

IN THE GENERAL DIVISION OF
THE HIGH COURT OF THE REPUBLIC OF SINGAPORE

[2024] SGHC 86

Suit No 383 of 2020

Between

Lim Ing Haan

... *Plaintiff*

And

Tuan 'Abdu Qayyim bin Tuan
Isa

... *Defendant*

JUDGMENT

[Damages — Assessment – Loss of future earnings]

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Lim Ing Haan
v
Tuan ‘Abdu Qayyim bin Tuan Isa

[2024] SGHC 86

General Division of the High Court — Suit No 383 of 2020
See Kee Oon J
20, 25–28 September, 29 December 2023

26 March 2024

Judgment reserved.

See Kee Oon JAD:

Introduction

1 The plaintiff, Ms Lim Ing Haan (“Ms Lim”), is an interventional cardiologist consultant at and director of Lim Ing Haan Cardiology Pte Ltd (the “Clinic”). She brought an action against the defendant, Mr Tuan ‘Abdu Qayyim Bin Tuan Isa (“Mr Tuan”), in HC/S 383/2020 seeking damages in respect of injuries to her right wrist which were occasioned by a traffic accident. The central dispute concerns the quantification of Ms Lim’s loss of future earnings consequent upon her undergoing an anticipated surgery, sometime in the future, in respect of the said injuries (the “Expected Surgery”).

Facts

2 As an interventional cardiologist, Ms Lim performs complex surgical procedures which involve the use of her right wrist, and which require precision and attention to detail.¹

3 At about 6pm on 4 May 2017, Ms Lim was driving her motor vehicle along the first (outermost) lane of Bukit Timah Road. Mr Tuan, driving his motor vehicle, attempted to execute a right turn from the second lane of Bukit Timah Road and collided with Ms Lim's vehicle (the "Accident").²

4 As a result of the Accident, Ms Lim suffered severe injuries to her right wrist (collectively, the "Injuries"), which include the following:

- (a) open comminuted right distal radius fracture;
- (b) scapholunate ligament tear;
- (c) lunatotriquetral ligament tear;
- (d) triangular fibrocartilage complex ("TFCC") tear; and
- (e) ulnar nerve neuropraxia.³

5 Ms Lim underwent surgery on her right wrist on the same day. In the years that followed, she continued to seek medical attention for the Injuries from time to time.

¹ Ms Lim's Affidavit of Evidence-in-Chief ("AEIC") at paras 2 and 15.

² Statement of Claim (Amendment No. 4) ("SOC4") at para 1; Defence (Amendment No. 4) ("Defence") at paras 1 to 2.

³ Ms Lim's Lead Counsel Statement at p 4; Mr Tuan's Lead Counsel Statement at p 4.

6 Ms Lim commenced this action on 30 April 2020. On 11 May 2021, interlocutory judgment was entered by consent against Mr Tuan at 100% in Ms Lim’s favour, with damages to be assessed. The matter then came before me for assessment of damages.

7 Prior to the trial, the parties reached agreement on some facts, and, with the assistance of their medical experts, also reached agreement on 31 of 35 issues placed before the medical experts.⁴ Ms Lim engaged two medical experts, Dr Lim Beng Hai and Dr Andrew Chin Yuan Hui (“Dr Chin”). Mr Tuan engaged Dr Chang Wei Chun (“Dr Chang”). Dr Lim Beng Hai, Dr Chin and Dr Chang are collectively referred to as the “Medical Experts”. I reproduce Ms Lim’s summary of the agreed facts which incorporates the agreed issues set out in the Joint Medical Experts Table of Issues (this may be found in the annex to this judgment for ease of reference):

- a. [Ms Lim] has sustained a certain degree of permanent incapacity as a result of the accident caused by the Defendant (see S/No. 2 of the Joint Medical Experts Table of Issues).
- b. The permanent incapacity relates to (see S/No. 3 of the Joint Medical Experts Table of Issues):
 - i. Pain;
 - ii. Loss of joint motion / Restricted range of motion on her right wrist; and
 - iii. Her occupation is affected.
- c. [Ms Lim] continues to experience persistent pain in her right wrist (see S/No. 9 of the Joint Medical Experts Table of Issues).
- d. The dexterity of [Ms Lim] right wrist has been compromised due to pain and loss of flexibility (see S/No. 11 of the Joint Medical Experts Table of Issues).

⁴ Ms Lim’s Written Opening Statement (“WOS”) at para 5; Ms Lim’s Bundle of Core Documents (“Joint Medical Experts Table of Issues”).

- e. [Ms Lim] will require some form of surgery in the future within the next 5 years (see S/Nos. 18, 22, 23, 24, and 25 of the Joint Medical Experts Table of Issues).⁵
- f. Following the surgery, the [Medical Experts] have agreed on three (3) scenarios (see S/No. 28 of the Joint Medical Experts Table of Issues):
 - i. The best-case scenario for [Ms Lim] is she may continue doing what she is doing at 70% to 80% capacity (“Partial Fusion Surgery Scenario”);
 - ii. The moderate-case scenario for [Ms Lim] is she may continue doing what she is doing at 50% capacity (“Joint Replacement Surgery Scenario”); or
 - iii. The worst-case scenario will allow her to continue working but not as an interventional cardiologist (“Total Fusion Surgery Scenario”).
- g. There is a real possibility that [Ms Lim] will need to retire as an interventional cardiologist if there is total wrist fusion surgery (see S/No. 35 of the Joint Medical Experts Table of Issues).⁶

8 The remaining disputed issues between the Medical Experts are as follows:

- (a) Whether there has been progression in Ms Lim’s wrist condition.
- (b) Whether Ms Lim will likely have to retire early due to the Injuries.
- (c) Whether surgery on Ms Lim’s wrist will accelerate her rate of early retirement.⁷

⁵ See also Ms Lim’s Written Closing Submissions (“WCS”) at paras 3.3 to 3.12, Mr Tuan’s WCS at paras 18 and 62.

⁶ Ms Lim’s WOS at para 6. See also Ms Lim’s Lead Counsel Statement at pp 6 and 7.

⁷ Ms Lim’s WOS at para 9; Joint Medical Experts Table of Issues at s/n 31.

The parties' cases

Ms Lim's case

9 The parties reached agreement on three of the heads of damages claimed by Ms Lim, which are:

- (a) Pain and suffering (part of general damages): \$40,000.⁸
- (b) Cost of future medical expenses (part of general damages): \$70,000.⁹
- (c) Medical expenses (part of special damages): \$40,740.20.¹⁰

10 As set out in her Statement of Claim (Amendment No. 4), Ms Lim seeks the following additional heads of damages:

- (a) General damages, including interest thereon:
 - (i) Loss of earning capacity: quantum to be assessed.
 - (ii) Loss of future earnings: quantum to be assessed, or, in the alternative, an award of provisional damages and/or an order that she is entitled to further damages at such future date as the court thinks fit.
 - (iii) Cost of future transport expenses: quantum to be assessed.
- (b) Special damages, including interest thereon:

⁸ Mr Tuan's WOS at p 3; Ms Lim's WCS at para 1.2.

⁹ The parties informed the court of this orally on the first day of trial.

¹⁰ SOC4 at para 10.

- (i) Transport expenses: quantum to be assessed.
- (ii) Loss of earnings on 62 days of hospitalisation leave: quantum to be assessed.¹¹

11 However, Ms Lim clarified during the trial that she does not seek to claim for loss of earning capacity, transport expenses, and loss of earnings arising from hospitalisation leave. Instead, she says that the primary relief sought at trial is her loss of future earnings, which can either be determined in these proceedings or be provided for by way of an award for provisional damages pursuant to O 37 r 8 of the Rules of Court (Cap 322, 2014 Rev Ed).¹²

12 Ms Lim's case is that she will require surgery on her wrist in the next five years and she will not return to her pre-accident state.¹³ Any form of surgery would compromise her wrist function, dexterity, motion and range of motion.¹⁴ There is also a real possibility that she will need to retire as an interventional cardiologist, in the event she undergoes a total wrist fusion.¹⁵ It may be that the other surgical options will result in early retirement. She relies on her accounting expert's report on the quantification of her loss of future earnings, and points out that the Injuries caused by Mr Tuan have thwarted and/or destroyed her career plans while she was at the prime of her career.¹⁶ She says that the increase in revenue of her surgical practice in the years after she suffered

¹¹ SOC4 at paras 9 to 14, Ms Lim's WOS at paras 31 to 34.

¹² Ms Lim's WOS at para 34; Ms Lim's WCS at paras 1.3 and 7.3.

¹³ Ms Lim's WOS at para 34; Reply (Amendment No. 2) ("Reply") at para 10.4.

¹⁴ Reply at para 10.3.

¹⁵ Ms Lim's WOS at para 6(g).

¹⁶ Reply at paras 10.2 to 10.3.

the Injuries does not bar her claim for loss of future earnings.¹⁷ At the conclusion of the hearing, she revised her claim to seek a sum of \$12,294,165 as damages for her loss of future earnings.¹⁸

Mr Tuan's case

13 Mr Tuan's case is that Ms Lim is not entitled to any damages for her loss of future earnings.¹⁹ He points out that, despite Ms Lim's own medical expert having identified a reduction in her working capacity since she suffered the Injuries, she has since generated a higher total revenue and has not suffered any loss of earnings since the Accident. Accordingly, there is no reasonable basis for Ms Lim to make a claim for her loss of future earnings.²⁰

14 Mr Tuan also says that, if the court is minded to award damages for Ms Lim's loss of future earnings, this should be on the basis of his accounting expert's evidence, which is explained in fuller detail below. He says that, if the court takes this approach, then Ms Lim may only be awarded \$194,550 or \$292,413 as damages for the loss of her future earnings.

15 Mr Tuan also denies that Ms Lim is entitled to an award of provisional damages and/or an order that she is entitled to further damages at such future date as the court deems fit. This is because, *inter alia*, Ms Lim has not proven any discernible loss in income since the Accident, there is no correlation between her future medical treatment and a decrease in her future earnings, and

¹⁷ Ms Lim's WOS at para 13.

¹⁸ Ms Lim's WCS at para 7.1.1.

¹⁹ Mr Tuan's WOS at p 5 (s/n 4).

²⁰ Mr Tuan's WOS at pp 7 and 8.

she has not sufficiently identified or particularised the contingencies which would trigger an award for provisional damages.²¹

Expert evidence

16 Given the heavy reliance on expert reports in this case, it is useful to set out the various reports which I shall refer to.

Medical expert evidence

17 The Medical Experts are all eminently well-qualified and experienced orthopaedic surgeons. I do not propose to set out details of their qualifications in this judgment .

18 The Medical Experts gave their evidence concurrently through a court-led process of questioning, informally known as “hot-tubbing”. As set out in the Joint Medical Experts Table of Issues, they were in agreement on 31 out of 35 of the identified issues. Hence, the concurrent expert evidence focused substantially on the remaining disputed issues as outlined above at [8]. I address the relevant aspects of their evidence in more detail in examining the specific issues for determination below. In doing so, I refer to the following reports from the Medical Experts:

- (a) Dr Lim Beng Hai’s first report dated 9 January 2019, which makes reference to various examinations of Ms Lim between 4 May 2017 and 4 July 2018²² (“Dr Lim Beng Hai’s First Report”).

²¹ Defence at para 10.

²² Dr Lim Beng Hai’s AEIC at pp 11 to 16.

- (b) Dr Lim Beng Hai's second report dated 18 March 2020²³ ("Dr Lim Beng Hai's Second Report").
- (c) Dr Lim Beng Hai's third report dated 14 March 2023, based on an examination of Ms Lim on 8 February 2023²⁴ ("Dr Lim Beng Hai's Third Report").
- (d) Dr Chin's first report dated 26 August 2021²⁵ ("Dr Chin's First Report").
- (e) Dr Chin's second report dated 3 March 2023, based on an examination of Ms Lim on 10 February 2023²⁶ ("Dr Chin's Second Report").
- (f) Dr Chang's first report dated 20 November 2021, which was based on an examination of Ms Lim on 20 October 2021²⁷ ("Dr Chang's First Report").
- (g) Dr Chang's second report dated 24 August 2022²⁸ ("Dr Chang's Second Report").
- (h) Dr Chang's third report dated 8 April 2023²⁹ ("Dr Chang's Third Report").

²³ Dr Lim Beng Hai's AEIC at pp 37 to 41.

²⁴ Dr Lim Beng Hai's AEIC at pp 51 to 53.

²⁵ Dr Chin's AEIC at pp 75 and 76.

²⁶ Dr Chin's AEIC at pp 84 and 85.

²⁷ Dr Chang's AEIC at pp 70 to 79.

²⁸ Dr Chang's AEIC at pp 80 and 81.

²⁹ Dr Chang's Supplementary Affidavit of Evidence-in-Chief ("SAEIC") at pp 9 to 11.

- (i) Dr Chang's fourth report dated 15 May 2023³⁰ ("Dr Chang's Fourth Report").

