death, right? Correct?

A. Any hemorrhage is serious at the time and can be subject to subsequent complications. But in terms of lifelong impact, yes, a - one that leads to permanent disability would be of a greater import.

Q. Okay. So, do you have your August 26, 2021 report available to you?

A. Yes.

Q. I don't think we've marked any of these yet as exhibits. We'll have to do that before we're finished. But at Page 1, Paragraph 3 it reads, "There is a high risk or morbidity and mortality if AVM rupture occurs. I tell my patients based on my personal experience that the risk of serious permanent neurological deficit or death is about fifty percent if their AVM ruptures." I read that correctly, right?

A. Yes.

Q. And this is what you're saying you tell your patients, if you don't have treatment and should you have a spontaneous bleed in the future, then there's a fifty percent risk of serious permanent neurological deficit or death. That's what you've said in your report in this matter, right?

A. Yes.

Q. Can we go back to the *O'Connor* case, Paragraph 264, which is Page 70. Sorry, Doctor, we're having some technical difficulties pulling up the case.

MR. CRUZ: Your Honour, I am - have an issue just - I'm sitting quietly on this, but...

MR. MANDEL: I think the witness should be excused.

MR. CRUZ: Well, no...

THE COURT: Sure. Why don't we actually take an hour now for lunch and you can get your equipment going, or do you...

MR. CRUZ: Well, hang on. Before we excuse the

witness, my issue is not about the content of any of any of this. It's that we've been screen-sharing the *O'Connor* case. The witness has been answering questions based on seeing a passage. In all fairness he should have a copy of the case. He's done fine so far without it, but I think he should have a copy of the full document in fairness to him.

MR. MANDEL: I have no problem with him being sent a full copy. I don't know that I have the capacity to do that, if my friends do. 'Cause they're computer literate.

THE COURT: Can you guys email it to him over the lunch hour?

MR. MANDEL: And they, they can send it to him right now.

MR. CRUZ: We can. We have a CanLII copy. We can send him an email with that, so then he can...

THE COURT: So why I don't tell him it's coming. We're going to – we'll take an – is this a good time to take an hour?

MR. MANDEL: I would really like to be able to finish this one point.

THE COURT: Okay, that's fine. We can...

MR. MANDEL: 'Cause I don't want to...

THE COURT: No, no, no. I...

MR. MANDEL: We've just laid a foundation. I don't want to have to repeat it.

THE COURT: That's why I asked you. Doctor, they're going to email you the whole case, and we're going to take lunch shortly, not quite yet. But I think they're emailing it to you as we speak. We've just got some technology issues.

MR. MANDEL: Thus my preference to do in-person cross, Your Honour.

THE COURT: No, I know. I think you're going to see more and more virtual as we go on. For some stuff it's really good, like pre-trials where you've got counsel like travelling from Aurora to Brampton. I have a friend who does that. It's so cost-efficient to, to do them by - you know it knocks a couple thousand dollars, right.

MR. MANDEL: Your Honour, I have a couple questions. One is I don't know if my friend's can pull it up and screen share. They may have greater technical capacity, or I could read verbatim what I want to read, and my friends can verify that what I'm doing is accurate.

THE COURT: Sure. Have you sent it to him now? Yeah, you've...

MR. GOLDENBERG: Yes, Your Honour.

THE COURT: And you don't need - oh.

MR. GOLDENBERG: And I'm happy to try screensharing from my computer.

MR. MANDEL: Like you're right. If, if you've already sent it and if the doctor can just confirm having received it, then that's also one way...

THE COURT: Did you receive it, Doctor?

A. Yes.

THE COURT: Okay. So, what we're - proposed to do is we'll sort out the technology issue over lunch hour. Mr. Mandel's going to just read you word for word - is it Paragraph 264?

MR. MANDEL: Correct.

THE COURT: And you can follow along with your copy.

MR. MANDEL: So, it's at Page 70, Doctor, if that's of assistance, Page 70, Paragraph 264. Do you have it available?

THE COURT: Oh, and now we've got screen share, too.

MR. MANDEL: Yes. And now we have screen share as well.

MR. MANDEL: Q. So, again, I have to set the stage a little bit because we were interrupted by technology concerns. But we just finished going through your August 26, 2021 report, and on Page 1, Paragraph 3 you'd confirmed the advice that you give your patients. You say, "I tell my patients based on my personal experience that the risk of serious permanent neurological deficit or death is about fifty percent if their AVM ruptures." You recall me having read that aloud to you a few moments ago?

A. Yes.

Q. Right. And that's without treatment if you have a spontaneous rupture there's a fifty percent chance of serious permanent neurological deficit or death, right? That's what you put in your Denman report? Right?

A. Sorry, I missed your, your question.

Q. That's what you put in the Denman report, right?

A. Sorry, I missed what you're referring to. I was looking at a few different documents here.

Q. Paragraph 3 of Page 1 of your August 21, 2021 report in the Denman matter spoke of the practice where you tell your patients that if they have a spontaneous bleed in the future, there's a fifty percent chance that that spontaneous bleed will result in serious permanent neurological deficit or death, that's what you put in your Denman report, right?

A. Yes.

Q. Okay. Now, when we see what you advised the

court under oath in *O'Connor* at Page 70, Paragraph 264, we see - this is your quote - "The best evidence that we have is that the bleeding risk for AVMs is around two percent annually with a ten percent risk of permanent neurological disability or death if hemorrhage occurs." That's what it says, right?

A. Yes.

Q. So, when you're testifying on behalf of defendant physicians in a case where it's favourable to the defence to say don't treat, you say, "The risk of permanent neurological disability or death with a future spontaneous bleed is ten percent", but on behalf of your long-time friend and teacher in this case, you're saying that there's a fifty percent risk of serious permanent neurological deficit with AVMs. So, my question for you is in which case were you wrong? The one in which you testified under oath, or the one in which you offered your unconditional opinion in this matter?

A. Well neither is wrong, and the, the one that you have on the screen there is, talks about evidence and that's literature and that's what the, that's - you know, there's literature that has that information. In my August 26th letter I said what I tell my patients and that's based on my experience. And based on my experience, even though patients may not have severe disability on a grading scale, it's actually very common for patients to not recover back to their baseline. And you know in the literature you've come across neurological disability scales, the Modified Rankin Scale, various kind of stroke outcome scales, and depending on the, the type of deficit and the severity, you know, people get ranked and generally someone who's regarded as a Modified Rankin Scale of 1 or 2 is, is felt to be a good outcome, and in many respects that is. But when patients come to my office and they say my life is not the same because I can't do this, or I've lost my ability to this, that is a much

more common occurrence than, than having a grade on a scale. So, the language is important, and what I refer to in my August 26th letter is what I tell my patients based on my experience, which is really based on what patients tell me. In the document that you have on the screen there, that's the - that's the evidence from the literature and that's what it says.

Q. You told the court under oath in *O'Connor* that there's a ten percent risk of permanent neurological disability or death with spontaneous hemorrhage. That's what you said under oath in that courtroom, right? Right?

A. Yeah, I believe that's an extract from my report, not what I said in the court.

Q. Okay.

A. But yes, sir.

Q. Okay. It's an extract from a report that you wrote on behalf of defendant physician colleagues where you were taking a position that treatment wouldn't be recommended, right?

A. Yes...

Q. And in this case...

A. But context is much...

Q. And in this case where you're gonna suggest if you're permitted to testify that it was appropriate to recommend treatment, you've quintupled the risk of permanent neurological disability with a spontaneous bleed. You've - you've put in your report a risk analysis that's five times greater of permanent neurological disability or death than what you testified to under oath in a B.C. Court less than five years ago, true or false?

A. The statements are what they are.

Q. Yes, they are.

A. In my report - in my report, again, I would just highlight what I said was there's a, there's a high risk of morbidity and mortality if AVM rupture occurs. I tell my patients

based on my personal experience that the risk of serious permanent neurological deficit or death is about fifty percent, because that's what patients tell me their life has changed. And then I referred to a publication on the long-term outcome after brain AVM rupture which is published in 2018 which was not available to me at the time of, of the *O'Connor* case. And you can see if you scroll down in my report, or what to bring it up, what the figures from that are. So, I, I don't - I don't agree with your implication that one of them is wrong, or that they're misleading. The, the statements are context specific, and the language is clear.

Q. Yeah. The language is clear. We can agree with that. The language in your report is clear. And the language from the report you delivered in *O'Connor*'s clear. Why are you telling your patients the fifty percent risk when the literature is talking about ten percent? Why are your patients having such a worse adverse outcome with spontaneous bleed than what's reported in the literature that you rely upon when testifying in *O'Connor*?

A. Well, I've already said this, but the, the fact is that the literature is based on grading scales, and we've already described the fact that patients and AVMs are, are each unique and they're different and, and the disability associated say with an AVM in eloquent cortex can very much different. We - I mentioned to you that, that a Spetzler-Martin Grade 1 or 2 AVM situated in a part of visual cortex would lead to a very different kind of disability and impact on patient life than an AVM say in language cortex or dominant hand. And so while on a grading scale or in a publication where that patient might be included as one of the, a very large number of individuals being, being sort of analyzed, when you deal with one patient at a time and they come to the office after, after they're recovered or during the course of their recovery, and what might not qualify as a serious

disability or might not get them out of a Modified Rankin Scale of 1 or 2, can still be of life-changing import to them. So, the context is quite different.

Q. Okay. The context is different, but the words are the same. In one case you said ten percent risk. In the other one you said fifty, right? Right? That's - I mean I'm not - I'm just using your words. You're giving me a very lengthy explanation to explain what is apparently a discrepancy, and you used the same words in both reports to describe the risk of spontaneous bleed. In one report you said fifty percent being serious and in the other one you said ten percent, right? That's what happened.

A. Yeah. I've explained the context.

Q. Yes. You've explained the context.

A. That's what the words say.

Q. There's also other context. You are testifying on behalf of defendant physicians both times who had a desire for an absolutely different treatment decision, right? Who had a very different interest in the outcome of whether treatment would recommended or not. In one case your position was it wouldn't, and in the other case it is that it would, and the consistency that we have as in both cases you've sided with your defendants. And in this one on behalf of your defendant friend who was your teacher, who you've collaborated with in co-publishing papers and delivering presentations, right?

A. Well, I'm not siding with anyone. I'm providing an opinion to assist the court in making a decision.

Q. Thank you. We'll take our break, our lunch break now.

THE COURT: So we're gonna take an hour. So we'll be back at about ten after two our time, which is I don't know - are you three hours behind?

A. I am, yes.

THE COURT: Okay. So we'll be back in an hour.

MR. MANDEL: Thank you, Your Honour.

THE COURT: Okay. Thanks. Just a quick question. Can we have him exit? I just - I have a question.

MR. MANDEL: Sorry.

CLERK REGISTRAR: He's in the waiting room.

MR. MANDEL: Yes.

THE COURT: Is the thought being what I said this morning that I would - I would hear the motion. But we, we need to get his evidence in, 'cause I'm worried that this case goes somewhere else and it's not finished, right. So, I'd make a ruling on whether he's biased at the end. My only question is...

MR. MANDEL: You have to hear my submissions before you make these rulings.

THE COURT: Oh, no. Just - so do...

MR. MANDEL: Like I'm going to take you to the Court of Appeal and the Supreme Court of Canada that says you do it now.

THE COURT: Okay. That was my question, right. That you...

MR. MANDEL: Right. You do it now according to the Supreme Court of Canada on this, and that it pollutes the record and it's prejudicial. And...

THE COURT: Okay. So that's all I wanted to know.

MR. MANDEL: And then...

THE COURT: Are you going to make your submissions now?

MR. MANDEL: I'm going to make my submissions, and I'm going to ask for a ruling. I'm going to have a

secondary submission. I'm going to say that it's - even if you don't think bias is reason to exclude him, it's duplicative. We've heard from Roy. We've already heard from a Rule 53 expert who signed a Form 53 who said, "I will test - I will write a report in keeping with my duty in areas of my expertise", and then wrote a report on behalf of all three defendants.

THE COURT: Got it. I understand.

MR. MANDEL: So, there's bias. And then there's gonna be duplication. And Your Honour can keep saying...

THE COURT: No, I, I...

MR. MANDEL: ...let it all in, but at some point I'm going - I have to put on the record my position...

THE COURT: Yeah. Well, let's...

MR. MANDEL: ...because otherwise I don't think bias or duplication or any of it means anything anymore.

THE COURT: No, I, I understand your position. So that - that's all I wanted to know. You're gonna make submissions today.

MR. MANDEL: I am going to make submissions today.

THE COURT: And then you're going to respond. Okay. Okay, so it's - okay. All right. So ten after two.

UNIDENTIFIED VOICE: This court is...

UNIDENTIFIED VOICE: All rise.

MR. CRUZ: Sorry, Your Honour, all, all - just all of which is to say we're not going to get very far if you do let the witness in. We've got some time issues, I suppose, but that's fine.

MR. MANDEL: Yeah. Or if you like - or if you exclude the witness, we're done, right.

MR. CRUZ: My simple point is I thought that I would have a chance of getting the chief done today. Now that's clearly...

THE COURT: That's not happening.

MR. CRUZ: Clearly not happening.

MR. MANDEL: I agree.

THE COURT: So, we've got Wednesday, Thursday, Friday, right?

MR. MANDEL: Yes. And by the way, I mean the Brief I gave you before about four corners...

THE COURT: Yeah, yeah.

MR. MANDEL: ...right? I mean if I don't get him excluded for bias and I don't get him excluded for duplication, then Your Honour may say I'm only going to let him in to speak about Radovanovic because I've already heard an expert speak about Ter Brugge and Pereira, so I'm going to confine him to Rado. That would be an out. And then I said, "Great, okay. Let's deal with his evidence on Rado"...

THE COURT: Okay.

MR. MANDEL: ...within the four corners of his report.

