

Noor Azlin bte Abdul Rahman and another v Changi General Hospital Pte Ltd and others
[2021] SGHC 10

Case Number : Suit No 59 of 2015
Decision Date : 19 January 2021
Tribunal/Court : General Division of the High Court
Coram : Belinda Ang Saw Ean JAD
Counsel Name(s) : Vijay Kumar Rai (Arbiters Inc Law Corporation) for the plaintiffs; Kuah Boon Theng SC, Yong Kailun Karen, and Samantha Oei Jia Hsia (Legal Clinic LLC) for the first defendant.
Parties : Noor Azlin Binte Abdul Rahman — Azmi Bin Abdul Rahman — Changi General Hospital Pte Ltd — Imran Bin Mohamed Noor — Yap Hsiang — Soh Wei Wen, Jason

Tort – Negligence – Causation

Damages – Assessment

Damages – Quantum

19 January 2021

Judgment reserved.

Belinda Ang Saw Ean JAD:

Introduction

1 This court is required to consider issues relating to damages following the decision of the Court of Appeal (reported in *Noor Azlin bte Abdul Rahman v Changi General Hospital Pte Ltd and others* [2019] 1 SLR 834 (“CA Judgment”)) that the first defendant, Changi General Hospital Pte Ltd (“CGH”), is liable in negligence to the first plaintiff, Ms Noor Azlin binte Abdul Rahman (deceased) (“Ms Azlin”). The second plaintiff, Mr Azmi bin Abdul Rahman (“Mr Azmi”), who is Ms Azlin’s older brother, is the executor of her estate, and he was added as a party to HC/S 59/2015 (“Suit 59”) so as to continue with the action in his capacity as executor of the estate. Mr Azmi is not pursuing any separate cause of action in his own right against CGH.

2 Ms Azlin passed away on 1 April 2019, about a month after the CA Judgment in February 2019. As she was still alive at the time of judgment, the Court of Appeal’s inquiry did not extend to whether CGH’s negligence caused or contributed to her death. In the CA Judgment, the Court of Appeal was only concerned with the delay in diagnosis and treatment in the light of the progression of her lung cancer from stage I to stage IIA, the growth of the nodule in her lung, and nodal metastasis (CA Judgment at [117]–[123]).

3 With her passing, Ms Azlin’s estate, as a general rule, bears the burden of proving a causal link between CGH’s negligence and her death. Bearing in mind that similar principles apply to causation of damage and quantification of loss, the loss in issue (*ie* death) crucially results from the Court of Appeal’s finding of damage that had given rise to a cause of action. Hence, Ms Azlin’s death is a matter going to quantification of loss. I will elaborate more on this point later. Essentially, this judgment will consider whether the heads of damages as claimed are caused by CGH’s negligence and,

if so, the next step in the inquiry is the quantification of damages in respect of it. I should mention that, despite Ms Azlin's death, the issues raised by the Court of Appeal for consideration for the assessment of damages remain relevant, namely, the impact of the stage at which the cancer was at, the size of the nodule, and the presence of nodal metastasis on the effectiveness of a lobectomy performed in March 2012 and the risk of relapse after treatment (CA Judgment at [125]). These issues are relevant because, while the Court of Appeal has found that Ms Azlin's nodule in July 2011 was malignant, the Court of Appeal has left the degree and type of malignancy to be assessed by this Court.

4 The assessment of damages ("AD") was conducted in a six-day trial over the course of two weeks from 24 August to 4 September 2020. The parties called one expert witness each. These are the same experts who had earlier testified at the trial in the High Court ("HC trial"). The evidence of witnesses of fact led at the trial are also being relied upon for the AD.

5 I pause in the narrative to mention Ms Azlin's earlier application for interim payment before the Assistant Registrar ("AR"), which was appealed to a Judge in Chambers. On 23 September 2019, the AR ordered interim payment in the sum of \$200,000. The interim payment was upheld on appeal on 3 February 2020. Application for leave to appeal to the Court of Appeal was denied at first instance on 9 March 2020 and by the Court of Appeal on 5 May 2020.

6 At the hearing of the application for interim payment and again on appeal, counsel for CGH, Ms Kuah Boon Theng SC ("Ms Kuah") pointed out that the evidence adduced at the HC trial was insufficient to support some of the pleaded heads of claim. Yet, the estate did not seek leave to call further evidence to make good the deficiencies in readiness for the hearing to assess damages. For instance, no evidence has been led on Ms Azlin's expected full life expectancy. In addition, no justification has been given for the calculation of Ms Azlin's medical expenses post-trial. Neither has the estate amended the statement of claim to reflect heads of claim that are consonant with Ms Azlin's death. Consequently, both the quantum and the heads of claim have not been tidied up. For instance, a pleaded claim for loss of earnings has been retained when it should have been changed to a claim for loss of inheritance. Again, no leave has been sought to include a plea for aggravated and punitive damages that are now advanced in closing submissions. I have set out the foregoing because it provides an overall view of the background to the assessment of damages and how the shortcomings have impacted the damages recoverable.

Summary of CA Judgment against CGH

7 The facts and issues in dispute are reported in *Noor Azlin bte Abdul Rahman v Changi General Hospital Pte Ltd and others* [2019] 3 SLR 1063 ("HC Judgment") as well as in the CA Judgment. The setting for Ms Azlin's various claims for damages against CGH arose from her visits to CGH's Accident and Emergency ("A&E") department on different occasions over a period of several years with different presenting medical complaints on each visit. During one visit, a nodule in her right lung was picked up in an X-ray. Whilst she sued three doctors employed by CGH, two of whom were doctors in the A&E department, all three doctors were found not to be negligent, and as such there was no vicarious liability on the part of CGH. However, Ms Azlin succeeded on an independent cause of action against CGH for, *inter alia*, its failure to have in place an adequate system in respect of patient management to ensure that incidental findings in radiology reports are followed up. Given CGH's failure to maintain such an adequate patient management system, there was delay in the diagnosis and treatment of Ms Azlin's lung cancer.

8 Specifically, the Court of Appeal found that CGH breached its duty of care to Ms Azlin. CGH had failed to ensure that there was proper follow-up in Ms Azlin's case even though radiological reports in

April 2010 and July 2011 recommended follow-up on the opacity of a nodule in the right mid-zone of her chest. There were also serious inadequacies in CGH's patient management system (see [24] below and CA Judgment at [96]-[100]).

9 The events that led to the April 2010 and July 2011 radiological reports were as follows.

10 On 31 October 2007, Ms Azlin visited CGH's A&E department when she complained of lower chest pain and shortness of breath. A chest X-ray was ordered ("the October 2007 X-ray") and an opacity in the right mid-zone of her chest was noted. On 15 November 2007, Ms Azlin went to CGH's Specialist Outpatient Clinic ("SOC") and was attended to by Dr Imran bin Mohamed Noor ("Dr Imran"), the second defendant. Dr Imran ordered and reviewed two chest X-rays ("the November 2007 X-rays"). Dr Imran assessed that the opacity noted on the October 2007 X-ray "appeared to be resolving or had resolved on its own". Dr Imran thus gave Ms Azlin an open date for follow-up and advised her to return if she felt unwell.

11 On 29 April 2010, Ms Azlin went to CGH's A&E department and complained of right lower chest pain again. Dr Yap Hsiang ("Dr Yap"), the third defendant, attended to her and ordered an electrocardiogram ("ECG") and an X-ray ("the April 2010 X-ray"), which showed an opacity over the right mid-zone of Ms Azlin's lungs. Comparing the 2007 X-rays with the April 2010 X-ray, Dr Yap saw that the opacity had been present since 2007 and noted that it appeared to be stable as its size had remained more or less the same. The opacity was therefore deemed to be an "incidental finding", *ie* a finding that was not related to the patient's presenting symptoms. Dr Yap ordered that the April 2010 X-ray be reported on and he specifically requested, in his clinical notes, that Ms Azlin be called back after the radiological report was out, if necessary. The April 2010 X-ray was reported by Dr Rameysh one day after and the radiological report (*ie*, the April 2010 radiological report) was sent to the A&E department for follow-up.

12 On 31 July 2011, Ms Azlin returned to the CGH A&E department for a presenting complaint. She was attended to by Dr Soh Wei Wen Jason ("Dr Soh"), the fourth defendant. Ms Azlin complained of intermittent left lower ribcage pain. Dr Soh ordered two chest X-rays in the erect and left oblique views ("the July 2011 X-rays") and an ECG. Dr Soh's provisional diagnosis was that Ms Azlin had costochondritis, which is of musculoskeletal origin. Dr Soh's supervising consultant agreed with Dr Soh's views. Thus, Dr Soh discharged Ms Azlin with analgesics.

13 The July 2011 X-rays were sent for reporting and the report was prepared on 1 August 2011 (*ie*, the July 2011 radiological report). Dr Soh did not receive this report and was unaware that the radiologist had detected the opacity in the right mid-zone of Ms Azlin's lung, noted that it was stable and had been there since April 2010, and recommended a follow-up of the opacity in the report.

14 As highlighted in the HC Judgment at [30], the nodule as shown in the four X-rays taken of Ms Azlin from 2007 to 2011 were measured by CGH's radiologists and Ms Azlin's witness, Dr Andrew Tan (Dr Tan"), and the defendants' expert, Dr Lynette Teo ("Dr Teo"). Their measurements were:

	October 2007 X-ray (cm)	November 2007 X-ray (cm)	April 2010 X-ray (cm)	July 2011 X-ray (cm)
Radiological reports	1.537 x 1.44	No measurement	1.9	2.6 x 2.2
Dr Tan	1.5	1.5	1.9	2.3
Dr Teo	1.72 x 1.88	1.77 x 1.77	1.73 x 2.38	2.13 x 2.47

15 I now turn to the events that led to Ms Azlin undergoing a biopsy of the nodule in February 2012 and subsequently a lobectomy in March 2012.

16 On 28 November 2011, Ms Azlin attended at the Raffles Medical Clinic and was seen by Dr Melvyn Wong ("Dr Wong"). She complained of cough, breathlessness and blood in the sputum (*ie*, haemoptysis). On 1 December 2011, Ms Azlin returned to the Raffles Medical Clinic for a chest X-ray ("the December 2011 X-ray"), which showed a lesion in the right mid-zone of the lung. Dr Wong informed Ms Azlin that the X-ray would be sent for reporting before determining the next steps. The radiological report, which was prepared by Dr Yeong Kuan Yuen, confirmed the presence of a round patch and ill-defined shadows at the mid-zone of the right lung and suggested that "this is likely to be the result of infection". After another return visit on 7 December 2011, Dr Wong then referred Ms Azlin to a respiratory physician at CGH's SOC for further evaluation.

17 On 15 December 2011, Ms Azlin was seen by a respiratory physician, Adjunct Assistant Professor Sridhar Venkateswaran ("Prof Sridhar") at CGH's SOC pursuant to Dr Wong's referral. Prof Sridhar ordered chest X-rays and a Computed Tomography ("CT") scan of Ms Azlin's chest ("December 2011 CT scan"). The December 2011 CT scan was conducted by consultant radiologist, Dr Elizabeth Chan ("Dr Chan"). Dr Chan's report noted that the December 2011 CT scan revealed a nodule measuring 2.4 x 2.0 x 1.8cm that appeared to be a pulmonary hamartoma (*ie*, benign lesion). [\[note: 1\]](#) Dr Chan recommended that a biopsy be conducted to establish a "baseline histological correlation". CGH's expert witness, Professor Goh Boon Cher ("Prof Goh"), explained that this meant that the biopsy was done to establish "a basis for diagnosis" *ie* "whether or not there [was] a basis for calling [the nodule] a malignancy or not". [\[note: 2\]](#) The report concluded with the tag "Abnormal – Further action or early intervention required".

18 On 16 February 2012, a biopsy of the nodule was performed by Dr Tan. The biopsy confirmed that the nodule was malignant, and that Ms Azlin had cancer that originated from the lung. The stage of the lung cancer was not yet known then.

19 On 1 March 2012, Prof Sridhar explained to Ms Azlin that there was a good chance that she could have a complete cure with a lobectomy. Ms Azlin was clinically staged as having stage I lung cancer. On 29 March 2012, she underwent a lobectomy and one-third of her right lung was resected. [\[note: 3\]](#) The tumour measured 3.0cm and was pathologically diagnosed as stage IIA non-small cell lung cancer ("NSCLC") because one out of ten lymph nodes – a level 10 lymph node [\[note: 4\]](#) – was positive for micro-metastasis. Ms Azlin underwent four rounds of adjuvant chemotherapy for about three months and CT scans every four months.

20 In August 2014, a recurrence of her lung cancer occurred. This was discovered on a CT scan dated 26 August 2014. A biopsy confirmed that the lung cancer had progressed to stage IV. In December 2014, an analysis of the tumour that was resected via lobectomy in March 2012 was done to determine its mutation type. The resected tumour from 2012 was retrospectively found to be positive for a rare echinoderm microtubule-associated protein-like 4 ("EML4")-ALK gene rearrangement. In other words, Ms Azlin was retrospectively diagnosed in 2014 to have been suffering from ALK-positive lung cancer in 2012. Prof Goh opined that ALK-positive lung cancer is caused by a rare mutation whereby there is a translocation (relocation or rearrangement) of a part of a chromosome, which brings together two genes which are usually not together, which results in the expression of a signalling receptor called the ALK. He also opined that it is not known what induces this genetic event or transformation. When the ALK gene is activated, two receptors called the tyrosine kinase will bind to each other and can stimulate cell proliferation (*ie*, cause an increase in the number of cells). When the ALK gene is expressed on the cell membrane and activated, it is oncogenic

(has the potential to cause cancer) and can transform what were initially benign cells into malignant or cancerous cells. Additionally, Prof Goh explained that the ALK gene is usually silenced in a normal human tissue. What this means is that the ALK gene is not expressed except under malignant conditions.

21 From 22 January 2015 to 8 July 2015, Ms Azlin was treated with a first-generation ALK-inhibitor, Crizotinib. In July 2015, she started on second-generation ALK-inhibitors, Ceritinib and Nivolumab, as part of a clinical trial. She remained on those drugs until October 2016, when the cancer progressed to her brain and mediastinal lymph node. She was then taken off the clinical trial and managed with radio surgery, chemotherapy and Ceritinib. From March 2017, Ms Azlin was treated with a third generation ALK-inhibitor, Lorlatinib.

22 The pertinent findings of the Court of Appeal are summarised as follows.

23 The key factual finding was that, while the nodule was more likely than not to have been benign as of November 2007, Ms Azlin was, on the balance of probabilities, suffering from lung cancer by July 2011. This is primarily due to two reasons, as explained by the Court of Appeal. First, Ms Azlin's lung cancer must have gone through stage IA as well as stage IB before progressing to stage IIA by March 2012. This is because, according to Prof Goh, an ALK-mutation positive tumour must progress through stages I to IV. Second, given the extremely short interval of time (eight months) between August 2011 and March 2012, it is unlikely that the progression of the lung cancer from stage IA to IIA happened within that time. Reasoning backwards in a "logical and principled fashion", the Court of Appeal concluded that it was more likely than not that Ms Azlin did have lung cancer by July 2011, an inference which the Court of Appeal also drew from the objective fact that the growth of the nodule between 2010 and 2011 was more significant than that between 2007 and 2010: CA Judgment at [104]–[114]. Pausing here, the Court of Appeal in effect is saying that, by July 2011, Ms Azlin's lung cancer could not have been at stage IA. It suffices for me to say for now that the size of the nodule, based on X-rays in July 2011, suggests a stage IB cancer (see [44] below for elaboration).

24 The Court of Appeal found that CGH breached its duty of care to Ms Azlin. CGH had failed to ensure that there was proper follow-up in Ms Azlin's case even though both the April 2010 and July 2011 radiological reports recommended follow-up. There were also serious inadequacies in CGH's patient management system because (i) it was unreasonable that all incidental findings were followed-up by the A&E department instead of a specific outpatient clinic; (ii) the system did not allow for a comprehensive management of a patient because there was no appropriate mechanism for the consolidation of what was already known of a patient; and (iii) there was no system to properly record decisions that were made, so any doctor further down the line would have no reference to check why a decision had been made: CA Judgment at [96]–[100].

25 On causation and damage, the Court of Appeal found that Ms Azlin would have been referred to a respiratory physician if there had been a proper system to ensure that the appropriate follow-up on Ms Azlin's case was carried out. By July 2011, the radiological report for the July 2011 X-rays would obviously show that the nodule was not of an infective nature, having persisted over a period of four years. It was thus more likely than not that the CT scan conducted in December 2011 and biopsy conducted in February 2012 would have been conducted earlier beginning in July 2011. Thus, CGH's negligence caused a delay in diagnosing Ms Azlin with lung cancer: CA Judgment at [115]–[116]. In turn, this delay in diagnosis caused the following damage to Ms Azlin: the progression of the lung cancer from stage I to stage IIA, the growth of the nodule, and nodal metastasis: CA Judgment at [117]–[123].

26 The Court of Appeal then observed that, whilst the HC trial was not bifurcated, the evidence and submissions were not directed to the specific facts as found by the Court of Appeal. Issues such as the impact of the stage at which the cancer was at, the size of the nodule, and the presence of nodal metastasis on the effectiveness of a lobectomy and the risk of relapse were not fully explored. Therefore, the Court of Appeal remitted the issue of loss and damage, including quantification (if any), to the trial judge (this court) with leave for the parties to refine or revise their evidence so as to address the specific factual findings made by the Court of Appeal: CA Judgment at [124]–[125].

The Estate's quantification of damages

27 The plaintiffs (hereafter referred to as the "Estate") have put forward a total claim of \$13,464,100.75 in damages, with the following breakdown.