Accounting expert evidence

19 The parties also engaged financial accounting experts to perform calculations to ascertain Ms Lim's loss of future earnings. The parties also appear to treat the net profit after tax of the Clinic as interchangeable with Ms Lim's income.³¹

20 Ms Lim engaged Mr Iain Potter ("Mr Potter"), who produced two reports dated 13 April 2022 ("Mr Potter's First Report")³² and 15 April 2023 ("Mr Potter's Second Report").³³ Mr Tuan engaged Mr Tam Chee Cheong ("Mr Tam"), who produced reports dated 25 October 2022 ("Mr Tam's First Report")³⁴ and 20 July 2023 ("Mr Tam's Second Report").³⁵ I refer to Mr Potter and Mr Tam collectively as the "Accounting Experts". Like the Medical Experts, the Accounting Experts are eminently well-qualified. As their professional qualifications are not disputed, I do not propose to set out details of their qualifications in this judgment.

21 Mr Potter and Mr Tam both take a broadly similar approach, but they differ on the assumptions made and the figures used to do their calculations. The parties adopt Mr Potter's classification of the revenue of the Clinic into

³⁰ Dr Chang's SAEIC at pp 12 and 13.

³¹ See also Mr Potter's First Report at para 2.13.

³² Mr Potter's AEIC at IP-1.

³³ Mr Potter's AEIC at IP-2.

³⁴ Mr Tam's AEIC at TCC-1.

³⁵ Mr Tam's SAEIC at TCC-2.

directly limited revenue (“DLR”) and indirectly limited revenue (“ILR”).³⁶ In broad terms, DLR relates to the revenue from surgical procedures that Ms Lim would perform, while ILR relates to all other revenue-generating activities from her surgical practice.³⁷ I summarise below the parties’ positions, adopting a broad three-step methodology, on how Ms Lim’s loss of future earnings should be calculated.

(a) First, the Accounting Experts calculate the total loss of earnings for each year after the Expected Surgery. This turns on the following factors:

(i) Year of the Expected Surgery: Ms Lim submits that she will undergo the Expected Surgery in three years (*ie*, in 2026)³⁸ while Mr Tuan submits that she will have it in four years (*ie*, in 2027).³⁹

(ii) Length of time Ms Lim will not be working due to the Expected Surgery: Ms Lim submits that this should be 12 months⁴⁰ and Mr Tuan submits that this should be four and a half months.⁴¹

(iii) Year of Ms Lim’s retirement: Ms Lim submits that she will retire at 70.⁴² Although she also submits that she may have

³⁶ *Eg*, Mr Tuan’s WCS at paras 27 and 60.

³⁷ Notes of Evidence (“NE”) for 20 September 2023 at p 69 line 1 to p 70 line 7.

³⁸ Ms Lim’s WCS at paras 5.13 and 5.15.

³⁹ Mr Tuan’s WCS at para 62.

⁴⁰ Ms Lim’s WCS at paras 5.13 and 5.16.

⁴¹ Mr Tuan’s WCS at para 62.

⁴² Ms Lim’s WCS at paras 4.9 and 5.21, n(n) 53 and 79.

to retire entirely as an interventional cardiologist,⁴³ this does not appear to feature in her proposed calculations as to the loss of her future earnings. Mr Tuan agrees that Ms Lim will retire at 70, but imposes a notional age discount (the “NAD”) of 15% after the statutory retirement age of 63.⁴⁴

(iv) Quantum of DLR: the parties agree that this is \$418,430.⁴⁵

(v) Percentage reduction in Ms Lim’s working capacity applied to DLR: Ms Lim submits that this is 100%,⁴⁶ but Mr Tuan submits that this is 10% to 15%.⁴⁷

(vi) Quantum of ILR: the parties agree that this is \$2,370,877.⁴⁸

(vii) Percentage reduction in Ms Lim’s working capacity applied to ILR: Ms Lim submits that DLR has a 50% impact on ILR.⁴⁹ Mr Tuan appears to take the position that DLR and working capacity do not directly affect ILR and has instead

⁴³ Ms Lim’s WCS at para 5.17.

⁴⁴ Mr Tuan’s WCS at para 62.

⁴⁵ Ms Lim’s WCS at para 4.12 and n(n) 58; Mr Potter’s Second Report at para 2.4; Mr Tam’s Second Report at Annex 1.

⁴⁶ Ms Lim’s WCS at paras 5.13 and 5.17.

⁴⁷ Mr Tuan’s WCS at para 62; Mr Tam’s Second Report at para 27 and n(n) 4.

⁴⁸ Ms Lim’s WCS at para 4.12 and n(n) 58; Mr Potter’s Second Report at para 2.4; Mr Tam’s Second Report at Annex 1.

⁴⁹ Ms Lim’s WCS at paras 5.13 and 5.18.

assessed ILR separately. He submits instead that there will be a year-on-year increase in capacity of 4%.⁵⁰

(viii) Quantum of costs: the parties agree that the ratio of direct costs to revenue for medicine and investigations are 33% and 43% respectively,⁵¹ and that the weighted cost ratio is 28.37% of ILR.⁵²

(b) Next, the Accounting Experts apply a deduction for corporate tax at a rate of 17%.⁵³

(c) Finally, the Accounting Experts apply an “adjusted” form of the following two multipliers (by multiplying one multiplier with the other):

(i) The first multiplier is obtained from the Personal Injuries (Claims Assessment) Review Committee Tables which are found in “*Actuarial Tables With Explanatory Notes for use in Personal Injury and Death Claims*” (Academy Publishing, 2021)

⁵⁰ Mr Tuan’s WCS at para 62; Mr Tam’s Second Report at para 27 and n(n) 5.

⁵¹ Ms Lim’s WCS at para 4.12 and n(n) 58; Mr Potter’s Second Report at para 2.5; Mr Tam’s Second Report at Annex 1.

⁵² Ms Lim’s WCS at Annex A (first table, column labelled “Costs”); Mr Tuan’s WCS at para 62; Mr Tam’s Second Report at Annex 1 (Section A, second table, column labelled “ILR Cost (Weighted Cost Ratio)”).

⁵³ Ms Lim’s WCS at para 4.13; Mr Tuan’s WCS at para 62; Mr Tam’s Second Report at Annex 1 (Section B, fourth column).

(the “PIRC Tables”).⁵⁴ The parties adopt the same multipliers for each year after the Expected Surgery.⁵⁵

(ii) The second multiplier is from Table C of the *Actuarial Tables with Explanatory Notes for Use in Personal Injury and Fatal Accident Cases* (8th Ed, 2020) UK Government Actuary’s Department (the “Ogden Tables”).⁵⁶ The parties adopt the same multiplier of 0.83.⁵⁷

Issues to be determined

22 The following issues arise for my determination:

- (a) in the event Ms Lim is entitled to claim damages for her loss of future earnings, what is the quantum of damages to be awarded; and
- (b) if Ms Lim is entitled to damages for loss of future earnings, whether I should make an award now or make a provisional award.

23 As noted at [1] above, the main point of contention at trial concerns the quantification of Ms Lim’s loss of future earnings. I make my assessment as to Ms Lim’s quantum of loss of future earnings with the assistance of the

⁵⁴ Ms Lim’s WCS at para 4.14; Mr Potter’s First Report at paras 2.14 to 2.17 and Annex 6; Mr Tuan’s WCS at para 62; Mr Tam’s Second Report at Annex 1 (Section C, second and third tables).

⁵⁵ Mr Potter’s First Report at Annex 6A (fourth column labelled “Multiplier”); Mr Tam’s Second Report at Annex 1 (Section C, eleventh column labelled “Multiplier [Extracted from PIRC]”).

⁵⁶ Mr Potter’s First Report at Exhibit IP-5.

⁵⁷ Ms Lim’s WCS at para 4.14; Mr Potter’s Second Report at Annex 6A (fifth column labelled “Other Vicissitudes”); Mr Tuan’s WCS at para 62; Mr Tam’s Second Report at Annex 1 (Section C, second and third tables, columns labelled “Other Vicissitudes [Extracted From Ogden Table]”).

Accounting Experts' evidence. In order to assess the Accounting Experts' evidence, however, I must first come to a view on the following issues in relation to the Expected Surgery, as they form the factual backdrop against which the Accounting Experts' calculations were carried out:

- (a) When is Ms Lim likely to undergo the Expected Surgery?
- (b) Which surgery will Ms Lim undergo in respect of the Injuries in the next five years?
- (c) How long will Ms Lim be unable to work after the Expected Surgery?
- (d) What is the impact of the Expected Surgery on Ms Lim's ability to work?

24 I then turn to the Accounting Experts' evidence of Ms Lim's projected loss of future earnings. The following issues arise for my determination:

- (a) What is the quantum of DLR?
- (b) What is the percentage reduction in working capacity applied to DLR?
- (c) What is the quantum of ILR?
- (d) What is the percentage reduction in working capacity applied to ILR?

When is Ms Lim likely to undergo the Expected Surgery?

25 Ms Lim submits that she will undergo the Expected Surgery in three years (*ie*, in 2026)⁵⁸ while Mr Tuan submits that she will have it in four years (*ie*, in 2027).⁵⁹ I note that Mr Tuan also states elsewhere that Ms Lim will undergo the Expected Surgery within five years.⁶⁰ I find that she is likely to undergo the Expected Surgery in approximately four years from the time of the trial.

26 Ms Lim's submission is made on the basis of her testimony that she is likely to undergo the Expected Surgery within the next three to five years,⁶¹ which is when she foresees that the pain will become so intolerable that she would require surgery. She explained that this was because she experiences persistent pain in her wrist every day.⁶² In my assessment, her evidence clearly shows that she intends to hold off having the Expected Surgery for as long as she possibly can, subject to her pain threshold.

27 I am not, however, persuaded by Ms Lim's reliance on Dr Lim Beng Hai's testimony that Ms Lim should undergo the Expected Surgery promptly.⁶³ This is because the evidence shows that Ms Lim has, since 2017, resisted Dr Lim Beng Hai's advice to undergo the Expected Surgery soon.⁶⁴ In any case,

⁵⁸ Ms Lim's WCS at paras 5.13 and 5.15.

⁵⁹ Mr Tuan's WCS at para 62.

⁶⁰ Mr Tuan's WCS at para 18; Mr Tuan's Written Reply Closing Submissions ("WRCS") at para 4.

⁶¹ Ms Lim's WCS at paras 3.10, 3.12 and 5.15.

⁶² NE for 20 September 2023 at p 73 line 12 to p 74 line 4.

⁶³ Ms Lim's WCS at paras 3.11 and 5.15; NE for 28 September 2023 at p 48 lines 5 to 7.

⁶⁴ NE for 20 September 2023 at p 5 line 25 to p 7, p 8 line 23 to p 11 line 19, p 12 lines 27 to 31, p 32 line 24 to p 33 line 2.

Dr Lim Beng Hai's advice as to what Ms Lim *should* do is distinct from the query as to when Ms Lim *is likely* to undergo the Expected Surgery.

28 Furthermore, Ms Lim does not give reasons for her submission that the lower limit of the range (*ie*, three years) should be accepted. Mr Tuan's submission is similarly devoid of supporting reasons: he merely adopts one of three scenarios put forward by Mr Tam, and for which Mr Tam also gave no explanation as to why he assumed that Ms Lim should undergo the Expected Surgery in four years.⁶⁵

29 Nonetheless, given that Mr Tuan is willing to accept that Ms Lim is likely to go for the Expected Surgery within four years, which is within the range agreed upon by the Medical Experts,⁶⁶ I find that Ms Lim is likely to undergo the Expected Surgery in approximately four years from the time of trial, that is, by end 2027.

Which surgery will Ms Lim undergo in respect of the Injuries in the next five years?

30 On my assessment of the evidence, Ms Lim is likely to undergo a partial wrist fusion in respect of the Injuries.

31 The Medical Experts agree that Ms Lim is likely to require surgery in the next five years (*ie*, the Expected Surgery).⁶⁷ As to the type of surgery, they agree that:

⁶⁵ Mr Tuan's WCS at para 61; Mr Tam's Second Report at para 26.

⁶⁶ Joint Medical Experts Table of Issues at s/n 24.

⁶⁷ Joint Medical Experts Table of Issues at s/n 23 and s/n 24; NE for 28 September 2023 at p 39 line 22 to p 40 line 2.

[A]t the point in time when surgery is required – she will have to decide on the type of surgery. It is unclear now what is needed but it will revolve around partial fusion (a) [ie, 4 Corner partial wrist fusion].

[neurolysis of right ulnar nerve] and [right ECU tendon tenosynovectomy] are not major points.

Doctors are definitely not consider[ing] [excision of right scaphoid with anchovy of distal radius] as it is not required if (a) [(this presumably refers to partial fusion)] is chosen.

If partial wrist fusion is not successful in alleviating the pain that [Ms Lim] experiences, the 3 Medical Experts opined that a total wrist fusion would have to be done.

The type of surgery that the [Ms Lim] requires will depend on the current state of the [Ms Lim] wrist at that material time.⁶⁸

Dr Lim Beng Hai clarified at trial that the “4 Corner partial wrist fusion” is one of many partial wrist fusion surgeries. He also confirmed this was a common recommendation between the Medical Experts.⁶⁹

32 Ms Lim does not presently express a clear preference for any particular procedure to be done for the Expected Surgery. She acknowledged that Dr Chin’s recommendation to her was to undergo a total wrist fusion, as against Dr Lim Beng Hai’s suggestion of a partial wrist fusion, but expressed no preference between both options.⁷⁰ She testified as follows:

[Dr Lim Beng Hai] recommended three different types of surgeries. The first surgery was a partial joint fusion; the second surgery was joint replacement; and the third surgery was a total joint fusion. So the partial joint fusion is rather complex with many components. After the surgery---I mean, in my readings, sometimes you need to re---redo the surgery with a total joint fusion. So it’s not like a one and only surgery; it’s only a temporising measure, mainly because the second option

⁶⁸ Joint Medical Experts Table of Issues at s/n 25.