MR. CRUZ: Your Honour, just being practical here, though, this is a real issue of trial fairness to both sides, in my submission. And the way I say - the reason I say that is that Your Honour didn't make the ruling about Dr. Findlay, and that you've said we're, you know, gonna leave that for the end. So, is Dr. Findlay capable of testifying on, against Dr. Pereira and Dr. Ter Brugge? That's an open question. My friend raised the same bias issue vis-à-vis Dr. Roy. That's been deferred. So we don't know what's

in play.

THE COURT: I, I understand.

MR. CRUZ: You can't then at the end of this one, with the third expert, make a ruling to exclude when we don't know who's in play at the beginning. And so...

THE COURT: No, I, I, I hear you.

MR. MANDEL: Let me respond to that. 'Cause look at how absurd to use - to borrow a phrase from the defence, that is. It doesn't matter how biased he is, he could have taken a bribe. You still have to let in his evidence because you, you didn't issue a ruling on Findlay. That's ridiculous. It's preposterous. And we're comparing absolute apples to oranges. Findlay, it's the scope of his testimony.

THE COURT: Yeah, I understand.

MR. MANDEL: This guy, Dr. Redekop, it's bias and duplication. These are absolutely different rulings. So, to say because you didn't come to a final decision on Findlay and the scope of his testimony, you're therefore obligated not to make a ruling until we hear from potentially biased duplicative evidence, that is not the law.

THE COURT: No, I, I hear you. But...

MR. CRUZ: All right. Well, we'll revisit this in the submissions.

THE COURT: Okay. So, an hour. So, we're actually closer to 2:15, so let's do 2:15.

R E C E S S

U P O N R E S U M I N G:

MR. MANDEL: Your Honour, before we get back to the

continuing cross on qualifications, we've made reference to a number of documents and failed to mark them as exhibits.

THE COURT: Oh, sure. You want to do that now?

MR. MANDEL: I think we should.

THE COURT: Just so we keep track of them.

CLERK REGISTRAR: So, the cross-examination of Dr. Roy, Page 170, will be Exhibit UU.

EXHIBIT NUMBER UU: Cross-examination of Dr. Roy, Page 170 – produced and marked.

CLERK REGISTRAR: And the Reasons for Judgment in the *O'Connor* case will be Exhibit VV.

EXHIBIT NUMBER VV: Reasons for Judgment in *O'Connor* case – produced and marked.

THE COURT: Sorry, Dr. Roy is UU?

CLERK REGISTRAR: Yes, Your Honour.

THE COURT: And the case is VV?

CLERK REGISTRAR: Yes.

THE COURT: Okay. Sorry.

MR. MANDEL: And we have yet to mark any of Dr. Redekop's reports as lettered exhibits. Should we mark the three reports the next three lettered exhibits now?

THE COURT: Sure. Sure. So WW, XX, YY.

EXHIBIT NUMBER WW: Dr. Redekop's report dated August 11, 2019 – produced and marked

EXHIBIT NUMBER XX: Dr. Redekop's report dated September 3, 2019 – produced and marked

EXHIBIT NUMBER YY: Dr. Redekop's report dated August 26, 2021 - produced and marked

THE COURT: Remind me at the end of the day to float some dates by you, 'cause I'm – you guys are gonna

get busy in the fall and we may want - want to set a day for oral - so I've mapped out some dates and we can talk about them.

MR. MANDEL: Okay. I think I misspoke. We've marked the first report as SS.

THE COURT: Oh.

MR. MANDEL: We didn't mark the next two, right. When Daryl was doing the exam in-chief we marked the August 11, 2019 report as SS.

THE COURT: Okay.

CLERK REGISTRAR: Sorry. Sorry, Your Honour. That's...

MR. MANDEL: Oh, Deanna says something different.

CLERK REGISTRAR: That's not correct.

MR. MANDEL: No, we didn't? Oh, that's not correct? Oh, okay.

THE COURT: It's not - it's not correct apparently.

MR. MANDEL: Okay. Sorry, my mistake.

CLERK REGISTRAR: I have the cross-examination transcript of Dr. Ter Brugge...

MR. MANDEL: Okay, okay, okay.

CLERK REGISTRAR: ...as SS.

MR. MANDEL: So the first report, and the one of August 11, 2019 is which - WW?

CLERK REGISTRAR: Yeah, yep.

THE COURT: She's going to keep you straightened out.

MR. MANDEL: And the September 3, 2019 report is XX?

CLERK REGISTRAR: That's correct.

MR. MANDEL: Thank you. Sorry about that.

THE COURT: No worries.

CROSS-EXAMINATION BY MR. MANDEL CONTINUES:

MR. MANDEL: Q. Good afternoon, Doctor.

A. Good afternoon.

Q. We're going to continue on with this review of some of your testimony and the principles of medicine that you espoused in this *O'Connor* case where you were retained to act on behalf of some defendant physicians, okay. And in particular we're going to go to Page 70, Paragraph 262. And after all that having ensured five minutes ago that it would work, tech has once again hijacked my cross-examination.

THE COURT: We're doing it on purpose. Do you want to just read it out again?

MR. MANDEL: Q. Yeah. Well, you already have a copy on your, your email, right. You can access the case even if we...

A. Yes.

Q. Okay. So...

THE COURT: Okay.

MR. MANDEL: Q. We're gonna do that, while we have tech work on tech issues that are beyond my pay grade. Can I get you to turn to Paragraph 262 at Page 70?

A. Yes.

Q. Okay. The last portion of that paragraph reads, "Dr. Redekop pointed out that while the presumed AVM in this case would likely have been "amenable to treatment", that does not mean the treatment would have been recommended." That's what it says, right?

A. Yes.

Q. And that's another important point applicable across the medical management of AVMs. Just because something might be amenable to treatment, doesn't mean that it would be recommended or should be recommended, right?

A. Yes.

Q. Okay. And then if we return back to Paragraph 264, this is one that we, we touched on before lunch, do you

recall that?

A. Yes.

Q. And you make reference in the very first sentence from this report that was quoted in the *O'Connor* matter, "The best evidence that we have is that the bleeding risk for AVMs is around two percent annually with a ten percent risk of permanent neurological disability or death if hemorrhage occurs." That's what the first sentence reads, right?

A. Yes.

Q. And this two percent annual risk of bleed without treatment, that's what you indicated at trial in the *O'Connor* matter, right?

A. Yeah, as I said that's actually an extract from the report.

Q. Right.

A. I don't think it was (indiscernible) at trial.

Q. But you had the same...

A. But it was part - part of the trial, yes.

Q. And you had the same duty when writing reports in *O'Connor* that you have in this case, right?

A. Yes, absolutely.

Q. And what you were doing in O'Connor was you were saying, "Yeah, we wouldn't have recommended treatment, and the risk without treatment is a bleed of two percent per year. And that's what - that's what your evidence was in *O'Connor*, right?

A. Yes.

Q. Yet, in this case in one of - the only report where you spoke about annual risk of bleed without treatment, you gave a range of two to four percent, right?

A. I think - yes.

Q. Right. And so again you know often physicians give ranges, that's often important and appropriate. But what you

did in *O'Connor* when advocating for the absence of medical intervention was use a low figure of two percent per year and now in a case where we're trying to justify treatment on behalf of the defendant physicians, and your friend and teacher and
5 collaborator, you've included a higher end of range of risk than what you did in your, in this *O'Connor* case four or five years ago, right?

A. I, I used that range, two to four percent.

Q. It is two to four percent in the Denman, two
10 percent in the *O'Connor* matter, right?

A. That's what it says.

Q. Yeah.

A. Yes.

Q. And when we convert annual rates to lifetime
15 risks, yet another thing you haven't done in any of your reports in this matter, right. You haven't indicated what Mr. Denman's lifetime risk of bleed was without treatment, right?

A. Correct.

Q. The difference between two percent a year and
20 four percent per year is quite profound, isn't it?

A. You know it's in the same order of magnitude, and there is a range within the literature to which, you know, which group do those fall into.

Q. The same order of magnitude of what? Sorry, I
25 cut you off. Sorry. The same order of magnitude of what?

A. Of, of annual risk of hemorrhage. Two...

Q. Oh, two percent...

A. Two percent to three...

Q. ...and four percent are the same?
30
A. Two to four percent.

Q. Two percent and four percent are the same? Is that what you're saying?

5 10 15 20 25 30

A. At - obviously two percent and four percent are not the same, but it is two percent and two to four percent, are they, they in disagreement? No.

Q. Hmm.

A. It's not stated the same way in the two documents.

Q. Mm-hmm. Right. But they're slanted in favour of the defence in both cases, right?

A. I disagree.

Q. Oh, because two percent...

A. I think that, that's just...

Q. 'Cause - because two percent was favourable to O'Connor in that case? Two percent was the, a basis for why you said there's no need to treat because the risk is so low. Whereas, in this case, you're justifying treatment because you're saying the risk is so high. These are opposite conclusions based upon different medical standards.

A. In, in neither case was I justifying treatment or not treatment. I was, I was providing an opinion on whether the care that was provided or might, might tentatively have been provided was reasonable.

Q. Yeah, actually what you were doing was talking about the adequacy of disclosure to a patient about material risks, right? That's what you were doing? Isn't that what you're here to do? To talk about the adequacy of the disclosure to Mr. Denman so that he can make an informed decision? That's what you're here to do, isn't it?

A. That's, that's what this case involves, yes.

Q. Right. And so the adequacy of disclosure - there, there are some inconsistencies in the type of disclosure that you say should be provided to Mr. Denman in this case, based upon your reports, and what your reports indicated in *O'Connor.*

MR. CRUZ: So, Your Honour, I have an objection to this.

THE COURT: Okay.

MR. CRUZ: And maybe we should put Dr. Redekop in the waiting room?

CLERK REGISTRAR: Sure.

THE COURT: Sure. Can - can you put Dr. Redekop in the waiting room for a few minutes, just while I hear Mr. Cruz and any response from Mr. Mandel?

CLERK REGISTRAR: Your Honour, he's in the waiting room now.

THE COURT: Okay. Perfect.

MR. CRUZ: Well, I think the doctor's answered accurately, but my friend is putting propositions to the witness that imply or suggest somehow that *O'Connor* is an informed consent case, which it is not. And so, as I'm listening to these questions, my friend is trying to equate what Dr. Redekop has opined in our case, which is an informed consent case, and with a case that doesn't have anything to do with informed consent, not a live issue. And my friend took Dr. Redekop earlier to early paragraphs in the decision where the issues are laid out, and that's not this kind of case. So, my friend's question should not assume that we're having the same discussion in both proceedings.

THE COURT: I think you just need to paraphrase it a bit. Just to read - 'cause it's...

MR. MANDEL: I've asked - I've asked my question. I mean I...

THE COURT: You just...

MR. MANDEL: If, if my friend clearly - if you're

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saying in one case there's a ten percent risk of bad outcome and then in the next one you're saying fifty, or if you're saying in the one case that the risk of hemorrhage without treatment is two percent, that's the best evidence, and then in the next one saying two to four...

THE COURT: No, I've got your point.

MR. MANDEL: ...I don't care if it's a consent case or not.

THE COURT: Yeah, yeah. No, I, I...

MR. MANDEL: It's the underlying medicine that's seems malleable to fit an outcome.

THE COURT: I hear you.

MR. MANDEL: Thank you.

MR. CRUZ: Bring him back?

THE COURT: You can bring him back in. If you were guessing - don't bring him in quite yet. How much - and I'm not in any way limiting you, don't take it that way. How much longer do you think you'll be?

MR. MANDEL: I have, you know, forty-five minutes...

THE COURT: Rough. Okay.

MR. MANDEL: ...on qualifications. But then I want to pass up a - well then, we have to figure out if Mr. Cruz is re-examining on qualifications 'cause I'm not gonna give him my Brief of Authorities so he can tailor his...

THE COURT: Yeah, that's fine.

MR. MANDEL: But I do - I will...

THE COURT: He may have some questions.

MR. MANDEL: ...want to provide to you a Brief that I'm going to ask Your Honour to read, and then I'm going to make submissions about why this witness's...

THE COURT: Yeah, yeah.

MR. MANDEL: ...evidence should be excluded for bias, duplication and everything else but...

THE COURT: Got it. No, I, I hear you.

MR. MANDEL: Can I continue?

THE COURT: You can.

MR. MANDEL: Thank you.

CROSS-EXAMINATION BY MR. MANDEL CONTINUES:

Q. Doctor, welcome back. Can you hear me?

A. Yes.

Q. Okay. We're still on Paragraph 264, okay, from the *O'Connor* case.

A. Yes.

Q. After having indicated to that court that the spontaneous risk of bleed from an untreated AVM is around two percent per year with a ten percent risk of permanent neurological disability, you went on to say, "This means that if we consider a ten-year epoch, E-P-O-C-H, rather looking at the lifetime risk for a fifteen-year-old of bleeding in the next decade is not more than twenty percent, and the risk of permanent disability or death is not more than two percent. In contrast the risk of intervention from most AVMs including low Spetzler-Martin grades is much higher." That's what you said, right?

A. Yes.

Q. Right. And so, what you were doing is you were saying that quite apart from looking at lifetime risks of spontaneous bleeds, you'd have to also be mindful of the unique circumstances of the patient and often it's appropriate to take a look at a ten-year period of time, right?

A. Yes.

Q. And you want to figure out what the risk of a

severe outcome is over the course of ten years without treatment because sometimes it's an important ten years and whereas with intervention it's an upfront risk, right? You're crystallizing the risk upfront, right?

5 A. Yes.

Q. And so again in certain circumstances, important circumstances, you don't even necessarily consider or completely rely upon lifetime risks. You also have to address what the ten-year risk is, right?

10 A. Yes.

Q. Right. And that's something that has to be discussed with patients as well, right?

A. Well, I think the, the content of the discussion with patients depends on their, on whatever stage of life they're at and what the important timeframes might be. And it might be one year, or it might five or ten. It varies from person to person. I don't think there's an expectation that a specific statement about ten years is included in a discussion, but certainly part of the discussion would, would include, you know, what are the important things to the, to the patient.

Q. Yeah. Part of - part of the important discussion that you'd have with the patient is not that treatment's now or never, but maybe later, right?