- (a) General damages: \$4,471,523.35, comprising the following items.
 - (i) Pain and suffering and loss of amenity: \$1,051,000.
 - (ii) Medical expenses (from 2015 to 1 April 2019): \$1,501,703.50.
 - (iii) Transport expenses (from 2015 to 1 April 2019): \$35,700.
 - (iv) Loss of take-home earnings:
 - (A) living years from 2016 to 2018: \$142,265.13; and
 - (B) lost years from 2019 to 2044: \$605,057.46.
 - (v) Loss of CPF:
 - (A) living years from 2016 to 2018: \$128,488.47; and
 - (B) lost years from 2019 to 2044: \$690,691.29.
 - (vi) Cost of nursing care, domestic and auxiliary helper (from 2014 to 1 April 2019): \$118,617.50.
 - (vii) Estate claim: \$198,000.
- (b) Aggravated or punitive damages: \$8,943,046.70.
- (c) Special damages: \$49,530.70, comprising the following.
 - (i) Pre-trial loss of earnings (2010 to 2015): \$26,910.09.
 - (ii) Medical expenses: \$19,620.61.
 - (iii) Transport expenses: \$3,000.

28 CGH submits that damages are not recoverable from CGH in that, even if Ms Azlin had been diagnosed and treated at stage I of her lung cancer, on the balance of probabilities, she would still have died from the disease. This contention is related to proof of the fact that, even if a given head of loss is one that is recognised in law where death ensued, there was no causal link between CGH's

negligence (the delayed diagnosis and treatment of Ms Azlin's lung cancer) and her eventual death. CGH's fallback position in the alternative is that the Estate is only entitled to \$20,800 in damages with the following breakdown: \$10,000 for pain and suffering and \$10,800 for the dependency claim.

Issues to be determined

29 As mentioned at [25] above, the Court of Appeal determined that CGH's negligence caused three forms of damage to Ms Azlin – the progression of the disease from stage I lung cancer to stage IIA, the growth of the nodule, and nodal metastasis. At the time of the CA Judgment, Ms Azlin was still alive and, on the question of damages, the inquiry, *inter alia*, would have been whether the management of the patient in July 2011 and in March 2012 would have been exactly the same, namely surgery followed by adjuvant chemotherapy. Another issue, if she were alive, is whether nodal metastasis was due to a delay in diagnosis and treatment and whether that translates into risk of relapse and a diminution in her full life expectancy. However, before me, the inquiry at the hearing to assess damages is whether there is evidence upon which to find that, on a balance of probabilities, Ms Azlin's full life expectancy was diminished and that translated to her death in April 2019. In short, these proceedings will examine whether there is a causal link between CGH's negligence and Ms Azlin's death. If the answer is in the affirmative, this court will then examine whether the Estate is entitled to claim each of the heads of claim, and the quantum claimed by the Estate as listed at [27] above.

The impact of CGH's negligence on risk of relapse and death

30 As highlighted in the introduction and [29] above, Ms Azlin's death is a matter going to quantification of loss. In applying principles of causation to quantification of loss, the matters to be examined at the AD hearing will be the impact of (i) the stage at which the cancer was at; (ii) the size of the nodule; and (iii) the presence of nodal metastasis. Related to these matters for this court's consideration will be the management of the patient in terms of the effectiveness of a lobectomy and the risk of relapse after a delay of approximately eight months. Associated with the risk of relapse is the element of diminution in full life expectancy that translated to her eventual death.

31 There was no list of agreed issues to address the matters outlined in [30] above. Instead, each party submitted its own list. Broadly, the common issues that are relevant to the question of whether CGH's negligence caused Ms Azlin's demise are as follows.

- (a) Was CGH's negligence in allowing the lung cancer to progress from stage I to stage IIA likely to have caused Ms Azlin's death on 1 April 2019 (independent of any pre-existing condition) ("causation question (a)")?
- (b) If the answer to (a) is in the affirmative, was Ms Azlin's fate already conclusively biologically determined when CGH breached its duty ("causation question (b)")?
- (c) If the answer to (b) is in the negative, were there available treatments that would have prevented Ms Azlin from dying in the way that she did ("causation question (c)")?
- (d) If the answer to (c) is in the affirmative, would Ms Azlin have availed herself of these treatments ("causation question (d)")?
- (e) If the answer to (d) is in the affirmative, would Ms Azlin have been "cured" and would she have lived to her full life expectancy if she had availed herself of the said treatments ("causation question (e)")?

32 These five questions are based on the approach set out in the Court of Appeal's judgment in *Armstrong, Carol Ann (executrix of the estate of Peter Traynor, deceased, and on behalf of the dependents of Peter Traynor, deceased) v Quest Laboratories Pte Ltd and another and other appeals* [2020] 1 SLR 133 ("*Carol Ann Armstrong*") at [72], which comprehensively dealt with the issue of causation in medical negligence.

33 The parties do not agree on the exact phrasing of causation question (b). The Estate frames causation question (b) as follows: "was [Ms Azlin's] fate already conclusively biologically determined in October 2007, April 2010 and/or July 2011 when [CGH] had failed in its duty to her?" CGH frames causation question (b) as follows: "was [Ms Azlin's] fate already conclusively biologically determined when [CGH] failed to refer her to a respiratory physician in August 2011?" Essentially, the difference in the parties' framing of causation question (b) boils down to the parties' differing positions on when CGH breached its duty to Ms Azlin. I will address this issue at [36] below. For present purposes, I find that the crux of causation question (b) is whether Ms Azlin's fate had already been conclusively biologically determined at the time of CGH's breach (see *Carol Ann Armstrong* at [72]). As such, I frame causation question (b) in these broader terms, as highlighted at [31(b)] above.

34 Another critical observation by the Court of Appeal in *Carol Ann Armstrong* is the distinction between fact probability and belief probability. Fact probability refers to a piece of probabilistic evidence that speaks to the existence (or non-existence) of a causal connection between the defendant's actions (or omissions) and the pleaded damage. Belief probability is the degree of overall strength and credibility attributed by the decision-maker (such as the court) to the fact probability evidence (*ie* the statistical study). In establishing belief probability, a court may look at, among other things, the credibility of the study, its authors and the reliability of the study. Statistical evidence "is really just fact probability" and, "while a court could place its belief in the reliability and appropriateness of that piece of fact probability (the statistical evidence), it need not invariably do so. Statistical evidence is but one factor to be weighed in the overall mix": *Carol Ann Armstrong* at [97]–[99]. This distinction is important because the assessment of the following causation questions must be made in reference to *belief* probability.

Staging of the disease at stage I in July 2011 and at stage IIA in March 2012: Difference between clinical and pathological staging

35 Ms Azlin's tumour was at stage I in July 2011. Ms Azlin's tumour was then resected on 29 March 2012 ([19] above), which is when she was pathologically staged at stage IIA. There was a recurrence of the lung cancer in August 2014 and the disease was then staged at stage IV ([20] above). It first bears highlighting that the surgery that would have been done for Ms Azlin at stage I of her cancer is also a surgical "resection". [\[note: 5\]](#) According to Prof Goh, a resection and a lobectomy "mean the same thing" medically. [\[note: 6\]](#) The main question is whether a surgical resection of the tumour at stage I would have made a difference and "cured" her of lung cancer so that there would, on the balance of probabilities, be no relapse or recurrence during the period that she actually suffered a relapse, which resulted in her death. Put another way, would surgery followed by adjuvant chemotherapy at stage I translate into no diminution in life expectancy?

36 I now come to the Court of Appeal's finding that CGH had failed to diagnose Ms Azlin in July 2011 (see CA Judgment at [116] and [120]–[123]). I find that July 2011 is referable to the time when the July 2011 X-rays were taken ([12] above). CGH submits that the delay in diagnosis only began from 1 August 2011, since that was when the 2011 radiological report was ready. This argument ignores the point as found by the Court of Appeal, namely, that the 2010 radiological report had *already* recommended follow-up, but CGH had failed to do so. If CGH had done so, then Ms Azlin's

cancer in July 2011 would more likely than not have been discovered then.

37 It first bears explaining the distinction between pathological and clinical staging. The clinical staging of lung cancer is derived mainly from impression and a biopsy (see also CA Judgment at [106]). At the HC trial in 2017, Prof Goh provided a clear explanation of how clinical staging is derived, and why Ms Azlin was staged at clinical stage I in March 2012: [\[note: 7\]](#)

A: ... So when we do clinical staging before a patient is treated, we will rely on the history, physical examination, followed by radiological investigations. Then we will follow with a comparison with an established criteria called the T, N, M staging system. T stands for tumour size, N stands for lymph node stations involved, and M stands for metastasis or no metastasis. So under this staging system, if a patient were to have a T1, then the size of the lesion would be less than 3cm based on the scan.

If the patient were to have like more than 3cm to 7cm, it would be considered a T2 and beyond that would be T3, and T4 would be it the pleural [*sic*], that means the lining of the lung is involved. Then the N would be dependent on the site of the lymph node that is involved. If it is the hilar, meaning closer to the tumour, then it's an N1, and if the mediastinal, meaning the central lymph nodes are involved, then it's an N2, and if the supraclavicular, meaning at the neck is involved, it's N3. And the M staging, the M stands for M0 or M1. M0 means there are no metastasis outside of these areas already identified, and the second would be M1 where there is distant metastasis to the liver, the opposite lung or bones or brain. So this would be considered M1.

So the staging -- then these three parts are put together to give an overall stage, which is Stage I to Stage IV. So in this case, based on the clinical staging, that means the radiological findings, there were no lymph nodes involved, they were not enlarged, so this patient at the clinical staging would be considered N0.

38 Therefore, prior to surgical resection of the tumour, Ms Azlin's cancer was *clinically* staged at stage I in March 2012 because the size of her tumour was no more than 3cm and, critically, there was no evidence of lymph node enlargement in the radiological reports available then.

39 The *pathological* staging of lung cancer, on the other hand, is a more "accurate" reflection of the stage of the cancer because it is determined after the tumour and affected lymph nodes have been surgically removed, dissected, and analysed by the pathologist to determine "definitively whether any [cancer] cells have gone to the lymph nodes or elsewhere". [\[note: 8\]](#) As explained by Prof Goh in the HC trial, "what the surgeon usually does" in a lobectomy is to "remove a portion of the lung called a lobe where the tumour is located and he will dissect the lymph nodes around the area of the distribution of the tumour via the lymphatics and based on that, the histopathologist will look under the microscope to see if there are cells that were there". [\[note: 9\]](#) During the AD hearing, Prof Goh again reiterated that, in a lobectomy, "the surgeon goes in, cuts it out, and ... he samples the lymph nodes and the whole pathology goes to the pathologist and then they measure the tumour and then they resect the lymph nodes". [\[note: 10\]](#) In the present case, the staging of Ms Azlin's cancer was changed from clinical stage I to pathological stage IIA after the lobectomy in March 2012. This change came about because "one out of 10 lymph nodes in station 10, which is a hilar region, was positive (N1 microscopic pathological stage, Stage II)". [\[note: 11\]](#)

What was the pathological stage of Ms Azlin's lung cancer in July 2011?

40 As stated, Ms Azlin’s cancer was pathologically diagnosed as stage IIA in March 2012 (see [19] above). Now, prior to the lobectomy, the clinical staging of Ms Azlin’s cancer in March 2012 was actually stage I because, as explained by Prof Goh at [37] above, the radiological reports did not show evidence of lymph node enlargement. [\[note: 12\]](#) To deal with the central question in this case – whether CGH’s delay in diagnosing Ms Azlin’s cancer, which was malignant by July 2011, caused Ms Azlin’s relapse and ultimate demise – this court needs to know, in order to compare like with like, the pathological stage of Ms Azlin’s cancer in July 2011.

41 However, there is no medical evidence of the pathological stage of Ms Azlin’s cancer prior to March 2012. The best that this court can do is to draw an inference from the testimony of Ms Azlin’s expert, Dr David Breen (“Dr Breen”), who testified that one can fairly assume that the clinical stage equals the pathological stage at the time when a patient is recommended resection. [\[note: 13\]](#)

42 With that inference in mind and the Court of Appeal’s finding that Ms Azlin’s had stage 1 cancer in July 2011, for present purposes of the assessment of damages, the approach is to ascribe a notional pathological stage for the disease in July 2011. It is possible to deem it as “pathological” stage I because there was no lymph node involvement or distant metastasis in July 2011, even though there is no actual pathological evidence to medically prove this (*ie* the tumour was not surgically removed and analysed in July 2011).

43 I now turn to another related preliminary question raised by parties, which is whether the lung cancer can be notionally staged as pathological stage IA or stage IB in July 2011. This question is of some relevance because the rate of relapse is naturally lower at stage IA than at stage IB, so the diminution in full life expectancy would be reduced if the delay in diagnosis caused a progression from stage IA to stage IIA rather than from stage IB to stage IIA.

44 In my view, for purposes of the assessment of damages, it is not unreasonable to deem Ms Azlin’s tumour at pathological stage IB in July 2011 by drawing inferences from the following evidence. According to Prof Goh and exhibit P2 submitted by Dr Breen, pathological stage IA is where the greatest dimension of the primary tumour is less than 2cm. Pathological stage IB is where the greatest dimension of the primary tumour is more than 2cm and less than or equal to 3cm. [\[note: 14\]](#) Pathological stage IIA is where the greatest dimension of the primary tumour is more than 3cm and/or where there is regional lymph node metastasis or distant metastasis. [\[note: 15\]](#) There is also Prof Goh’s testimony that, from the X-ray measurements of the tumour (based on X-rays taken on 31 July 2011), the staging would be “at least” clinical stage IB, since the greatest dimension of the tumour is between 2cm and 3cm. [\[note: 16\]](#) In fact, even the smallest dimension of the tumour is already more than 2cm in July 2011 (see [14] above). After all that has been said, the notional pathological stage to be ascribed for the disease in July 2011 is thus more possibly pathological stage IB in July 2011 rather than pathological stage IA, as suggested by Mr Rai. This is also what the Court of Appeal in effect was saying (see [23] above). For convenience, unless otherwise indicated, this Judgment will refer to the deemed pathological stage IB as “Stage IB”.

What are the respective relapse rates?

45 The medical literature relied on by the parties in this AD hearing shows that the survival/cure rate 5 years after treatment at stage IB ranges from 45% to 80%. The survival/cure rate 5 years after treatment at stage IIA ranges from 30% to 64%. [\[note: 17\]](#)

	Stage IA	Stage IB	Stage IIA	Stage IIB
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Dr Breen				
staginglungcancer.org (Exhibits P1 – P3) [note: 18]	73%	58%	46%	36%
SEER Database [note: 19]	49%	45%	30%	31%
National Lung Screening Trial [note: 20]	70–80%		-	
Prof Goh				
ANITA study [note: 21]	-	64%	52%	
JBR-10 study [note: 22]	-	Approx. 75%	Approx. 64%	
		Difference of 10–15%		

46 As Ms Kuah pointed out, the problem with the survival statistics in Exhibits P1 to P3 adduced by Dr Breen is that Dr Breen did not provide any references to show the source and basis for the graphs and statistics in Exhibits P1 to P3. When cross-examined on this, Dr Breen’s testimony was unsatisfactory. He stated that the information in Exhibits P1 to P3 were generated from an online calculator on the American College of Chest Physicians' website called staginglungcancer.org. [\[note: 23\]](#) Dr Breen first claimed on day 1 of the AD hearing that the information from this online calculator was based on the 8th edition of the lung cancer staging Atlas publication by Peter Goldstraw. However, on day 3 of the AD hearing, Dr Breen then sought to clarify that the information from the calculator was actually based on “the 7th edition by Goldstraw” because: [\[note: 24\]](#)

... when [he] was making the calculator and working on the calculator [he] had thought that it was the 8th edition that it was based on, but when [he] was finding the website link again and the calculator link again and reviewing it [he] realised that they have actually used the 7th edition on that calculator from the past. ...

47 Dr Breen could not “find a calculator for the 8th edition easily online”. [\[note: 25\]](#) Dr Breen also did not adduce *either* the 7th or 8th editions of this “Atlas” publication.

48 This is problematic because, to determine “belief probability”, *ie* the degree of overall strength and credibility, of a statistical study, a court looks at “the credibility of the study, its authors and the reliability of the study”: *Carol Ann Armstrong* ([32] *supra*) at [97(b)]. In this case, this court is completely unable to do so for Exhibits P1 to P3 when Dr Breen provided no sources for them and no explanation on how he calculated those figures.

49 Prof Goh also further testified that the online calculator relied upon by Dr Breen was generally not used by lung oncologists. Notably, Prof Goh explained that these online calculators: [\[note: 26\]](#)

... include a whole range of patients that are heterogeneous in their characteristics including those who are smokers, those who are non-smokers, those who receive further adjuvant therapy and those who do not, and these data also are retrospective in nature and therefore may have

missing components to them. [emphasis added].

50 Prof Goh's explanation helpfully reminds the court that the statistics are too general to relate to Ms Azlin's individual circumstances. Accordingly, it is abundantly clear that Exhibits P1 to P3 are unhelpful. Thus, I place no weight on the figures from Exhibits P1 to P3.

51 I also do not find the data from the SEER database to be helpful, since these databases include "a lot of heterogeneity in patients" – some "have received treatment, some have adjuvant chemotherapy, some did not, some had poor organ function and some had better organ function" [emphasis added]. [\[note: 27\]](#) I agree with Prof Goh that, for any piece of statistical study to be helpful, its findings should be based on data with characteristics that are similar to the specific circumstances of the patient (*ie*, Ms Azlin). The SEER database does not account for the individual circumstances of Ms Azlin (*eg* her age, and the fact that she was a Singaporean female smoker with ALK-positive cancer).

52 The statistics from the National Lung Screening Trial ("NLST") are also not helpful. First, the participants in the NLST were between 55 and 74 years' old; had a history of heavy cigarette smoking of at least 30 pack-years; and, if they were former smokers, had quit only within the previous 15 years. [\[note: 28\]](#) In contrast, Ms Azlin was only 32 years' old in July 2011 and had a smoking history of "about four pack years". [\[note: 29\]](#) Second, it is unclear how Dr Breen derived the numbers from the NLST, since Dr Breen did not disclose the medical literature evidencing the NLST survival statistics. Third, Prof Goh testified that the NLST is not "meant to show you the survival of patients ... in different stages of disease"; it is meant to show that "CT used as a form of screening reduced mortality". [\[note: 30\]](#) In any event, Dr Breen also did not provide the corresponding survival/cure rate for stage IIA for any comparison to be made. Thus, I did not place weight on the NLST statistics.