⁶⁹ NE for 28 September 2023 at p 50 line 21 to p 51 line 4.

⁷⁰ NE for 20 September 2023 at p 58 line 24 to p 59 line 3.

and the third option are worse off than the first option. But the first option is actually a temporising measure.⁷¹

From Ms Lim's evidence, she does not express any firm view as to what she is likely to choose as her Expected Surgery. I appreciate that it is not an easy decision for her to make. Understandably, she may be hesitant to state any positive preference since the Medical Experts have opined that it is "unclear now what is needed" (see above at [31]).

33 I am mindful of Ms Lim's reservations about the second and third options of a joint replacement and total fusion being "worse off" than the first option, *ie*, partial wrist fusion. This is not an unreasonable assessment on her part. From the tenor of Ms Lim's evidence, it would appear that it is quite unlikely that she will opt to undergo a total wrist fusion as that may result in her inability to perform complex surgical procedures as an interventional cardiologist thereafter (see [7] above and also [39] below for the scenarios postulated by the Medical Experts). The Medical Experts say that it is ultimately for Ms Lim to decide which surgery she will undergo. As the Medical Experts all agree in any event that surgery "will revolve around partial fusion", and since Ms Lim does not presently have a firm view as to which option is preferred, I find that it is wholly reasonable to adopt the premise that the Expected Surgery is likely to be a partial wrist fusion.

How long will Ms Lim be unable to work after the Expected Surgery?

34 Ms Lim submits that she should be given "12 months downtime" to recover after the Expected Surgery.⁷² Mr Tuan submits Ms Lim would only be

⁷¹ NE for 20 September 2023 at p 67 lines 10 to 17.

⁷² Ms Lim's WCS at para 5.13.

unable to work for four and a half months following the Expected Surgery for the purposes of calculating her loss of future earnings.⁷³ I find that she will be unable to work for a period of seven months after the Expected Surgery.

35 The Medical Experts reached the following agreement on the period during which Ms Lim will likely be unable to work while she is recovering from the Expected Surgery:

Doctors agree that down time will be 6 months to 1 year.

First 6 months of medical leave and second 6 months will allow her to take on “light duties”.⁷⁴

Ms Lim’s submission of “12 months downtime” is presumably based on the Medical Experts’ agreed evidence. She does not, however, provide any reason for her submission that the upper limit of 12 months should be adopted. In any case, the Medical Experts agree that after the first six months following the Expected Surgery, she can resume “light duties” at her surgical practice.

36 The expected period for which Ms Lim will be unable to work while she is recovering from the Expected Surgery was not subjected to scrutiny at trial. The Medical Experts were not challenged on their evidence in this respect. The only related testimony was Dr Lim Beng Hai’s evidence that “downtime ... means that you go for surgery, you need to be away from your work for at least about 3 month[s], if not---on the average”.⁷⁵ This is not inconsistent with the Medical Experts’ agreement, given that Dr Lim Beng Hai’s evidence was that Ms Lim would not be working for “*at least* about 3 month[s]” [emphasis added].

⁷³ Mr Tuan’s WCS at para 32 and p 22.

⁷⁴ Joint Medical Experts Table of Issues at s/n 34.

⁷⁵ NE for 28 September 2023 at p 57 lines 10 to 16.

37 Mr Tuan’s submission that a period of four and a half months is suitable is based on Mr Tam’s reliance on Dr Lim Beng Hai’s First and Second Reports:⁷⁶ Mr Tam calculated this as “6 weeks of recovery time + 3 months of physiotherapy (in total 4.5 months)”,⁷⁷ which he says were taken from Dr Lim Beng Hai’s First and Second Reports. It is not clear why or on what basis Mr Tuan proposes that I ignore Dr Lim Beng Hai’s subsequent agreement with the other Medical Experts, including Mr Tuan’s own expert, Dr Chin, that Ms Lim’s “down time will be 6 months to 1 year”. I therefore decline to do so.

38 The overall tenor of Ms Lim’s evidence indicates that she will want to resume working after the Expected Surgery as soon as she practicably can. In my view, it is appropriate to use seven months as the period of recovery for Ms Lim following the Expected Surgery. Ms Lim has not given me any reason to believe that the time needed for recovery would be higher by far than the minimum of six months agreed between the Medical Experts. The one-month uplift accounts for the possibility of a longer period of recovery, which the Medical Experts acknowledge, given that they agree on a period of between six and 12 months, as well as the possibility that she may be restricted to “light duties”, notwithstanding that no evidence is given as to her potential income in that period.

⁷⁶ Mr Tuan’s WCS at para 62.

⁷⁷ Mr Tam’s Second Report at pp 4 and 13.

What is the impact of the Expected Surgery on Ms Lim's ability to work?

The parties' cases

39 Ms Lim's case appears to adopt the Medical Experts' agreement on the impact of the Expected Surgery on her working capacity.⁷⁸ The Medical Experts agree that the potential outcomes of the Expected Surgery are as follows:

Best case[:] Partial fusion will limit about 50% of her wrist function, successful surgery will allow her to continue doing what she is doing at 70% to 80% capacity.

Moderate[:] joint replacement which will allow her 50% capacity[.]

Worst Case[:] total fusion which will allow her to continue working but not as an interventional cardiologist.⁷⁹

40 While Mr Tuan does not explicitly adopt a position contrary to the Medical Experts' agreement above, he disagrees with Mr Potter's working assumption that Ms Lim's capacity to perform surgical procedures would be reduced by 50% from 2026, by a further 50% from 2031 and then by a further 50% from 2036 (the "Capacity Assumption").⁸⁰ As the Capacity Assumption was adopted by Mr Potter in his calculations,⁸¹ Mr Tuan says that these calculations are fundamentally flawed and should not be relied upon.⁸² Mr Tuan's objection arises from the alleged contradiction between the expected reduction in Ms Lim's working capacity after the Accident (but before the trial and the Expected Surgery) and her post-Accident income, which actually

⁷⁸ Ms Lim's WCS at para 3.14.

⁷⁹ Joint Medical Experts Table of Issues at s/n 28; NE for 28 September 2023 at p 67 line 23 to p 68 line 30.

⁸⁰ Mr Tuan's WCS at paras 33 and 39.

⁸¹ Mr Potter's First Report at para 1.6(b); Mr Potter's Second Report at para 1.5(b).

⁸² Mr Tuan's WCS at para 28.

continued to increase (the “Pre-Accident Contradiction”).⁸³ He submits that, therefore, the Capacity Assumption is untrue⁸⁴ (and *also* that there is no correlation between an estimated reduction in working capacity with her income).⁸⁵ It can be inferred from his submission that he takes the view that after the Expected Surgery, Ms Lim is likely to experience a reduction in working capacity of less than 50%, or indeed none at all.

41 I deal first with Mr Tuan’s sole basis for questioning the Medical Experts’ agreement on the reduction in Ms Lim’s working capacity after the Expected Surgery, before assessing the evidence on this issue.

The Capacity Assumption is not wholly rebutted simply because of the Pre-Accident Contradiction

42 Mr Tuan submits that the contradiction between Ms Lim’s income after the Accident and the expected reduction in her working capacity after the Accident (but before the Expected Surgery) (*ie*, the Pre-Accident Contradiction) suggests that she is likely to experience no reduction at all, or a reduction of less than 50%, in working capacity after the Expected Surgery.⁸⁶

43 I agree that Dr Lim Beng Hai’s assessment on 18 March 2020 that “[Ms Lim’s] current reduction in working capacity can be estimated to be 50%”⁸⁷ is contradicted by events that have since transpired. Ms Lim admitted

⁸³ Mr Tuan’s WCS at paras 34 to 36; Mr Tuan’s WOS at pp 7 and 8.

⁸⁴ Mr Tuan’s WCS at para 34.

⁸⁵ Mr Tuan’s WCS at para 38.

⁸⁶ Mr Tuan’s WCS at paras 35 to 39.

⁸⁷ Dr Lim Beng Hai’s Second Report (at (e)).

that there was no limitation on her wrist in relation to her working capacity,⁸⁸ and her working capacity was not affected by the Injuries, until at least 31 August 2022, despite Dr Lim Beng Hai's assessment.⁸⁹ She also agreed that the revenue of her practice was not affected notwithstanding Dr Lim Beng Hai's assessment of a 50% reduction in her working capacity.⁹⁰

44 I do not accept, however, that this by itself suggests that any projected reduction in Ms Lim's working capacity *after the Expected Surgery* is unjustified or should be wholly disregarded.⁹¹ Considering the evidence on Ms Lim's likely working capacity after the Expected Surgery, I note as a starting point that all three Medical Experts agree that there *will* be a reduction in her working capacity.⁹² The only basis for Mr Tuan's challenge to this agreement is the Pre-Accident Contradiction. As I understand it, Mr Tuan's submission is that, because there was previously no correlation between Dr Lim Beng Hai's assessment of Ms Lim's working capacity and her income, therefore, the Medical Experts' evidence of Ms Lim's likely reduced working capacity after the surgery should not be used to extrapolate her future income. But the absence of such a correlation *after the Accident* is attributable to, *inter alia*, the steps Ms Lim took to preserve her working capacity.⁹³ She may not be able to continue doing so to the same degree *after the Expected Surgery* and

⁸⁸ NE for 20 September 2023 at p 37 lines 18 to 24.

⁸⁹ NE for 20 September 2023 at p 38 lines 8 to 15.

⁹⁰ NE for 20 September 2023 at p 38 lines 16 to 22.

⁹¹ Ms Lim's WCS at para 4.2.

⁹² Joint Medical Experts Table of Issues at s/n 28. See also NE for 20 September 2023 at p 60 line 30 to p 61 line 9.

⁹³ *Eg*, NE for 20 September 2023 at p 7 lines 20 to 28.

Mr Tuan does not adduce any evidence or make any submission that she can and she will.⁹⁴

45 Furthermore, the Medical Experts gave evidence that many other factors, beyond working capacity, could have affected Ms Lim's income after the Accident. I reproduce the relevant portions of their testimony below:

[Judge]: Shouldn't this evidence of a higher revenue generation be taken into account in assessing whether her working capacity has been affected?

[Dr Chin]: Now, first of all, are we comparing apples to apples? *Has her surgical workload increased or decreased? By how much? And the complexity of surgery, has it increased or decreased? Maybe, if the surgery is not complex, she could be doing more of the non-complex surgery.* So---so, these are all the questions that we have to really probe into it and ask. I mean, it's---it's---it's easy to state a ballpark, "Oh, she earns a bit more." How do we know that some of the---some of the earnings may not be directly related to surgery? We don't know. I mean, so---that's why I'm saying you have to compare apples to apples. *So, before---before she had an accident, how much surgery was she doing? What was the workload? What was the complexity of the surgery?* I think all these questions should be---should be compared ...

[Dr Lim Beng Hai]: Well, I think *the surgical cost, or what we call "surgical fees" have actually---over the years, have actually increased.* So that you have to take that into consideration. And I---I---I suppose the---the second thing is the---*the seniority, your expertise and all that does come into consideration.* You know, the more senior you are, the more popular you are in terms of your work. Now, whether you like it or not, the patients will come. It's---you---you have a very difficult decision. "Should I just reject? If I reject, my fear is that will there---then you get less and less. *If you accept, then you end up more and more.*"

...

[Dr Chang]: I would agree with the other two doctors. But how she earns a living---but it's all speculative. I think, at the end of the day, is that *because of this accident, has she lost her in-earning capacity? The answer is "No". So that should speak volumes for how much it has affected her.* On---on the contrary--

⁹⁴ See also Ms Lim's WCS at para 4.2; Ms Lim's WRCS at para 3.9.

-on the contrary, you could actually ask could she have actually earned a lot more had she not had the accident?⁹⁵

[Dr Lim Beng Hai]: *When you first start your private practice, your capacity is like this, and over the years, you grow. All of us will grow on--at the average of about 10 to 20 percent over the years, and some people, if you are good, you will grow and then you will shoot up. What we call the "exponential curve" that goes up. If you are no good, you will reach a certain stage, then the patient start not coming back to you, you start to deteriorate. Your growth has nothing to do with--unless you are totally incapacitated, that means you are not available, that's a different thing. But as long as you are available, I can tell you, as long as--if I have the same problem, okay, as long as patient comes to me, I will grit my teeth and I will do whatever needs to be done, because I cannot reject a patient. And if I reject a patient today, then other patients will not come. And this is where we--I am growing not because my wrist is not incapacitated. Even if my wrist is incapacitated, I will still grow. Why will I still grow? Because this is my business, this is my living. And if I have to grit through pain, I will do this. If I have to hold my pen and write, I will do it. Why? Because this is my business. It has nothing--it is--it is the will ...*

... I agree [that Dr Lim Beng Hai's estimation of Ms Lim's percentage of incapacity is *not a direct correlation* with the income she makes] ... Because two are ... [t]otally separate.⁹⁶

[emphasis added]

46 In my view, Dr Chang's evidence is not particularly helpful in clarifying how Ms Lim's working capacity should be assessed, given that it relies largely on retrospective reasoning. Past events are not necessarily a reliable indicator or predictor of future outcomes. The assessment of Ms Lim's expected change in working capacity serves to *assist in ascertaining the likely impact of the Expected Surgery on her income*. Nonetheless, the fact that her earning capacity

⁹⁵ NE for 28 September 2023 at p 29 line 26 to p 31 line 23.