A. Yes.

25 Q. Right.

A. Absolutely.

Q. And again, I think that's consistent with your testimony in *O'Connor*. If we go to Paragraph 254 at Page 67...

A. Yes.

30 Q. So, at Paragraph 254 the judge is talking about what Dr. Redekop wrote - that's you, what you wrote in your report for, on behalf of the defendants in that case, right?

A. Yes.

Q. And the quote that the judge is reading from your report reads, "I think every time that I see a patient with an AVM, and we've already talked about what the follow-up routine might be, it's a topic of, of conversation every time. The only decision that's made is not now or never. The only decision is do we need to do something now or do we defer until a later time?" I read that correctly, right?

A. Yes.

Q. And so every time you see a patient, the only decision is do we need to do something now or do we defer it until a later time. That's what you wrote in *O'Connor*, right?

A. Yes. That's what I wrote.

Q. And that's true, right?

A. Yeah.

Q. And so, one of the things Her Honour's gonna have to consider is whether Mr. Denman needed this elective course of medical intervention. Whether he needed it now or whether he could have deferred that to a later date. That's one of the things Her Honour's gonna have to consider, right?

A. Yes.

Q. And nowhere in your report, despite it being your invariable practice about which you speak to every patient, you never made reference to it being appropriate to consider the need to do something now or whether you're supposed to defer treatment or treatment discussions into a later time, right? You didn't put that in any of your reports, right?

A. I did not. The report wasn't about my practice.

Q. Right. Sorry, what was the last part there, Doctor?

A. My, my report in the Denman matter wasn't about my practice.

Q. The report in the Denman matter wasn't about your practice. That's, that's why you didn't include this relevant piece of information in a report that you know is to be unbiased, impartial and not advocate for one side or the other. You chose not to include this because this isn't about your practice, that's your answer?

A. Yeah. You can ask me about it. I think that the language in that quote, especially with the repetition of the word of means that that was actually a response to a question that I did give in court. I don't believe that that's an extract from a report that I submitted.

Q. Right. Okay.

A. And if you ask me that question, you'd get the same answer.

Q. Right. It's just something that you didn't put in your reports when addressing the evidence in this case, and whether any of the Defendants actually gave this option to defer to Mr. Denman, 'cause had you considered the discovery evidence you would have known that Dr. Radovanovic specifically didn't address this issue with Mr. Denman. Right?

A. From my reading of the discovery transcripts, the, the option about treating and not, or not treating the AVM was discussed on several occasions. I can't recall by whom, but the clinic notes were dictated by an individual based on group discussion.

Q. Uh-huh. I think my friend, Mr. Cruz, during the qualification of you in-chief spoke about your work at University of British Columbia, right?

A. Yes.

Q. You've been working there as a professor for quite some time, right?

A. I've been on faculty since 1993.

Q. Right. There's no other Redekop family members that are employed by UBC, correct?

A. Not my Redekop family.

Q. Right.

A. There might be some other Redekop's at the University of British Columbia.

Q. Right. There's no other Gary Redekop's at UBC, correct?

A. No.

Q. Your Honour, we're having tech issues. I have to pull up another document. This is not something that...

MS. GILBERT: Can Madam Registrar allow Sarah Naiman to screen share...

CLERK REGISTRAR: Sure.

MS. GILBERT: ...who's been allowed in?

CLERK REGISTRAR: Ms. Naiman, if you can hear me, you are able to screen share now. Oh.

MR. MANDEL: Okay. Take that off the screen for now, please. Thank you.

THE COURT: But you've got what you need?

MR. MANDEL: Yeah, Your Honour.

THE COURT: Okay.

MR. MANDEL: Because - because we're not in person, I've got two lawyers and a tech department trying to make sure that I can put exhibits to a witness.

THE COURT: No, I know. I know.

MR. MANDEL: With the utmost respect to whichever judge said this is the new norm, it's a bad practice. Just - I - and it's not relevant to anything in this case.

THE COURT: No, I know.

MR. MANDEL: But it's, it's - this is just - it's

emblematic of why it's a bad ruling or decision in general, but I'll carry on.

MR. MANDEL: Q. Doctor, are you ready for my next question?

A. Yes.

Q. Okay. So, you work at UBC. You have for a long time. There's no other Gary Redekop's at UBC as far as you know, right?

A. Correct.

Q. And you have an email address at UBC, right?

A. Yes.

Q. Okay.

THE COURT: Thank you.

MR. MANDEL: Q. And, Doctor, you have an obligation to provide opinion evidence that's fair, objective and non-partisan, right?

A. Yes.

Q. That's impartial, right?

A. Yes.

Q. You would do the same for the Denman's that you would do for your friend, Dr. Ter Brugge and his co-defendants, right?

A. Yes.

Q. So, I'd now like to pull up on the screen share an email exchange between Sloan Mandel@thompsonrogers.com dated April 28, 2017, and Gary Redekop on April 29, 2017. First of all, Doctor, can we go to the first email, the one that's Friday April 28, 2017, the one from smandel@thompsonrogers to Gary Redekop at gary.redekop@UBC.ca, do you see that?

A. Yes.

Q. That email reads, "Doctor, I act for a forty-nine year man and his family in med mal proceedings. He underwent

embolization therapy and surgical removal of a large Spetzler-Martin Grade 4 AVM with catastrophic neurological outcome. The involved physicians are at the Toronto Western Hospital. I have reason to believe that the surgery or treatment ought not to have been recommended and conservative management ought to have been followed. I'm somewhat familiar with the results of the ARUBA Trial, and I understand that this matter – this subject matter" sorry - "I understand that this subject matter is within your area of expertise. Would you be prepared to review it and, subject to your conclusions, be prepared to provide expert opinion on behalf of the family." I read that correctly, right?

A. Yes.

Q. And what was your response to that request?

A. I don't it in front of me.

Q. Well, just look at the top. The...

A. Oh. Oh, sorry. No.

Q. Right. So, when asked by the Denman's, through me, not knowing they're the Denman's, to take a look at a file before a Statement of Claim was issued to talk about whether management decisions by the physicians at the Toronto Western Hospital were appropriate or not, you did respond to the email within a day, with two letters, N-O, right?

A. Yes.

Q. Yet, on behalf of your buddy, friend, professional friend, or however you want to define it, in this close-knit medical community, never having testified against a physician on standard of care, at least not in the management of AVM issues, you've been more than willing to spend time drafting reports and advocating a position in favour of the defence, right?

A. I was asked by the defence lawyer to provide an opinion, and I agreed to.

Q. Yeah, but you wouldn't do it for me. Is that the

type of fairness, objectivity, non-partisanship and impartiality that this court should accept from a, an expert?

A. I don't think that really bears on impartiality. The - to be frank, the reason why I have generally steered clear of acting for plaintiffs is that because of the numerous national leadership roles that I have held, and in my position here as a leader of one of the largest departments of surgery in the country, I have felt that it's best for me not to be visibly acting against people in my subspeciality area. I certainly believe that every individual is entitled to expert advice and opinion, and to me, the issue of bias and non-partisanship has nothing to do with the kind of matters, whether plaintiff or defence, that I get involved with, with the opinions that I provide in those cases and whether they're biased or unbiased.

Q. Mm-hmm. You don't testify against physicians because of the oversight you have regarding these educational seminars, is that - did I hear you correctly?

A. No, it has nothing to do with educational seminars.

Q. Sorry.

A. It has to do with the fact that for many years I've held national leadership positions in organizations representing the, the speciality and subspeciality that I am in. And certainly, at some times there have been sensitive discussions and issues that involve national interest, and I think from a, from an optics point of view and in my standing as a leader, I have felt that it was best for the organizations for me not to be acting against members in my, my organizations.

Q. Sure.

A. However, I can tell you that I have certainly agreed to review files that did involve members of my group, and not every case - and not every case did I find that the standard

of care has been met.

Q. Hmm.

A. And I think that's a, a better surrogate or representative for my fairness and objectivity. It's not - it's not who I agree to act for, but the, the fairness and non-partisanship in the opinions that I provide.

Q. Well, I understand that's your opinion. We have no way to measure it. And that's like me saying well I've had a case with you before where the CMPA paid me despite your opinion to the contrary. It's sort of a comment that really has no bearing in whether this court ought to admit your evidence or not, right? So, what we know is what you've just said. Because of your national leadership positions, you don't review matters involving the management of AVMs against your colleagues. You won't do it for plaintiffs. Right? That's what we know.

A. That has been my practice, yes.

Q. Right. Not only have you - you won't do it for plaintiffs, you don't do it for the Denman's. But you are prepared, given this national leadership position in this small-knit community of maybe only sixty professionals across Canada, you are quite prepared to testify for your medical colleagues, right?

A. Yes. And I was quite prepared to approach it with an open mind and to make a determination about whether standard of care was met or not.

Q. Okay. Well, let's get to that. We're gonna mark this first. But then we're gonna get to how you approached it and why you say you approached it with an open mind, because you'd agree with me that if you did not approach it with an open mind, you really shouldn't be giving evidence in this case, right?

A. Yes.

Q. Okay. Can we mark the email exchange between Dr.

Redekop and Sloan Mandel between April 28 and 29, 2017 as the next lettered exhibit?

THE COURT: Is that X?

CLERK REGISTRAR: That will be ZZ, Your Honour.

5 MR. MANDEL: Sorry, numbered exhibit. I meant numbered exhibit.

CLERK REGISTRAR: Oh.

THE COURT: Oh, okay.

MR. MANDEL: I meant numbered exhibit.

10 CLERK REGISTRAR: Then that will be Exhibit 80, 8-0.

THE COURT: Eight zero. Okay.

EXHIBIT NUMBER 80: Email exchange between Dr. Redekop and Sloan Mandel between April 28 and 29, 2017 - produced and marked.

15 MR. MANDEL: Q. And, Doctor, you just indicated that you approached this case with an open mind and that if you didn't, you shouldn't be able to testify, right?

A. Yes.

Q. Can we go to Exhibit WW, which is your first

20 report dated August 11, 2019. Do you have it available to you?

A. Yes.

Q. Okay. Page 1 sets out your credentials, right?

A. Yes.

Q. Page 2 includes the materials that you reviewed

25 in preparation of your report, right?

A. Yes.

Q. And you didn't review the St. Michael's Hospital Chart?

A. I don't think I had the St. Michael's Hospital

30 Chart. Some of the records from the St. Michael's Records were actually included in the UHN file.

Q. Right. There were some St. Mike's records

included within the UHN file, but you didn't have a separate copy of the St. Michael's Hospital Chart when you provided your opinion, right?

A. No.

5 Q. Is that - you - when you say no and I use a negative in my sentence, that's a double negative. So, I was correct in that statement, right?

A. Correct.

Q. Right. Did you ask for a copy of the St.

10 Michael's Hospital Chart?

A. No.

Q. Did you review any of the email exchanges between the Denman's and the defendants prior to the preparation of your August 11, 2019 report?

15 A. No.

Q. Were you provided with any of the outcome statistics of any of the defendants prior to the preparation of your August 11, 2019 report?

A. No.

20 Q. In this first report at Page 5, I want to take you to the last paragraph. The last paragraph reads, at Page 5, "In addition to providing clinical care the Toronto Group, of which Drs. Pereira and Radovanovic are members, has a long history of prospectively gathering information about the natural history

25 of AVMs and other cerebrovascular conditions and honestly reporting their treatment outcomes", do you see that?

A. Yes.

Q. But you didn't know what their treatment outcomes were. You just made reference to the fact that they had a long

30 history of prospectively gathering information about treatment and no treatment decisions, right?

A. Ah - my reference in the statement was to the

Toronto Group and not specifically to Drs. Pereira and Radovanovic, although they're members of that group as stated.

Q. Right. So that's my problem. You see, you're cheerleading for the group as a whole, whereas your role in this case is to address what these unique defendants did specifically. You understand you're not to be a cheerleader for the - a - Toronto Western Hospital AVM group as a whole. You are supposed to talk about what the defendants did in this case, right?

A. Yes. And I don't think that's cheerleading.

Q. Mm-hmm.

A. You know, we may get to a discussion about relevance of data in the literature to institutional and personal practice. And the point is that, that the Toronto Group has, tracked and published on a variety of topics related to cerebrovascular surgery over the years...

Q. Right.

A. ...and that's what the statement says.

Q. Right. The same paragraph goes on to say, "This body of work has contributed substantially to our understanding of these diseases and has served as a valuable source of information to guide professionals in their treatment decisions. The group has also developed a website that provides information for patients and families", do you see that?

A. Yes.

Q. Nowhere in any of your reports have you made reference to the fact that these websites that we've marked as exhibits contain misleading information about the risks associated with embolization treatment and the annual bleed rate without treatment. You haven't made any reference to any misleading or erroneous piece of information in any of the websites apart from including it in a paragraph in your report where you say that the Toronto Western Hospital Group honestly reports treatment outcomes

and is a valuable source of information for professionals at large, right?

A. Yes.

Q. Right. The paragraph continues, "Dr. Radovanovic summarized the group philosophy about treatment in his examination for discovery when he stated that we "always consider available evidence and our own experience"", that's what you said, right?

A. Yes. That's what Dr. Radovanovic said.

Q. Right. But we know that the team didn't consider its own experience because it never disclosed to the Denman's Dr. Radovanovic's known twenty-five percent adverse outcome rate. You aware of that? Are you aware of that?

A. Am I aware of?

Q. That Dr. Radovanovic's adverse outcome rate for surgical resections for the period spanning January 2013 through to May 2015, one month before Mr. Denman's catastrophic outcome, that he had an adverse outcome rate of twenty-five percent. You weren't aware of that when you wrote in your report that "The defendants have a long history of prospectively gathering information about the natural history of AVMs and other cerebrovascular conditions and honestly reporting treatment outcomes." You weren't aware of his, Dr. Radovanovic's, adverse outcome statistics, despite the fact that they would have been available to you as at the date of your report. You weren't aware, right?