53 I find the ANITA and JBR-10 studies relied on by Prof Goh to be more helpful than the statistics relied upon by Dr Breen. As explained by Prof Goh, these two studies were based on the study of adjuvant chemotherapy trials of those with pathological stage IB and stage II NSCLC, and the patients in these studies used the same combination of drugs as Ms Azlin did. [\[note: 31\]](#) However, even these studies are of limited application, because they do not take into account patients with ALK-positive cancer, which is a critical factor in this case. It is also unclear what population these studies are based on. Furthermore, there is no differentiation between stages IIA and IIB in these studies.

54 In any event, the statistics provided by both parties are consistent in that all the statistics show a general trend of a fall in about 10–15% in the survival rate from pathological stage IB to pathological stage IIA. The critical point, however, is the increase in relapse rate in this case. As explained by Dr Breen, the relapse rate is the converse of the survival rate. [\[note: 32\]](#) That would mean that, in this case, Ms Azlin's prognosis of a relapse increased by about 10–15%.

55 Bearing in mind the Court of Appeal's guidance on belief probability in *Carol Ann Armstrong* ([32] *supra*), I now turn to examine the other pertinent factors in this case that might explain why there was a relapse in Ms Azlin's cancer despite the lobectomy in March 2012.

Reason for relapse

56 The next important question is why the cancer relapsed in 2014 even though the tumour and affected lymph node had already been resected in March 2012? In addition, no distant metastasis (*ie* no metastasis outside of the areas already affected and identified, such as the liver, the opposite

lung, bones, or brain) was detected at that time. [\[note: 33\]](#)

57 For the reasons that I will come to, the nub of the issue in relation to Ms Azlin's cancer relapse has to do with CGH's delay in diagnosis rather than a delay in treatment. In other words, the problem is, critically, a delay in diagnosis in the first instance which caused Ms Azlin's relapse. I will now elaborate beginning with patient management in terms of treatment.

58 On the evidence, the delay in treatment did not change the nature of the treatment. There was no difference in patient management in terms of the treatment that she received in March 2012 (*viz*, lobectomy and adjuvant chemotherapy) and what she would have received prior to that at stage I. It bears emphasising that pathological stage IIA is ordinarily still considered, medically, a relatively "early" stage, and Ms Azlin still had a chance for "cure" (*ie* no relapse or recurrence over a given period of time) even when she received her lobectomy and corresponding adjuvant chemotherapy at pathological stage IIA in March 2012. Indeed, the statistics adduced by Prof Goh show that the survival rate for stage II is still above 50% (see [45] above). The evidence also shows that Ms Azlin would not have been prescribed ALK inhibitors prior to March 2012 even if her cancer had been detected earlier, because ALK inhibitors are only given to a patient whose disease is at an advanced stage. [\[note: 34\]](#) Both Dr Breen and Prof Goh agree that ALK inhibitors are not meant to cure ALK-positive cancer, but only to prolong life and to improve the quality of life of a patient in the end stages of the cancer. This explains why, in 2012, ALK inhibitors were only available to patients with stage IV cancer. Even so in 2012, ALK inhibitors were not yet available for clinical trials in Singapore. [\[note: 35\]](#)

59 The critical explanation provided by Prof Goh as to why the cancer still recurred in 2014 despite the lobectomy in March 2012, which completely removed the nodule and affected lymph node, was as such: [\[note: 36\]](#)

A: ... the fact that ... there were [cancer] cells in the peribronchial or perihilar lymph nodes ... suggest that *the cancer has had an opportunity for the cells to go into the lymphatics* and travel to the lymph node and populate the lymph node. So that is the first level.

When you see that then the chances of these cancer cells being in the circulation, in contact of circulation and circulating around the body, is higher and because of that that is why years down the road you will see some patients relapsing in the liver, in the bones or in the brain, yes.

[emphasis added]

60 This explanation is critical. The Court of Appeal had already found that CGH's negligence caused a delay in diagnosing Ms Azlin with lung cancer in July 2011, which caused her to suffer from nodal metastasis and a progression of the lung cancer from stage I to stage IIA (see [25] above). Prof Goh's testimony provides an explanation to the missing link of whether CGH's delay in diagnosis caused Ms Azlin's relapse and death: the answer must be yes. This is because, as explained by Prof Goh, once there was nodal metastasis *ie* nodal involvement, the cancer cells *entered her lymphatic system* (as evidenced by microscopic metastasis in the Hilar lymph node) which resulted in a higher risk of relapse *even with* a lobectomy that removed *both the tumour and the affected lymph node*. In this case, the removal of both the tumour and affected lymph node in March 2012, coupled with the absence of distant metastasis then, did not stop a relapse of her cancer in 2014.

61 On the other hand, at Stage IB of the cancer, there would be, *by definition*, no microscopic

node involvement, so the cancer cells would not have entered the lymphatic system yet. In other words, on a balance of probabilities, there would have been no microscopic node involvement if Ms Azlin had undergone lobectomy and adjuvant chemotherapy at Stage IB of the disease. The foregoing is a reminder of the Court of Appeal's finding (at [122] of the CA Judgment) – if Ms Azlin had been diagnosed with lung cancer in July 2011, it is more likely than not that she would not have suffered from nodal metastasis and any consequences that may follow.

62 Another critical factor in this case is that Ms Azlin's lung cancer was an ALK-positive lung cancer. According to Prof Goh's testimony at the AD hearing, ALK-positive lung cancers are generally "more aggressive" and they "will tend to recur". [\[note: 371\]](#) Critically, Exhibit D4 adduced by CGH, which is an article (Jin Ho Paik *et al*, "Clinicopathologic implication of ALK rearrangement in surgically resected lung cancer: A proposal of diagnostic algorithm for ALK-rearranged adenocarcinoma" (2012) *Lung Cancer* 76 at 403), show that ALK-positive lung cancer also "tended to show more frequent lymph node metastasis despite its lower T stage". This explains why, despite Ms Azlin's relatively early clinical staging (of stage I), the cancer cells had entered her lymphatic system, resulting in microscopic node involvement in March 2012.

63 Ms Kuah placed emphasis on Exhibit D4 and Ms Azlin's ALK mutation to submit that Ms Azlin's relapse was not due to any delay in diagnosis, but was due to the ALK mutation of her cancer; hence, even if the lobectomy had been carried out at an earlier point in time, there would already have been nodal metastasis present.

64 However, even assuming that ALK mutation increases the risk of nodal metastasis, Ms Azlin did not have ALK mutation in July 2011. While Prof Goh last testified in the HC trial that he was of the opinion that it was unlikely that Ms Azlin's nodule commenced as a non-ALK-positive lung cancer before developing into an ALK-positive lung cancer, [\[note: 381\]](#) this testimony by Prof Goh must be seen in the full context of his evidence in the HC trial, which is that Ms Azlin did not have cancer in July 2011 (*ie* Prof Goh was of the opinion that Ms Azlin's cancer developed after July 2011 and that, when it began, it began as an ALK-positive cancer). In this AD hearing, guided by the Court of Appeal's findings, Prof Goh, who is CGH's own expert, has now refined his evidence to state that he is of the view that, even if Ms Azlin had cancer in July 2011, this is unlikely to be an ALK-positive one at that time, and that the ALK mutation only developed *after July 2011*. [\[note: 391\]](#) This is because the dimensions of the nodule show that it underwent "accelerated growth and transformation" after July 2011. [\[note: 401\]](#) Therefore, CGH's own expert contradicts Ms Kuah's submission here that Ms Azlin's lung cancer was by 31 July 2011, an ALK-positive one. Thus, I am unable to accept Ms Kuah's submission in this regard.

65 In any event, *even if* Ms Azlin's lung cancer had already transformed into an ALK-positive lung cancer by 31 July 2011, this does not necessarily mean that there was already microscopic nodal metastasis then. In this regard, one has to read Exhibit D4 very carefully. Where there is microscopic node involvement, the cancer *ipso facto* becomes at least pathological stage IIA; at pathological stage I, there is, by definition, *no* microscopic nodal involvement (see [39] above). Exhibit D4 *does not say* that ALK-positive lung cancers would necessarily and invariably *begin* with microscopic nodal involvement. If that were so, it would mean that ALK-positive lung cancers begin from pathological *stage IIA*, rather than stage I, but this was not Prof Goh's evidence at the HC trial (which was that ALK-positive lung cancers would definitely start *from stage I* and progress through stage I to stage IV: see [23] above).

66 Thus, all Exhibit D4 shows, as Prof Goh clearly explained, is that: [\[note: 411\]](#)

... [if a] patient has got *clinically* early stage lung cancer and imaging shows no nodal enlargement, no nodal metastasis, and the patients go for surgery, so in such patients compared with a patient with ALK versus non-ALK, the patient with ALK-positive lung cancer will more likely have a microscopic node involvement. [emphasis added]

67 In other words, Exhibit D4 shows that, for patients with ALK-positive lung cancer, there is a stronger likelihood that their early *clinical* staging of the cancer (of stage I) does not accurately reflect the true *pathological* staging of the cancer (which could be pathological stage II, even though the clinical staging might be “early” (at stage I), because once there is nodal metastasis, the cancer, *by definition*, becomes pathological stage II).

68 However, in this case, the Court of Appeal had already explicitly found that Ms Azlin, more likely than not, had cancer by July 2011, and that CGH’s delay in diagnosis had caused Ms Azlin’s cancer to *progress from stage I* to stage IIA (see [25] above). In other words, the Court of Appeal’s finding is that Ms Azlin, more likely than not, had stage I cancer in July 2011 and for the reasons explained above may be deemed to be at *pathological stage I* in July 2011. Consequently, Ms Azlin’s ALK-positive lung cancer, *by definition*, *could not* have had nodal metastasis in July 2011, since a cancer that is at pathological stage I, *by definition*, does not have nodal metastasis.

69 Thus, Ms Kuah’s submission in this regard is going against the grain of the Court of Appeal’s finding. Exhibit D4 goes no further than to explain why Ms Azlin’s cancer was at pathological stage IIA in March 2012 when she had the lobectomy, even though the clinical staging of her cancer in March 2012 (stage I) was still relatively early.

70 It also bears reiterating that, when asked why Ms Azlin’s cancer relapsed despite the lobectomy done in March 2012, Prof Goh’s explanation was *not* that ALK-positive cancers will recur no matter what. Rather, Prof Goh explained that it was because the lobectomy was done at a stage when Ms Azlin’s lymph node had already been affected (stage IIA), which meant that the cancer cells had entered the lymphatic system (see [59] above).

71 Therefore, the fact that this was an ALK-positive cancer meant that it was even more critical and urgent that the lobectomy be carried out earlier while Ms Azlin was still at (deemed) pathological stage I before the cancer cells entered the lymphatic system. This is consistent with the Court of Appeal’s finding (CA Judgment at [119]) that:

... it is precisely because the ALK-positive lung cancer was prone to behave aggressively *that any delay in diagnosis would be detrimental*; in such situations, the timeline of treatment becomes especially important. [emphasis added]

72 While CGH did not know in 2011 and 2012 that Ms Azlin’s cancer was ALK-positive, that is immaterial because CGH and its doctors must perform their duties to cover for contingencies. ALK was already discovered in 2007, so this is not a situation whereby CGH was dealing with a disease that was unknown in the medical field. [\[note: 421\]](#) In any case, in this AD hearing, confining himself to the Court of Appeal’s findings, Prof Goh refined his evidence to state that, even if Ms Azlin had cancer in July 2011, this is unlikely to be an ALK-positive one (see [64] above).

73 Therefore, CGH’s failure to detect and carry out a lobectomy while Ms Azlin’s cancer was still at Stage IB is more likely than not to have caused her relapse in August 2014 and her subsequent death on 1 April 2019.

Was Ms Azlin’s fate conclusively biologically determined when CGH breached its duty to Ms

Azlin?

74 In *Carol Ann Armstrong* ([32] *supra*), this question was a live issue in that case because the respondents' case was that there was another, simultaneous, cause of fatal melanoma originating from the primary tumour *before* the respondents' negligence (misdiagnosis in September 2009) that would also cause Mr Peter Traynor ("Mr Traynor") to die. According to the respondents in that case, Mr Traynor was suffering from an aggressive form of malignant melanoma such that, by 2009, the melanoma from the primary tumour had already spread through his blood stream and/or through the lymphatic system into the distant organs.

75 This is not the situation in the present case. First, this issue is now quite straightforward having regard to the finding and conclusion above that there was no microscopic node involvement at Stage IB of the disease. Second, there is no evidence to suggest that Ms Azlin had some sort of "pre-existing condition" or other issue such that, even if CGH had not been negligent in July 2011, she would have died at the age of 39 in 2019. As such, it is clear in this case that Ms Azlin's fate was not conclusively biologically determined when CGH breached its duty.

Were there available treatments that would have prevented Ms Azlin from dying in the way that she did, and would Ms Azlin have availed herself of these treatments?

76 The answer to causation question (c) in this case is in the affirmative. It is undisputed that a lobectomy (and adjuvant chemotherapy) would have been available to Ms Azlin even at pathological stage I. CGH, however, submits that Ms Azlin would not have benefited from ALK inhibitors prior to March 2012, because the first ALK inhibitor, Crizotinib, was only approved by the US Food and Drug Administration in 2012 for treatment for patients "who had metastatic disease" *ie* stage IV disease. [\[note: 43\]](#)

77 CGH's argument misses the point made earlier *ie* the key and critical difference is surgery at Stage IB before microscopic node involvement. ALK inhibitors do not provide "cure" and are only given to prolong life and improve quality of life (see [57] above).

78 As for causation question (d), I agree with counsel for the Estate, Mr Vijay Kumar Rai ("Mr Rai"), that on the facts it is readily inferable that Ms Azlin would have availed herself of a lobectomy (and adjuvant chemotherapy) had this been offered to her at stage I of her cancer. Even though Ms Azlin was asymptomatic prior to exhibiting symptoms like cough, breathlessness and blood in the sputum months later, based on X-ray measurements of the tumour on 31 July 2011 (see [14] above), Ms Azlin's tumour would be "at least" Stage IB, since the greatest dimension of the tumour is between 2cm and 3cm. [\[note: 44\]](#) In fact, even the smallest dimension of the tumour is already more than 2cm in July 2011 ([44] above). Thus, on a balance of probabilities, the tumour size and the fact that it had grown over time would have given cause to Ms Azlin to avail herself of a lobectomy at stage I of her cancer. She also agreed to a biopsy of the nodule in February 2012 on the recommendation of Dr Chan even though the nodule in the CT scan appeared to be a benign lesion (see [17] above). These pointed to Ms Azlin's concern for her health posed by the size of the nodule and her willingness to follow the recommendation of Dr Chan (in late 2011) and Prof Sridhar (in early 2012).

Would Ms Azlin have been "cured" and would she have lived to her full life expectancy if she had availed herself of the said treatments?

79 Causation question (e) entails three cumulative sub-questions, as adapted from the Court of Appeal's judgment in *Carol Ann Armstrong* ([32] *supra*) at [174].

(a) Did CGH's breach cause Ms Azlin to die in the way that she had on 1 April 2019 ("the first sub-question")?

(b) But for CGH's breach, would Ms Azlin not have died on 1 April 2019 at the age of 39 ("the second sub-question")?

(c) But for CGH's breach, would Ms Azlin have gone on to live until the age of her full life expectancy ("the third sub-question")?

80 The critical question is whether Ms Azlin would not have suffered a relapse thereafter and would have lived to her full life expectancy, if she had availed herself of a lobectomy prior to March 2012 when she was still at Stage IB of her cancer (see *Carol Ann Armstrong* at [176]).

81 CGH submitted that its breach did not cause Ms Azlin to die in the way that she had because all of the medical literature adduced by both parties' expert witnesses shows that the survival rate of a lung cancer patient is never 100% at 10 years or even 5 years after treatment, even if the patient was treated at stage IA or stage IB.

82 As also explained by Prof Goh while under cross-examination by Mr Rai, when it comes to lung cancer, one cannot speak of "cure" in its absolute sense. In other words, there is no such thing as a "complete cure" when it comes to cancer. Instead, a patient is only "cured" to the extent that the patient does not have a remission of the cancer within a specific timeframe (eg, 5 years, 10 years, 15 years after the treatment): [\[note: 45\]](#)

Mr Rai: ... Prof Sridhar affirmed in his affidavit of 19 January 2016 that based on his impression that the 1st plaintiff possibly had stage I disease at the time, there was a good chance that she could have a complete cure with a lobectomy. ... Do you disagree with that statement by him?

A: I don't disagree with that statement.

Q: Thank you, Prof Goh. And Dr Breen has also said or testified to the same effect, both below as well as here in this assessment hearing. Are you aware of that, Prof Goh?

A: Yes.

Q: And do you disagree with that statement?

A: No.

Q: Thank you, Prof Goh. Dr Breen also testified that cure equated to non-recurrence. Do you disagree with that?

A: Yes, *in cancer terms treatment means remission or not remission. Cure is relative.*

...

Court: Yes, what is your understanding of cure, please?

A: *So my understanding of cure is dependent on the time of where we take the follow-up and whether the disease had recurred or not. For example, if we were to take three years from the time of diagnosis and the patient hasn't recurred, then to us that is a cure at that point of time, and if you take ten years and the patient hasn't recurred, then the cure is at that point of time, but it does not mean that the patient will not recur in 15 years or 20 years. So cure actually has to be qualified, I feel.*

Mr Rai: But you agree that there are EML4 ALK-positive tumours that after resection are completely cured; are you aware of that?

A: *Have not recurred yes.*

Q: So in that context they would be cured permanently?

A: *I don't think the duration of follow-up is long enough for us to comment on that.*

Q: Well, I just said if it doesn't recur and they are completely cured that would be a permanent cure, agree?

A: Agree.

[emphasis added]

83 Thus, CGH submits that, even if Ms Azlin had been treated earlier, there is no "guarantee" that she would be considered completely "cured" and would be expected to have a normal life expectancy, as if she never had cancer.

84 In my view, CGH's submission that there is no guarantee of a "complete cure" is beside the point. The statistical evidence showing that there is never any 100% chance of a complete cure is only *one* factor in the entire mix of factors to consider if Ms Azlin would more likely than not have been "cured" (*ie* have no relapse within a specified timeframe) and live to her full life expectancy.