⁹⁶ NE for 28 September 2023 at p 36 line 5 to p 38 line 17.

was not reduced following the Accident might arguably *suggest* that her working capacity was not materially impacted.⁹⁷

47 In my view, it is preferable however to also take into account the other Medical Experts' evidence that other factors can affect one's earning capacity. Specifically, I accept that the following are important (if non-exhaustive) factors which could explain the increase in Ms Lim's income after the Accident (derived from the Medical Experts' testimony as quoted above):

- (a) surgical workload;
- (b) complexity of surgery;
- (c) rising surgical costs;
- (d) increasing seniority; and
- (e) increasing number of patients that seek her services given her time spent in practice.

Although no specific evidence of the potential impact of these factors in Ms Lim's case was adduced, I accept that these are plausible complementary explanations for her increased income after the Accident. They suggest that her income could have increased *notwithstanding that her working capacity may not have increased*. I am conscious that Ms Lim accepted that her working capacity had not been affected by the Injuries.⁹⁸ This was her subjective and genuinely candid assessment of her own working capacity. It was not in her

⁹⁷ See also NE for 28 September 2023 at p 35 lines 24 and 25; Mr Tuan's WRCS at para 10.

⁹⁸ NE for 20 September 2023 at p 38 lines 8 to 15.

interest to make such a concession. In any case, the lack of any perceived impact on her part on her working capacity may simply reflect her sheer determination and strength of will in continuing to perform her work after the Accident.

48 The foregoing analysis rebuts Mr Tuan's submission that Ms Lim is likely to experience no reduction, or a reduction of less than 50%, in working capacity after the Expected Surgery, *simply because of* the Pre-Accident Contradiction. Accordingly, Mr Tuan's primary objection to the Medical Experts' agreed evidence on this issue also falls away. I turn now to assess more generally the evidence on Ms Lim's working capacity after the Expected Surgery.

The evidence suggests that Ms Lim is likely to experience a 20% to 30% reduction in her working capacity after undergoing a partial wrist fusion

49 Having regard to the Joint Medical Experts Table of Issues, I note at the outset that the Medical Experts agree that, if Ms Lim undergoes a partial wrist fusion, she is likely to suffer a 50% decrease in her wrist function and a 20% to 30% reduction in her working capacity.⁹⁹ It is significant that the views of the Medical Experts on this issue are unanimous and uncontradicted.

50 Further, I note that the Medical Experts' agreement on this issue is not materially contradicted by the sections of their respective reports which address Ms Lim's working capacity after the Expected Surgery. To begin with, these reports were prepared prior to their agreement on the Joint Medical Experts Table of Issues. In any case, their reports do not give me sufficient reason to doubt the overall credibility of their agreed evidence. I shall only highlight some minor observations as follows:

⁹⁹ Joint Medical Experts Table of Issues at s/n 28.

(a) Dr Chang's Fourth Report states that:

during cardiac interventional procedures, such as catheterisations, forceful and extreme motions of the wrist are not required. A wrist that is not as flexible as before would not be an impairment.¹⁰⁰

However, it is not clear on what basis he makes this statement, as no evidence has been adduced of his familiarity with the cardiac interventional procedures which Ms Lim would perform in the course of her work. It is also not clear why flexibility is required for forceful motion, nor what the term "extreme motions" refers to (*eg*, whether it refers to extreme power, dexterity, range or something else entirely in relation to motions).

(b) Dr Lim Beng Hai's Third Report states that the impact of the medical procedure(s) on Ms Lim is that her "lifestyle, job and physical capacity will drop by 50%".¹⁰¹ The value of this evidence is doubtful, however, given that this was his singular, general response despite having, in the preceding paragraph, listed five different medical procedures that Ms Lim would likely require which could culminate in that outcome.¹⁰²

51 Taken together, I accept the Medical Experts' unanimous evidence that there will be a reduction of 20% to 30% in Ms Lim's working capacity after the Expected Surgery, which is likely to be a partial wrist fusion. In my view, it is reasonable to take the mid-point of 25%. The Medical Experts have not put forth any other reasons to adopt either the lower or upper ranges of 20% or 30%.

¹⁰⁰ Dr Chang's Fourth Report at p 2.

¹⁰¹ Dr Lim Beng Hai's Third Report at para (e).

¹⁰² Dr Lim Beng Hai's Third Report at para (d).

What is Ms Lim's projected loss of future earnings?

52 I begin by addressing several submissions from the parties which deal with the Accounting Experts' evidence generally, before turning to specific sections of their calculations which are disputed by the parties.

53 First, I disagree with Ms Lim's submission that, because the broad three-step methodology (see [21] above) is shared between the Accounting Experts, their consensus "extends beyond the methodology itself and extends to encompass agreement on the variables/assumptions to be input into the methodology."¹⁰³ This oversimplifies the differences between the Accounting Experts' approaches. While the broad three-step approach appears to have been taken by both Accounting Experts, the assumptions and specific figures applied are clearly different¹⁰⁴ and merit close examination.

54 Second, I reject Mr Tuan's submission that Mr Potter's reports cannot be safely relied on because, *inter alia*, Ms Lim rejected them.¹⁰⁵ I agree with Mr Tuan that Ms Lim did appear to disagree with parts of Mr Potter's evidence. I reproduce the relevant questions and responses below:

Q Just that the second table completes the picture with 2022 numbers. With these numbers in mind, I'm going to put it to you that the revenue from your cardiology practice between 2014 to 2022 in respect of directly limited revenue, revenue for which you earned from carrying out surgery did not show any correlation between a 50% drop in your working capacity versus the revenue you made in 2017 all the way to 2022. Do you agree?

A Agree.

¹⁰³ Ms Lim's WCS at para 4.15.

¹⁰⁴ Mr Tuan's WRCS at para 16. *Eg*, Mr Tuan's WCS at para 31.

¹⁰⁵ Mr Tuan's WCS at paras 28(i) and 29.

Q And with that same set of facts, I also put it to you that between 2017 and 2022, *there is also a no observable drop of 25% in your indirect revenue between 2017 and 2022---*

A Agree.

Q ---*despite your reduced working capacity of 50% as of 2020. Do you agree?*

A Agree.

Q Thank you. You agree. *That being the case*, I am putting to you that *Mr Potter's computation of your loss in---from 2025 onwards, right, is unsupported and unreasonable because the assumptions for which he is relying on from you are shown to be unsustainable from the revenue of your practice between 2017 and to date, and as well as the medical report opinion of Dr Lim Beng Hai. Agree?*

A Agree.¹⁰⁶

[emphasis added]

Ms Lim's final answer in this quotation above appears, at first blush, to possibly constitute a rejection of all of Mr Potter's calculations and evidence as the question addressed "Mr Potter's computation of [Ms Lim's loss]". However, the question which elicited that final answer clearly followed from counsel's earlier questions immediately preceding, which addressed Mr Potter's assumption that a 50% drop in working capacity on DLR would mean a corresponding 25% drop in ILR.¹⁰⁷ This is evident from Mr Tuan's counsel stating "[t]hat being the case"; and then putting it to her that the reason for doubting Mr Potter's calculation was due to "assumptions [which are] unsustainable". Read in full context, Ms Lim's concession is more specific and confined: she disagreed with Mr Potter's assumption that the effect of a 50% drop in working capacity on DLR would mean a 25% drop in ILR.¹⁰⁸ Hence, she

¹⁰⁶ NE for 20 September 2023 at p 57 line 24 to p 58 line 12.

¹⁰⁷ NE for 20 September 2023 at p 57 line 24 to p 58 line 5.

¹⁰⁸ See also NE for 20 September 2023 at p 55 lines 11 to 14; p 56 line 30 to 31.

agreed with counsel that since this assumption was wrongly made, Mr Potter's calculations are "unsupported and unreasonable". She did not reject all of Mr Potter's calculations generally.

55 I note that, on Mr Tuan's submission, Ms Lim's rejection of Mr Potter's evidence goes further than what is stated in the preceding paragraph. He appears to submit that Ms Lim *also* disagreed with Mr Potter's assumption concerning a correlation between Ms Lim's working capacity and revenue between 2017 and 2022 (*ie*, after the Accident and prior to the Expected Surgery). But it is not clear from the line of questioning by Mr Tuan's counsel at trial that this was Ms Lim's evidence. In addition, Mr Tuan does not show that Mr Potter did, in fact, make an assumption in respect of the correlation between Ms Lim's working capacity and revenue prior to the Expected Surgery. Such an assumption is not included among Mr Potter's list of assumptions that were made in preparing his reports.¹⁰⁹ In any case, I find that the Pre-Accident Contradiction should not inform an understanding of what is likely to occur after the Expected Surgery¹¹⁰ (at [44] above). I therefore reject this submission.

56 For completeness, I add that Ms Lim's attempt to explain away her purported rejection of Mr Potter's evidence by arguing that the questions posed by counsel for Mr Tuan belie a "lack of understanding of the methodology in calculating [Ms Lim's] loss of future earnings"¹¹¹ is not persuasive. The purported deficiencies in counsel's understanding would not change the fact that

¹⁰⁹ Mr Potter's First Report at paras 1.6, 2.2 and 2.19; Mr Potter's Second Report at paras 1.5, 1.7 and 2.20.

¹¹⁰ Ms Lim's WRCS at paras 3.5 and 3.6.2.

¹¹¹ Ms Lim's WRCS at paras 3.5 to 3.7.

Ms Lim did express disagreement with at least a confined part of Mr Potter's analysis.

57 I also note that, contrary to Mr Tuan's submission, Ms Lim clearly still endorses and relies on Mr Potter's evidence, at least in relation to the appropriate methodology to be adopted for computing her loss of future earnings.¹¹²

58 Even if I am wrong, and Ms Lim's testimony should be understood to signify disavowal of Mr Potter's evidence, I would have no difficulty ascribing limited weight to her testimony. The question of whether Mr Potter's erroneous assumptions should render all of his calculations "unsupported and unreasonable" such that the court should reject the said calculations wholesale is not a factual one which Ms Lim is well-placed to answer.¹¹³ It is instead a matter of reasoning which the court is capable of addressing without relying on Ms Lim's factual evidence.

59 Third, Mr Tuan submits that Mr Potter's calculations were made on the basis of assumptions that are unsupported by the objective evidence, specifically, "the available medical evidence and/or historical evidence". Instead, the assumptions had been provided by Ms Lim's counsel to Mr Potter. He says that Mr Potter's calculations should therefore be disregarded.¹¹⁴ I disagree for the following reasons:

- (a) An assessment of the Medical Experts' reports is not within Mr Potter's expertise. To the extent that the assumptions deal with issues

¹¹² Eg, Ms Lim's WCS at paras 5.13 to 5.19.

¹¹³ Ms Lim's WRCS at para 3.8.

¹¹⁴ Mr Tuan's WCS at paras 49 to 54.

that the Medical Experts take differing views on, such as how long Ms Lim might be unable to work and the reduction in her working capacity after the Expected Surgery, these issues were not for Mr Potter, whose expertise lay in accounting, to decide based on his assessment of the Medical Experts' reports.

(b) Mr Tuan further argued that Ms Lim had conceded that “consideration should be given to all medical evidence and communications provided” in order for Mr Potter’s report to be effective, which concession was made in the course of Mr Tam’s cross-examination by counsel for Ms Lim.¹¹⁵ This also does not get Mr Tuan very far. It was suggested to Mr Tam during his cross-examination that his reports should not be accepted as he “had failed to summarise and/or consider some of the medical evidence available”.¹¹⁶ But that criticism of Mr Tam was premised on the approach that *only Mr Tam* took: Mr Tam arrived at his conclusion having reviewed the Medical Experts’ reports.¹¹⁷ That being the case, his failure to consider some of the Medical Experts’ reports is a valid criticism of his approach. It does not, however, follow that this would equally be a valid criticism of Mr Potter’s approach.

60 Fourth, Mr Tuan submits that Ms Lim’s alternative calculations set out by way of a “customisable calculator” must be rejected, and instead only the

¹¹⁵ Mr Tuan’s WCS at para 53.

¹¹⁶ Mr Tuan’s WCS at para 53. See also Ms Lim’s WCS at paras 4.3 to 4.5.

¹¹⁷ NE for 26 September 2023 at p 7 lines 4 to 8, p 7 line 18 to p 8 line 9; Mr Tam’s First Report at paras 20 to 26, 40 to 43, 47 to 53; Mr Tam’s Second Report at paras 7, 16 to 23 and 27, n(n) 4 and 6. See also Ms Lim’s WRCS at paras 3.16 to 3.18.

calculations in Mr Potter's First Report or Second Report may be accepted.¹¹⁸ In my assessment, I am not constrained to either an acceptance or rejection of these calculations. Ms Lim's pleadings indicate that she seeks damages for the loss of her future earnings and she pleads that she:

reserves the right to adduce an expert report on the particulars of the general damages including but not limited to the quantification of her loss of earning capacity and future earnings in the course of the proceedings at trial or at the assessment of damages.¹¹⁹

She has also set out her case in relation to the quantification of her loss of future earnings with sufficient detail. As is evident from my ensuing analysis below, my analysis and decision on the quantification of her loss of future earnings is based on the substantive submissions canvassed in the parties' cases, rather than on specific reliance on either Ms Lim's "customisable calculator" or the calculations derived therefrom.