A. I disagree with the statement that you made because that misquotes from my report. I didn't say the defendants have a long history. I referred to the Toronto Group of which they were part.

Q. Right.

A. And I didn't have Dr. Radovanovic's outcomes available to me at the time that I did this report.

Q. Right. And that's my point. You didn't have them available to you, but they, they could have been made available to you had they been produced to you, right?

A. I suppose that's true, yes.

5 Q. Right. And during in-chief when Mr. Cruz was asking you questions about what you'd received, he specifically identified the documents that you received prior to writing this opinion at Exhibit WW. And then he blended everything together. Then he said, "And you received a whole bunch of other materials 10 including exhibits and trial testimony and Dr. Pereira's discovery transcript." What he didn't ask you, and what I think this court might benefit from knowing is when. When did you receive the subsequent material specifically, what did you receive and when?

A. I think I can answer that question.

15 Q. Great.

A. Sorry, I, I can't find it - I'm - just from a quick scan, and I don't want to take the court's time. It's within the last few months, and I think if you're asking the timing in relation to any of my reports, it was after all of 20 those.

Q. Okay. No, I understand that you have received subsequent information after your last report. I really sort of am trying to figure out when. Because, you know, there's an obligation to provide updated reports. And if you've had, for 25 instance, adverse outcome statistics for a year or so, I'm certainly going to take the position in this trial that you had an obligation to disclose it if you're going to be permitted to testify about them. So maybe you can look during the break and we won't waste more time now.

30 A. If - and - well, I can try - if, if you...

Q. We'll figure it, but during the next break...

A. Yeah.

Q. ...what I want to know is you received and when.

A. If you're referring to the, the Radovanovic presentations, AVM ENS, Madrid 2015, and Management of AVM, I downloaded those on April 5, 2022.

5 Q. Okay. Well that just means that's when you looked at them, or is that when you received them?

A. I think that's when I received them.

Q. Okay. So for reasons unknown you were receiving relevant information about the outcome statistics of Dr.

10 Radovanovic, I don't know, after the trial started and four years or many years after your report, right? I guess that's what we've just discovered.

A. That's when I received it.

Q. Yeah. Okay. Prior to - and you haven't provided

15 any updated report, right, given any of the new information that you've been provided?

A. I have not.

Q. Right. And so, prior to this August 11, 2019 report that we've marked as lettered Exhibit WW, you were provided

20 with Andrea Denman's discovery transcript prior to the preparation of that report, right?

A. Yes.

Q. Have you referred to any of her discovery evidence anywhere in any of the reports that you've authored?

25 A. I don't think I've made a quote from the discovery.

Q. You don't just not quote from it. You don't paraphrase it. You don't make reference to it. It doesn't exist in any of your reports, other than having been a listed document

30 for review, right?

A. Yes.

Q. So why as an expert who's supposed to be

impartial, neutral, non-partisan, fair, unbiased, why did you make the decision to completely exclude from your analysis, your documented analysis, any of Andrea Denman's evidence?

A. I, I didn't exclude it. I, I read the document carefully and I considered it as I was forming an opinion.

Q. How would we know from...

A. The fact, the fact that I...

Q. ...a review of your report that you considered it? How would we know from a review of your report that you spent more than five seconds looking at it?

A. How would you know? Well, I, I guess I said that I reviewed it. That's how you would know.

Q. Mm-hmm.

A. Obviously, I, I didn't quote from it or refer to it in the body of the report. True.

Q. Nor even paraphrase it. Nor even state what her position was or her recollection of what she was told or saw or anything. You just rejected it all, effectively deciding that it wasn't worthy of inclusion in your report. That's what you did, right?

A. No.

Q. Okay.

A. I disagree. I did consider it.

Q. Oh.

A. Yes.

Q. Mm-hmm. And your report would detail the consideration that you gave it, right?

A. I did - I didn't include a quote or a reference specifically to that document.

Q. Did you...

A. To my report.

Q. Did you - did you give - well, okay. I'll move

on. Let's look at some of the factual assumptions that you've included in your first report. Can you go to Page 3? At Paragraph 3 you make reference to permanent left homonymous hemianopsia, right?

5 A. Yes.

Q. And you've indicated that Mr. Denman couldn't see anything in the left half of the visual field of both eyes, right?

A. Yes.

Q. And that was one of the factual assumptions that

10 you based your opinion upon, right?

A. Yes.

Q. Nowhere in your report did you indicate for instance that Mr. Denman had macular sparing with some salvageable central vision. You didn't put that in any of your reports, did

15 you?

A. I didn't put it in because he didn't have macular sparing.

Q. Right. That's your - that's a factual assumption that you're making which runs counter to a good deal of evidence

20 that we've heard in this case. But I'm - just want to make sure that Her Honour understands that you have not considered in any of your evidence the notion that Mr. Denman had some degree of macular sparing. You have assumed that it was complete homonymous hemianopsia, right?

25 A. You know I didn't include it in, in this document, but I have reviewed both of his visual field assessments, and I don't believe that he has macular sparing and I'm quite prepared to explain to the court why that's the case.

Q. Yeah, I don't - well, I'm not gonna get into that

30 now. You've just outlined what your factual assumption is and to the extent that you disagree with Dr. Roy and some of the defendants, we'll see if you're entitled to do so. That's a

subject matter for future debate. Let's go to Page 4 of your report, Paragraph Number 10. Well, before we even get there, what you've done in these factual assumptions is you've outlined the facts as you understand them in a chronological way, right?

5 A. Yes.

Q. And you've included the important factual assumptions that belie your findings, opinions and conclusions, right? Right?

A. I'm not sure what you're - mean by belie. You
10 said...

Q. They're the foundation of your opinion. You've put...

A. Yes.

Q. You've put in your report the factual assumptions
15 upon which you have relied to come to the conclusions to which you've come to, right?

A. Yes.

Q. Right. And you had the discovery transcripts when you did this, right?

20 A. Yes.

Q. Okay. And so at Paragraph 9, you were speaking of an August 5, 2014 date, right?

A. Yes.

Q. There's no reference to Dr. Pereira, correct?

25 A. No.

Q. Am I correct?

A. You are correct.

Q. Right. And then at Paragraph 10 we get to the next attendance at the Toronto Western Hospital being August 19,
30 2014, right?

A. Yes.

Q. And your report reads, "Mr. Denman underwent

embolization of his AVM. Prior to the embolization procedure, Mr. Denman met with and had a lengthy discussion with Dr. Pereira", do you see that reference?

A. Yes.

5 Q. That's a discussion, a lengthy discussion that you've assumed Mr. Denman had on August 19, 2014 prior to the procedure, right?

A. Yeah, I'm not sure at which - the, the specifics of the timing of the meeting, or the discussion with Dr. Pereira
10 and Mr. Denman. But it was prior to the embolization procedure.

Q. Right. And like you've admitted two minutes ago when you did your report you went through your chronology and you outlinded*[sic]*, you outlined the facts that you assumed that form the foundation of your opinion evidence, right? That's what you
15 agreed to just a couple minutes ago, right?

A. Yes.

Q. Right. And in the August 19, 2014 paragraph, you say, right, "Mr. Denman - on August 19, 2014, Mr. Denman underwent embolization of his AVM. Prior to the embolization procedure, Mr.
20 Denman met with and had a lengthy discussion with Dr. Pereira." That's what it says, right?

A. Yes.

Q. And, so, did he have a lengthy discussion with Dr. Pereira on August 19, 2014 as you've outlined as part of your
25 factual assumptions?

A. That's not what, what the statement says. It says the procedure was done on August 19 and prior to the procedure he had a discussion. Prior doesn't mean that it happened immediately on August 19, and I'd have to refer to the,
30 the records to...

Q. I thought you were being chronological, Doctor? I thought you were being chronological. Isn't that what you were

doing in your report?

A. Sure. I'm - the chronology reflects the events as they happened.

Q. Yes, they do.

5 A. But the, the statement doesn't.

Q. Oh, okay.

A. I, I don't see that there's an inconsistency in saying that a procedure was done on August 19, and prior to that a meeting occurred. I, I would not infer that the meeting was

10 immediately prior.

Q. Right. When did Dr. Pereira get his licence to practice medicine in the Province of Ontario?

A. I believe it was in early August. I, I've read that in the discovery transcript, and I actually can't remember

15 the date, but it was shortly before this time.

Q. Right. At Paragraph 11 we've now - you're now talking about the December 9, 2014 procedure, right?

A. Yes.

Q. There's no reference whatsoever to any informed

20 consent discussion when you're going through your analysis of December 9, 2014, right?

A. I didn't include that.

Q. Right.

A. Ahh...

25 Q. Right.

A. No, I just...

Q. Right. And back to Paragraph 10 again. You say he met with Dr. Pereira and had a lengthy discussion. Where? Where did he have this lengthy discussion with Mr. Denman?

30 A. I would have to refer to the, the records on, from which I made that statement about. I...

Q. Who was present? Who was present when he

allegedly had this lengthy discussion?

A. Ahh...

Q. Was his wife present, for instance?

A. I, I don't recall that specifically, but I do recall from the discovery transcript of Mrs. Denman that she was present at, I believe the January meeting. I'm not sure that she was at any of the prior meetings.

Q. Right. Okay. Let's take a look at some of the paragraphs in your opinion and discussion section at Pages 5 through 7. And let's take a look at the last paragraph on Page 5 to start. Again, I think we've already reviewed this this paragraph. So actually, let me go to the paragraph beforehand, the last sentence. The second last paragraph in the Opinion and Discussion Section at Page 5, it reads, "As members of this clinical team, Drs. Pereira and Radovanovic worked collaboratively with their colleagues to provide the best possible individualized approach for each of their patients", do you see that?

A. Yes.

Q. And you're talking about each of their patients, plural. You're talking about all their patients that Drs. Pereira and Radovanovic work with collaboratively, right? That's what you're saying.

A. Yes.

Q. Right. So, you're not even limiting your testimony to how great these guys are in terms of their management with Mr. Denman, you're talking about how they work collaboratively with their colleagues to provide the best possible individualized approach for each of their patients, plural, right?

A. Yeah. And what that refers...

Q. You don't think that's cheerleading? Is that cheerleading?

A. Well, you can call it what you want. From my

point of view it's pointing out the facts that with respect to, to professionalism and standards, you know, some physicians and surgeons might undertake an independent practice where their care decisions and treatment is not subject to discussion or review with colleagues or scrutiny, and at this particular institution all the patients who have AVMs are reviewed at a multidisciplinary round and input is obtained from all of the different disciplines involved in the care. And - so I think that's important to point out.

Q. Do you know...

A. But...

Q. Do you know what assuming your conclusion means?

A. I...

Q. Do you know what that means, Doctor?

A. I think I can figure that out, yes.

Q. Right. And if in a research paper you assumed your conclusion, the research paper would be garbage, true or false?

A. Well, the conclusions have to be based on data.

Q. Yes.

A. Sometimes...

Q. Yes, they do. Let's move on to Page 6, Paragraph - the first full paragraph which is the second paragraph. It begins, "Both Drs. Pereira and Radovanovic were well-trained and experienced in their respective areas of AMV treatment", you see that?

A. Yes.

Q. Did you know that Dr. Radovanovic had never resected a Spetzler-Martin 4 AVM prior to Mr. Denman?

A. I don't know - I don't know the, the specific details about what cases he has or hasn't done.

Q. Right.

A. My, my statement stands. They were well-trained and they were experienced.

Q. Uh-huh. If we continue on in that same paragraph it reads, "In terms of their professional qualifications and experience in AVM treatment, their participation in the multidisciplinary group and their knowledge of the literature as well as their own results, Dr. Pereira and Dr. Radovanovic met the standard of care of interventional neuroradiologists and neurosurgeons who treat AVMs with embolization and surgery. That's what it says, right?

A. Yes.

Q. And you're making specific reference to their knowledge of the literature as well as their own results. That's the foundation for your conclusion in that paragraph, right?

A. Yes.

Q. But you didn't know what their own results were. You assumed that they were what? You didn't say, right?

A. I, I didn't say what their results were. I said in that paragraph, I said that they're well-trained and they're experienced and that they're familiar with the literature, and they incorporate their own personal experience and results into the treatment recommendations that they make.

Q. How do you know that? How - how do you - why are you giving the benefit of the doubt to these guys that they did what you purport to say? You don't know what they did or didn't do? You weren't there, right?

A. I - absolutely, I, I wasn't there. But I read the materials. I read the transcripts for their discovery. I heard the description of their training and experience.

Q. Where did Dr. Radovanovic talk about his outcome results specifically in any of the transcripts that you were provided?

A. Hmm.

MR. CRUZ: I have an objection to this, and maybe...

MR. MANDEL: I'll move on. I'll move on.

THE COURT: Okay.

MR. CRUZ: Well, just to be clear in the preceding paragraph, there's a quote from Dr. Radovanovic's transcript.

THE COURT: That's fine. He's moving on.

MR. MANDEL: Q. In the next paragraph of Page 6, the second full paragraph, it begins, "Mr. Denman attended", do you see that?

A. Yes.

Q. "Mr. Denman attended the AVM clinic on several occasions and had multiple discussions with his physicians about his AVM diagnosis, the risks of bleeding if not treated, and the various approaches to treatment including their risks. The initial discussions were with Dr. Ter Brugge and later with Dr. Pereira regarding the embolization treatment, and with Dr. Radovanovic about the surgical treatment", that's what it says, right?

A. Yes.

Q. It goes on to say, "It is clear that the documentation of these conversations does not thoroughly reflect the entire content of the risk discussions. But there is no doubt that the involved physicians believe that they had accurately and thoroughly conveyed the important details and also made an effort to answer all of Mr. Denman's questions", that's that you say, right?

A. Yes.

Q. You have not made reference to these - the details of these conversations. You've - you're simply relying upon the transcripts as a holus bolus package of data, right?

A. Well I was, I was relying on the materials. I didn't think it was necessary to make lengthy quotes from documents that are available, but this was my summary of...