85 For the reasons aforementioned at [35] to [72] above, I find that it is clear that the first sub-question is satisfied in this case, *ie* CGH's breach caused Ms Azlin to die in the way that she did – by causing her cancer to progress from Stage IB to stage IIA such that, despite the lobectomy done at pathological stage IIA in March 2012, her cancer cells had entered her lymphatic system which increased the risk of and caused a relapse of the cancer just 2.5 years later in August 2014. This caused her eventual death about 4.5 years later on 1 April 2019, because stage IV lung cancer is generally considered "incurable". [\[note: 46\]](#)

86 In this case, the key fact, as highlighted at [61] earlier, is that, at stage I, the cancer cells would not yet have entered Ms Azlin's lymphatic system. Once the cancer progressed to stage IIA, the cancer cells would have done so. This meant that the chances of a "complete cure" from a lobectomy is not high once the cancer progressed to stage IIA. Indeed, *this* is Prof Goh's explanation for why, in this case, Ms Azlin's cancer relapsed despite the lobectomy.

87 Furthermore, the crux of the first sub-question is whether CGH's breach caused Ms Azlin to die in the way that she did, *ie* for her to suffer a relapse in August 2014 and her eventual death in April 2019 from the cancer. Prof Goh's clear testimony (at [59] above) makes it plain that this was so.

88 In these circumstances, I find that, on a balance of probabilities, CGH's negligence, which caused the cancer to progress from Stage IB to stage IIA, caused the cancer cells to enter Ms Azlin's lymphatic system, which caused her relapse in August 2014 and subsequent death on 1 April 2019.

89 I am also satisfied that the second and third sub-questions are, on a balance of probabilities, satisfied in this case. The key fact which leads me to this conclusion is the fact that Ms Azlin was only 39 years' old when she died on 1 April 2019. Besides the ALK-positive lung cancer, she did not have any other known major illness. Thus, it is self-evident that, on balance, but for CGH's breach, Ms Azlin would not have suffered a diminution of her full life expectancy, having passed away at the young age of 39 years' old.

90 That said, I digress to make one observation. A critical gap in the evidence for the purpose of quantification of her loss in this case, as CGH highlighted, [\[note: 471\]](#) is evidence of Ms Azlin's full life expectancy having regard to her age, race, smoking habits, obesity and lifestyle. In *Carol Ann Armstrong* ([32] *supra*), the appellant called an accounting expert who exhibited life expectancy tables provided by Statistics Canada to show that a Canadian male aged 49 in 2013 would be expected to live until 81.7 years of age (see *Carol Ann Armstrong* at [180]). This was not even contradicted by the respondents at the trial in that case (see *Carol Ann Armstrong* at [197]). Even then, the Court of Appeal remitted the issue of Mr Traynor's life expectancy to the High Court Judge for his determination, since the High Court Judge did not ultimately make a finding on what Mr Traynor's life expectancy would have been (see *Carol Ann Armstrong* at [197]). In this case, the life expectancy of a Singaporean female with Ms Azlin's characteristics (age, smoker, race, obesity and lifestyle) in 2019 was not adduced in evidence. This omission has a bearing on the quantification of loss, for example, the dependency claim.

General Damages

91 Compensatory damages for personal injuries are of two types, general and special. General damages have two major components: (1) pain and suffering and loss of amenity; and (2) post-trial pecuniary loss such as future earnings. Special damages refer to pre-trial pecuniary loss and include: (a) pre-trial out-of-pocket expenses such as medical, nursing and supportive care, transportation and household expenses; and (b) pre-trial loss of earnings or profits.

92 If death ensues, the tortious cause of action of the deceased person survives for the benefit of the estate. As regards the claims of the estate of a deceased person, the estate may not recover from the tortfeasor damages for: (a) loss of income in respect of any period after death (s 10(3)(a) (ii) of the Civil Law Act (Cap 43, 1999 Rev Ed)) ("CLA"); and (b) loss of expectation of life. However, in assessing damages in respect of pain and suffering, the court is entitled to consider any suffering likely to have been caused to the claimant by his awareness that his expectation of life had been reduced (s 11(1), CLA).

93 It is well-established that the aim of an award of damages is to restore a plaintiff to the same position as if the tortious wrong had not been committed: *ACES System Development Pte Ltd v Yenty Lily (trading as Access International Services)* [2013] 4 SLR 1317 at [14]. It is equally well-established that a plaintiff claiming damages must do "its level best" to prove both the fact of damage and its amount. A plaintiff cannot make a claim for damages without placing before the court sufficient evidence of the loss it has suffered, even if it is otherwise entitled in principle to recover damages. On the other hand, the court must also adopt a flexible approach and allow for the fact that, in some cases, absolute certainty and precision is impossible to achieve. Where precise evidence is obtainable, the court expects to have it; where it is not obtainable, the court must do the best it can: *Robertson Quay Investment Pte Ltd v Steen Consultants and another* [2008] 2

SLR(R) 623 at [27]–[31].

94 Before delving into the individual heads of claims advanced here, I pause to make a preliminary observation that, while the Estate is now seeking to make a multitude of claims (listed at [27] above), the claims were not satisfactorily or adequately pleaded. At the trial, Ms Azlin had originally claimed \$6,701,406.91 in general damages, the bulk of which stemmed from her claim for future medical expenses (\$3,173,130); and \$49,530.70 in special damages. Ms Azlin did not make any claim for aggravated or punitive damages (which explains why this claim was not pleaded). Now, at this AD hearing, the Estate’s claim for damages, as outlined at [27] above, has ballooned despite a reduction in the Estate’s claim for general damages to \$4,471,523.35 as a result of Ms Azlin’s death – the claims for loss of future medical expenses, transport expenses, take-home earnings and CPF, and cost of nursing care have all dwindled. The Estate is ostensibly making up for this shortfall now by embarking on an unpleaded claim for aggravated and/or punitive damages amounting to \$8,943,046.70, which is even more than the entirety of Ms Azlin’s original claim of \$6,701,406.91. The Estate’s submissions on its new claim for aggravated and/or punitive damages thus read to me as simply contrived in the absence of supporting evidence, amongst other things.

Pain and suffering and loss of amenity

95 The Estate seeks \$1,051,000 in damages for Ms Azlin’s pain and suffering and loss of amenity, while CGH submits that an appropriate figure is \$10,000. The Estate submits that a component approach – as opposed to a global approach – should be applied in this case, and the breakdown is as follows:

- (a) pain and suffering from treatment: \$300,000;
- (b) pain and suffering from shock and anxiety: \$200,000;
- (c) pain and suffering from awareness of reduction of expectation of life: \$185,000;
- (d) pain and suffering from tumour: \$300,000;
- (e) loss of amenity: \$60,000; and
- (f) loss of prospects of marriage: \$6,000.

96 “Pain and suffering” refers to the physical pain and emotional and intellectual suffering arising from the injury (*Au Yeong Wing Loong v Chew Hai Ban and another* [1993] 2 SLR(R) 290 (“*Au Yeong Wing Loong*”) at [11]), while “loss of amenity” refers to the loss of the ability to enjoy life to its fullest (*Halsbury’s Laws of Singapore – Civil Procedure, vol 4* (LexisNexis, 2016 Reissue) at para 50.387). Whether there is loss of amenity is an objective fact that does not depend on an appreciation of the loss by the victim: *Tan Kok Lam (next friend to Teng Eng) v Hong Choon Peng* [2001] 1 SLR(R) 786 (“*Tan Kok Lam*”) at [28].

97 Where non-pecuniary loss – such as pain and suffering and loss of amenity – is concerned, the guiding principle is that of “fair compensation”. This means that compensation ought to be reasonable and just and need not be “absolute” or “perfect”: *Lua Bee Kiang (administrator of the estate of Chew Kong Seng, deceased) v Yeo Chee Siong* [2019] 1 SLR 145 (“*Lua Bee Kiang*”) at [9].

98 There are two methods to determine what is “fair compensation”. The first is the component method, by which the loss arising from each item of injury is individually quantified and then added up

to estimate the overall loss that the claimant has suffered. The second is the global method, by which all the injuries sustained by the claimant are considered holistically to arrive at an estimation of his overall loss: *Lua Bee Kiang* at [10].

99 The principle behind the component method is that damages should be awarded for losses that may properly be regarded as distinct or discrete. However, a concern regarding the component method is that the overall quantum must be a reasonable sum that reflects the totality of the claimant's injuries. This latter point is the principle which animates the global method. The two methods are complementary rather than mutually exclusive because they are simply different practical modes of producing a fair estimate of the claimant's loss. The application of both methods may proceed in two stages. The court should first apply the component method to ensure that the loss arising from each distinct injury suffered is accounted for and quantified. The court should then apply the global method to ensure that the overall award is reasonable and neither excessive nor inadequate: *Lua Bee Kiang* at [11]–[13].

Stage one: Quantifying individual limbs of pain and suffering and loss of amenity

(1) Pain and suffering from the cancer: tumour, treatment, and shock and anxiety

100 Bearing in mind the foregoing principles, I begin with the first stage of the analysis and now delve into the specific claims raised by the parties. The Estate has adopted a "component approach" and made specific submissions on each component of Ms Azlin's pain and suffering and loss of amenity (see [95] above). In respect of Ms Azlin's pain and suffering from the cancer and treatment (excluding loss of amenity and pain and suffering from the awareness of reduction of life), the total claim amount is \$800,000: \$300,000 from the treatment; \$300,000 from the tumour; and \$200,000 from shock and anxiety.

101 CGH submits that there is no basis to award damages for pain and suffering from the lobectomy and the cycles of adjuvant chemotherapy that followed it prior to the relapse in August 2014. This is because management of the disease in terms of treatment would be the same whether she had surgery and adjuvant chemotherapy either at pathological stage I or stage IIA. I am not persuaded by this submission. Firstly, as a matter of principle, an award of damages for pain and suffering from delay in treatment caused by a tortfeasor's breach is not novel: see *eg Gavalas v Singh* [2001] VSCA 23, where the appellant was awarded damages for the interim pain and suffering that the appellant had to endure during the 10.5 weeks without treatment before the actual operation took place, such as headaches, left-sided weakness and other related symptoms.

102 Secondly, in this case, had treatment been provided at Stage IB before the inevitable onset of symptoms like cough, breathlessness and blood in the sputum that were exhibited in November 2011, Ms Azlin would have felt considerably better than she did as a result of the lack of diagnosis and treatment. Thirdly, Ms Azlin's associated pain and suffering is also the characteristic progress of lung cancer. At the time of the lobectomy in March 2012, Ms Azlin had to endure the pain and suffering of resecting a nodule that was 3cm in size and the affected level 10 lymph node. If she had undergone a lobectomy while at Stage IB, the nodule that would have been resected would have been smaller in size (as is evident from the table at [14] above). The same analysis applies to the four rounds of adjuvant chemotherapy for three months after the lobectomy.

103 On the matter of added or extra pain and suffering (whether from delay in initial treatment or from further treatment after a relapse), the observations of Baroness Hale in *Gregg v Scott* [2005] 2 AC 176 in [205]–[206] are instructive:

This means that it cannot be said that the later pain, suffering and loss of amenity caused by the need for further treatment, and the associated loss of earnings and costs of care, were consequential on the injury caused by the negligence. Even if the initial treatment had led to remission, the need for further treatment and the relapses would have happened anyway because of the disease.

Even on conventional principles, this does not necessarily mean that the claimant is not entitled to anything at all. *The defendant is liable for any **extra** pain, suffering, loss of amenity, financial loss and loss of expectation of life which may have resulted from the delay.* If, without the delay, the claimant would have achieved a longer gap before more radical treatment became necessary, then he should be entitled to damages to reflect the acceleration in his suffering. If the pain and suffering he would have suffered anyway was made worse by the anguish of knowing that his disease could have been detected earlier, then he should be compensated for that.

[emphasis added in italics; emphasis in original in bold italics]

104 I pause here to mention that the parties were invited to make further submissions on the foregoing observations made by Baroness Hale. Mr Rai submits that Baroness Hale's observations support the Estate's submission that damages should be awarded for Ms Azlin's pain and suffering that was made worse by the mental anguish of knowing that her expectation of life had been greatly reduced (see [118] below). CGH submits that the Estate has failed to adduce any evidence to prove that Ms Azlin suffered any extra pain and suffering and loss of amenity as a result of the delay in diagnosis of cancer.

105 Returning to the analysis, I find that it can be gathered from the evidence outlined above that Ms Azlin did have to suffer extra pain and suffering from the medical treatment as a result of CGH's delay in detection of the cancer. As stated, her pain and suffering would be associated with disease progression. In this case, ALK-positive lung cancer has to progress from stage IA through IB to IIA (see [23] above). In short, her pain and suffering from a delay in detection and treatment of the cancer would at least be from July 2011 until March 2012.

106 As mentioned earlier, CGH's position is that an award of \$10,000 for pain and suffering is fair compensation. This quantum is based on CGH's further assessment of the evidence at the trial that, even after Ms Azlin's relapse in August 2014, Ms Azlin had minimal symptoms and was able to perform her activities of daily living unassisted. [\[note: 48\]](#) She remained independent and was able to go to work, gather with friends for meals, and attend chemotherapy alone. She was able to cook, socialise and shop, even as of January 2017. [\[note: 49\]](#) Ms Azlin was also given the third-generation ALK inhibitor, Lorlatinib, in March 2017 (see [21] above), which prolonged her life for another two years.

107 Whilst Ms Azlin did not provide a clear bifurcation of her pain and suffering, pre- and post-relapse, in her evidence, she did provide a list, in chronological order, of her pain and suffering in Schedule B of her Statement of Claim. I accept Ms Azlin's testimony that she suffered physically from the relapse of the cancer and the corresponding treatment. Since the relapse in August 2014 until her demise, Ms Azlin had to attend National Cancer Centre Singapore ("NCCS") and Singapore General Hospital ("SGH") twice a week and was on continual hospitalisation leave. [\[note: 50\]](#) She recounted that her biopsy in July 2015 was "an extremely painful procedure even though it was done under local anaesthesia". On or around 19 August 2015, Ms Azlin had to be sent to CGH's A&E Department in an ambulance as she had fluid in her lungs and was unable to breathe. At that time, she had believed that she "would not survive the ordeal". On 24 August 2015, Ms Azlin attended the A&E Department

of SGH and she was warded for a few days. From July to September 2015, she was vomiting badly as a result of the chemotherapy. She also had occasional chest pains and was “totally exhausted”. On or around 15 January 2016, Ms Azlin was diagnosed with hypothyroidism which had to do with the treatment for cancer. She stated in her affidavit of evidence-in-chief (“AEIC”) that, since 28 January 2016, she had pain in her arms, nausea, weakness, joint pains and body aches, and chest pains with limitation of movement, all as a result of the treatment for cancer. Not only had Ms Azlin suffered physically and experienced significant discomfort after the relapse of the cancer and treatment she received, but she also suffered significant distress and anxiety. [\[note: 51\]](#)

108 At the first stage, reference may be made to assessment guidelines, the main resource being Charlene Chee *et al*, *Guidelines for the Assessment of General Damages in Personal Injury Cases* (Academy Publishing, 2010) (“the Guidelines”): *Lua Bee Kiang* ([97] *supra*) at [15]. However, the Guidelines do not provide any guidelines on pain and suffering from cancer and its treatment. Instead, the plaintiffs rely on various precedents to justify the quantum of damages sought. Although precedents are more appropriately considered at stage two of the analysis, I nevertheless turn to the precedents highlighted by Mr Rai to assess the Estate’s quantification of each individual item of loss.

109 In *TV Media Pte Ltd v De Cruz Andrea Heidi and another appeal* [2004] 3 SLR(R) 543 (“*TV Media*”), the Court of Appeal reduced the High Court’s award of \$250,000 for pain and suffering and loss of amenity to \$150,000. In that case, the respondent brought an action against five defendants for her liver damage, allegedly caused by her consumption of a slimming drug, “Slim 10”. The respondent had been hospitalised for 36 days; had undergone numerous blood tests, a liver biopsy and a liver transplant; and had suffered from lethargy, jaundice, hallucinations and bouts of vomiting. The court also considered the following future sufferings of the respondent: a restriction of her physical activities and food preferences; a nagging fear of liver failure or that her weakened body will succumb to disease; risks to her and her foetus if she becomes pregnant; an increased risk of renal failure and skin cancer so that she will have to cover up when she goes out under the sun, thus affecting her social and working life; the fact that visits to hospital are now a way of life for her and that she must remain on immunosuppressant medication for the rest of her life; and the fact that she is now uninsurable.

110 In *Ramesh s/o Ayakanno (suing by the committee of the person and the estate, Ramiah Naragatha Vally) v Chua Gim Hock* [2008] SGHC 33 (“*Ramesh*”), the victim was a 26-year-old lorry driver who had sustained multiple injuries including: severe head injuries to both sides of the brain; bilateral cord palsy; difficulty in swallowing; deranged liver functions and sepsis; left iliac bone fracture; disc protrusions; and contractures of the lower limb. As a result of the injuries, he had been declared to be mentally disabled. The victim was left unable to move or talk and required life-long medication for epileptic seizures. The victim was left with a shortened life expectancy of ten years. The High Court, after reviewing various precedents, awarded the victim \$185,000 for pain and suffering *and* loss of amenity.

111 In *Tan Juay Mui (by his next friend Chew Chwee Kim) v Sher Kuan Hock and another (Liberty Insurance Pte Ltd, co-defendant; Liberty Insurance Pte Ltd and another, third parties)* [2012] 3 SLR 496 (“*Tan Juay Mui*”), the plaintiff, who was then almost 48 years’ old, was knocked down by a bus and suffered severe injury to her left foot and brain. Her left leg below the knee was amputated to save her life and she lost her ability to manage herself and her affairs. During recovery, the plaintiff suffered complications resulting in loss of vision and paralysis of her left side. Routine testing revealed a new onset of type 2 diabetes mellitus in October 2007. She fell into diabetic coma in 2010 and required insulin injections thereafter. The Assistant Registrar awarded \$230,000.00 for pain and suffering and loss of amenity for the head and leg injuries. The Assistant Registrar rejected a claim for damages for pain and suffering based on the plaintiff’s diabetes.