Should it be assumed that Ms Lim's working capacity would be reduced by 50% from 2026, by a further 50% from 2031 and by a further 50% from 2036?

61 I turn to Mr Tuan's submission that Ms Lim should not be able to recover any damages for loss of future earnings because Mr Potter's calculations were based on the Capacity Assumption. Mr Tuan submits that the Capacity Assumption is untenable given that Ms Lim generated a higher total annual revenue after the Accident notwithstanding that her own doctor identified a reduction in her working capacity since she suffered the Injuries (*ie*,

¹¹⁸ Mr Tuan's WRCS at paras 18 to 22.

¹¹⁹ SOC4 at para 10.

the Pre-Accident Contradiction).¹²⁰ I find that the Capacity Assumption should not be adopted in calculating Ms Lim's loss of future earnings.

62 I disagree with Mr Tuan's submissions in support of that conclusion. For the reasons explained at [44] above, the Pre-Accident Contradiction does not mean that the Capacity Assumption is false.¹²¹

63 Nonetheless, in my view, the Capacity Assumption was not rightly adopted for the purposes of calculating Ms Lim's loss of future earnings consequent upon the Expected Surgery. The Capacity Assumption made by Mr Potter is as follows:

[Ms] Lim's capacity to perform surgical procedures will be reduced by 50% from 2026, by a further 50% from 2031 and by a further 50% from 2036.¹²²

This appears to find its basis in Dr Lim Beng Hai's Second Report. To be clear, I am not making a finding that, as a matter of *fact*, Dr Potter made this assumption *because* it was in Dr Lim Beng Hai's Second Report.¹²³ The query and response in Dr Lim Beng Hai's Second Report are set out below:

[The query posed to Dr Lim Beng Hai:] e) please also perform a further clinical examination of [Ms Lim] and let us know: ... iii. the activities related to daily living and occupation *that [Ms Lim] has difficulties performing.*

...

[Dr Lim Beng Hai's response:] With regards to her occupation as an interventional cardiologist, *her current reduction in working capacity* can be estimated to be 50%, and a further 50% reduction of the current working capacity in 5 years, and

¹²⁰ Mr Tuan's WCS at paras 33 to 39.

¹²¹ Mr Tuan's WCS at paras 34 to 38.

¹²² Mr Potter's Second Report at para 1.5(b).

¹²³ See also NE for 25 September 2023 at p 56 line 21 to p 57 line 29.

another 50% reduction in the subsequent five years can be expected. The reduction in working capacity may eventually result in an early retirement.¹²⁴

[emphasis added]

64 It would appear that Ms Lim’s counsel instructed Mr Potter to make the Capacity Assumption on the basis of Dr Lim Beng Hai’s Second Report. However, a careful reading of Dr Lim Beng Hai’s Second Report shows that Dr Lim Beng Hai’s assessment of the reduction of Ms Lim’s working capacity concerned the period after the Accident but *before the Expected Surgery*. The question posed concerned the activities related to daily living and occupation that Ms Lim presently “has difficulties performing” and the answer addressed the “current reduction in working capacity”. Neither the question nor the response addressed the Expected Surgery and the likely effect of the Expected Surgery on Ms Lim’s working capacity.

65 Mr Potter, however, relying on the instructions provided by counsel, made his calculations on the basis that the Capacity Assumption concerned the reduction in Ms Lim’s working capacity *after the Expected Surgery*. This is evidenced from the following:

(a) Mr Potter’s First Report states that:

To compute LIH Cardiology’s loss of profits before tax, I have:

a) Calculated the loss of Directly Limited Revenues and Indirectly Limited Revenues for each year from 2025 (when [Ms] Lim is expected to lose 4.5 months’ income due to further surgeries on her wrist) to 2041 (when [Ms] Lim expects to retire), *by reference to my instructions [n(n) reads “Paragraph 1.6”] ...*¹²⁵

¹²⁴ Dr Lim Beng Hai’s Second Report (at (e)).

¹²⁵ Mr Potter’s First Report at para 2.11(a).

[emphasis added]

Paragraph 1.6 of Mr Potter’s First Report sets out the assumptions he made in preparing that report, which includes that Ms Lim’s capacity to perform surgical procedures will be reduced by 50% from 2026 and by a further 50% from 2031. This assumption was updated and superseded by the Capacity Assumption in Mr Potter’s Second Report.¹²⁶

(b) Mr Potter’s Second Report at Annex 5A also sets out calculations on the basis that DLR will reduce by 50% every five years (and the corresponding reduction for ILR). This is evident from his “Basis” of the “Calculation of Net Annual Loss” being:

- (i) “50% DLR, 25% ILR” between 2026 and 2030;
- (ii) “75% DLR, 43.75% ILR” between 2031 and 2035; and
- (iii) “87.5% DLR, 57.81% ILR” between 2036 and 2041.¹²⁷

This is consistent with the Capacity Assumption.

66 The sum of this evidence is that Mr Potter made the Capacity Assumption in order to calculate Ms Lim’s loss of future earnings *after* the Expected Surgery. However, the Capacity Assumption, being derived from Dr Lim Beng Hai’s Second Report, actually addresses Ms Lim’s reduction in working capacity *before* any Expected Surgery. It bears mentioning that I do not make the finding that this problem was through any fault or professional shortcoming on Mr Potter’s part.

¹²⁶ Mr Potter’s Second Report at para 1.5.

¹²⁷ Mr Potter’s Second Report at Annex 5A (second column labelled “Basis”).

67 I find therefore that the Capacity Assumption should not have been made. Instead, as I have found above at [51],¹²⁸ calculations of Ms Lim's loss of future earnings should be made on the basis that her working capacity will reduce by 25% after the Expected Surgery.

Should the NAD be applied?

68 The parties have put forward their calculations on the basis that Ms Lim will retire at 70.¹²⁹ However, Mr Tuan additionally seeks to impose the NAD of 15% on the working capacity of Ms Lim for the purposes of assessing her DLR after the statutory retirement age of 63.¹³⁰ According to Mr Tam, the NAD accounts for "the impact of age on ability and capacity to undertake surgical procedures on a normal basis".¹³¹ I find that the NAD should not be applied.

69 Ms Lim submits that Mr Tam does not provide any basis or explanation for the quantum of NAD imposed.¹³² At trial, Mr Tam did, however, attempt to explain the basis for the quantum of NAD he had proposed as follows:

This 15% number is assumed by me to some extent referenced [in the Ogden] table that Mr Potter has used in his calculation¹³³ ...

So this is a table that Mr Potter used as a reference to calculate a discount for other vicissitudes, which is other factors to be taken into account in discounting the income or loss of revenue or loss of earnings throughout the period of the claim¹³⁴

¹²⁸ See also Ms Lim's WCS at para 4.2.

¹²⁹ Ms Lim's WCS at paras 4.9 and 5.21, n(n) 53 and 79.

¹³⁰ Mr Tuan's WCS at para 62.

¹³¹ Mr Tam's Second Report at para 27; NE for 26 September 2023 at p 56 lines 14 to 19.

¹³² Ms Lim's WCS at para 5.23.

¹³³ NE for 26 September 2023 at p 56 lines 19 and 20.

¹³⁴ NE for 26 September 2023 at p 57 lines 2 to 5.

...

“Table C Loss of earnings to pension age 60: Females - Not disabled”. Effectively, table C is the table that Mr Potter used to determine the discount factor for [Ms Lim]. And if I refer you in the first column on the left where it says, “Age of trial”, I believe that Mr Potter has used the age of trial at 52, and the second column which is the, “Level 3, Employed” column. “Level 3” meaning the highest level of education. “Employed” means [Ms Lim] is employed and [Ms Lim] is not disabled. On that basis, at the age of trial of 52, Mr Potter has selected a discount factor of 0.83, which is effectively a discount of 17%, as one of the discount that he has used in the calculation. Now, just want to highlight the fact, Your Honour, that this table C as in table D, another table is an [Ogden] table, only shows discount factor up to pension age 60. Because the assumption is that the ... loss of earning is up to pension age, 60. In this case, [Ms Lim], as you are aware, is claiming for a loss of earnings up to age 70, well beyond so-called pension retirement age. So on that basis, my view is that it’s appropriate to apply a further discount, what I call an age discount, to [Ms Lim's] calculation of the loss of earnings beyond the retirement age. In this case in Singapore, it’s 63, so I apply after 63 years old. That’s the basis of the age discount of 15%. And why 15%? Well, it’s a number that I chose quite close to the discount factor that Mr Potter used, 0.83, which is 17%. I just took a lower number, 15%.¹³⁵

It is not clear to me on what basis Mr Tam assumed that the 15% NAD is referenced “to some extent” in the Ogden Tables. It is also not clear to me why he “just took a lower number” than the 17% adopted by Mr Potter in pegging the NAD at 15%.

70 Mr Potter says the Ogden Tables account for “other vicissitudes of life besides mortality”,¹³⁶ which is reflected in the explanation given in the PIRC Tables at p viii:¹³⁷

¹³⁵ NE for 26 September 2023 at p 57 line 12 to p 58 line 5.

¹³⁶ Mr Potter’s First Report at para 2.15.

¹³⁷ Mr Potter’s First Report at Exhibit IP-4.

In the current eighth edition of the Ogden Tables, various adjustment factors are included to take into account other vicissitudes of life besides mortality. These are (a) gender; (b) age band; (c) education level; (d) whether the individual was disabled at the time of the accident; and (e) whether the individual was employed at the time of the accident.

As the above explanation indicates, the multipliers in the Ogden Tables, which were adopted by Mr Potter and incorporated within his computations, *already account* for “other vicissitudes of life” which *include* aging among the various adjustment factors. It is unnecessary to further impose a NAD of 15% as this would appear to duplicate what has already been factored in by both parties in their computations (at [21(c)(ii)]). There is thus no basis for me to accept that Mr Tam is correct in his assumption that the multipliers in the Ogden Tables serve the same purpose as Mr Tam’s NAD of 15%.¹³⁸ Accordingly, the primary basis for Mr Tam’s calculations made involving the NAD is questionable.

71 Mr Tam’s testimony that he imposes the NAD only for the years *after Ms Lim is past the retirement age* in Singapore is also questionable. He recognises that the significance of “pension age 60”¹³⁹ in the Ogden Tables lies in the “loss of earning”¹⁴⁰ thereafter, and draws a parallel between “pension age 60” in the Ogden Tables and the statutory retirement age of 63 in Singapore. But he is also clearly cognisant that Ms Lim’s claim is premised on her ability to *continue working* until she is 70 (*ie*, well past both the pension age of 60 in the Ogden Tables and the retirement age of 63 in Singapore). Mr Tam also does not explain the significance of reaching, specifically, the *retirement age in Singapore* in connection with Ms Lim’s “ability and capacity to undertake

¹³⁸ Ms Lim’s WCS at para 5.23.

¹³⁹ Mr Potter’s First Report at Exhibit IP-5 (Table C).

¹⁴⁰ NE for 26 September 2023 at p 57 lines 24 to 28.

surgical procedures on a normal basis”.¹⁴¹ Further, even if I accept Mr Tam’s proposition that the NAD ought to apply, I am unpersuaded as to why a flat rate of 15% is a suitable figure. I therefore have difficulty accepting Mr Tam’s reasoning.

72 Additionally, it is curious that Mr Tam applies the NAD only to calculations of loss of future earnings in the event Ms Lim does *not* undergo the Expected Surgery,¹⁴² but not to the calculations for the scenario where Ms Lim undergoes the Expected Surgery.¹⁴³ This cannot be rationalised on the basis of Mr Tam’s mistaken equation of the multipliers in the Ogden Tables to the NAD, because some of his calculations apply both discounts.¹⁴⁴

73 For the reasons above, I find that the NAD should not be applied. I should also mention that I am not aware of any precedent, nor has any been cited to me by the parties, for the use of the NAD whether in the manner applied by Mr Tam or otherwise.

What should be the percentage reduction in working capacity applied to DLR?

74 Ms Lim submits that the percentage reduction in working capacity applied to DLR should be 100%,¹⁴⁵ but Mr Tuan submits that this should only

¹⁴¹ Ms Lim’s WCS at para 5.24.

¹⁴² Ms Lim’s WCS at para 5.26; Mr Tam’s Second Report at Annex 1 (Section C, first table labelled “No Surgery”, rows 12 to 18).

¹⁴³ Mr Tam’s Second Report at Annex 1 (Section C, second to fifth tables); Ms Lim’s WCS at para 5.21.

¹⁴⁴ Mr Tam’s Second Report at Annex 1 (Section C, first table labelled “No Surgery”, rows 12 to 18).