Q. Right. You have a boiler plate...

5 A. It's a summary statement.

Q. You have a boiler plate conclusion that says, "I've read the discovery transcripts and it's clear that the documentation of these conversations does not thoroughly reflect the entire content of the risk discussions, but there's no doubt

10 that the involved physicians believed they had accurately and thoroughly conveyed the important details, and also made an effort to answer all of Mr. Denman's questions, right? That's the conclusion that you came to, right?

A. Yes.

15 Q. Mm-hmm. So, for you to have come to that conclusion you've either assumed the conclusion or you've assumed the reliability and credibility of defence standard practice evidence. Which is it?

A. Well, actually one of the statements that stood

20 out to me in one of the clinic notes, and I can't remember which one it is, was a very brief note. I believe it was dictated by Dr. Ter Brugge. And during the course of it, or it - as part of the note, it said, "Mr. Denman took copious notes and will go home and discuss things with his wife and return to the clinic for

25 further discussion", something like that.

Q. Mm-hmm.

A. And so it seems to me that taking copious notes would have to be an indicator that there was significant discussion that was not included in the, in the actual note of the

30 visit, and the fact that, that he went home to consider and was gonna return again, I think is consistent with, with the statement made that they believe that they had conveyed the important

details and made an effort to answer all the questions. And it was that specific incident that, that I think, you know, highlights the basis for me coming to that opinion.

Q. You weren't there, right?

5 A. I was not there.

Q. And if you read the transcripts, you know that Dr. Ter Brugge has no independent recollection of what he did or didn't do, right?

A. Yes.

10 Q. And so for you to come to a conclusion that he met the standard of care and did everything right, you either have to assume his standard practice, as he's described it, meets the standard of care, or you've assumed your conclusion. And what I'm asking you is which did you do - assume your conclusion or assume 15 that Dr. Ter Brugge's self-professed standard practice evidence was true, reliable, and credible? Which did you do?

A. As I said, I, I went on the basis of the notes and, and the events around them. And so for Dr. - Dr. Ter Brugge may not remember the circumstances at the time of the visit and 20 when he dictated the note. But at the time of the visit - if he dictated that Mr. Denman took copious notes, that - I don't think it matters whether he remembers that after the fact. And I don't think that my assumption that the content of the meeting included more than the content of the note. I, I don't think that's 25 speculation, and I don't think that the two choices that you set out are the only ones. I wouldn't agree with either of them.

Q. Right. You made reference to my - in response to my question to the fact that Mr. Denman prepared copious notes to go speak to his wife about what Dr. Ter Brugge had to say, right? 30 That's one of the reasons why you say the discussions were more detailed than what Dr. Ter Brugge put in his June 5, 2014 consult note, right?

A. Yes.

Q. Yet, despite the fact that Mr. Denman, according to you, took copious notes and discussed the contents of those notes with his wife, you haven't referred to any of the evidence about what Andrea Denman says Michael told her, right?

A. I didn't refer to it.

Q. Right. You recognize, Doctor, that the notes in and of themselves do not reflect the entirety of what would be required for an appropriate risk discussion to have been held on these dates, right? There must have been discussion over and above what was charted for the doctors to meet the standard of care, right?

A. Yes.

Q. Okay. And you have assumed that there was greater discussion than what was charted, right?

A. Yes.

THE COURT: Oh. Don't worry.

MR. MANDEL: Q. And in making those assumptions, you've relied upon the defence evidence of self-professed standard practice, right?

A. I've included it, that in my considerations, yes.

Q. Right. What you didn't consider is whether their self-professed standard practice is inaccurate. You never considered that, did you?

A. Of – well, of course I would consider that.

Q. Oh, oh, where was that in your report? I missed it.

A. I – I didn't make a statement to that effect.

Q. Right.

A. I...

Q. Of course not. That wouldn't have been helpful to the defence. At Paragraph 4 on Page 6, the one that begins,

"Dr. Pereira's clinic note", do you see that?

A. Yes.

Q. And five lines up, six lines up from the bottom you say, "Although the note does not list all of the specific numbers quoted, the elements of the discussion are clearly articulated. It is clear that there were lengthy and detailed discussions", right? You see that reference?

A. Yes.

Q. Again, you're - once again you're talking about it being clear that there were lengthy and detailed discussions at a meeting where you weren't at, right?

A. I was not at the meeting.

Q. Right. And you mentioned although the note does not list all of the specific numbers quoted, in fact the note didn't list any number of any kind whatsoever, isn't that true?

A. Yeah, I'd have to look at the specific note, but...

Q. Well, if you're allowed to testify, I'll take...

A. ...but there are not many references to specific numbers.

Q. If, if you're allowed to testify, I'll take you to Page 231 of the Joint Document Brief. But what I put to you, Doctor, is it's not that the note doesn't list all of the specific numbers quoted. It doesn't list any. But you've assumed the accuracy, credibility, and everything else associated with these numbers to come to your conclusion, right?

A. I, I've assumed that the content of the discussion was greater than that which was documented, yes.

Q. You've not only assumed that the content of the discussion was greater than the note, but you've assumed that the content of the discussion met the standard of care, isn't that right?

A. I made that – I'll just read the statement, this – yes, I did.

Q. Right.

A. I did make that statement.

Q. And that's my point is if you've assumed that the content of a discussion meets the, the standard of care, you've assumed your conclusion. And if you did that for one of these research papers that you sign your name to, it would be garbage, right? Right?

A. Well, the – a conclusion has to be based on information.

Q. Yes, it does.

A. And sometimes, as in this case, the information is not, is not as exhaustive as one, in terms of documentation, as one would like it to be. That's clear. From reading through the discovery transcripts and the description of the discussions, yeah, it was my – it was my opinion that they had thoroughly discussed these subjects.

Q. Mm-hmm. In any of your reports did you identify a single inconsistency in any of the defence evidence?

A. I don't recall an inconsistent – mentioning an inconsistency.

Q. You don't recall mentioning it any inconsistency, I agree with you. There's nothing in any of your reports that mentions an inconsisty*[sic]*. What I'm – inconsistency. What I'm asking you is why didn't you mention any of the inconsistencies in the defence evidence? When you read their transcripts, you must have noted that there were discrepancies and inconsistencies between what the defendants' expectations were and what they believe should have happened. You must have – you must have been able to see that if you had a thorough read of these discovery transcripts. We've spent weeks exploring them in this trial with

reference to specific portions of the transcript. Why didn't you list a single inconsistency in any of the evidence?

A. Well, I'm not sure which inconsistencies you're referring to, but if the court allows me to provide further opinion or input, then I'll be happy to go over those.

Q. Hmm. Let's go to your second report. The one we've marked XX. And this is the September 3, 2019 report. And at Page 3, Paragraph 5, the one that begins, "Mr. Denman attended the AVM Clinic", do you see that reference?

A. Yes.

Q. Your Honour, are you with me?

THE COURT: Yeah.

MR. MANDEL: Q. And it reads, "Mr. Denman attended the AVM Clinic on several occasions and had multiple discussions with the physicians about his AVM diagnosis, the risks of bleeding if not treated, and the various approaches to treatment including a - risks. The initial discussions with Dr. Ter Brugge and later with Dr. Pereira regarding the embolization treatment, and with Dr. Radovanovic about the surgical treatment, it is clear that the documentation of these conversations does not thoroughly reflect the entire content of the risk discussions, but there's no doubt that the involved physicians accurately and thoroughly conveyed the important details and also made an effort to answer all of Mr. Denman's questions." That's what it says, right?

A. Yes.

Q. Right. So, this is a cut and paste job from your first report, because I read that paragraph to you from your first report, right?

A. Yes, I think you're correct. That is the same, virtually the same.

Q. Right. And any of the flaws that you've already addressed in that first report about assuming conclusions would

equally apply to that paragraph in your second report, right?

A. I think it's - both paragraphs are open to, to criticism, yes. They're pretty much the same.

Q. Well, I appreciate that you're volunteering that, because it's important to be transparent. And thank you for acknowledging that these paragraphs, these conclusionary paragraphs are open to criticism. We can agree on that, right?

A. Yes.

Q. 'Cause they don't detail the nature of the discussions, the content of the discussions, who had them or when. What we have is a boiler plate statement that there were multiple discussions by the physicians, and they did everything right, right? And that's - that's what your paragraph says. Paraphrased. Right?

A. I guess that's a para - that's a reasonable paraphrase.

Q. Thank you.

A. It's a little bit more detailed than that, but...

Q. Right. But not much. But not much more detailed than that, right?

A. It's a - it's a relatively short paragraph.

Q. You haven't in your first report or in this report, made any reference to the quantification or range of risk for either treatment or the absence of treatment as it relates to Mr. Denman, you haven't in your first report or your second report, indicated what the risk without treatment would be for him or what the risk with treatment would be for him. You haven't identified it in your report, right?

A. Right.

Q. Pardon?

A. I have not.

Q. Right. So the whole case is this decision tree,

do I have treatment or don't I have treatment or can I defer it? And in your first two opinions, you haven't even addressed what those risks are, right? You haven't quantified them or put them in a range at all. You've, you've contained boiler plate conclusions, supporting the quality of care of your friend, teacher co-collaborator, but you haven't put any meat on the bone. Right?

A. You know, I, I haven't put numbers in the, uh, in the document. That's true.

Q. Right. Mr. Denman would want to hear numbers, wouldn't he?

A. Uh...

Q. Are you going to tell me a patient wouldn't want a known numbers doctor? Is that what you're about to tell me?

A. No, I, I, I think that a, a patient, um, would want to know numbers.

Q. Right.

A. Yes.

Q. So then why wouldn't you put them in your first two reports?

A. Well, frankly, I wasn't asked to put numbers in. I was asked to comment on the, on the care that was provided. Not, not my opinion or, or what my practice would be, but that's the, through a fundamental reason.

Q. Yeah. You you're the expert. Right? I don't care if the, the lawyer asks you to put in a number or not. We're talking about what should be disclosed to the patient. Are, are you saying that you wrote your report and limited it because you were asked not to address certain issues? Is that what you're saying?

A. No, it's exactly the opposite...

Q. Right.

A. I...

Q. So then why didn't you put in the numbers?

A. I was asked to address certain issues, which I did.

Q. Oh, okay. All right. Let's go to your third report, August 26th, 2021. That we've marked as Exhibit YY, it's essentially, uh, a one page report, fair Dr.?

A. Yes.

Q. And in the second paragraph on page one, you speak of the best estimate for the risk of AVM rupture as two to four percent annually, right?

A. Yes.

Q. And we spoke about this earlier in other matters. Other litigation proceedings you've described it as two percent, but in this one you've described it as two to four percent, right?

A. Uh, yes.

Q. And then in the very, sorry, go ahead?

A. Uh, I, I didn't qual, I didn't, um, qualify that with ruptured or unruptured AVM that...

Q. No, you didn't.

A. ...it's become apparent in the, in the proceedings thus far, that there is probably a difference.

Q. Well, I'm just going to look at your report and read the words and assume that as a, a physician expert, who's been retained 75 to a hundred times to provide expert opinion, who has four active cases with the CMPA and who's testified in AVM cases before, that you would've included in your report, the important factors that you would want to testify about. Is that a fair assumption?

A. Yeah. I mean, usually I, the, the content of my report is, is not what I would want to testify about. It's usually what I've been asked about. In fact, I would say it's exclusively, what I've been asked about.

Q. Mm-hmm. Okay. The third paragraph of your third report we've already discussed, this is the one where you gave a, uh, a risk of serious permit, neurological deficit or death at five times, the rate that you testified about in O'Connor, right. We've discussed paragraph three already.

A. Yeah. They're referring to different things. One, one is literature to that time, which was, um, you know, a number of years ago. And the other is, is what I tell patients...

Q. Mm-hmm.

A. ...because what, what patients experience and what's important to them is not necessarily the same as, as what a, a literature published stroke scale, uh, outcome measure might mean. So they're, they're apples and oranges, but they're different numbers. Yes.

Q. What's reported in the literature is apples and oranges. When compared to what you actually tell your patients, and that's the standard of care opinion that this court is supposed to receive. Right?

A. What I said was the - it's not, not what I, what I tell patients and what the literature says is not apples and oranges. What patients tell me and what the literature says can be apples and oranges.

Q. I don't really care what patients tell you. They could tell you that they're six feet tall when they're four foot five. This is why we have literature, right? This is why we do studies and reviews. This is why, the reason why you actually have credentials to testify is because you've done research. You've been taught in medical school. It's not because Joe the plumber comes in and tells you something, that might be something that you consider, but it would not result in a severe permanent neurologic deficit or death risk estimate, that's five times higher, instead of ten percent 50 percent, it wouldn't do that, true or false?

A. If Joe the plumber tells me that something is important to him and it's affected his life, then that is the most important thing, yeah.

Q. Yeah. And if Mr. Denman said the most important thing for me was to have an accurate cumulative risk for the treatment that was discussed and might potentially be required. And I want to weigh that against my lifetime risk of bleed. That's the type of information that should be provided to him, right?

A. Yes.

Q. And that's the type of information that physicians should provide without having to be asked, right?

A. Yes.

Q. And you didn't put it in your reports, that's my, that's my point. If, if it's the type of information that nobody should have to ask for it to obtain, why are we playing a game of hide and seek with your reports?

A. I think I've, I've already pretty clearly stated that in the two reports preceding this one that, that you, um, have brought out clearly the, the documentation doesn't, doesn't reflect the, uh, extent, uh, in detail of the discussions that took place. So I think we all acknowledge that.

Q. In none of your reports, did you provide a lifetime risk of spontaneous bleed, true?

A. True.

Q. In none of your reports, did you provide a cumulative treatment risk or range of risk, true? True?

A. True yes.

Q. Okay. In none of your reports, did you indicate what the range of risk was that was allegedly disclosed to the Denman's prior to the combined procedure, on January 29th, 2015, true?

A. True. I think there was only one mention of, of

numbers that I included in, in my report.

Q. Yeah. The only number that you mentioned in your report was the three to five percent quoted in Dr. Ter Brugge’s August 5th, 2014 consult note that he dictated two and a half days after the fact. Right?