112 The High Court held that the amount awarded for the head injuries (including paralysis and loss of vision and amenity) (\$170,000) was neither clearly inadequate nor clearly excessive, though it could have been adjusted upwards because the Assistant Registrar had wrongly concluded that the pain and suffering and loss of amenity in a person not in a vegetative state had to always be for less than the amount awarded to an unconscious victim: at [30]–[36]. The High Court held that the award for the plaintiff’s leg injury (\$60,000) was also neither clearly inadequate nor clearly excessive: at [54]. In addition, the High Court awarded the sum of \$20,000 for pain and suffering and loss of amenity from the plaintiff’s diabetes because it was reasonably foreseeable that the serious injuries sustained by the plaintiff could cause her to develop conditions like diabetes: at [42]–[49]. Thus, in total, the plaintiff received \$250,000 for pain and suffering and loss of amenity.

113 One must be careful when comparing the Estate’s claim for pain and suffering from the tumour and its treatment with the foregoing precedents, because the foregoing cases did not distinguish between a claim for pain and suffering and a claim for loss of amenity. This is where the Estate is mistaken: the Estate seems to have relied on the foregoing precedents’ total award for pain and suffering *and* loss of amenity (ranging from \$150,000 to \$250,000) to justify *each component* of the Estate’s claim for pain and suffering (eg pain and suffering for the treatment, the tumour, and shock and anxiety etc: see [95] above). This is presumably how the Estate arrived at the figure of \$800,000 for pain and suffering from the tumour and its treatment alone, excluding pain and suffering from awareness of reduction of expectation of life and loss of amenity (which, when added, would bring the total claim to \$1,051,000). This is clearly manifestly excessive. None of the foregoing cases, which also involved extensive injuries and considerable pain and suffering suffered by the respective victims, involved a case that went beyond even \$300,000 for *both* pain and suffering and loss of amenity.

114 In this case, the Estate’s claims of \$300,000 for pain and suffering from treatment, \$200,000 for shock and anxiety, and \$300,000 for the pain and suffering from the tumour, as outlined at [95] above, are indubitably too high. Furthermore, the pain and suffering from the tumour overlaps with the pain and suffering from the cancer treatment. Thus, these two cannot be independent standalone claims. I note that the award in *Ramesh* for pain and suffering and loss of amenity seems to be low as compared to the plaintiff in *Tan Juay Mui* who received an award of \$250,000 for similar head and leg injuries in respect of pain and suffering and loss of amenity. In my judgment, at this juncture, I would simply state that a sum of \$140,000 for pain and suffering for the cancer tumour, treatment, and shock and anxiety is appropriate.

(2) Psychiatric injuries

115 While the Estate has highlighted pain and suffering from psychiatric injuries as a distinct claim, the Estate does not actually quantify this claim. Nonetheless, there is a claim of \$200,000 for pain and suffering from shock and anxiety and there is also reliance on *Siew Pick Chiang v Hyundai Engineering and Construction Co Ltd and another* [2016] SGHC 266 (“*Siew Pick Chiang*”), a decision on pain and suffering. In that case, the plaintiff, who had been cycling on a public pavement when she was struck by a bundle of overhead cables, suffered physical injuries which were relatively minor, but the plaintiff also suffered Post-Traumatic Stress Disorder (“PTSD”) which was so serious that it gave rise to other medical issues. The plaintiff was awarded a total of \$164,000 as damages for her pain and suffering *and* loss of amenity, with the following breakdown (*Siew Pick Chiang* at Annexure A):

1.	PTSD	\$80,000
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2.	Impairment of memory and cognitive injuries	\$25,000
3.	Head injury	\$10,000
4.	Benign positional paroxysmal vertigo	\$10,000
5.	Fibromyalgia	\$15,000
6.	Neck and back injuries, abrasions on face, arms and legs and spondylosis	\$8,000
7.	Other injuries	\$20,000
8.	Loss of marriage prospects (agreed)	\$6,000

116 CGH submits that the Estate has not adduced any supporting evidence such as a medical report to prove that Ms Azlin suffered any recognisable psychiatric illness such as depression, emotional stress, PTSD and suicidal thoughts. Accordingly, CGH submits that the Estate's claim for damages for psychiatric injuries should not be allowed.

117 I agree with CGH. Pain and suffering from "psychiatric injury" is not the same as pain and suffering from "shock and anxiety", which is an established aspect of pain and suffering: *Au Yeong Wing Loong* ([96] *supra*) at [11]. I disallow any claim for damages for pain and suffering from psychiatric injuries in this case. As regards the claim for pain and suffering from shock and anxiety, I have already dealt with Ms Azlin's distress and anxiety above at [114]. Therefore, this separate claim for \$200,000 is an overlapping claim which is disallowed.

(3) Awareness of reduction of expectation of life

118 The Estate claims a sum of \$185,000 for the pain and suffering from Ms Azlin's awareness of her reduction of expectation of life. Although damages for loss of expectation of life are not recoverable, in assessing damages in respect of pain and suffering, the court is entitled to take into account any suffering likely to have been caused to Ms Azlin by her awareness that her expectation of life had been reduced. In this regard, I am mindful that this action was commenced by Ms Azlin in 2015, after her relapse in August 2014, and at a time when she was still alive. At that time, she was already looking at a life expectancy of ten more years if her Statement of Claim is to be believed. In addition, her awareness that her expectation of life would be reduced was after the lobectomy in March 2012 when she was told that she had stage IIA cancer. Prior to that, Ms Azlin was continuously advised by the doctors that her nodule was benign. Even when she was advised to undergo the lobectomy, she was informed that she had a good chance for cure (see [19] above). In these circumstances, the pain and suffering arising from her realisation of a diminution in her life, before and after her relapse, would be clearly palpable. Hence, I consider that Ms Azlin would have had sufficient awareness that the length of her life had been reduced, so as to include this matter within the award of damages.

119 In relation to the length of her life that had been reduced, CGH submits that Ms Azlin only lost 3 years of her life because updated data from the JBR-10 study relied on by Prof Goh shows that the median survival for patients with stage II NSCLC who received chemotherapy is 6.8 years while the median survival for patients with stage IB NSCLC and who received chemotherapy is 9.8 years. [\[note: 521\]](#) Thus, CGH submits that the damages awarded for the awareness of the reduction in her expectation of life should be limited to a multiplier of 3 years because that is the actual reduction in

overall survival. It is on this basis that CGH submits that only \$10,000 should be awarded to the Estate.

120 CGH's arguments are misconceived. The updated data from the JBR-10 study dealt with the median survival of patients who received chemotherapy. The Estate's case is that Ms Azlin would not have relapsed and would have lived to her full life expectancy if CGH had duly performed a lobectomy while she was still at Stage IB of her cancer. Therefore, the actual reduction in overall survival cannot only be 3 years.

121 As regards the Estate's claim figure of \$185,000, the Estate has not cited any precedent on quantum in support. There is also no evidence on Ms Azlin's full life expectancy (see [90] above) to extrapolate precisely from CGH's figure of \$10,000. At this juncture, I find that a sum of \$80,000 is appropriate.

(4) Loss of amenity

122 The Estate claims the sum of \$60,000 for Ms Azlin's loss of amenity, excluding the loss of marriage prospects. As explained at [96] above, a claim for "pain and suffering" and a claim for "loss of amenity" are not the same and neither is one subsumed under the other. Not only has the Estate not justified nor explained the claim amount of \$60,000 in its closing submissions, CGH has also not made any specific submissions regarding the Estate's claim for this \$60,000.

123 In *Tan Kok Lam* ([96] *supra*), the 67-year-old victim turned into a "persistent vegetative state" and had his life expectancy reduced (to five years) after she was knocked down in an accident. The Court of Appeal reversed the High Court judge's decision and restored the award made by the Assistant Registrar of \$80,000 for loss of amenity. In that case, the distinction between loss of amenity and pain and suffering was critical because the victim's persistent vegetative state precluded a substantial award for pain and suffering.

124 While the exact duration of the reduction of Ms Azlin's loss of amenity is unclear because the Estate did not adduce evidence of her expected full life expectancy but for CGH's breach, there is no question that her life expectancy was reduced substantially due to CGH's breach. In this case, Ms Azlin was relatively young when she suffered a relapse in August 2014 (35 years' old) and died in April 2019 (39 years' old). Ms Azlin also had to go through extensive medical treatment following her relapse, which naturally reduced her ability to enjoy life to its fullest. For instance, Ms Azlin testified that she gave up badminton, aqua-aerobics, and brisk walks. She also reduced socialising activities. [\[note: 53\]](#) However, the evidence also shows that Ms Azlin's quality of life was actually considerably improved from the ALK inhibitors: Ms Azlin remained independent and was able to work, cook, socialise and shop, and Ms Azlin was able to live until April 2019 after her relapse in August 2014 (see [106] above). As aforementioned at [58] above, this is the very purpose of ALK inhibitors. This is a key distinguishing factor in this case from *Tan Kok Lam*. Furthermore, unlike *Tan Kok Lam*, where the victim was precluded from a substantial award for pain and suffering despite the significant effects of the accident, which led the court to award a higher independent sum for the victim's loss of amenity in that case, the tentative award for pain and suffering in this case – \$220,000 – is not so low that a higher award for loss of amenity is required. Thus, I find that a quantum of \$30,000, which is about slightly less than half of the sum of \$80,000 awarded in *Tan Kok Lam*, is appropriate for Ms Azlin's loss of amenity.

(5) Loss of marriage prospects

125 There is a claim for loss of marriage prospects in the sum of \$6,000. CGH opposes this claim

because there is an absence of any evidence regarding a loss of marriage prospect. Evidence that Ms Azlin had dated her then boyfriend, one Mr Moore, is not good enough to discharge the Estate's burden of proof. Ms Azlin was not engaged to be married and marriage was not being seriously contemplated. CGH cites *Poh Huat Heng Corp Pte Ltd and others v Hafizul Islam Kofil Uddin* [2012] 3 SLR 1003 ("*Poh Huat Heng*"), where damages for loss of marriage prospects were awarded to the respondent who had been engaged to be married prior to his accident. The Court of Appeal noted (at [37]) that "[m]arriage was clearly on the cards and it was just a matter of time". In that case, the respondent's imminent marriage was called off by his ex-fiancée's parents due to the permanent disabilities he sustained from an accident – paralysis of lower limbs with the effect that he was permanently wheelchair bound; absence of sensation below the groin and absence of control over his bowels and bladder; erectile dysfunction; and infertility (at [4]).

126 In response, the Estate submits that *Poh Huat Heng* did not hold that engagement was a pre-requisite for an award of damages for the loss of marriage prospects. Rather, the test is whether "marriage was clearly on the cards and it was just a matter of time", and this was clearly the case for Ms Azlin because she had a propensity for marriage.

127 In my view, this head of claim is rare. The Court of Appeal's analysis of this issue in *Poh Huat Heng* at [37] was as such:

It is true that the Respondent estimated that there was a 50% chance that his ex-fiancée's parents might well change their minds and agree to his marrying his ex-fiancée. We must bear in mind that the Respondent had been engaged to be married prior to the Accident. *Marriage was clearly on the cards and it was just a matter of time.* However, according to the Respondent, after the Accident, he heard from his friends that his former fiancée's parents were adamant that the marriage was not to take place. *Having regard to the Respondent's physical state after the Accident, it is not difficult to understand the position taken by the parents of his ex-fiancée.* If the Respondent's ex-fiancée were to proceed to marry the Respondent, *she would, to all intents and purposes, be not a wife, but a lifetime maid to him.* In our view, the Respondent's estimate of a 50% chance of eventually being able to marry his ex-fiancée is no more than wishful thinking on his part. *Objectively, we are unable to disagree with the AR's finding that the Respondent has lost his marriage prospects.* In this regard, we draw attention to the Respondent's uncontradicted oral evidence that *his marriage had been well in sight prior to the Accident, but that prospect was lost as a result of the Accident.* What the Respondent now has is no more than a hope of eventually marrying his ex-fiancée. To award him nothing for the loss of his marriage prospects just because of the dimness of his hope would be harsh and unreasonable. [emphasis added]

128 A careful reading of the foregoing extract will show that the test is whether, objectively, the tortfeasor's negligence caused the victim to lose his or her marriage prospects (and not simply loss of marriage). The court may take into account whether marriage had been "well in sight" or "on the cards" prior to the negligence, which might be the case if the victim was already engaged (as in *Poh Huat Heng*), and whether the damage suffered by the victim will render him or her incapable of being a spouse (as in *Poh Huat Heng*, where the ex-fiancée would "be not a wife, but a lifetime maid" to the respondent).

129 In this case, while I have my sympathies for Ms Azlin, three factors weigh against awarding damages for loss of marriage prospects. First, it is not unheard of that couples have tied the knot before the partner dies from a serious illness like cancer. I would not consider cancer as a disease that would *ipso facto* give rise to any loss of marriage prospects.

130 Second, Mr Moore testified in the HC trial that, while Ms Azlin raised the topic of marriage a

few times in 2013 and early 2014, “nothing concrete” was planned “because of [the] instability of [his] work”. [\[note: 54\]](#) This is clearly different from *Poh Huat Heng* ([125] *supra*), where the respondent had already been engaged prior to the accident.

131 Third, Ms Azlin’s ailments, while painful, do not rise to the degree of disability that the respondent in *Poh Huat Heng* sustained from the accident, as outlined at [125] above. In fact, as mentioned at [106] above, Ms Azlin’s quality of life was sustained by the ALK inhibitors, and she was even able to continue working. Therefore, the present facts are very different from those in *Poh Huat Heng*.

132 For these reasons, I am unable to award the Estate any damages for loss of marriage prospects.

Stage two: Considering the aggregate award of pain and suffering and loss of amenity

133 I now turn to the second stage of the analysis to assess if the global award is manifestly excessive or inadequate. There are two important considerations at the second stage. The first is whether there are “overlapping” injuries, *ie* injuries which either: (a) together result in pain that would not have been differentially felt by the claimant; or (b) together give rise to only a single disability. In such circumstances, compensating for each distinct injury would likely result in an excessive award. The second consideration is precedent, which should be referenced to assist in arriving at a fair estimate of loss and to ensure that like cases are treated alike: *Lua Bee Kiang* ([97] *supra*) at [17]–[18].

134 I turn to the first consideration of “overlapping injuries”. As aforementioned at [114] above, the pain and suffering from the cancer treatment and the tumour are overlapping. There is also some overlap between the pain and suffering from shock and anxiety and the pain and suffering from Ms Azlin’s awareness of her reduction of expectation of life, because both give rise to feelings of shock and anxiety. Ms Azlin’s pain and suffering from her awareness of her reduction of expectation of life is a subset of her feelings of shock and anxiety. These overlaps were not appreciated by the Estate in closing submissions.

135 I next turn to the precedents, which I have outlined at [109] to [112] and [115] above. In light of these precedents, CGH’s submission of \$10,000 is surprising, not only because it is so out of line with the precedents, but, more importantly, also because CGH did not appeal against the AR’s decision to award the Estate \$200,000 in interim payment (see [5] above). One would thus expect CGH to adopt the same position that a global award of damages of \$200,000 is appropriate in this case. On the other hand, the Estate’s position – \$1,051,000 – is also completely at odds with the precedents and is manifestly excessive. The court is not assisted when parties take such outlandish positions that are clearly unsupported by the precedents or the evidence.

136 I have highlighted at [124] above that a quantum of \$30,000 is appropriate for the Estate’s claim for loss of amenity. I also stated at [113] above that the Estate’s claim for pain and suffering conflated and applied the precedents’ global award for pain and suffering and loss of amenity to the Estate’s individual items of loss, even though the victims in the cited precedents also suffered considerable injuries and pain and suffering. This led to the Estate’s extravagant claim for pain and suffering. Based on the initial sums quantified above, the total sum to be awarded for Ms Azlin’s pain and suffering is for a total sum of \$220,000: \$140,000 for her pain and suffering from her cancer tumour, treatment, shock and anxiety; and \$80,000 for the pain and suffering from her awareness of the reduction of her life expectancy. A sum of \$30,000 for loss of amenity is fair and reasonable. In summary, the global sum is \$250,000 for Ms Azlin’s pain and suffering (\$220,000) and loss of amenity

(\$30,000).

137 This global sum of \$250,000 is equal to the sum awarded in *Tan Juay Mui* ([111] *supra*) (\$250,000), which involved a victim who suffered from injuries and treatment which affected the victim's entire body, and who suffered reductions in life expectancy as in this case. While the award of \$250,000 is more than the awards in *Siew Pick Chiang* ([115] *supra*) (\$164,000), *TV Media* ([109] *supra*) (\$150,000) and *Ramesh* ([110] *supra*) (\$185,000), that may be attributed to the fact that those cases are slightly more dated.

138 As such, I find the global award of \$250,000 to be fair and reasonable for the pain and suffering and loss of amenity suffered by Ms Azlin, and I award this sum accordingly.

Medical expenses

139 The Estate claims a total sum of \$1,501,703.50 in general damages for medical expenses incurred from 2015 to 1 April 2019. Basically, this claim is for the costs of drugs that Ms Azlin was prescribed as a patient undergoing clinical trials.

140 On the other hand, CGH submits that the Estate has not produced any supporting documents (eg invoices or receipts) to show what was actually incurred by Ms Azlin by way of medical expenses. Secondly, CGH highlights that the Estate's claim is "inflated" because it is demanding to be paid the cost of obtaining the clinical trial drugs (Ceritinib and Nivolumab) commercially, as well as the costs of medical consultations, oxygen and twice-monthly CT scans.

141 In particular, CGH points out that Ms Azlin was enrolled in a clinical trial from July 2015 to October 2016, which covered the cost of the drugs (Ceritinib and Nivolumab), transport expenses, consultations, investigations, surveillance tests (blood tests and radiological scans), and the cost of treating any side effects. She was not even charged any cost as part of this trial. [\[note: 55\]](#) From October 2016, Ms Azlin was then taken off the clinical trial because she was no longer responsive to the combination of drugs and was deemed to be not suitable to continue with the treatment regime of Ceritinib and Nivolumab. [\[note: 56\]](#) Her disease was managed with radio surgery, chemotherapy and Ceritinib. From March 2017, Ms Azlin was treated with a third-generation ALK-inhibitor, Lorlatinib.