¹⁴⁵ Ms Lim’s WCS at paras 5.13 and 5.17.

be 10% to 15%.¹⁴⁶ At this juncture, I briefly address Mr Tuan's alternative submission that Ms Lim will suffer no loss of future earnings because there is no correlation between her working capacity and her ability to earn income.¹⁴⁷ He appears to advance this argument on the basis of the Pre-Accident Contradiction. For the reasons given at [42] to [48] above, I do not accept this submission.¹⁴⁸

75 Ms Lim explains that the percentage reduction in working capacity applied to DLR should be 100% because:

the ultimate outcome that can be anticipated due to the complexity and inherent risks of partial fusion (best-case) or joint replacement (moderate-case) surgery is that [Ms Lim] is likely to undergo total wrist fusion (worst-case) which will *reduce her working capacity by 100%* and lead to her retirement as an interventional cardiologist.¹⁴⁹

[emphasis added]

This explains the basis for Ms Lim's submission that her *working capacity* would reduce by 100%, but does not address the *effect* of a change in her working capacity *on her DLR*. In so far as Ms Lim's submission pertains to the percentage reduction in her working capacity applied to DLR, some important clarifications should be made in this regard. As I have found at [51] above, her working capacity is likely to reduce by 25%, not 100%. There is no cogent basis to assert that she *will* more likely than not undergo a total wrist fusion. To the contrary, the Medical Experts have only opined that a total wrist fusion "*may*"

¹⁴⁶ Mr Tuan's WCS at para 62; Mr Tam's Second Report at para 27 and n(n) 4.

¹⁴⁷ Mr Tuan's WCS at paras 33 to 39, 56 to 58; Mr Tuan's WRCS at para 13.

¹⁴⁸ See also Ms Lim's WRCS at para 3.20.

¹⁴⁹ Ms Lim's WCS at paras 3.20 and 5.17.

[emphasis added] be required after a partial wrist fusion¹⁵⁰ – this represents no more than a possibility, rather than a likelihood, of that event occurring. Ms Lim herself recognises that only “*sometimes* you [may] need to ... redo the surgery with a total joint fusion” [emphasis added].¹⁵¹ Her evidence suggests a considerable degree of risk-aversion; she considers total wrist fusion to be an option that would make her “worse off”.¹⁵² Equally, it cannot be assumed that the “ultimate outcome” must be the worst-case scenario which will reduce her working capacity by 100% and force her into early retirement as an interventional cardiologist. As such, the relevant reduction in her working capacity applied to DLR should similarly be 25%, not 100%.

76 It is observable from Mr Potter’s calculations that he proceeded on the basis that a reduction in Ms Lim’s working capacity would lead to the same reduction (*ie*, 100%) in her DLR (on a percentage basis): the only factor affecting DLR is set out in the “Basis” column of the table in Annex 5A of Mr Potter’s Second Report. This can only refer to the reduction in working capacity since Mr Potter proceeded on the following assumptions, which exhaustively account for the contents of the said “Basis” column: (a) the Capacity Assumption; and (b) an assumption that every 50% reduction in capacity to undertake surgical procedures would result in a 25% reduction in her income from non-surgical activities.¹⁵³

77 It appears from Mr Potter’s testimony that he understood the concept of “working capacity” to be interchangeable with DLR:

¹⁵⁰ Joint Medical Experts Table of Issues at s/n 25 and 27.

¹⁵¹ NE for 20 September 2023 at p 67 lines 13 to 14.

¹⁵² NE for 20 September 2023 at p 67 lines 15 to 16.

¹⁵³ Mr Potter’s First Report at paras 1.6 and 2.2; Mr Potter’s Second Report at para 1.5(b).

And in order to calculate the losses, I then, for the purpose of my first and second reports had regard to the instructions as to the impact of [the Expected S]urgery on [Ms] Lim's capacity to full DLR.¹⁵⁴

This perhaps explains why Mr Potter does not explicitly explain in his reports *why* he proceeded on the basis that a reduction in Ms Lim's working capacity would lead to the same reduction (*ie*, 100%) in her DLR. .

78 The definition of DLR, according to Mr Potter, is as follows: "Revenue from procedures for which [Ms] Lim's capacity would be limited as a result of the Accident",¹⁵⁵ a definition which was not disputed and instead adopted by Mr Tam.¹⁵⁶ With this in mind, the use of the term "direct" in "directly limited revenue" suggests that there is a *direct relationship* between Ms Lim's working capacity and DLR, in other words, that they have a positive correlation. But this does not ineluctably mean that the multiplicand for the purposes of that correlation is 1 (*ie*, 100%).

79 Nonetheless, I accept Mr Potter's evidence that, as a matter of percentage changes, changes in Ms Lim's working capacity would have the same impact on her DLR, given that DLR is earned through surgical procedures done by Ms Lim.¹⁵⁷ While I recognise that many other factors beyond working capacity are likely to affect the revenue of the Clinic (at [47] above), evidence of those other factors have not been placed before the court.

¹⁵⁴ NE for 25 September 2023 at p 12 lines 28 to 30.

¹⁵⁵ Mr Potter's First Report (section labelled "Definitions").

¹⁵⁶ Mr Tam's First Report at para 29.

¹⁵⁷ Mr Potter's First Report (section labelled "Definitions"); Mr Potter's First Report at para 2.7; NE for 20 September 2023 at p 35 lines 14 to 16, p 69 lines 1 to 3, p 69 line 15 to p 70 line 7. See also acceptance of this point by Mr Tuan: NE for 20 September 2023 at p 27 lines 13 to 17, p 29 lines 8 and 9.

80 Mr Tuan's submission of a reduction in working capacity of only 10% to 15% is based on Mr Tam's Second Report, which in turn relies on Dr Chang's Fourth Report.¹⁵⁸ Specifically, Mr Tuan relies on the following excerpt from Dr Chang's Fourth Report:

It is pointed out that during cardiac interventional procedures, such as catheterisations, forceful and extreme motions of the wrist are not required. A wrist that is not as flexible as before would not be an impairment.

With successful surgery to the right wrist, the condition of the joint would be improved and leave her with residual incapacity estimated to be 10% to 15%.

She will not need to retire prematurely due to the wrist injury.¹⁵⁹

For the reasons given at [50(a)], I do not place any weight on Dr Chang's evidence on the effect of wrist impairments on cardiac interventional procedures. I reiterate the concerns I have with Dr Chang's evidence, as stated at [46] above. Dr Chang's evidence also concerns only Ms Lim's working capacity, and he is not in a position to comment on the *impact* of changes in Ms Lim's working capacity *on her DLR* as that is not within his expertise. I also note that Dr Chang's Fourth Report is superseded by his agreement with the other Medical Experts that the impact of a partial wrist fusion on Ms Lim's working capacity is 20% to 30%.¹⁶⁰

81 I accept that changes to Ms Lim's working capacity would logically have a significant impact on the procedures in the DLR list that she can perform and that the revenue therefrom would similarly be significantly impacted. That

¹⁵⁸ Mr Tuan's WCS at para 62; Mr Tam's Second Report at para 27 and n(n) 4.

¹⁵⁹ Mr Tam's Fourth Report at paras 20 and 27 (second table labelled "Scenario B") and n(n) 4.

¹⁶⁰ Joint Medical Experts Table of Issues at s/n 28.

being said, I do not think that the impact of the Expected Surgery on DLR would be as extensive as 100%, according to Ms Lim, for the same reasons why I am not persuaded that her working capacity would be reduced to the extent as suggested (*ie*, 100%). This would be at variance with the unanimous opinion of the Medical Experts who have assessed a 20% to 30% reduction in her working capacity if she undergoes a partial wrist fusion, as I have noted above (at [49]).

82 For these reasons, I find that there will be a 25% reduction in Ms Lim's DLR after the Expected Surgery.

What should be the percentage reduction in working capacity applied to ILR?

83 Ms Lim submits that a change in DLR will have a 50% impact on ILR.¹⁶¹ Consequently, the percentage reduction in working capacity applied to ILR should be half of that applied to DLR ("Mr Potter's ILR Assumption"). Mr Tuan appears to take the position that neither DLR nor working capacity directly affect ILR. He proposes that changes to ILR after the Expected Surgery should be assessed on a basis separate from Ms Lim's working capacity and DLR after the Expected Surgery. He submits instead that there will be a year-on-year increase in her ILR of 4%.¹⁶²

Mr Potter's ILR Assumption

84 Ms Lim adopts Mr Potter's ILR Assumption that the impact of a reduction in working capacity on ILR would be half of that of DLR.¹⁶³ Mr Potter's statement of this assumption is reproduced below:

¹⁶¹ Ms Lim's WCS at paras 5.13 and 5.18.

¹⁶² Mr Tuan's WCS at para 62; Mr Tam's Second Report at para 27 and n(n) 5.

¹⁶³ See also NE for 25 September 2023 at p 12 lines 29 to 31.

... for every 50% reduction in [Ms] Lim's capacity to undertake surgical procedures, [Ms] Lim would experience a 25% reduction in her income from other activities performed though LIH Cardiology.¹⁶⁴

Ms Lim submits that Mr Potter's assumption is "more equitable and rational" than Mr Tam's alternative assumption that ILR will increase by 4% annually ("Mr Tam's ILR Assumption"), and is "grounded on sound and cogent logic".¹⁶⁵

85 Mr Potter gave the following explanation for his assumption:

I thought that the impact would be *somewhere between zero and a half of whatever the impact would have been on the DLR business*. My reason for saying that is that there would at a minimum be a loss of ILR revenue in respect of those patients who were referred elsewhere and then continued seeing by [a doctor or surgeon] elsewhere. So it would, at minimum, be losing that portion of the revenue ... Then, in a situation where any professional is having to turn away a portion of their---of their business, you can expect that there would also be some knock-on impact on referrals and obtaining of business in the future, generally. I don't know how much that impact would be, *and I put an upper limit on the impact at the---the same as the impact to the directly limited revenue*. So I think it would be *surprising if the ILR business were affected to a greater extent than the DLR business* ... So we find ourselves needing the estimate an impact somewhere between zero and 50% of the impact on DLR. *Absent any---any scientific method for working out what the impact would be, I adopted the midpoint of that range, which then gives us an ILR impact of 25% for a corresponding DLR impact of 50%*.¹⁶⁶

[emphasis added]

It is clear that the premise of Mr Potter's reasoning is that the impact of a reduction of Ms Lim's working capacity on her DLR cannot be more than the impact of the same on her ILR. Accordingly, "50%" – which refers to the 50%

¹⁶⁴ Mr Potter's First Report at para 2.2.

¹⁶⁵ Ms Lim's WCS at para 5.18; Ms Lim's WRCS at paras 3.13 to 3.14.

¹⁶⁶ NE for 25 September 2023 at p 11 lines 6 to 28. See also NE for 25 September 2023 at p 68 line 10 to p 69 line 14.

reduction in Ms Lim's working capacity every five years, *per* the Capacity Assumption – is taken as the upper bound.

86 I have found that the Capacity Assumption does not refer to Ms Lim's working capacity *after the Expected Surgery* (at [64] above). It follows that the Capacity Assumption is of very limited utility in assessing the impact of the Expected Surgery on ILR. It should not form the basis for ascertaining a correlation between DLR and ILR. For this reason, I have doubts about Mr Potter's use of 50% as the upper bound in identifying the percentage reduction in ILR caused by a reduction in Ms Lim's working capacity.

87 Another difficulty is that Mr Potter does not explain why the impact of a reduced working capacity on ILR is *circumscribed* by the impact of a reduced working capacity on DLR. All he says is that "it would be surprising if the ILR business were affected to a greater extent than the DLR business",¹⁶⁷ and "it's unlikely and doesn't seem reasonable to assume that it would be equal or above to the impact on the surgical revenues".¹⁶⁸ But this does not fully explain why a reduction in Ms Lim's working capacity cannot have a greater effect on ILR than on DLR. In fact, Ms Lim has testified that the "snowballing" impact of the Expected Surgery on ILR will be greater than on DLR (see [94] below).

88 This criticism of Mr Potter's analysis is related to Mr Tuan's broader submission that there is no "historic correlation" between DLR and ILR and therefore ILR should not be assessed in relation to DLR. This submission is based on Mr Tam's finding that "even though there was a decrease in average annual revenue after the accident for DLR of 8%, the ILR showed an increase

¹⁶⁷ NE for 25 September 2023 at p 11 lines 20 to 22.

¹⁶⁸ NE for 25 September 2023 at p 70 lines 1 to 3.

of 19% instead”.¹⁶⁹ I agree with Mr Tam that there does not appear to be a correlation between trends in DLR and trends in ILR. I note, however, that the lack of “historic correlation” was a conclusion reached on an analysis of just eight years’ worth of data. This, in my view, diminishes the strength of Mr Tam’s conclusion and his counterargument to Mr Potter’s ILR Assumption.

89 Nevertheless, the damages sought in this action are the losses consequent upon the Expected Surgery. It is logical to expect that, since the Expected Surgery is likely to result in a reduced working capacity for Ms Lim, there will therefore be some reduction in her ILR. This is because her ability to work and bring in revenue, even if indirectly related to the procedures she can conduct, will be affected. My finding is supported by Ms Lim’s testimony that the business which generates ILR arises from the work that she does which generates DLR (at [94] below).

90 Third, I recognise that Mr Tuan objects to Mr Potter’s decision to take the mid-point between the bounds of 0% and 50%.¹⁷⁰ I am less troubled by this choice on Mr Potter’s part. He recognises that he had no basis to choose another number in that range and thus he adopted the neutral mid-point.¹⁷¹ Mr Tuan appears to suggest that Mr Potter should have looked for a “trend ... or a history” of a relationship between DLR and ILR,¹⁷² but I am not sure that would be an acceptable approach either. That is because, as Mr Potter pointed out, in the preceding years there was “growth in the business... not... a scenario where

¹⁶⁹ Mr Tuan’s WCS at para 44.