A. I, I don't, I, I can't recall the, the, the timing circumstances, but I'll take your, your word on that. Yes.

Q. Okay. Um, maybe we can take our break and you can, uh, look to see what you received and when, and...

THE COURT: We better just take 10 minutes, cause I'm only here till 25 today, and you've got to get this thing argued. Right?

MR. MANDEL: Okay. I don't need to know it. If, if he's allowed to testify, I ask that it be produced during the course of his testimony. If he's allowed to testify, I'm, I'm happy to...

THE COURT: Okay.

MR. MANDEL: ...make submissions, but if my friend is going to re-examine, then I have to wait for his re-exam first.

THE COURT: Got it. Any re-exam?

MR. CRUZ: Is my friend finished?

THE COURT: He's finished.

MR. CRUZ: Okay.

THE COURT: Instead of waiting, otherwise we're going to run out of time. That's not a criticism, Mr. Mandel.

RE- EXAMINATION BY MR CRUZ:

MR. CRUZ:

Q. Just a few questions by way of re-examination, Dr. Redekop. Um, my friend, uh, asked you about the O'Connor case

numbers that I included in, in my report.

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APPENDIX B

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SUBMISSIONS BY MR. CRUZ:

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MR. CRUZ: So, so Your Honour has said I don't need to address duplications, so I won't. But,

but I will observe this before moving right on to bias, which is Your Honour's read our written submissions, I think, about everything, including duplication. And in the duplication part of the argument, one of the key elements is, is it the wrong expert, or is it an expert in a different specialty? That's a, a crucial consideration in that area of analysis. The same is true here on the bias side. And what we're thinking about, among other things, is the perspective that the doctor brings to bear as an expert witness in the case.

And so, when we think about Dr. Redekop, now in this case, Dr. Redekop is unique. And so, when we think about Your Honour's ability to decide the case on all the issues, he's the only witness being proffered who does both of the procedures in issue in the case, it's embolization and surgical resection in a multidisciplinary context. And the way I tendered him was to speak to both of those issues. And he is the only one capable of doing so.

So, in terms of the idea of necessity if we were talking about duplication, I would argue that there is necessity because of the unique perspective. Your Honour doesn't need me to speak about that. But I think it's an important thing to keep in mind from the get-go, which is Dr. Redekop's experience is unique.

Likewise, my friend obviously does not take issue with Dr. Redekop's qualifications. And his qualifications as Your Honour saw from the *CV* the other day are impressive and cover the waterfront in this area. So, expertise in endovascular procedures, expertise in microsurgical resection in a leading centre in Canada.

So, when we get to the bias question, I say that this issue is answered completed by the decision of the Supreme Court of Canada in *White Burgess*.

THE COURT: Sorry. In...

MR. CRUZ: In, in *White Burgess*.

THE COURT: ...*White Burgess*.

MR. CRUZ: And, you know, my friends argue about Your Honour's gatekeeping function. And I obviously agree with them that Your Honour's a gatekeeper. And the case law is very clear about that. Your Honour knows that case law. So, Your Honour's role is to be a gatekeeper. Yes. So, let's think about that for a moment without focussing too much on the particular case law.

What's the purpose of being a gatekeeper? It's to ensure trial fairness, right? And so, the issue that arises *vis-à-vis* bias is often, and in the key cases relied upon by my friend, the *Parliament* case which I was involved with, *and the Bruff-Murphy* case are jury trials. And so, we're thinking about trial fairness in the context of a jury trial. Those are the major cases my friend does rely on. He has others, but

those are the two big ones.

And so, when you think about the idea of a gatekeeper, and when you think about what does that mean, it doesn't just apply to the admissibility of expert evidence; it applies to the admissibility of all evidence. So, Your Honour's role as gatekeeper is to act as gatekeeper on everything.

So, earlier in the trial, we had the objections about hearsay evidence. So, *vis-à-vis* Mrs. Denman, her, Mr. Denman's brother, Paul L'Heureux, as well, they were hearsay objections. Your Honour didn't rule on those, and Your Honour didn't have to. Your Honour said fairly that you as the trial judge can consider the hearsay issue at the end, and Your Honour observed multiple times that you often will hear evidence that turns out to be inadmissible once you are able to make the decision in the context of the whole record. So, Your Honour lets that in.

That would not work in a jury trial. And so, my friend talks about timing. And he cites in his material in paragraph 9 *Bruff-Murphy* on that, that admissibility is to be decided at the time the evidence is proffered. I agree with that. I, I think that's the general principle. Your Honour agrees with it, too. If we were dealing with a jury, then every issue of inadmissibility on any topic would be decided at the time that

it’s proffered, because allowing it to be heard by the jury results potentially in unfairness.

That isn’t true in judge alone. And Your Honour’s observed that multiple times during the trial, Your Honour is capable of, number one, making decisions about credibility. So, one of the aspects of my friend’s argument is an allegation that Dr. Redekop has made decisions about credibility. I say he has not. But leaving all that aside, the danger, the gatekeeper issue, doesn’t arise in the same way in a judge alone trial as it would with a jury. So, we don’t want an expert to colour a jury who may misunderstand the evidence or misuse it in a way that Your Honour will not.

So, to the extent that any expert has said things about the credibility of anyone, or what to believe or not to believe, that’s Your Honour’s decision, not theirs. And Your Honour’s not going to be misled by that. So, the gatekeeper rule and the trial fairness rule really is about that and making sure that the jury is not misled in cases like *Bruff-Murphy* or *Parliament*. But that consideration doesn’t apply here.

So, to the extent that the gatekeeper role is one that exists throughout the trial, and the cases say, and my friend has said, I think, that Your Honour is always a gatekeeper, and whether it’s the first witness or the last witness, that

you're a gatekeeper. That's true. And indeed, in the, in the *Parliament* case, they talk about that. So, having allowed an expert to testify without objection, if the trial judge then later thinks that the jury's going to be adversely impacted by that expert's evidence, then the trial judge has a duty as a gatekeeper to act on that even later. So, there's no doubt that the gatekeeper role in the context of a jury trial is a continuing one and an ongoing one.

Totally different here. And in particular, the issue of trial fairness goes the other way. Having argued for the rejection of the hearsay evidence earlier in the trial from Mrs. Denman, Mark Denman, Paul L'Heureux, having argued for those things, Your Honour deferred those. If Your Honour had ruled in our favour, that changes the record. It changes how the defence might be conducted. It changes what evidence might be called. Your Honour deferred that decision. We also made objections to the admissibility of Dr. Findlay to speak to Drs. Pereira and Ter Brugge. Had Your Honour ruled in our favour on those points, that too changes the record. It changes the way the rest of the case gets conducted.

So, the trial fairness issue here is one of equality throughout the trial. So, to exercise a gatekeeper role in the very last witness of the trial, having decided to defer admissibility decisions earlier is unfair in itself, and should

not be done in my submission. And so, if we were doing a judge trial, I would think, I would have a totally different attitude towards this and a different outlook. But the way Your Honour has approached the case and has chosen to approach the case is to recognize that you're sitting judge alone, to recognize that you're not going to be misled by something that's hearsay or something that's inadmissible expert evidence, and that you're going to be able to make decisions about it in the end once you've got a full record, and one you understand how it all fits together. And once you hear the submissions of the parties on issues that quite frankly are not really yet crystalized. My friend speaks passionately about the positions that he has, and, and that's great. But as I've said before, and as we've said in our opening, we've got two ships passing in the night here as to theories, and as to the way to approach the evidence.

And a simple example of that is the issue of discussions. So, when we're talking about discussion, are the discussion that took place between Mr. Denman and the doctors only what's recorded in the notes? Is that possible? Clearly not. My friend wants to approach it that way, and indeed, elicited Dr. Findlay's evidence in that way. Dr. Findlay hadn't read the discoveries, and he's opining on the chart, and my friend asked him in questions about, you know, 'assuming that this was all that was said, then

what's your opinion?' Okay. Fine. My friend wants to approach it that way. We do not.

If Your Honour takes a peek even let's say at the January 29th note, I won't pull it up. But if you look at that and you think about it, the note on its face, and the same is true of Dr. Ter Brugge's note, makes it clear that more was discussed than what was recorded. There's absolutely no doubt about that. And it would be illogical and wrong to conclude otherwise.

So, now, what was the content of those discussions? That's for Your Honour to decide based on the evidence that you ultimately do accept, and you've got to make decisions about the hearsay and so on. But the point being that we've got disputes about what the factual record is, we've got disputes about what you can make of the evidence. And you should not be, in my submission, making a decision as a gatekeeper in the last witness that changes that playing field.

So, while it's true that the timing of things is really in the normal course to be decided, evidentiary issues like this are to be decided when the evidence is proffered, having not adopted that practice during this trial, we should stay on the same course.

So, I said a few minutes ago that this argument or this issue is decided and really is answered

by *Bruff*, by *White Burgess*. And it’s the decision of the Supreme Court of Canada, obviously binding. And if you have the brief of authorities, I'm going to take you through three paragraphs. So, my friend’s brief of authorities from Friday, perhaps if you have notes in that. And I think my friend said at one....

THE COURT: Can you just read them out? I’ve got them somewhere, but just read the three paragraphs. And what three paragraphs are they?

MR. CRUZ: Well, they’re long actually. So, if, if Your Honour doesn’t mind, it’ll be easier if it’s open in front of you. It’s my friend’s brief of authorities, the white volume from Friday. Or we have ours. Do you have our brief of authorities?

THE COURT: Can I borrow yours?

MR. CRUZ: Yes.

THE COURT: Hold on. I must have it somewhere here. Brief of authorities. I got Mr. Mandel’s here first.

MR. CRUZ: Yes. So, if you’ve got Mr. Mandel’s, the *White Burgess* case is at Tab A, or 1, I guess, Tab 1.

THE COURT: Did you say Tab 1?

MR. CRUZ: Yes.

THE COURT: Got it.

MR. CRUZ: So, my friend, I think, focussed on paragraph 45 and said that’s the, the ratio. But when you look at paragraphs 48, 49, and 50, those are really the key paragraphs in *White Burgess*. And so, if we look at 48, and again, they’re

long. So, let me take you through them. So, in 48:

> Once the expert attests or testifies on oath to this effect, the burden is on the party opposing the admission of the evidence to show that there is a realistic concern.

THE COURT: Hold on. My 48 is not that. You're in *White Burgess*. My 48 starts at, "To be fair to the trial judge."
MR. CRUZ: I'm looking at Tab 1 in my friend's brief, paragraph 48. Maybe you're looking at another case.
MR. MANDEL: Are you looking at the expert bias brief, Your Honour, or the Four Corners brief? Or....
THE COURT: Oh, the expert bias brief.
MR. MANDEL: Yes, so the expert...
THE COURT: Yes.
MR. MANDEL: ...bias brief, Tab 1 is....
THE COURT: It could be a different, let me just find the, it could be a different source.
MR. MANDEL: It shouldn't be. If, if Your Honour's brief is different than what Darryl's saying, and it's also different in mine, then that doesn't make any sense whatsoever.
THE COURT: Oh. Maybe – okay. Anyway, "Once the expert attests or testifies"?
MR. CRUZ: Yes. So....
THE COURT: Okay. I'm with you now.
MR. CRUZ: Hang on. You've got it. Okay. So,

so...

THE COURT: I think I was at...

MR. CRUZ: ...that, that....

THE COURT: ...don't worry about it. I think I was at Tab 2.

MR. CRUZ: Okay. No problem.

THE COURT: I've got, I'm with you now. So, 48, 49, and 50.

MR. CRUZ: So, so at paragraph 48, so that first little clause about attesting really speaks to the Form 53 and the expert acknowledging and accepting that he understands his duty and, and that he's prepared to fulfill his duty, and is able to do so. So, Dr. Redekop did that here. Once he has done that, and he's testified under oath, then:

> [T]he burden is on the party opposing the admission of the evidence to show that there is a realistic concern that the expert's evidence should not be received because the expert is unable and/or unwilling to comply with that duty.

And that's the, the test, unable and unwilling to comply. So, you heard nothing in Dr. Redekop's evidence on Monday that leads to that conclusion. He has said repeatedly he understands his duty, he's willing to comply with it, he believes that he is not making decisions that Your Honour should make. And he said it multiple times.

Now, can an expert in the box make errors or say things in a way that sound inconsistent with that duty? Sure. But then that's for Your Honour to assess on the merits. The issue is inability or unwillingness to comply. That's the test.

So, continuing on, to the extent that we're looking at this as a threshold issue in 49, it said that:

> The threshold requirement is not particularly onerous and it will likely be quite rare that a proposed expert's evidence will be ruled inadmissible for failing to meet it.

And let me pause there. My friend made a comment the other day that there's a consistent problem in the way med mal cases are being done these days and that, as a result, biases everywhere. And indeed, my friend argued for the inadmissibility of Dr. Roy on bias. They withdrew that on Monday. But the notion that's being advanced by plaintiff's counsel in these cases is that every expert is biased. And that's what's happening. Now, they're succeeding in some cases as they have, particularly in front of a jury as we've talked about. But the notion is that everyone is biased.

And the Supreme Court of Canada says that's not what we're talking about here. This is a high

threshold, and "likely be quite rare" is what they say. So, to the, to exclude an expert on the basis of bias should not happen in every case. And it should not happen on the basis of the way they've written their reports. One of the things about working with experts as counsel, obviously, as Your Honour knows from being a judge and from being counsel previously, is that you try not to shape what they say too much. You give them the, the framework, and then it's up to them. And they're not experts in this. And their reports should not be parsed in that way.

But then the next sentence:

> The trial judge must determine, having regard both to the particular circumstances of the proposed expert and the substance of the proposed evidence, whether the expert is able and willing to carry out his or her primary duty to the court.