142 I agree with CGH that the basis of the Estate's claim is suspect. The object of an award of damages is to place the injured party as nearly as possible in the same financial position as he would have been in but for the negligence. The basic rule is that a plaintiff cannot recover more by way of damages than the amount of his actual loss. Thus, if a collateral benefit compensates for the same loss, it must be taken into account in determining the actual level of compensation required through an award of damages: *Lo Lee Len v Grand Interior Renovation Works Pte Ltd and others* [2004] 2 SLR(R) 1 at [12]. This is to prevent double recovery.

143 There are two well-established exceptions to the basic rule against double recovery. The first is where a plaintiff recovers any moneys under an insurance policy for which he has paid the premiums, and the insurance moneys are not deductible from damages payable by the tortfeasor. The second is where the plaintiff receives money from the benevolence of third parties prompted by sympathy for his misfortune, as in the case of a beneficiary from a disaster fund, and the amount received is again to be disregarded. The number of exceptions is not closed, and there would be borderline cases which turn on the special facts: *Minichit Bunhom v Jazali bin Kastari and another* [2018] 1 SLR 1037 ("*Minichit Bunhom*") at [84], affirming *The "MARA"* [2000] 3 SLR(R) 31 ("*The "MARA"*") at [28]–[29].

144 As highlighted by CGH, it was further explained from *National Insurance Co of New Zealand Ltd v Espagne* (1961) 105 CLR 569 ("*Espagne*") at 573 (per Dixon CJ), cited by *The "MARA"* at [32], that:

The reasoning begins with a distinction which I think is clear enough in general conception. There are certain special services, aids, benefits, subventions and the like which in most communities are available to injured people. *Simple examples are hospital and pharmaceutical benefits which lighten the monetary burden of illness. If the injured plaintiff has availed himself of these, he cannot establish or calculate his damages on the footing that he did not do so.* On the other hand there may be advantages which accrue to the injured plaintiff, whether as a result of legislation or of contract or of benevolence, which have an additional characteristic. It may be true that they are conferred because he is intended to enjoy them in the events which have happened. Yet they have this distinguishing characteristic, namely they are conferred on him not only independently of the existence in him of a right of redress against others but so that they may be enjoyed by him although he may enforce that right: they are the product of a disposition in his favour intended for his enjoyment and not provided in relief of any liability in others fully to compensate him. [emphasis added]

145 CGH submits that the sponsorship of the clinical trial costs provided by the pharmaceutical companies is akin to the "hospital and pharmaceutical benefits which lighten the monetary burden of illness" as stated in *The "MARA"* at [32], and thus should not be compensable as damages. In contrast, Mr Rai submits that the sponsorship by the pharmaceutical companies is akin to advantages provided out of benevolence, and thus should not preclude the Estate's separate claim for damages.

146 In my view, the Estate's claim for medical expense lacks credence in that it does not make sense and there is no explanation proffered as to why Ms Azlin is claiming for the commercial costs of drugs that she was no longer responsive to. I also agree with CGH's submission that the Estate has not proved that Ms Azlin had incurred any medical expenses arising from the treatment of cancer from 2015 to 1 April 2019, seeing that Ms Azlin's medical costs were covered by the clinical trial. The sponsorship was not given specifically to Ms Azlin for charitable purposes, but was part and parcel of a clinical trial of the ALK inhibitors. This is certainly more akin to the hospital and pharmaceutical benefits which lighten the monetary burden of Ms Azlin's treatment for cancer. Thus, the fact that Ms Azlin had availed herself of this sponsorship is material, and she should not be able to establish her damages on the footing that she did not do so.

147 Mr Rai's submission that "there was no assurance" that Ms Azlin "would always be entitled to" the "compassion or charity" of the pharmaceutical companies sponsoring the clinical trial misses the point. Mr Rai's further contention that Ms Azlin "ought to have been entitled to choose for herself whether she wished to further treatment in Singapore or pursue the latest treatment in the United States of America or Japan" again misses the point. No evidence was led that private medical treatment or treatment overseas were options that were available to her and that she considered those options. The fact of the matter is that Ms Azlin never went to a private clinic or overseas and hence the Estate is in no position to show that the commercial cost of the drugs, the subject matter of the claim, were reasonable and necessary. Above all, the commercial cost of the drugs was never actually incurred. It goes without saying that there can be no recovery for the putative commercial costs of these two drugs.

148 Therefore, I agree with CGH that there is no basis to award the Estate general damages for the alleged medical expenses from 2015 to 1 April 2019.

Transport expenses

149 The Estate seeks a sum of \$37,500 in general damages for transport expenses from January 2015 to 31 March 2019 (4.25 years) on the basis that Ms Azlin's transport expenses after 22 January 2015 were estimated to be \$8,400 per year based on \$700 per month for travel by taxi to hospital and back home. CGH, however, submits that no damages for transport expenses ought to be granted because "the [plaintiffs] have not provided any details to explain how they arrived at the estimate of S\$700 per month". Furthermore, Ms Azlin would have been entitled to the travel expenses arising from her participation in the clinical trial during the period she was enrolled in the clinical trial.

150 I agree with CGH that the Estate's explanation for the quantum of \$37,500 is very vague. Unlike the claim for pre-trial transport expenses, there is no explanation for how the Estate arrived at the estimated sum of \$700 per month in transport fares post-trial (eg how many trips were made to the hospital in a month). The quantum of \$700 per month is clearly a bare assertion. In addition, as highlighted by CGH, Ms Azlin received an allowance from the clinical trial for her travel expenses. This is the critical difference between the Estate's claim for post-trial transport expenses and pre-trial transport expenses (since the latter was not covered by Ms Azlin's clinical trial). The Estate has not indicated the amount of transport allowance Ms Azlin received for participating in the clinical trial and if the allowance was more than or less than the actual expense.

151 In these circumstances, the Estate has not established that post-trial transport expenses of \$700 per month were actually incurred by her. Hence, the Estate claim for a sum of \$37,500 is disallowed.

Cost of nursing care, domestic and auxiliary helper

152 The Estate seeks a sum of \$118,617.50 in general damages for the cost of nursing care, domestic and auxiliary helper from late 2014 until 1 April 2019 as she was often bedridden since late 2014. CGH, again, submits that the Estate is not entitled to damages for this head of claim because the Estate has never provided any supporting evidence whether documentary or otherwise to prove that these expenses were incurred. CGH also highlights that, when Ms Azlin testified at the HC trial in January 2017, she admitted that she had not had to employ a domestic helper or a nurse to assist her. This was corroborated by Dr Daniel Tan's testimony.

153 Again, I agree with CGH that the Estate's bare assertion is fatal. If expenses related to nursing care etc were incurred, objective evidence would be obtainable. As such, I reject the Estate's claim for general damages for the cost of nursing care, domestic and auxiliary helper from late 2014 until 1 April 2019.

Loss of take-home earnings and CPF or loss of inheritance

154 The Estate's claim for loss of earning and CPF is as follows:

- (a) The loss of take-home earnings:
 - (i) living years from 2016 to 2018: \$142,265.13; and
 - (ii) lost years from 2019 to 2044: \$605,057.46.
- (b) Loss of CPF:
 - (i) living years from 2016 to 2018: \$128,488.47; and

(ii) lost years from 2019 to 2044: \$690,691.29.

155 Singapore courts have repeatedly stressed the distinction between loss of future earnings from loss of earning capacity. Loss of future earnings and loss of earning capacity are distinct measures, so a plaintiff bears the burden of providing sufficient evidence for each of these heads of damages if claimed for. The loss of future earnings refers to lost income or profit, while the loss of earning capacity refers to potential losses because of the victim's reduced subsequent competitiveness in the job market. An award for loss of future earnings is based on some reasonably objective premise that enables the court to determine the multiplicand: see, eg, *Koh Chai Kwang v Teo Ai Ling* [2011] 3 SLR 610 at [10] and [33]. On the other hand, loss of earning capacity is most commonly employed in cases where future earnings cannot be easily ascertained because the injured is an infant or a student yet to enter the job market.

Loss of earnings and CPF during lost years

156 The Estate argues that the appropriate head of claim in this case is loss of earnings and lost years and not loss of inheritance. However, Ms Kuah rightly pointed out that s 10(3)(a)(ii) of the CLA specifically states that, where a cause of action survives for the benefit of the estate of a deceased person, "the damages recoverable for the benefit of the estate of that person shall not include any damages for loss of income *in respect of any period after that person's death*" [emphasis added] (see also *Lassiter Ann Masters (suing as the widow and dependant of Lassiter Henry Adolphus, deceased) v To Keng Lam (alias Toh Jeanette)* [2005] 2 SLR(R) 8 at [11] and [28]). The text of s 10(3)(a)(ii) of the CLA is clear. The purpose for disallowing the estate of a deceased person from claiming damages for loss of income for the lost years was explained by the then Second Minister for Law, Professor S Jayakumar, on 4 March 1987 (*Singapore Parliamentary Debates, Official Report* (4 March 1987) vol 49 at col 67):

First, double compensation may be payable in cases where the deceased's dependants are not also beneficiaries of the deceased's estate. The wrongdoer may have to pay damages to both the deceased's estate for 'lost years' and to his dependants for 'loss of dependency', a result which surely cannot be acceptable.

Secondly, where the deceased has no dependants, other persons, eg, distant relatives, may receive a 'windfall' and be unjustly enriched by such an award.

Thirdly, the estate claim for 'lost years' is often higher than the 'loss of dependency' claim. In some cases, dependants may obtain damages which are more than their actual loss of dependency. Such cases include cases where the dependants are already elderly and are likely to have died before the deceased person had he not met with a premature death in an accident.

157 While Mr Rai cited *AOD (a minor suing by his litigation representative) v AOE* [2016] 1 SLR 217 ("*AOD*") for the proposition that s 10(3)(a)(ii) of the CLA "did not disallow" damages for one's loss of income during the lost years from being awarded in a claim brought by a "living plaintiff", that is precisely the point – only a living plaintiff may bring a claim for loss of income during the lost years. This was the very situation in *AOD*, since the plaintiff minor in that case – who was nine years' old when he was knocked down by a vehicle driven by the defendant – had not yet died at the time of trial and assessment of damages. The plaintiff minor was claiming for his lost income during his lost years because doctors estimated that he would live only to the age of 38.

158 In this case, however, Ms Azlin passed away before the assessment of damages. This is the very reason for the application in HC/SUM 3339/2019 to permit Mr Azmi to continue and carry on Suit

59 in his capacity as the executor of Ms Azlin's estate. Therefore, the appropriate claim is for loss of inheritance under s 22(1A) of the CLA, which unfortunately was not pleaded even in the alternative. Besides, a claim for loss of inheritance has in fact been expressly disavowed by Mr Rai in these proceedings.

159 By way of observation, I agree with Ms Kuah that the Estate's claim for loss of earnings (and CPF) or loss of inheritance from 2019 to 2044 is dubious. There is a paucity of evidence to sustain a loss of inheritance claim. There is no evidence of Ms Azlin's savings per year. There is no evidence of her post-retirement expenses or what the discount for accelerated receipt and vicissitudes of life should be. Finally, there is also no evidence of how much of Ms Azlin's savings would be apportioned to the stated dependants (the parents and Mr Azmi).

Loss of earnings and CPF during living years

160 The Estate submits that Ms Azlin's total estimated earnings in the period between 2016 and 2018 would have amounted to \$177,831.412 (including CPF) or \$142,265.13 (excluding CPF). The Estate claims a sum of \$128,488.47 in lost CPF from 2016 to 2018. [\[note: 57\]](#) Annexed to Ms Azlin's AEIC (for the HC Trial) are her tax annual statements to show her annual salary from 2008 to 2016: [\[note: 58\]](#)

- (a) 2008: \$27,300
- (b) 2009: \$33,742
- (c) 2010: \$35,778
- (d) 2011: \$38,976
- (e) 2012: \$32,372
- (f) 2013: \$47,608
- (g) 2014: \$42,951
- (h) 2015: \$51,165.22
- (i) 2016: \$41,369

161 CGH, however, challenges the claim on the footing that Ms Azlin had admitted during the HC trial in January 2017 that she was still working as a corporate secretarial services supervisor, albeit on a part-time basis. CGH also highlights that an article published in The Straits Times on 28 February 2019 states that Ms Azlin reported that she: [\[note: 59\]](#)

... continues working at her job in the corporate secretariat sector, helping new companies set up offices. Iyer Practice Advisers, where she works, allows her to work part-time so she can continue with her treatment. She gets \$22 an hour. ...

CGH also urges this Court to draw an adverse inference against Ms Azlin for failing to call her employer, Mr Shanker Iyer ("Mr Iyer"), as a witness.

162 I see the force of CGH's submission that, on its face, Ms Azlin's tax returns actually

demonstrate that she had continued to be employed every single year up till the very year she filed her AEIC for the HC Trial (2016), and that her salary did not suffer a significant decrease ever since her diagnosis in February 2012. In fact, Ms Azlin's annual salary from 2013 to 2016 was higher than her salary prior to 2013.

163 According to the evidence, from March 2017, Ms Azlin was treated with a third-generation ALK-inhibitor, Lorlatinib. Notably, the Estate did not clarify nor adduce evidence in the AD hearing to prove that Ms Azlin did not work from 2017 to 2019 (eg evidence from her employer or former employer). This is, once again, a head of claim where precise evidence ought to be obtainable. Thus, this court is not able to accept the plaintiffs' bare claim that Ms Azlin had stopped working from 2016, especially when she was able to work up to 2016, even after she was placed on ALK inhibitors. Indeed, the Estate did not challenge the accuracy of the information Ms Azlin provided during the interview with the Straits Times (see [161] above), for instance that she continued to work albeit on a part-time basis, and the report did not specify the duration of part-time employment. The court is unable to award the Estate general damages for Ms Azlin's loss of earnings or CPF from 2016 to 2019.

Estate or dependency claim

164 The "estate claim", as labelled in the Estate's closing submissions, is for a sum of \$198,000. However, the Estate did not make any specific submissions in closing submissions to explain the grounds for making this "estate claim" of \$198,000. The Statement of Claim and Ms Azlin's AEIC instead labelled the claim for the sum of \$198,000 as a "dependency claim", with the following breakdown.

- (a) Anticipated costs of obtaining grant of letters of administration: \$6,000.
- (b) The estimated loss of dependency at \$1,600 per month over 10 years: \$192,000.

165 The Statement of Claim and Ms Azlin's AEIC identified the dependants as Ms Azlin's parents and her older brother, the second plaintiff, Mr Azmi. In the HC trial, Ms Azlin testified that she was then still giving her parents \$650 each. She also gave Mr Azmi \$200 every month for financial support until late 2015. [\[note: 60\]](#) Ms Azlin's pleaded case is that she: [\[note: 61\]](#)

... would have given more in financial support, namely, about \$1,200 to her parents and about \$400 to [the second plaintiff], but for the fact that she had to incur additional expenses of about \$1,500 every month since March 2012 for costs of medical treatment and medication, transport and legal fees and disbursements which in turn had reduced the mount she was able to spare for her dependants.

166 Significantly, CGH does not object to this court awarding a sum of \$10,800 for the dependency claim. This sum of \$10,800 is calculated by adopting a "token sum" of \$300 per month for a period of three years as payments to Ms Azlin's parents.

167 As highlighted by Ms Kuah, the Estate appears to have conflated an estate claim and a dependency claim. These two are distinct. On the death of any person, all causes of action, other than causes of action for defamation or seduction or for inducing one spouse to leave or remain apart from the other or a claim for damages for adultery, subsisting against or vested in him survives against, or for the benefit of, his estate: ss 10(1) and 10(2) CLA. An estate claim is the action brought by the personal representatives of the deceased to pursue these causes of action for the benefit of the deceased's estate. A dependency claim under s 20 of the CLA is a distinct claim by the deceased person's dependants for damages for the benefit of the dependants.

168 Ms Azlin's parents and brother do fall within the meaning of "dependants" in s 20(8) of the CLA. Yet, in this case, there is no indication on the writ and statement of claim that the executor is bringing a dependency claim on behalf of the dependants of the deceased. The writ and pleadings also do not indicate the capacity in which he is suing. Notably, the capacity in which Mr Azmi is suing is found in HC/SUM 3339/2019 (see [158] above). It provides that Mr Azmi is only named as the second plaintiff for the purpose of continuing the action, not for bringing a claim on behalf of Ms Azlin's dependants. In his supporting affidavit to this application, Mr Azmi deposed that he wished to be substituted for Ms Azlin "in pursuing her claims against the Defendants on behalf of her estate".

169 Be that as it may, CGH does not actually object in principle to the dependency claim of the parents (see [166] above).

170 Generally, there are two methods for assessing a dependency claim. Under the traditional method, the court adds together the value of the benefits received by the dependants, and each dependant has to prove the value of the benefit received. Alternatively, under the percentage deduction method, the court deducts the deceased's exclusively personal expenditure from his or her net salary: *Carol Ann Armstrong* ([32] *supra*) at [211]–[212]. In a dependency claim, calculation of the damages to which a dependant is entitled for loss of dependency is by what is known as the multiplier-multiplicand approach. The multiplier is the number of years for which a dependant could claim for his or her loss (with a discount for accelerated receipt and the vicissitudes of life) while the multiplicand is the annual value of the dependency: *Carol Ann Armstrong* at [258]. I find the commentary in Gary Chan Kok Yew and Lee Pey Woan, *The Law of Torts in Singapore* (Academy Publishing, 2nd Ed, 2016) at para 20.076 on how the multiplier is to be determined so that different multipliers could be applied to each dependent if their circumstances differ to be helpful:

As stated in *Ling Kee Ling v Leow Leng Siong* [[1994] 3 SLR(R) 395 at [8]], in assessing the claim of any dependant, the relationship between the deceased and the dependant, the personal circumstances of the deceased and the dependant, such as age, occupation, financial means and needs, and marital status, have to be considered in order to determine what the reasonable expectations would be.

171 In assessing a dependency claim, there does not have to be distinct evidence of pecuniary advantage in existence, and it suffices that there is some basis of fact from which such an inference can be drawn: *Carol Ann Armstrong* at [234]. On the facts of *Carol Ann Armstrong*, the Court of Appeal held at [235] that there was "ample basis for the inference to be drawn that Mr Traynor would have provided for the dependents" – his wife and children – "out of the family's annual expenses", since Mr Traynor was the sole breadwinner of his family, and the court found that it "would be fair" to infer that half of the family's annual expenses (the annual expenses being \$243,000) would have been spent on the dependants.