¹⁷⁰ Mr Tuan’s WCS at para 43.

¹⁷¹ NE for 25 September 2023 at p 68 line 10 to p 69 line 14.

¹⁷² NE for 25 September 2023 at p 70 lines 16 to 25.

[Ms Lim was] being prevented from doing something”.¹⁷³ Mr Potter also rightly says that there is no “historic pattern or a dataset that observes a period when [Ms Lim is] going to suffer from ... the types of limiting conditions that we’re told she will be suffering from [after the Expected Surgery].”¹⁷⁴

91 Fourth, Mr Tuan also submits that, as Ms Lim has disagreed with Mr Potter’s ILR Assumption in her testimony, the ILR Assumption should be rejected.¹⁷⁵ I have found at [54] above that Ms Lim did disagree with Mr Potter’s ILR Assumption and she conceded that, because this assumption was wrongly made, Mr Potter’s calculations are “unsupported and unreasonable”. But I do not place much weight on this because, first, the validity of Mr Potter’s ILR Assumption is not an issue of fact on which Ms Lim’s evidence is crucial. Second, Ms Lim rejected Mr Potter’s ILR Assumption because her projected 50% reduction in working capacity after the Accident (but before the Expected Surgery) did not trigger a 25% reduction in her ILR at the time. But Mr Potter’s ILR Assumption concerns the consequences of a reduction in Ms Lim’s working capacity *after* the Expected Surgery. No reasons have been given in support of this proposed equivalence.

Mr Tam’s ILR Assumption

92 Mr Tam takes the view that, after the Expected Surgery, there will be an annual increase in ILR of 4%. This is because:

Based on the historical financial information presented in paragraph 10 of [Mr Tam’s Second Report], the lowest growth rate for ILR was 4%. The assumption here is that [Ms Lim]

¹⁷³ NE for 25 September 2023 at p 72 lines 11 and 12.

¹⁷⁴ NE for 25 September 2023 at p 72 lines 16 to 19.

¹⁷⁵ Mr Tuan’s WCS at paras 46 and 47.

would have shifted her attention to growing the ILR business following her reduced working capacity in DLR from 2028.¹⁷⁶

...

Specifically, based on the tables in paragraph [10 of Mr Tam's Second Report], [Mr Tam made] the following observations:

...

b) In the years before the accident, the ILR was on an increasing trend year on year from 2014 to 2017 despite the volatility of the DLR over the same period.

c) In the years before the accident, there was no evidence of any correlation between the DLR and ILR. Both DLR and ILR seemed to move independently.

...

f) In the years after the accident, the ILR was also on an increasing trend year on year except in Covid impacted year 2020. Again, this suggested that there was no evidence of any correlation between the DLR and ILR.¹⁷⁷

Mr Tam also testified that there is no evidence that, after the Expected Surgery, even though there may be a reduction in Ms Lim's working capacity, there would be any material change to ILR. This is because, both before and after the Accident, "despite some change in her DLR, ILR did not move in the similar direction that Mr Potter has made an assumption on".¹⁷⁸

93 The first difficulty is that all the numbers relied on by Mr Tam and the observations made thereon were taken prior to the Expected Surgery.¹⁷⁹ Given that I have found that the Expected Surgery will result in a reduction of Ms Lim's working capacity, I find it difficult to rely on pre-Expected Surgery numbers to make findings on the revenue of the Clinic post-Expected Surgery.

¹⁷⁶ Mr Tam's Second Report at n(n) 5.

¹⁷⁷ Mr Tam's Second Report at para 15.

¹⁷⁸ NE for 26 September 2023 at p 55 lines 15 to 20.

¹⁷⁹ Ms Lim's WCS at para 5.19.

This difficulty is exacerbated by the fact that the thrust of Mr Tam’s argument appears to be that an *increase* in ILR is likely after the Expected Surgery because ILR has largely been increasing notwithstanding some decreases in DLR. I also note that Mr Tam appears to suggest that this trend will continue because Ms Lim’s reduced working capacity concerns only DLR and not ILR. But no explanation is given as to why he maintains that Ms Lim’s working capacity concerns only DLR and not ILR, and why her reduced working capacity would affect only DLR.

94 Second, Mr Tam assumes that Ms Lim is likely to shift her attention to growing “the ILR business”. This would appear plausible if DLR is diminished on account of a significant reduction in her working capacity. However, there is no evidence that “the ILR business” can be grown independently of the procedures that generate DLR. Ms Lim testified to the contrary:

[if Ms Lim no longer operates on patients after the Expected Surgery,] of course the directly related will be affected. *But the indirectly related comes from the directly related.* So everything will be---will snowball.¹⁸⁰

...

The---the indirectly limited portion is generated by the directly limited portion. And they actually have a snowballing effect through the years, so it becomes many---magnified through the years.¹⁸¹

[emphasis added]

I therefore doubt that Mr Tam can fairly make such an assumption. Absent that assumption, his position that Ms Lim will enjoy a 4% annual growth rate of her ILR after the Expected Surgery is entirely speculative.¹⁸²

¹⁸⁰ NE for 20 September 2023 at p 35 lines 15 to 17.

¹⁸¹ NE for 20 September 2023 at p 62 lines 22 to 24.

¹⁸² Mr Tam’s Second Report at n(n) 5.

95 I therefore have significant concerns about the parties' submissions in relation to the effect of the Expected Surgery on ILR. I accept that a reduction in Ms Lim's working capacity would result in a reduction in her ILR. The question is *how much* that reduction would be. In my view, Mr Potter's ILR Assumption is more persuasive and should be preferred over Mr Tam's ILR Assumption. As indicated above, however, I disagree that the upper limit for DLR should be 50%, but I am prepared to accept that the reduction occasioned by the Expected Surgery on ILR should be taken as half of the reduction to DLR. As I have found that the likely reduction in Ms Lim's working capacity is 25%, and the likely reduction in her DLR is also 25%, I find that the likely reduction in ILR is 12.5%.

How should Ms Lim's loss of future earnings be computed?

96 To recapitulate, my findings are that Ms Lim is likely, on the balance of probabilities, to:

- (a) undergo the Expected Surgery within four years from the time of the trial (*ie*, by end 2027);
- (b) opt to undergo a partial wrist fusion;
- (c) be unable to work after the Expected Surgery for a duration of seven months; and
- (d) experience a 25% reduction in her working capacity after the Expected Surgery.

97 Following from the above findings, I have determined that after the Expected Surgery there will be a 25% reduction in her working capacity which

applies to her DLR, and a corresponding 12.5% reduction in her working capacity which applies to her ILR.

98 Further, having regard to the above findings, I proceed on the basis that she is likely to resume working in 2028.

99 The parties' submissions proceed on the common basis, as Ms Lim herself has submitted, that she will retire at the age of 70.¹⁸³ It is therefore unnecessary for me to make a specific finding as to whether or to what extent the Expected Surgery that she undergoes will accelerate her rate of early retirement. Similarly, it is unnecessary for me to state a view as to whether the age of 70 amounts to early retirement in her working context.

100 Before setting out the relevant computations, I note in passing that Ms Lim's quantification of her loss of future earnings appears to be a constantly moving target. Mr Potter's First Report indicated that Ms Lim's expected loss of future earnings was \$7,575,748.¹⁸⁴ Mr Potter's Second Report, prepared in response to Mr Tam's First Report, indicated that Ms Lim's expected loss of future earnings was higher at \$9,629,880.¹⁸⁵ On this basis, the claim amount quantified in Ms Lim's Written Opening Statement was also \$9,629,880.¹⁸⁶ However, in Ms Lim's Written Closing Submissions, the figure is increased to \$12,294,165.¹⁸⁷

¹⁸³ Ms Lim's WCS at paras 4.9 and 5.21, n(n) 53 and 79.

¹⁸⁴ Mr Potter's First Report at para 2.19.

¹⁸⁵ Mr Potter's Second Report at para 2.20.

¹⁸⁶ Ms Lim's WOS at para 10.

¹⁸⁷ Ms Lim's WCS at para 7.1.1.

101 The increase to \$12,294,165 is premised on Ms Lim's proposed adoption of a 100% reduction in her DLR (and a corresponding 50% reduction in her ILR). This would only be potentially justifiable if, as another starting premise, it is assumed that she will undergo a total wrist fusion. These premises are flawed. I have explained above why I do not accept either of them. In doing so, I have taken into account the totality of the evidence in determining when Ms Lim is likely to undergo the Expected Surgery and which surgical procedure she is likely to adopt.

102 Adopting the three-step approach common to both Accounting Experts, the first step is to calculate the pre-tax and pre-multiplier loss of profits. As I have adopted a one-time reduction of working capacity of 25% (instead of, for example, the Capacity Assumption which sees an incremental reduction in working capacity every five years) and rejected the NAD, this step of the calculation applies for every year between 2028 and 2041. In 2041, as Ms Lim turns 70 on 16 July 2041, I adjust the numbers to adopt a 6.5 month-basis instead of an annual basis.¹⁸⁸

- (a) The loss in DLR per year is $0.25 \times \$418,430.00 = \$104,607.50$.
- (b) The loss in ILR per year is $0.125 \times \$2,370,877.00 = \$296,359.63$.
- (c) The reduction in cost per year is $0.2837 \times \$296,359.63 = \$84,077.23$.
- (d) The pre-tax and pre-multiplier loss of profits is $\$104,607.50 + \$296,359.63 - 84,077.23 = \$316,889.90$.

¹⁸⁸ Ms Lim's WCS at para 5.10.1.

(e) The post-tax, pre-multiplier loss of profits is $0.83 \times \$316,889.90 = \$263,018.62$.

103 Applying the multipliers, the quantum of Ms Lim’s loss of future earnings is as follows. The “adjusted” multiplier refers to the application of both the PIRC Tables and Ogden Tables multipliers (as agreed between the parties), and is obtained by multiplying both aforesaid multipliers (see above at [21(c)]).

| Year | Age | PIRC Tables multiplier | Ogden Tables multiplier | “Adjusted” multiplier (applied to \$263,018.62) | Loss of profits |
|------|-----|------------------------|-------------------------|---|-----------------|
| 2028 | 57 | 0.99 | 0.83 | 0.8217 | \$216,122.40 |
| 2029 | 58 | 0.99 | 0.83 | 0.8217 | \$216,122.40 |
| 2030 | 59 | 0.99 | 0.83 | 0.8217 | \$216,122.40 |
| 2031 | 60 | 0.98 | 0.83 | 0.8134 | \$213,939.35 |
| 2032 | 61 | 0.99 | 0.83 | 0.8217 | \$216,122.40 |
| 2033 | 62 | 0.96 | 0.83 | 0.7968 | \$209,573.24 |
| 2034 | 63 | 0.89 | 0.83 | 0.7387 | \$194,291.85 |
| 2035 | 64 | 0.84 | 0.83 | 0.6972 | \$183,376.58 |
| 2036 | 65 | 0.77 | 0.83 | 0.6391 | \$168,095.20 |

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| 2037 | 66 | 0.71 | 0.83 | 0.5893 | \$154,996.87 |
| 2038 | 67 | 0.69 | 0.83 | 0.5727 | \$150,630.76 |
| 2039 | 68 | 0.66 | 0.83 | 0.5478 | \$144,081.60 |
| 2040 | 69 | 0.63 | 0.83 | 0.5229 | \$137,532.44 |
| 2041 | 70 | 0.62 | 0.83 | 0.5146 | \$73,359.36 (on a 6.5 month basis <i>ie</i> , 0.542 applied to \$135,349.38) |
| Total | | | | | \$2,494,366.85 |

Should provisional damages be awarded?

104 The primary relief that Ms Lim seeks is her loss of future earnings. She seeks *in the alternative* an award for provisional damages.¹⁸⁹ Mr Tuan denies that Ms Lim is entitled to an award of provisional damages and/or an order that she is entitled to further damages at such future date as the court deems fit.¹⁹⁰ As determined above, I find that she has established her claim for loss of future earnings, albeit not to the extent that she has sought to quantify her loss. The final sum of \$12,294,165 that she seeks to claim is unsupportable in principle. In the circumstances, it is not necessary for me to decide if Ms Lim is entitled to an award of provisional damages.

¹⁸⁹ Ms Lim's WOS at para 34; Ms Lim's WCS at para 7.3.

¹⁹⁰ Defence at para 10; Mr Tuan's WCS at paras 69 to 77.

Conclusion

105 With the Expected Surgery, Ms Lim’s career as a highly-skilled interventional cardiologist will certainly be adversely affected in the longer term. With respect, however, it is surely an overstatement to claim that the “devastating consequences” of the Accident “will effectively destroy her livelihood”.¹⁹¹ She has not lost her livelihood as an interventional cardiologist. I do not think that she will be losing her livelihood anytime soon, even after the Expected Surgery, as she will likely still be able to run her surgical practice, albeit possibly without being able to perform more complex surgical procedures.