So, again, that's the test. So, it's ability, willingness. And Dr. Redekop has testified under oath. And there's no reason for Your Honour to think otherwise, that he's trying to do that. Maybe he's not doing the best job, my friend's going to suggest that as he did with Dr. Roy, and he's going to attack the report and say the report's not great. Fine. That's about the merits, that's for Your Honour to weigh and to consider in the balance. But it doesn't go to

inability or unwillingness. And that's the test.

And when we think about the nature of things that give rise to the bias, the next sections of the Supreme Court of Canada's decision are crucial and eliminate the other concerns that my friend has listed in his list of 14 where he says that 8 are present. The court in *White Burgess*....
THE COURT: I think he later said maybe more.
MR. CRUZ: He said maybe more, because, you know, it's easy to attack when you want to find issues with wording. But the interests here are the ones that matter. And the kinds of things that really result in a bias are delineated by the Supreme Court of Canada in terms of orders of magnitude and the kinds of biases that give rise to concern. So, for example:

> [I]t is the nature and extent of the interest or connection with the litigation or a party thereto which matters, not the mere fact of the interest or connection; the existence of some interest or a relationship does not automatically render evidence of the proposed expert inadmissible. In most cases, a mere employment relationship with the party calling the evidence will be insufficient to do so.

So, let me pause there. If Dr. Redekop was an employee of Dr. Ter Brugge, that's not enough. So, you know, when you think about this, a

relationship is not the problem in itself. And we're talking here in, in the case of Dr. Redekop's relationship with Dr. Ter Brugge, frankly, the kind of relationship that is everywhere in Canadian society. We're a small country. And in particular, when you take a discipline like neurosurgery, everyone knows everyone, training centres are, well, there are only a few training centres across the country. And as you heard from Dr. Redekop, there might be 50 to 60 people who practice in this area in the whole country. It's inevitable that these people will know each other. They all know each other. Dr. Findlay knows everyone, too. That's not the bar.

And so, having studied in the same centre 25 years ago, knowing who the defendants are, that's not the barrier. The test again is unable, unwilling to carry out your duty. That's the test. So, if Dr. Redekop was an employee, that's not a problem in itself.

> On the other hand, a direct financial interest in the outcome of the litigation will be of more concern.

Now, "of more concern", think about that. So, Dr. Redekop obviously doesn't have a financial interest in the outcome of the litigation. But even if he did, they're not saying that that would bar you. And obviously, witnesses are

testifying in cases where they may have a financial interest. And that doesn't bar them. So, a direct interest in the outcome isn't good enough. So, when we think about that, 'more concern,' the point is, okay, let's analyze it and decide whether it crosses a line that puts the person again into the category of unwilling or unable to adhere to their duty. That's the issue.

So, then we get to the next one:

> The same can be said in the case of a very close familial relationship with one of the parties or situations in which the proposed expert will probably incur professional liability if his or her opinion is not accepted by the court.

So, that's the kind of relationship where you're worried even more. It's not, it's not saying, the court is not saying that's an absolute bar to testifying. It's saying, as with the employment relationship, as with the financial interest, that those kinds of relationships are of greater concern. So, a very close familiar relationship, there's nothing like that here.

And so, the relationship between Dr. Ter Brugge and Dr. Redekop does not meet the legal test. And it doesn't drive you to a conclusion that he's unable and unwilling to meet his duty. So,

then the next one is one that my friend relies upon a lot, which is:

> [A]n expert who, in his or her proposed evidence or otherwise, assumes the role of an advocate for a party is clearly unwilling and/or unable to carry out the primary duty to the court.

So, that's the line of cases like *Bruff-Murphy* and *Parliament* to which my friend refers. So, there is an issue about that, I say, particularly in the context of jury cases as we've seen. And *Parliament* is a good example of that, which, which I lost. But as we say in our material, so if I take you to our written submissions, in *Parliament*, in, I'm looking at paragraph 9 of our submissions without turning up the whole case:

> "The Court of Appeal doesn't conclude that Dr. Bruce ought to have been disqualified. The Court of Appeal says:
>
> > [I]n some critical instances [Dr. Bruce, the expert] was giving evidence about what actually happened, based on his view of the credibility of the witnesses.
>
> The trial judge ought to have exercised her gatekeeping role and her residual discretion to exclude that specific evidence, not his evidence as an expert altogether, but

evidence where he is crossing the line into fact finding."

Okay? So, that's the rationale in, in *Conley* v. *Parliament* in the Court of Appeal. It's not that the expert should be excluded. And then ought to have given the jury a midtrial instruction or a final charge that they should ignore any and all of the expert's credibility expressions or issues about reliability.

So, this is a jury case. And the, in that jury case, the Court of Appeal is not saying exclude the expert. The Court of Appeal is saying, okay, if there's a line that's crossed somewhere, then exclude that and give a jury instruction to make sure that's not wrongly taken into account. But not cut the expert altogether.

So, we're not in that scenario, we're in judge alone. Your Honour is not facing that danger. You're not going to misunderstand. So, if Dr. Redekop says to Your Honour, 'I don't believe Mrs. Denman. I think she, her demeanour on her discovery transcript seemed to me to be whatever and I don't believe her, and I do believe Dr. Pereira or Ter Brugge for these reasons, and I find that their evidence is more reliable,' you're not going to accept that because that's your job, not his. And Your Honour's able to separate those ideas.

And so, the other part of this, and, you know, it's a feature of the cross of Dr. Roy, it's a feature of the cross of Dr. Redekop on Monday, my friend is very skilled at using words, focussing on the legal side of things and how people understand their legal obligations or what the form means, or whatever. Experts, even experts who've testified a lot, are still not lawyers. And they're doing their best to work with what they've got. They have the documents that they have. They make the assumptions that they've made.

So, to the extent that Dr. Redekop was in the box and was asked questions about that in cross, what did you have, what did you not have? The same is true for Dr. Roy. And he says, 'honestly and fairly, I didn't have that,' or, 'I did have A, B, C, and D, but not E, F, and G.' Then Your Honour is then in a position where you can assess on whether the foundation for the opinion is worthy of discussion on the merits and whether the opinion itself is acceptable. So, Your Honour's in the position to do that. And if the assumptions are not borne out, if the assumptions are wrong, if a key piece of information is missing, that's for Your Honour to assess, and Your Honour is trained to do that, unlike a jury.

So, the essence of it is that when we look at *White Burgess*, and I'll come back to that, the court says in the last part of 49:

> I emphasize that exclusion of the threshold stage of the analysis should occur only in very clear cases in which the proposed expert is unable or unwilling to provide the court with fair, objective and non-partisan evidence.

So, let's stop there and think about that for a second. Let's say the expert does that. So, let's say the expert actually does provide evidence in the end that isn't fair, objective, or non-partisan. Then Your Honour can reject it on the merits. That's not the test. So, the actual fairness of the evidence is something for Your Honour to figure out at the end.

It's the inability or the unwillingness to try that's the problem. And that's what the Form 53 is about. The expert is not a lawyer or a judge. The expert has to navigate their own way through their duty, thinking about their own area of expertise, what they feel that they can comment on. Do they have enough information to come to an opinion? And when they do so, is it well founded? Well, that's the kind of thing that Your Honour can assess based on the reports, based on their evidence in the box, and based on everything, including the cross.

And so, one of the things of course that's a key feature of this and that has to be kept in mind

is, as you've observed, my friend has no problem crossing experts for days. And he will do so here, too. So, you're going to get, assuming he's admitted, if Your Honour rules in my favour, you're going to get a full cross, a thorough going over of any deficiency in the report, even if it's a typo, it's going to be pointed out. Okay? And so, if that's right, then what Your Honour has is the full ability to assess the witness and whether or not you should rely on it. And so, that's the key issue.

And then again, in 50, it's repeated again, "The concept," and this is actually a slightly different point, but very important:

> The concept of apparent bias is not relevant to the question of whether or not an expert witness will be unable or unwilling to fulfill its primary duty to the court.

And so, take Dr. Redekop's statement that he wouldn't help Mr. Mandel. You might say, well, that seems like apparent bias because he has worked for the defence. I, I know Your Honour's aware that there are experts on both sides of the bar who do cases only for one side or the other. So, there are plaintiff's experts who only act for plaintiffs. And there are defence experts who only act for defence witnesses.

MR. MANDEL: Sorry. I object.

THE COURT: He's....

MR. MANDEL: Is this evidence, is this evidence now that he's now speaking...

THE COURT: Well, it's evidence, but....

MR. MANDEL: ...of the entire bar in cases?

THE COURT: All I was going to say is, as I look over my experience in this, generally it's brought out that they do percentages for X, percentages for Y. I think he's the only, in front of me, I'm not saying it doesn't happen, and I'm not saying I don't believe you, but in front of me, I've had a split. You know, sometimes they're more slanted to one than the other. But he's the first I've had who only acts for doctors, right?

MR. CRUZ: Well, to be fair, and so *vis-à-vis* his evidence, he said that his leadership roles have caused him to not want to act for plaintiffs. That's a choice he's made.

THE COURT: Yes.

MR. CRUZ: He also testified, my friend emphasized the fact that he's got four defence files. He also said he has one plaintiff's file. So, he has a plaintiff's file currently. So, his current files are five. He has four defence, one plaintiff's. He also said he's found against doctors *vis-à-vis* the standard of care in reviewing files. So, he's testified to that effect. But Your Honour can't take apparent bias and decide whether the person should be excluded in this case. And, and the same is true when you take a look at the *O'Connor* decision. So, the two ideas kind of go together. So, if I look at

the refusal to take on my friend’s brief and *O’Connor*, those might give rise to questions of apparent bias, but not actual bias in the meaning of the case law. And so, the court, the Supreme Court of Canada says:

> The concept of apparent bias is not relevant to the question of whether or not an expert witness will be unable or unwilling to fulfill its primary duty to the court. When looking at an expert’s interest or relationship with a party, the question is not whether a reasonable observer would think that the expert is not independent. The question is whether the relationship or interest results in the expert being unable or unwilling to carry out his or her primary duty to the court to provide fair and non-partisan and objective evidence.

So, you have a witness who has gotten in the box and said, ‘I'm willing to do that, I understand my duty, I'm going to try my best, I don't want to make decisions about facts, that’s for the court.’ He’s made that clear. And you do not have evidence that he is unable or unwilling to fulfill his duty, not a single thing.

Now, I mentioned *O’Connor*. Obviously, *O’Connor* is something dangerous to rely on in, in this context for one simple reason. We only have a small snippet of information about the case. We

have the decision, which is not evidence. We have the questions that my friend and I asked of Dr. Redekop the other day. But you don't have the record of that case in front of you, you don't have all the reports, you don't have the back and forth, you don't have the context to use that to make any kind of decision.

And so, it's clear from *O'Connor* that, like from the decision itself, and as Dr. Redekop agreed with me in re-examination, *O'Connor* may not even be about an AVM. It might be about a micro-AVM. But that was presumed. There was no treatment in the case. There was no embolization. There was no resection. It was a very different circumstance than Mr. Denman. And so, to try and take evidence out of a court decision, accept it for the truth, and make decisions about bias on that basis would be wrong, in my submission. And so, you certainly can take Dr. Redekop's answers. But we're looking at a thin slice where Dr. Redekop said very different situation, very different context.

And so, again, the, the essence of this is that the test is about an inability or unwillingness to carry out the duty. And my friends have not met that standard. Let me re-orient myself with my notes.

THE COURT: Okay.

MR. CRUZ: So, in terms of ability or unwillingness to fulfill his duty, the list of,

so, you know, the list of things that my friend has put forward as being problematic include a number of submissions about the reports themselves. So, again, the assumptions, the reliance on the discovery evidence, I suppose, in some way, the positive statements that are made about TWH as a centre, and those kinds of issues, again, don't go at all to the test in issue in the bias cases. So, putting it all together, Your Honour, my submission is that to the extent that Your Honour has concerns about report accuracy, or the way things are stated, or assumptions, or foundation, that goes to the merits and not to the issue of exclusion at the outset.

THE COURT: You'll get to reply anyway, right? I'm going to hear from Mr. Mandel, and if you want to reply to anything he says...

MR. CRUZ: Sure.

THE COURT: ...I'll hear you.

MR. CRUZ: Sure.

THE COURT: Don't worry.

MR. CRUZ: And you know, so, so maybe I will, I think I can pause there frankly, because I think I've made the points with Your Honour that I need to make. The, so there are really two central issues here. One is whether the test is met. But the second is really about the gatekeeper role that I spoke about earlier and how this particular trial has been run.

And Your Honour has chosen to go down a path

which is open to Your Honour, and I think that we've rolled with it all the way through because we are judge alone. And so, it's a very different kettle of fish. And so, Your Honour, in my submission, should have the benefit of all the evidence available to you that the parties are proffering, and then Your Honour can take it in the end, and put it all together, and figure out what is in and what is out.

One of the difficulties with this from counsel's point of view is that we don't know. So, we don't know what you're going to do with the hearsay issue or with issues around Dr. Findlay and so on. Fine. We can argue at all in the way that Your Honour has contemplated. But the same should apply to Dr. Redekop. And so, if Your Honour doesn't have any other questions, my submission is that Dr. Redekop is not biased within the meaning of the case law, not in any way, shape, or form.

But the gatekeeper role and the legal test from *White Burgess* doesn't allow for exclusion. And I, I point again to *Conley* as my last comment, or *Parliament v. Conley* which is really, but even in that context, even with a jury, even where the expert was crossing a line, the answer is not to exclude the expert, the answer is to focus on those particular problematic issues in the evidence. And Your Honour's well-placed to do that at the end of this trial. Thank you.

THE COURT: Thank you. Just, just a question. And I don't know if you're going to need 10 or 15 minutes. But can you zoom in on that, you can zoom in on whatever you want. But your friend is saying because I deferred hearsay rulings and I don't know what else I, questions of Dr. Findlay, that I should defer this issue of bias, which if I find results in an exclusion of evidence. Can you differentiate....

MR. MANDEL: Well, let me address it first.

THE COURT: Yes. Yes.

MR. MANDEL: I'll, I'll get to my formal submissions. But I'll....

THE COURT: Yes. No. That's fine.