172 In this case, the Estate seems to be relying on the traditional method to assess the dependency claim. Unlike the situation in *Carol Ann Armstrong*, which involved a father-husband whose dependants were his wife and children, the alleged dependants in this case are Ms Azlin's parents and older brother. It is not quite as self-evident in this case as it was in *Carol Ann Armstrong* that Ms Azlin would have provided for her parents and her older brother. The Estate also has not adduced any objective evidence to prove or corroborate the values of the benefits allegedly received by Ms Azlin's parents and her brother. I should mention that Ms Azlin's mother testified at the trial (see [175] below) but Mr Azmi did not testify at the AD hearing.

173 There is also no justification for why the multiplier should be 10 years, as sought by the Estate. It is especially odd that the Estate is seeking to apply the same multiplier to both the parents and Mr

Azmi, when the parents are much older than Mr Azmi (the father is now 82 years' old while the mother is 74 years' old). Given this age difference, it is obvious that the number of years for which the parents could claim for their loss would be less than Mr Azmi's (who is now 53 years' old). I repeat the commentary quoted in [170] above.

174 Finally, although Mr Azmi obtained letters of administration, there is also no evidence whatsoever to support the claim amount of \$6,000 incurred to obtain letters of administration.

175 While Ms Azlin pleaded that she gave some allowance to Mr Azmi, Mr Azmi did not attest or come to court to testify and explain his dependency claim. Thus, I am unable to award his dependency claim, since there is no satisfactory evidence to support it. As for Ms Azlin's parents, while Ms Azlin's father did not testify in court, Ms Azlin's mother, Mdm Azizah Bt Yahya ("Mdm Azizah"), did give evidence – both in her AEIC and in court – that Ms Azlin contributed a monthly allowance to her and her husband. I note that, as highlighted by CGH, Mdm Azizah's testimony was not always consistent. In court, she first stated that she received "around \$1,000 plus" per month from Ms Azlin before her cancer. [\[note: 62\]](#) This, however, then changed to "\$1,200". [\[note: 63\]](#) Furthermore, neither this sum of "\$1,000 plus" nor the sum of "\$1,200" appeared in Mdm Azizah's AEIC, so it was belatedly raised in court. In her AEIC, Mdm Azizah also stated that Ms Azlin stopped contributing to her "in or around late 2015". [\[note: 64\]](#) However, in court, Mdm Azizah then testified that Ms Azlin only stopped contributing in around October 2016. [\[note: 65\]](#)

176 Nevertheless, I am satisfied that Ms Azlin did contribute some allowance to her parents, although the quantum and regularity of the payments appear to be imprecise, particularly in light of Mdm Azizah's unclear testimony. In my view, a fair and reasonable multiplicand is \$600 per month.

177 I next set out to determine the appropriate multiplier. As stated, the Estate did not adduce evidence of the average life expectancy of a female in Singapore, and it is, as aforementioned at [173] above, unclear what the Estate's basis for applying a 10-year multiplier is. In the recent case of *Seto Wei Meng (suing as the administrator of the estate and on behalf of the dependants of Yeong Soek Mun, deceased) and another v Foo Chee Boon Edward and others (Singapore General Hospital Pte Ltd, third party)* [2020] SGHC 260 ("*Seto Wei Meng*") at [49], the High Court noted that the average life expectancy of a female in Singapore is about 86 years' old. The High Court then calculated the multiplier for the dependency claim by first deducting the dependant's (Mdm Lee, the deceased's mother) age at the time of the deceased's (Mandy Yeong) death – 71 years' old – from the average life expectancy of a female in Singapore (86 years' old) to get a dependency period of 15 years. The High Court then applied a discount of 25% for accelerated receipt and vicissitudes of life to derive a discounted multiplier of 11.25 years for Mdm Lee's loss of support.

178 To determine the multiplier for Mdm Azizah's dependency claim, it is the remaining years of Mdm Azizah's life, rather than the remaining years that Ms Azlin would have worked for before retirement, that is critical, since Ms Azlin was only 39 years' old when she died, and was thus nowhere near the statutory minimum retirement age of 62 years' old (see s 4 of the Retirement and Re-employment Act (Cap 274A, 2012 Rev Ed)). Thus, to derive the number of years which Mdm Azizah can expect to receive the dependency sum from Ms Azlin, the difference between Mdm Azizah's age when Ms Azlin passed away (73 years' old) and the age of Mdm Azizah's expected life expectancy has to be calculated. The question, thus, is what is Mdm Azizah's expected full life expectancy?

179 Unfortunately, the Estate has not adduced any evidence of this. I prefer not to adopt the approach in *Seto Wei Meng* and would stick to requiring the Estate (like in *Carol Ann Armstrong* ([32] *supra*)) to prove the average life expectancy of Mdm Azizah, not only with reference to the average

life expectancy of a female in Singapore based on actuarial reports but also with reference to the particular characteristics of Mdm Azizah, including her race, weight and lifestyle.

180 Be that as it may, I note that CGH is not actually disputing that a dependency claim of \$10,800 may be awarded (see [166] above). This sum of \$10,800 is calculated by adopting a “token sum” of \$300 per month for a period of three years as payments to Ms Azlin’s parents. This length of three years is presumably based on CGH’s position that Ms Azlin only lost, at best, 3 years of her life expectancy from the delay in diagnosis (see [119] above). I have already explained at [120] above why this submission should be rejected. Further, in my view, the token sum of \$300 per month is too low in light of the mother’s testimony that *her expectation* was that Ms Azlin would contribute an average monthly sum of between \$600 to over \$1,000 to her, and that she would continue to receive this contribution, had her daughter not taken ill and continued to be gainfully employed. Since Ms Azlin was nowhere near the statutory retirement age, Mdm Azizah would have expected to receive this sum all the way until her passing. Thus, I find the Estate’s multiplier of 10 years to be not unreasonable. Applying a discount of 25% for accelerated receipt and vicissitudes of life (which was also the discount applied in *Seto Wei Meng*) would result in a discounted multiplier of 7.5 years for Mdm Azizah’s loss of support.

181 In the circumstances, I will adjust CGH’s figure of \$300 per month to \$600 per month, and CGH’s multiplier of 3 years to 7.5 years, and award a sum of \$54,000 (\$600 x 12 x 7.5) for the dependency claim as payments to Ms Azlin’s mother.

182 In summary, the global award of general damages is \$304,000 (being \$250,000 for the Estate’s claim plus \$54,000 for the dependency claim) ([138] above).

Aggravated and punitive damages

183 Aggravated damages are distinct from punitive damages (also called exemplary damages: see *ACB v Thomson Medical Pte Ltd and others* [2017] 1 SLR 918 (“ACB”) at [156]). Punitive damages are “meant to punish, deter, and condemn” and may be awarded in tort “where the totality of the defendant’s conduct is so *outrageous* that it *warrants punishment, deterrence, and condemnation*” [emphasis added] (*ACB* at [156] and [176]). On the other hand, aggravated damages are (*ACB* at [156]):

... awarded to *augment* a sum awarded in general damages to compensate for the enhanced hurt suffered by the plaintiff due to the aggravation of the injury by the manner in which the defendant committed the wrong or by his motive in so doing, either or both of which might have caused further injury to the plaintiff’s dignity and pride ... [emphasis in original]

184 In this case, to advance the claim for aggravated and punitive damages, the Estate has made spurious claims against CGH and its expert witnesses. As regards the expert witnesses, the Estate has made many sweeping, baseless, and unwarranted accusations against the two expert witnesses called by CGH, Prof Goh and Dr Lynette Teo. For instance, the Estate claims that: [\[note: 66\]](#)

... [CGH] had engaged as a hired gun, ... one Dr Lynette Teo ... to come up with dubious readings of the nodule purely for purposes of denying liability and to facilitate further dubious opinions thereon by her colleague from the same hospital, Prof Goh. ...

185 These accusations are vague, without specificity and particulars. It is especially surprising to see the Estate making such claims in these AD proceedings when the Court of Appeal had already stated in its CA Judgment at [119] that they were “greatly assisted” by Prof Goh’s evidence. Both

Prof Goh and Dr Lynette Teo work for the National University Hospital ("NUH"), which is not only a reputable public hospital in Singapore but also an independent third party separate from CGH. Prof Goh's credentials also speak for themselves: Prof Goh is a Senior Consultant in medical oncology and the Head of the Department of Haematology-Oncology at the National University Cancer Institute and NUH. Dr Lynette Teo is also a Senior Consultant at the National University Cancer Institute and Department of Diagnostic Imaging, NUH. Counsel do little to assist the court, and do no service to their clients, when they seek to disparage an expert witness's credibility and testimony for the mere sake of doing so. Having heard and seen Prof Goh and Dr Lynette Teo testify, in my view, they had properly discharged their duties as expert witnesses to the full satisfaction of the court.

Aggravated damages

186 The Estate seeks aggravated damages of \$8,943,046.70, which is two times the quantum of general damages sought, principally because CGH did not concede liability but instead fought the Suit "tooth and nail all the way to the Court of Appeal and even beyond", even though CGH was seemingly "aware" of the flaws in its system by 2014. The Estate relies on the fact that CGH had instituted improvements to its system in 2014. The Estate submits that it is "abhorrent, repugnant and/or egregious" of CGH not to concede liability earlier even though they knew that Ms Azlin was already terminally ill and not someone with deep pockets. [\[note: 67\]](#)

187 The Estate submits that the harm that Ms Azlin suffered may be analogised to *Li Siu Lun v Looi Kok Poh and another* [2015] 4 SLR 667 ("*Li Siu Lun*"), where I awarded aggravated damages of two times the quantum of general damages because "Gleneagles took positions inconsistent with the pleadings and postured in the conduct of legal proceedings, [which] would give rise to frustration, anger, indignation or a heightened sense of grievance." The Estate also relied on *Philp v Ryan and others* [2004] IESC 105283 ("*Philp v Ryan*") for the proposition that aggravated damages may be awarded in negligence cases, as long as the basis of the claim is based on the behaviour subsequent to the negligent acts, and CGH's "deceitful conduct" subsequent to its negligent failure to follow up on Ms Azlin's case warrants aggravated damages. The Estate submits that, similar to the plaintiff in *Philp v Ryan*, Ms Azlin was a terminally ill woman who was led to think that, by virtue of CGH's concealment of its systemic deficiencies, CGH had a plausible defence against her claims of negligence, which exacerbated her mental anguish and stress throughout the proceedings.

188 It first bears highlighting that the Estate did not plead a claim for aggravated or punitive damages. Despite this, Mr Rai submits that the Estate is still entitled to claim aggravated or punitive damages by virtue of Article 14 of the First Schedule of the Supreme Court of Judicature Act (Cap 322, 2007 Rev Ed) and O 33 r 2 of the Rules Of Court (Cap 322, R 5, 2014 Rev Ed) ("ROC"), as was held in *ACB* ([183] *supra*).

189 O 33 r 2 of the ROC provides:

The Court may order any question or issue arising in a cause or matter, whether of fact or law or partly of fact and partly of law, and whether raised by the pleadings or otherwise, to be tried before, at or after the trial of the cause or matter, and may give directions as to the manner in which the question or issue shall be stated.

190 As highlighted by Ms Kuah, I had held in *Li Siu Lun* at [163], which the Estate itself relies on, that aggravated damages have to be specifically pleaded and the amount awarded as aggravated damages must be identified separately in the court's final award. This is consistent with the position that aggravated damages are "parasitic" and "depend ultimately on the adequacy of the quantum of general damages awarded".

191 O 33 r 2 of the ROC confers upon the court the power to order “any question or issue arising in a cause or matter” to be determined preliminarily. This power ought to be exercised “if it would save substantial time and expenditure”: *ACB* at [22]. In *ACB*, the appellant underwent in-vitro fertilisation treatment at a fertility clinic operated by the second respondent, which employed the third and fourth respondents. The appellant sued the respondents in tort for damages arising from the fact that the appellant’s ovum had been fertilised using sperm from an unknown third party instead of sperm from the appellant’s husband. The initial sole issue which was placed before the Court of Appeal was simply whether the claim for the costs of the upkeep of the child was legally sustainable. However, the Court of Appeal found this to be “strikingly inadequate” to cover the consequences of parenthood. Consequently, the Court of Appeal asked for further submissions on the other possible claims that might be advanced, and the Court then exercised the power under O 33 r 2 of the ROC to broaden the remit of the inquiry to include the issues of loss of autonomy and punitive damages because this would “allow fuller treatment of the issues and allow for a more just outcome”: *ACB* at [18] and [22]. The Court of Appeal’s emphasis on the “strikingly inadequate” quantum of the potential upkeep costs is consistent with my finding in *Li Siu Lun* ([187] *supra*) that a claim for aggravated damages depends on whether the quantum of general damages awarded is adequate.

192 The key distinction between *ACB* ([183] *supra*) and the present facts is that, in the present case, I had already explicitly raised the matter of amendments to Mr Rai. There was no application for leave to amend. Thus, the last amendment to the statement of claim was made on 8 January 2016. It is critical that a claim for aggravated damages is pleaded because the defendant must be given notice that the plaintiff is pursuing a claim for aggravated damages, so that the defendant is given adequate opportunity to adduce evidence to respond to the plaintiff’s claim that the defendant aggravated the plaintiff’s injury by the manner in which the defendant committed the wrong or by his motive in so doing. As Ms Kuah highlighted, it was only in the Estate’s closing submissions did the Estate outline the grounds on which it sought aggravated and punitive damages. The Estate has unleashed serious allegations such as the fact that CGH “withheld discovery of important evidence”, delayed the proceedings, and that CGH and/or its expert witnesses were “deceitful”. [\[note: 68\]](#) Had a claim for aggravated damages, and the facts supporting the claim, been pleaded, CGH would have had the opportunity to address the serious allegations if it had wanted to. It might have wanted to adduce evidence from its witnesses to explain how it conducted its proceedings. As such, I find that there is no basis to award aggravated or punitive damages in this case, since they were not pleaded by the Estate.

193 Furthermore, aggravated damages should only be awarded where the amount of general damages is inadequate in the circumstances of the case and requires augmentation: *Li Siu Lun* at [138]. *ACB* was an unusual case where the upkeep costs sought were “strikingly inadequate” to cover the consequences of parenthood arising from the respondents’ negligence. On the other hand, the present case is relatively unexceptional. I also reiterate my observations at [94] above that the Estate’s claim for aggravated or punitive damages read, to me, as being very contrived – there was little justification for it, and it appeared as nothing more than an attempt to increase the quantum of the recoverable damages for the Estate (which is consistent with the fact that it was not pleaded and only appeared in the Estate’s case after Ms Azlin’s passing).

194 In any event, I find that the claim for aggravated damages is not made out in this case. It first bears noting that *Li Siu Lun* concerned a case of the tort of conspiracy to injure by unlawful means, not negligence. The facts of *Li Siu Lun* are also far removed from the present case. In *Li Siu Lun*, the plaintiff was made to undergo two medical procedures by the defendants even though he only consented to one. The second procedure was added to the signed consent form post-surgery without the plaintiff’s knowledge or consent. It was in these circumstances that I found the hospital’s

conduct to be “plainly exceptional conduct”: *Li Siu Lun* at [167]. As I explained in *Li Siu Lun* at [164], for there to be such “plainly exceptional conduct”, there must have been “evidence of contumelious or exceptional conduct or motive on the part of the defendant in inflicting the injury and the plaintiff must have suffered some kind of intangible loss”.

195 In this case, there is no evidence of any contumelious or exceptional conduct or motive on CGH’s part in “inflicting the injury” on Ms Azlin. The mere fact that CGH has been found liable to Ms Azlin due to its inadequate system does not *ipso facto* lead to aggravated damages. A critical factor in this case is that the CA Judgment was, as far as I am aware, the first ever case in Singapore where a local court had found negligence arising from a hospital’s systemic failures in the context of incidental findings in X-rays requested by the A&E department. The Court of Appeal also made important clarifications on the role of statistical evidence in assessing causation (see, *eg*, [34] above). In these circumstances, it would not be fair to allege, as the Estate has, that CGH took unreasonable, much less “deceitful”, positions in contesting liability.

Punitive damages

196 As highlighted by Ms Kuah, punitive or exemplary damages for the benefit of an estate are statutorily outlawed: s 10(3)(a)(i), CLA. As such, I agree with CGH that there is no basis to award punitive damages in this case, since the claim is brought by Mr Azmi for the benefit of the estate.

197 In any event, it is clear that punitive damages are not appropriate in the present circumstances. Punitive damages are meant to punish the wrongdoer and are only rarely awarded in torts. There are no Singaporean cases where punitive damages have been awarded in the context of medical negligence. The test is whether CGH’s conduct was “so outrageous”. While proof of intentional wrongdoing or conscious recklessness is not required, the Court of Appeal also observed that an award of punitive damages would “usually only be appropriate where the defendant’s wrongdoing was intentional or consciously reckless”: *ACB* ([183] *supra*) at [199]–[206].

198 Mr Rai submits that punitive damages are warranted in this case because “there is a strong impetus to deter similar conduct by healthcare providers”, namely “deceitful conduct” by CGH and “its key witnesses Dr Lynette Teo Li San and Prof Goh”, who “have displayed arrogance towards the patient [which CGH] was supposed to take care of”. [\[note: 69\]](#) CGH’s “deceitful conduct” lasted for 5 years and counting, and demonstrated a “high degree of indifference” to Ms Azlin’s suffering. [\[note: 70\]](#) Mr Rai also submitted that the facts of the present case are analogous to *A v Bottrill* [2003] 1 AC 449 (“*Bottrill*”), which the Court of Appeal in *ACB* said warranted punitive damages.