106 Ms Lim’s overall competence and ability to handle complex surgical procedures would naturally diminish over time as she ages. It is fair to say that, generally, any potential patient would, not unexpectedly, have less confidence in the skills of surgeons who are of more advanced age to undertake complex procedures. Ms Lim herself fully recognises that there may be serious risks and implications if she were to perform such procedures without full confidence in her ability to do so.¹⁹²

107 Given Ms Lim’s resilience and fortitude, she is unlikely to be forced into premature retirement after the Expected Surgery. To her immense credit, she has stoically endured the pain resulting from her injuries after the Accident. The revenue generated from her surgical practice has increased. She has managed to adapt well to her circumstances to mitigate her loss in the meantime. But past events do not necessarily foretell the future; I assess that she is rightly entitled

¹⁹¹ Ms Lim’s WCS at para 8.1.

¹⁹² NE for 20 September 2023 at p 34 lines 16 to 23.

to claim for loss of her future earnings as her working capacity will, in all likelihood, be reduced if she undergoes the Expected Surgery by end 2027. Nevertheless, for the reasons I have explained above, I am of the view that she is not entitled to damages to the extent that she seeks.

108 To sum up, I award Ms Lim the following damages, with interest at the rate of 5.33% on item (a) below only from the date of the writ until the date of judgment, and at the rate of 2.67% on item (c) from the date of the Accident until the date of judgment (*Wee Lai Soon (alias Hoi Lai Soon) and another v Ong Jian Min* [2022] SGHC 102 at [161]):

- (a) General damages for pain and suffering: \$40,000 (agreed).
- (b) Special damages: cost of future medical expenses: \$70,000 (agreed).
- (c) Special damages: medical expenses: \$40,740.20 (agreed).
- (d) Loss of future earnings: \$2,494,366.85 (assessed).

109 No interest is awarded in respect of items (b) and (d) above, in line with the decision of the Court of Appeal in *Teo Sing Keng and another v Sim Ban Kiat* [1994] 1 SLR(R) 340 (at [51] to [55]) (see also *Tan Hun Boon v Rui Feng Travel Pte Ltd and another* [2018] 3 SLR 244 at [151(c)]; *Muhammad Adam bin Muhammad Lee (suing by his litigation representatives Noraini bte Tabiin and Nurul Ashikin bte Muhammad Lee) v Tay Jia Rong Sean* [2022] 4 SLR 1045 at [311]).

110 I will hear the parties separately on their submissions as to costs.

See Kee Oon
Judge of the Appellate Division

Joseph Lopez, Mubin Shah and Pearline Chia (Joseph Lopez LLP)
for the plaintiff;
Patrick Yeo, Lim Hui Ying and Joyce Ooi (Legal Solutions LLC) for
the defendant.

Annex

| List of Issues To Be Determined by the Medical Experts | | | | | |
|---|--|--|------------------------|-----------------------|--------------------|
| S/N | Issue | Agreed By All 3 Medical Experts | If Not Agreed | | |
| | | | Dr Lim Beng Hai | Dr Andrew Chin | Dr WC Chang |
| Present State / Before Going Through Recommended Surgical Procedures | | | | | |
| 1. | What injury did the Plaintiff sustain because of the accident? | Agreed. 1. Open comminuted right distal radius fracture 2. Scapholunate ligament tear 3. Lunatotriquetral ligament tear 4. Triangular fibrocartilage complex (TFCC) tear 5. Ulnar nerve neuropraxia | | | |
| 2. | The Plaintiff has sustained a certain degree of permanent incapacity as a result of the accident caused by the | Agreed. | | | |

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| | Defendant in 2017. Agree or disagree? | | | | |
| 3. | Explain the permanent incapacity. | Agreed. 1. Pain 2. Loss of joint motion / Restricted range of motion on her right wrist 3. Her occupation is affected | | | |
| 4. | Since 2017, there has been no improvement in the Plaintiff's wrist condition. Agree or disagree? | Agreed. | | | |
| 5. | Since 2017, there has been progression in the Plaintiff's wrist condition. Agree or disagree? | Disagreed. | There has been progression in the Plaintiff's wrist condition since 2017. The latest MRI Report dated 8 February 2023 shows an increased synovitis, indicating changes and progression to the Plaintiff's condition. The Plaintiff's injuries are a result of trauma rather than degeneration. In the case of arthritis, such as the Plaintiff's, it is necessary to examine not just the bones, symptoms such as pain, swelling, loss of movement, | Plaintiff had a fracture that was complicated by post-traumatic arthritis. However, it appears from MRI that her conditions have plateaued as there are no noted changes to the joint / bone. | |

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| | | | and decreased function indicate the progression of arthritis. | |
| 6. | Explain the progression? | Disagreed. | Worsening soft tissue, new tears in the ligament | See point 5 |
| 7. | The Plaintiff has developed post-traumatic arthritis in her right wrist. Agree or disagree? | Agreed. | | |
| 8. | More specifically, it is the radial carpal arthritis of the wrist. Agree or disagree? | Agreed. | | |
| 9. | The Plaintiff continues to experience persistent pain in her right wrist? Agree or disagree? | Agreed. | | |
| 10. | The Plaintiff has lost strength in her right-hand grip. Agree or disagree? | Agreed. Dr Chang is of view that the loss is about 10%. At the mediation, Dr Chang added that the grip strength on the right hand is, on average, approximately 10% stronger. | | |
| 11. | The dexterity of the Plaintiff's right wrist has been compromised due to pain and | Agreed. | | |

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| | loss of flexibility. Agree or disagree? | | | | |
| 12. | A crucial ligament also known as scapholunate ligament is torn. The Plaintiff is experiencing pain and inflammation of her right wrist due to a tear in the scapholunate ligament, specifically the dorsal and central membranous portions. Agree or disagree? | Agreed. | | | |
| 13. | In addition to the tear in the scapholunate ligament, there is also a tear in the triangular fibrocartilage complex (TFCC), which is another crucial ligament in the wrist. Agree or disagree? | Agreed. | | | |
| 14. | The MRI scan shows that the Plaintiff's ECU tendon is torn. Agree or disagree? | Agreed. *All doctors agreed that the term should be "split" and not "torn". | | | |
| 15. | The tears and injuries to the joints, ligaments, and tendons are considered permanent and | Agreed. | | | |

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| | are unlikely to heal naturally over time. Agree or disagree? | | | | |
| 16. | There is no sign of improvement in the Plaintiff's post-traumatic arthritis. Agree or disagree? | Agreed. | | | |
| 17. | Does the injury have an impact on the Plaintiff's work/job as an interventional cardiologist, be in in terms of efficiency/speed/accuracy or limiting her ability to now perform complex intricate surgery. Agree or disagree? | Agreed. | | | |
| 18. | The Plaintiff will require some form of surgery in the future. Agree or disagree? | Agreed. | | | |
| 19. | What is considered a "good functional range of motion of wrist" to be able to continue work as an interventional cardiologist who performs complicated / intricate surgeries? | Unable to comment as "functional range of motion" is subjective. | Dr Beng Hai opines that a "good functional range of motion of wrist" will depend on the occupation of the individual. | . | Dr Chang is of the view that the fact that Plaintiff can continue performing surgery would mean that she still has her functional range |

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| | | | Dr Beng Hai gives an example of a hard labourer who may not require extensive wrist range of motion compared to an interventional cardiologist, for whom wrist function and motion are crucial due to the precision required in their work. However, Dr Beng Hai is unable to comment on the matter specifically. | | |
| Retirement Age | | | | | |
| 20. | What is the average age at which surgeons reach their professional peak in their careers? | Unable to comment. Doctors agreed that there is no industry standard / statutory retirement age. | | | |

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| 21. | The average age of a surgeon / interventional cardiologist is 75 years old. Agree or disagree? | Unable to comment. | | | |
| 22. | The Plaintiff will likely have to retire early due to the injuries suffered. Agree or disagree? | <p>Disagreed</p> <p>*Doctors agreed that surgery would be anticipated within the next 5 years.</p> | <p>Dr Beng Hai and Dr Andrew Chin are of the opinion that the injury sustained by the Plaintiff will cause her to retire earlier than if she does not have the injury. The time that the Plaintiff will need to retire depends on the rate of deterioration of her right wrist. The likelihood of retiring increases when the pain increases. Currently, her ligaments and TFCC are torn, her distal radius joint is unstable. It will be problematic when her arthritis worsens.</p> <p>Dr Beng Hai states that it is not the case that the sooner the corrective surgery, the better the outcome. He is of the view that the Plaintiff has not reached or pass the optimal time to undergo the surgery. The optimal time to perform the corrective surgery would be when the Plaintiff can no longer withstand the pain.</p> | | <p>She will have to stop doing what she is doing now if she has pain and difficulty. She can undergo treatment and continue, albeit at a different level.</p> |

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| | | | Dr Beng Hai highlights that when the time comes, we will advise her that it is time to go for the corrective surgery, which he believes will be within the next 5 years. | |
| Recommended Surgical Procedures | | | | |
| 23. | The Plaintiff will require surgery to manage her pain. Agree or disagree? | Agreed. | | |
| 24. | What is the estimated time frame that the Plaintiff is likely to require surgery? Do you agree or disagree that it will be within the next 5 years? | Agreed. | | |
| 25. | <p>What are the types of surgeries / procedures that the Plaintiff will require?</p> <p>Dr Lim Beng Hai has recommended the following surgical options: (a) 4 Corner fusion / total wrist fusion right wrist (this option being the most extensive)</p> | <p>Agreed that at the point in time when surgery is required – she will have to decide on the type of surgery. It is unclear now what is needed but it will revolve around partial fusion (a).</p> <p>(c) and (d) are not major points.</p> | | |

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| | <p>(b) Excision of right scaphoid with anchovy of distal radius (c) Neurolysis of right ulnar nerve (d) Right ECU tendon tenosynovectomy.</p> <p>Dr WC Chang has recommended the following procedures: (a) 4 Corner partial wrist fusion (b) Wrist arthroplasty</p> | <p>Doctors are definitely not considering (<i>sic</i>) (b) as it is not required if (a) is chosen.</p> <p>If partial wrist fusion is not successful in alleviating the pain that the Plaintiff experiences, the 3 Medical Experts opined that a total wrist fusion would have to be done.</p> <p>The type of surgery that the Plaintiff requires will depend on the current state of the Plaintiff's</p> | | | |
| Post-Surgery: Possible Outcome / Complications / Likelihood of the Plaintiff regaining the strength and dexterity of her wrist | | | | | |
| 26. | The surgery will fully restore the Plaintiff's wrist to its pre-accident state. Agree or disagree? | Agree that Plaintiff will not go back to pre-accident state. | | | |
| 27. | What are the potential risks or complications associated with | All surgery carries a risk of complication. | Dr Beng Hai comments that significant | | |

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| | the surgery for the Plaintiff's wrist? | Unable to comment as the list is non-exhaustive. The usual will be infection, losing wrist joint etc. | complication with the surgery may include developing an infection which may result in the Plaintiff requiring a total wrist fusion (instead of a partial wrist fusion). | | |
| 28. | What is the (a) best-case scenario and (b) worst-case scenario for the Plaintiff assuming the surgery is successful? | <p>Agreed as follows:</p> <p><i>Best case</i> → Partial fusion will limit about 50% of her wrist function, successful surgery will allow her to continue doing what she is doing at 70% to 80% capacity.</p> <p><i>Moderate</i> → joint replacement which will allow her 50% capacity</p> | | | |

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| | | <i>Worst Case</i> → total fusion which will allow her to continue working but not as an interventional cardiologist. | | | |
| 29. | What is the (a) best-case scenario and (b) worst-case scenario for the Plaintiff assuming the surgery is unsuccessful? | Refer to point 28 | | | |
| 30. | There will be long-term implications / considerations related to the surgery for the Plaintiff's wrist. Agree or disagree? | Refer to point 28. | | | |
| 31. | The surgery will accelerate the Plaintiff's rate of early retirement. Agree or disagree? | This will depend on what type of surgery the Plaintiff will undergo. If the Plaintiff undergoes a total wrist fusion, it will | Dr Beng Hai and Dr Andrew Chin are of the view that there will be early retirement as partial fusion or arthroplasty would effectively limit the range of wrist function. | Dr Chang is of the view that an early retirement is not required even if the Plaintiff undergoes a | |

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| | | <p>effectively bring the Plaintiff's career as an interventional cardiologist to an end. This is because the surgery locks movement of the wrist for pain relief.</p> <p>It was agreed that the Plaintiff can still work as a cardiologist with no sub-speciality in interventional work.</p> <p>The common position was that there is no industry standard with regard retirement.</p> | | | <p>partial wrist fusion or arthroplasty.</p> |
| 32. | <p>Given the Plaintiff relies on her right hand to perform surgical procedures which require high level of precision, skills, stability, and stamina, any partial or total fusion of her wrist will limit her range of motion. Agree or disagree?</p> | <p>Agreed.</p> | | | |

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| 33. | The Plaintiff will need to reduce her case load or be limited from accepting high level complex surgeries. Agree or disagree? | Agreed. | | | |
| 34. | The Plaintiff will require long term post-operative care and rehabilitation measures. Agree or disagree? | Doctors agree that down time will be 6 months to 1 year. First 6 months of medical leave and second 6 months will allow her to take on “light duties”. | | | |
| 35. | There is a real possibility that the Plaintiff will need to retire after surgery. Agree or disagree? | She will have to retire as an interventional cardiologist if there is total wrist fusion. | | | |