MR. MANDEL: It's a....

THE COURT: And then obviously you're going to deal with unable, unwilling.

SUBMISSIONS BY MR. MANDEL:

MR. MANDEL: It's, it's an argument, with the utmost respect to my friend, of false equivalencies.

THE COURT: Sorry. Say that again.

MR. MANDEL: With the utmost respect to my friend, it's an argument that's premised upon false equivalencies. Okay? Because you let Andrea testify about what Michael told her in the context of this case where Dr. Ter Brugge put in his records, 'Michael made copious notes to go discuss them with his wife,' with emails that included Michael and Andrea in every exchange

with a physician in a record where Dr. Pereira says informed consent was obtained from the patient and his family, my friends object to your having heard his evidence. They did so passionately, by the way, they said that you have to protect and worry about the reputations of the defendant physicians. It would be unfair for you to even hear the evidence because of the good reputations of the defendants, an objection that I've never heard before, but one that was made.

So, Your Honour heard the hearsay evidence saying that you retained the right to address it, exclude it, have it go to weight. But to suggest that because Your Honour admitted evidence that was in part hearsay but corroborated by the defendant's own notes and records, somehow that precludes you from excluding biased evidence.

The other example that my friends gave was that you let Dr. Findlay testify about the, the required disclosure to a patient when making informed decisions about treating an AVM. Of course, this is something that Dr. Findlay said he does in practice, it's something that he says he does as part of an AVM team, it's something that he does all the time. It's something that we know from the defence, the defendants themselves, they delegate these responsibilities to people of different disciplines. Otherwise an entire AVM conference would have to meet with the patient to discuss the risks and benefits

discussed by the AVM conference. That didn’t happen in this case. Dr. Ter Brugge met with the patient to discuss not only embolization but the prospect of surgery, something he doesn’t do.

So, again, my friends, respectfully, I say, torture, torture themselves into this position to suggest that Dr. Findlay can’t testify about the risks of embolization, which of course means Dr. Ter Brugge can’t, couldn't possibly have obtained Mr. Denman’s informed consent about a surgical process because he doesn’t do it. We’ll see what they say about that in their written argument, how, how that suck and blow works.

But the notion that because you let Dr. Findlay testify in keeping with what he wrote in his report where he said he was qualified to do it, did it in practice, because you let that in, you’re excluded in pre-empting from addressing the overwhelming bias that we’ve seen demonstrated through my cross-examination of this witness. So, that’s my response to the false equivalency position, because you didn’t....

THE COURT: Okay. I, I understand.

MR. MANDEL: Okay. Okay.

THE COURT: I got that.

MR. MANDEL: So, let me start with some things about which I agree with my friend, Mr. Cruz. He said I was passionate. I am, right? I'm not just passionate for the Denman’s, I'm passionate for the law. And I'm passionate for good

practice, appropriate practice, and fair practice. My friend, and there are some things that I, I also agree that the test is a very onerous one to exclude biased evidence. I agree. It’s a very onerous test. But my friend attributed certain arguments to me that I’ve never made, and that are false. He said, you know, I’ve made submissions that everybody’s biased. The industry’s biased. In my 26 years of practice, I’ve never brought a motion to exclude the evidence of an expert witness. Not in 26 years. This is the first case.

Your Honour has experience in medical malpractice cases before you were called to the bench, and certainly in hearing medical malpractice cases while sitting on the bench. I'm not going to ask Your Honour questions, because I, it would be absolutely improper. But I am going to put hypotheticals, okay, rhetorical questions, if I may.

THE COURT: Sure.

MR. MANDEL: In all Your Honour’s experience, defending physicians in medical malpractice cases or hearing medical malpractice cases behind the bench, how frequently have you heard a party say, ‘I would like to call an expert who is a friend, student, co-collaborator, refuses to testify for the other side, refused to even look at the file for the other side of the specific case, testified in prior proceedings where, although not identical facts, there are certain basic

statements of principle that equally apply where he's either come to arguably opposite conclusions or very dramatically different conclusions. Who has written reports, who has assumed the credibility of the defendants because he himself admitted in my cross-examination that he couldn't possibly base his conclusions on the records, he had to assume credibility of self-professed standard practice evidence, who, in his reports, he's admitted he didn't address any of the competing evidence proffered by Andrea Denman'?

So, I'm asking the question rhetorically, because I admit and agree that it's a high test. I'm not asking Your Honour, it would be improper for me to ask. I put to Your Honour, you've probably never seen it, you've probably never seen it in practice or on the bench. And my friend wants to parse out this fact and this fact, Your Honour, as you know, you have to consider the totality of what's been demonstrated, right? You have to put it all together.

Let's, let's flip this around. Let's turn it on its ear. Let's say I wanted to call an expert on behalf of Mr. Denman who was his friend, teacher, co-collaborator, refused to defend doctors, gave testimony in prior cases that is somewhat inconsistent with the testimony that he gave in this case, accepted that all of Mr. Denman's evidence was credible, excluded all of the defendants evidence because he didn't even

reference it in, in its report, what would the defence be saying if I had the gall to try and pull that on this court? 'Let it in, Your Honour, of course, let it in. Let it in, go to weight.' They wouldn't say that, because it would be absurd.

I believe that my friends didn't accurately represent some of Madam Justice Vella's findings about duplication. I know Your Honour doesn't want to hear about it. But I think it misrepresents what Her Honour made, the finding she made. She found Dr. Schemitsch qualified to testify. She excluded his evidence on the basis of duplication in a judge alone trial without a jury. My friend made reference to the *Parliament* case in which he argued last year, I'm sure quite ably and unsuccessfully, in the Court of Appeal. He made reference to Dr. Bruce, right, and, 'well, you know, what should have happened is he shouldn't have been allowed to give any evidence where he based his findings on credibility.'

Well, of course, that's all that Dr. Redekop's done. His whole report assumes credibility. The whole report, because he's admitted that the notes don't sufficiently identify adequate disclosure. What my friend didn't reference about the *Parliament* case is that another one of his experts, Dr. Fleming, was excluded for bias, completely.

If Your Honour lets Dr. Redekop testify, I guarantee you that I'm going to stand up every three minutes and talk about the Four Corners doctrine, because you've read his reports, we've reviewed them during qualifications. To quote some of the other case law in my Four Corners brief, long on conclusion and short on substance. You're going to let it in, you're going to have him testify, I'm going to say, 'this isn't in his report.' 'Well, you let Dr. Findlay testify.' I mean, the, the bleeding never stops. You know, and so, my friends, with respect, they won't like the analogy, but I'm going to deliver it anyway. They want to poison this record.

THE COURT: Sorry. Just say that....

MR. MANDEL: They want to poison this record. Okay? There is a, a river of poison that's flowing into a village. And Your Honour has the ability to press a button and put up the dam to stop everybody in the village becoming infected. And their answer is, 'Mr. Mandel is very good at cross-examination. Let him deliver the antibiotics through cross.' I'm asking you not to infect a village so that I have to.

This is an informed consent case. Expert testimony is not essential. I'm quoting Your Honour in one of Your Honour's previous rulings. It's not essential. If it's not essential, is duplication essential? If it's not essential, do we have to hear from a biased witness who is buddies for 25 years, co-collaborator, student,

won't testify for defendants, or sorry, for plaintiffs rather, refused to look at the file for the Denmans, came to opposite conclusions or very different conclusions in prior sworn testimony in the *O'Connor* case where it was convenient to him to come to opposite conclusions because he was defending a doctor who wanted a different outcome than these doctors, who's made credibility findings in his report and entirely ignored the evidence of Andrea Denman? Is it necessary for Your Honour to hear it? Is the probative value, does it outweigh the prejudicial effect before we poison the village?

There were some statements my friend made, I'm sure inadvertently, during his submissions that were inaccurate, right? 'This witness has never testified against a physician on standard of care.' June 20, 2022, cross-examination, page 53:

> "When have you ever testified that, that a physician colleague failed to meet the standard care, if ever? And I put to you, you never have?
> Yes. I agree with that."

He's never done it. He's never testified against a physician. We don't how many times he's advocated behind the scenes for a standard of care having been met only for the SMPA who have disregarded his opinion and paid anyway. So,

I'll conclude by saying, I demonstrated at least indicia of bias. It's not, the test is not, does the defendant disagree that he's biased, right? That's ridiculous. It would be ridiculous that because he says, 'I don't think I'm biased,' he's therefore not biased.

My friend directed you to paragraph 48 of *White Burgess*. It's a paragraph that I had highlighted for Your Honour, too. It reads:

> Once the expert attests or testifies under oath to this effect, the burden is on the party opposing the admission of the evidence to show that there is a realistic concern that the expert's evidence should not be received because the expert is unable or unwilling to comply with that duty.

"A realistic concern." I submit to Your Honour, I have demonstrated more than a realistic concern, more. I have met the test in *White Burgess*.

> If the opponent does so [meaning me], the burden to establish on a balance of probabilities this aspect of the admissibility threshold remains on the party proposing to call the evidence.

Mr. Cruz, he has to establish on the balance of probabilities that his witness isn't biased.

> If this is not done, the evidence, or those parts of it that are tainted by a lack of independence or impartiality, should be excluded.

All of it assumes the credibility of the defence. All of it. All of his evidence should be excluded.

> This approach conforms to the general rule under the *Mohan* framework, and elsewhere in the law of evidence, that the proponent of the evidence has the burden of establishing its admissibility.

I have satisfied my *prima facie* duty to show that there has been a realistic concern. My friend now has, on a balance of probabilities, the obligation to prove I'm wrong. And what has he done? He’s quoted the defendant, essentially, ‘I signed a Form 53, I must therefore have demonstrated on the balance of probabilities that I'm not biased, otherwise I’ve signed a Form 53 falsely.’

THE COURT: So, when you just said defendant, you mean expert?

MR. MANDEL: Expert.

THE COURT: Okay.

MR. MANDEL: Defence expert. My, my apologies.

THE COURT: No. No. I just wanted to make sure the record’s clear.

MR. MANDEL: Yes. No. You're, you're quite correct. And thank you, Your Honour. The decision isn't left up to the defendant, sorry, the defence expert...

THE COURT: I got it.

MR. MANDEL: ...as to whether he's biased or not. It, it is a ridiculous proposition to suggest that a biased witness determines whether his evidence gets into this court because he professes not to be biased. That's Your Honour's decision to make after having had antibiotics administered to Dr. Redekop, okay? After we exposed him for what has happened.

And I'll just end by saying I'm passionate, not just for the Denman's, but for the law and for good practice. Is this what we want to happen again and again and again and again, and again? Or do we want to put a stop to it so that it doesn't happen again? Thank you, Your Honour. If you don't have any questions, I'll sit down.

THE COURT: No. No. No questions. Any reply?

MR. CRUZ: Yes, please.

REPLY SUBMISSIONS BY MR. CRUZ:

MR. CRUZ: So, to address first the false equivalency issue, it's a perfect equivalency, not a false equivalency, because the prior issues, the hearsay issue, the Dr. Findlay issue, are issues of admissibility that are outstanding. Perfect equivalency to this. So, my friend

argues that, 'Well, wait a minute, that hearsay should have admitted. It was perfectly right for me to lead it. Your Honour's going to rule in my favour effectively at the end on that, and so it's admissible.' Likewise, he says Dr. Findlay gives an opinion that should be accepted and that there is no actual issue with the scope of his opinion, so false equivalency.

My friend is using his own arguments about the outcome of those objections to justify saying that it's a false equivalency. But it's a perfect equivalency because Your Honour hasn't decided those things, and those objections are outstanding. So, whether or not my friend is right, let's assume for the sake of this discussion that he is, that the hearsay evidence is admissible, that Dr. Findlay has ability to testify against all three defendants. Let's assume those are true. Your Honour hasn't yet decided that. So, we've got objections about those things. And even if my friend is right in the end, the objections haven't been ruled upon. That's the same thing as what we're doing here.

The comment about *Parliament*, it's true that Dr. Fleming was excluded for the same argument that was made *vis-à-vis* Dr. Bruce. So, that was a midtrial ruling by Justice Woodley. But in the face of the Court of Appeal decision, Justice Woodley's decision would be different now because the Court of Appeal makes it clear as to what to

do in that situation. And I read that to Your Honour. So, it’s not the exclusion of the witness, it’s dealing with the problem. So, had the Fleming issue been argued in, in light of the Court of Appeal’s decision, the result would have been the same as Dr. Bruce because they were in the same, they were the same argument for both witnesses.

In my submissions earlier, I did not say that Dr. Redekop had testified. I, I was referring to the fact that he had four defence files and one plaintiff file. So, I didn’t say he testified.

MR. MANDEL: Not on standard of care, [indiscernible].

MR. CRUZ: But there is no case that my friend has given to Your Honour, and I don't know of one, where any expert on either side has ever been disqualified for only acting for one side. And you know, I'm not giving evidence. But, you know, we know that there are experts who are at least regulars on one side or the other. And no one’s excluded for that reason alone despite the number of cases.

THE COURT: But your friend isn’t saying exclude for that reason. He’s piled up all of them, right?

MR. CRUZ: Fair. Fair. So, you know, my friend has piled up lots of different arguments, yes. But this is the key point. And my friend’s last argument about *White Burgess* is really the key point. So, when my friend takes you to paragraph

48 in the discussion about the burden, that's got to be modified by the next paragraph, because the burden is not a burden on the plaintiff's part, or the party proffering the, or making the objection to show that there is apparent bias. It's to show that there's an inability or unwillingness to adhere to the duty. That's the issue. And he hasn't done that.

So, you know, my friend has not led any evidence, or has not cross-examined, none of the admissions of Dr. Redekop lead to the conclusion that he's unable or unwilling. So, that's the problem. And again, this is an issue that Your Honour can address on the merits in the totality of all the evidence when you have heard everything, and when you're fully cognizant of the whole record. And we're not in a jury situation. And so, Dr. Redekop should be allowed to testify, in my submission.

RULING:

THE COURT: Thank you. Dr. Redekop is, is excluded. He's not testifying.