199 In *Bottrill*, the defendant was a pathologist who misread and misreported the results of cervical smears taken from the plaintiff and failed to detect that she had high grade intraepithelial lesions, which are a precursor to aggressive cervical cancer. The plaintiff subsequently developed invasive cervical cancer which required aggressive treatment and she received a poor prognosis. If the smears had been correctly reported, the treatment would have been less severe and her prognosis much better. The plaintiff sued and claimed punitive damages, but this was dismissed on the ground that the facts did not support the conclusion that the defendant acted in a manner which evinced an outrageous and flagrant disregard for her safety. Subsequently, an investigation was carried out and it was revealed that the defendant had also been alarmingly negligent in respect of the treatment of other persons and that his false reporting rate exceeded 50%. On this basis, the plaintiff applied for a re-trial. The Privy Council reversed the New Zealand Court of Appeal’s decision and allowed a re-trial.

200 The Court of Appeal in *ACB* at [201] observed that *Bottrill* was a case where “the defendant’s conduct, though technically only negligent”, was, “because of its quality or extent, or its duration or

repetitiveness, or casualness or indifference, or any other reprehensible feature”, so “beyond the pale that it is properly characterised as outrageous”. This was because of the betrayal of the trust reposed in the defendant-doctor by his patients; the magnitude of the potential harm his conduct posed; and his sustained pattern of laxity and incompetence. The Court of Appeal in *ACB* at [201] also cited Lord Nicholls’ example in *Bottrill* of “a person who deliberately points a loaded gun at another person and, believing it to be unloaded, squeezes the trigger, causing serious injury”. Such “stupidly dangerous behaviour” should attract an award of punitive damages, even if the person “genuinely believed his act to be harmless”.

201 In the present case, however, CGH’s negligence cannot be likened to such “stupidly dangerous behaviour” or the “sustained pattern of laxity and incompetence” in *Bottrill*. There is no evidence to suggest that CGH’s negligence in this case affected anyone else besides Ms Azlin, unlike in *Bottrill* where the defendant-doctor’s negligence affected multiple patients. Furthermore, despite the Estate’s assertion *ad nauseam* that CGH’s conduct was “deceitful”, there is no proof of this “deceitful” conduct. The Court of Appeal certainly did not find in its judgment that CGH was “deceitful”. As such, there would be no basis to award punitive damages.

Special damages

202 The Estate seeks a sum of \$49,530.70 in special damages, with the following breakdown.

- (a) Pre-trial loss of earnings (2010 to 2015): \$26,910.09.
- (b) Medical expenses (2012 to 2015): \$19,620.61.
- (c) Transport expenses (2012 to 2015): \$3,000.

Pre-trial loss of earnings

203 The Estate submits that Ms Azlin had suffered a loss in her pre-trial income since 2011. From around August 2014, Ms Azlin was only able to work for half a day on most days that she was able to report to work, and she was frequently hospitalised and on medical leave. She faced stagnation of job prospects and reduced pay and termination of employment in late 2015. As she was unable to perform due to her medical condition and was on frequent medical leave, she had to tender her resignation with effect from 31 October 2015. In return, she accepted an offer of part-time employment by her employers which was made purely on compassionate grounds. Her employer, Mr Iyer, continued to pay her full salary until around end October 2015 on compassionate grounds even though she was unable to work on most days. Ms Azlin also believed that she was rightfully not given any bonus as she could not work whereas her colleagues could. The loss in Ms Azlin’s pre-trial income from 2010 or 2011 to 2015 is estimated to be \$26,910.09. [\[note: 71\]](#)

204 CGH submits that the evidence shows that Ms Azlin would have undergone the lobectomy, adjuvant chemotherapy and surveillance scans even if she had been diagnosed at pathological stage IB. Consequently, any alleged loss that arises from the period of Ms Azlin’s cancer treatment following her diagnosis cannot be said to be caused by CGH.

205 The general rule is that special damages have to be strictly proven. Otherwise, they are not recoverable: *Wee Sia Tian v Long Thik Boon* [1996] 2 SLR(R) 420 at [15]. Therefore, in *Bocotra Construction Pte Ltd v Thorkildsen* [1994] 2 SLR(R) 387, the Court of Appeal accepted only the documentary evidence given to establish the plaintiff’s earnings and did not accept his oral evidence because it was inconsistent with the documents and no adequate explanation for the inconsistency

was given.

206 In this case, I am not satisfied that the Estate has proven any loss of earnings from 2010 to 2015. As CGH highlighted, Ms Azlin herself admitted in her AEIC that her employer paid her “full salary” until end October 2015. [\[note: 72\]](#) The Estate has not adduced any evidence from Ms Azlin’s employer to show that she would have received more pay than what she was paid between 2010 and 2015 but for her cancer and relapse in 2014.

207 Furthermore, at the HC trial, Ms Azlin could not explain how she projected her “losses” of income. [\[note: 73\]](#) Indeed, it is very unclear, as CGH pointed out, how the Estate derived the sum of \$26,910.09. According to Ms Azlin’s AEIC, her estimated losses in the years from 2010 to 2015 are \$10,920 in 2012 and \$6,435.61 in 2014. [\[note: 74\]](#) This clearly does not add up to \$26,910.09.

208 Therefore, there is no basis to grant special damages for the pre-trial loss of earnings as claimed.

Medical expenses

209 The Estate is claiming medical expenses that Ms Azlin incurred from 6 March 2012 to 22 January 2015, amounting to \$19,620.61 as per Schedule C to the Statement of Claim (“Schedule C”). [\[note: 75\]](#) Schedule C sets out the amounts purportedly paid by Ms Azlin to the NCCS between 6 March 2012 and 22 January 2015.

210 CGH submits that no special damages for the medical expenses should be awarded because Ms Azlin conceded that the bulk of the medical expenses incurred were covered by various sources of funding and did not require payment from her own pocket. [\[note: 76\]](#) In particular, Ms Azlin’s medical expenses were paid for by her insurance policies and she also received financial assistance from the Medication Assistance Fund Plus, National Cancer Centre-Medifund and the Ministry of Health’s (“MOH”) Medication Assistance Fund. [\[note: 77\]](#) CGH submits that the Estate should not be allowed to recover the expenses covered by these sources because the Estate is not under any obligation to repay the insurer. CGH also highlights that, in any event, the Estate’s figure of \$19,620.61 is incorrect, and that Schedule C actually gives rise to a sum of \$19,597.16, with the following breakdown: [\[note: 78\]](#)

- (a) Payment by cash: \$466.95
- (b) Payment by Medisave: \$3,279.70
- (c) Payment by insurance: \$15,357.66
- (d) Payment by NCC Medifund: \$492.85

211 CGH’s submission at [210] above is not correct. As highlighted by Dixon CJ in *Espagne* ([144] *supra*), advantages accrued to an injured plaintiff as a result of “contract” are “conferred on him not only independently of the existence in him of a right of redress against others but so that they may be enjoyed by him although he may enforce that right” and are “not provided in relief of any liability in others fully to compensate him”. Insurance payouts are such advantages accruing due to contract. The Court of Appeal in *The “MARA”* ([143] *supra*) at [32] also went on to cite Windeyer J’s judgment in *Espagne* at 599–600:

Is there a governing principle in all these cases? So far as any rules can be extracted, I think that they may be stated, generally speaking, as follows: In assessing damages for personal injuries, benefits that a plaintiff has received or is to receive from any source other than the defendant are not to be regarded as mitigating his loss, *if: (a) they were received or are to be received by him as a result of a contract he had made before the loss occurred and by the express or implied terms of that contract they were to be provided notwithstanding any rights of action he might have; or (b) they were given or promised to him by way of bounty, to the intent that he should enjoy them in addition to and not in diminution of any claim for damages. The first description covers accident insurances and also many forms of pensions and similar benefits provided by employers: in those cases it is immaterial that, by subrogation or otherwise, the contract may require a refund of moneys paid, or an adjustment of future benefits, to be made after the recovery of damages.* The second description covers a variety of public charitable aid *and some forms of relief given by the State* as well as the produce of private benevolence. In both cases the decisive consideration is, not whether the benefit was received in consequence of, or as a result of the injury, but what was its character: and that is determined, in the one case by what under his contract the plaintiff had paid for, and in the other by the intent of the person conferring the benefit. *The test is by purpose rather than by cause.* [emphasis added]

212 Indeed, as aforementioned at [143] above, the Court of Appeal in *Minichit Bunhom* ([143] *supra*) at [84] reaffirmed the position that insurance payouts form an exception to the rule against double recovery. This principle makes sense because insurance payouts would have been received by Ms Azlin not merely due to CGH's negligence, but primarily because Ms Azlin would have presumably duly paid her insurance premiums to the insurer. There is thus no "double recovery" because, as clearly explained by Windeyer J in *Espagne*, the benefit from the insurance contract – the insurance payout – accrues to Ms Azlin as a result of a distinct contractual relationship between the insurer and Ms Azlin.

213 The same reasoning applies to government subsidies. Subsidies are provided by the government to its citizens or residents due to the government's relationship with its people. Such subsidies are awarded for a multitude of public policy reasons, such as the betterment of public health or access to affordable healthcare for citizens who qualify for assistance.

214 The Court of Appeal in *The "MARA"* at [32] endorsed Windeyer J's *dicta* in *Espagne* that relief given by the state should also be an exception to the rule against double recovery. Therefore, the fact that Ms Azlin's medical expenses were paid by her insurance or government subsidies does not prevent her from claiming for compensation for these medical expenses from the tortfeasor.

215 It is not clear to me how CGH derived the figure of \$19,597.16. This is because CGH did not cite any footnote references in its written submissions to explain where they got the figures presented by them in the breakdown listed at [210] above. In any case, CGH only raised this point in its written reply submissions for the AD hearing, even though the sums listed in Schedule C, which total up to \$19,620.61, have been as it is since at least 2016 (see [192] above). As such, I award the Estate special damages of \$19,620.61, and I will leave the Estate to separately account to the insurer(s) and/or relevant agencies who made payment (if any) of this sum of \$19,620.61.

Transport expenses

216 The Estate submits that Ms Azlin had incurred expenses for transport, which would not have been incurred but for CGH's negligence. She had to commute from home to NCCS, SGH and back home at a cost of about \$40 two-way, for about 75 trips between 6 March 2012 and 22 January 2015

amounting to an estimated sum of \$3,000 in total. [\[note: 79\]](#) CGH submits that Ms Azlin's "treatment would have been the same even if she had been diagnosed" at stage I and "there is no evidence that the delay in diagnosis caused" Ms Azlin's relapse. [\[note: 80\]](#) This argument is no longer viable in light of my conclusion that CGH's negligence did cause Ms Azlin's relapse. CGH also submits that the Estate has failed to produce any documentary evidence (eg receipts) to substantiate the claim for transport expenses. While I see the force of CGH's submission, I am satisfied that, during the time she was ill and receiving treatment, there would be the usual check-ups to follow, and in her condition, she would have to travel in a taxi. A sum of \$40 for two-way taxi fare from Ms Azlin's home in Changi to NCCS and SGH is not unreasonable.

217 As such, I award the Estate the sum of \$3,000 as special damages for Ms Azlin's transport expenses.

Conclusion

218 In conclusion, I award a total amount of \$326,620.61 as damages to the Estate, with the following breakdown:

- (a) \$304,000 as general damages:
 - (i) \$250,000 for pain and suffering and loss of amenity; and
 - (ii) \$54,000 for dependency claim; and
- (b) \$22,620.61 for special damages comprising the sum of \$19,620.61 for medical expenses and the sum of \$3,000 for transport expenses.

219 The parties have taken different positions on interest. The Estate prays for interest on general damages and special damages at the rate of 5.33% per annum from the date of the negligence to the date of award. CGH, relying on *Teo Sing Keng and another v Sim Ban Kiat* [1994] 1 SLR(R) 340 ("*Teo Sing Keng*") at [50]–[55], submits that interest for general damages for pain and suffering and loss of amenity should run from the date of service of the writ to the date of the judgment, at a rate of 5.33% per annum, while interest for any pre-trial loss of earnings and special damages should be half of the interest rate awarded for general damages (*ie* 2.67%) from the date of the incident (*ie* 31 July 2011) to the date of the judgment.

220 It should be recalled that an interim payment of \$200,000 for damages was paid to the Estate on 30 September 2019. In my judgment, interest on general damages for the full sum of \$304,000 (ascertained after assessment of damages) is to run from 10 April 2015 (date of service of the writ on CGH) to 29 September 2019 at the rate of 5.33% per annum, and thereafter interest on the balance sum of \$104,000 is to be calculated at the same rate of 5.33% from 30 September 2019 to the date of judgment. Interest payable on general damages in this judgment is structured in this way to take into consideration the interim payment of \$200,000 in general damages to the Estate on 30 September 2019.

221 I now come to interest on special damages. As highlighted by CGH, in *Teo Sing Keng* at [50], the Court of Appeal awarded an interest rate (3% per annum) for the special damages from the date of the accident to the date of the judgment. This was half of the interest rate awarded for the general damages in that case (6% per annum). In my view, interest for special damages and the appropriate rate of interest to apply are matters for the court's discretion depending on the facts of the case (see s 12 of CLA). In this judgment, interest on special damages in the total sum of

\$22,620.61 is recoverable. I found the Court of Appeal's recent comments in *Minichit Bunhom* ([143] *supra*) at [95]–[96] to be instructive:

... [T]he basis for an award of pre-judgment interest lies in the fact that the defendant had kept the plaintiff out of sums to which the latter has been shown to be entitled (at [137]). In that regard, as a matter of principle, plaintiffs who have been kept out of pocket should be able to recover interest on the sums that are found to have been owed to them *from the date of their entitlement, ie, the date of accrual of loss, until the date they are paid* (at [138]). The court, however, *has the discretion to depart from this general rule* if, for instance, the plaintiff had been guilty of inordinate delay in bringing the action (at [139]).

On the facts, we are of the view that an award of interest from the date the writ of summons was filed (*ie*, 12 June 2015) to the date of this court's judgment (*ie*, 17 January 2018) *at the standard interest rate of 5.33% per annum* would be a fair estimation of the opportunity cost suffered by the appellant in having been kept out of the sums to which he was entitled. In this regard, we note that the invoices recording the appellant's medical expenses were issued to and paid by KPW on his behalf over a period of around a year after the accident. In this context, if the appellant's submission for the period of interest to commence on the date of the accident was accepted, that would lead to over-compensation. Both parties are in agreement that the end date of the interest-bearing period should be the date of this court's judgment, delivered orally on 17 January 2018.

[emphasis added]

222 Other than referring to *Teo Sing Keng*, Ms Kuah did not develop the stance taken as to why the rate of interest should be half of 5.33%. I am inclined to award interest on \$22,620.61 and interest is to be computed at the rate of 5.33% from 6 March 2012, which is the first date of the recoverable claims for the special damages (see [209] and [216] above), until the date of this judgment.

223 For completeness, since CGH has already paid \$200,000, the hospital now only has to pay the balance of the judgment sum (plus interest as computed in the foregoing paragraphs). As for costs, the Court of Appeal has reserved the costs of the appeal in CA/CA 47/2018 and the HC trial. As for costs of this AD hearing, parties have submitted their respective costs schedules. Whilst costs should generally follow the event (the winning party is the Estate), it is clear from this judgment that not all costs were incurred in pursuing claims that bear a reasonable relationship to the dispute, such that additional work was generated by the conduct of the winning party.

224 I have taken the foregoing comments on board as regards quantum of costs to be awarded. For this AD hearing, CGH is to pay the Estate party and party costs fixed at \$105,000 plus reasonable disbursements which disbursements are to be taxed by the Registrar if there is no amicable agreement on the same within three weeks of this judgment.

[\[note: 1\]](#) Dr Chan Hui Ying Elizabeth's AEIC dated 22 July 2016 at [3].

[\[note: 2\]](#) Transcript, 27 April 2017, p 87 lines 19–25.

[\[note: 3\]](#) Adjunct Associate Professor Koong Heng Nung's AEIC dated 19 January 2016 at [3]–[4]; Transcript, 1 February 2017, lines 19–20.

[\[note: 4\]](#) Dr Daniel Tan Shao Weng's AEIC dated 20 September 2016 at [4].

[\[note: 5\]](#) Transcript, 25 January 2017, p 91 lines 3–6; Professor Goh Boon Cher's 1st AEIC dated 19 September 2016 at p 9, [18].

[\[note: 6\]](#) Transcript, 1 September 2020, pp 47–49.

[\[note: 7\]](#) Transcript, 27 April 2017, p 84 line 18 to p 85 line 24.

[\[note: 8\]](#) Transcript, 27 April 2017, p 86 line 25 to p 87 line 1.

[\[note: 9\]](#) Transcript, 27 April 2017, p 21 lines 1–7.

[\[note: 10\]](#) Transcript, 3 September 2020, p 20 line 24 to p 21 line 3.

[\[note: 11\]](#) Transcript, 27 April 2017, p 21 lines 1–10; p 85 lines 8–9.

[\[note: 12\]](#) Professor Goh Boon Cher's 2nd AEIC dated 23 January 2020 ("Prof Goh's 2nd AEIC") at p 5, [2].

[\[note: 13\]](#) Transcript, 25 August 2020, pp 27–28.

[\[note: 14\]](#) Transcript, 4 September 2020, p 23 lines 4 to p 25 line 9.

[\[note: 15\]](#) Transcript, 24 August 2020, p 22 lines 5 to p 25 line 18.

[\[note: 16\]](#) Transcript, 3 September 2020, p 20 line 17 to p 21 line 8, p 22 line 25 to p 27 line 7; Transcript, 4 September 2020, p 31 lines 10–20.

[\[note: 17\]](#) Plaintiffs' closing submissions dated 25 September 2020 ("PCS") at [114]; 1st Defendant's closing submissions dated 25 September 2020 ("DCS") at [62]–[63].

[\[note: 18\]](#) Transcript, 26 August 2020, p 3 lines 14–22.

[\[note: 19\]](#) Dr David Breen's AEIC dated 8 November 2019 ("Dr Breen's AEIC"), p 10.

[\[note: 20\]](#) Dr Breen's AEIC, p 10 and p 12, [2].

[\[note: 21\]](#) Prof Goh's 2nd AEIC at p 6, [7(a)]; Exhibit D1.

[\[note: 22\]](#) Prof Goh's 2nd AEIC at p 6, [7(b)]; Transcript, 1 September 2020, p 141 line 2 to p 143 line 17; Joint Core Bundle for Assessment of Damages, Tab 8.

[\[note: 23\]](#) Transcript, 26 August 2020, p 3 line 14 to p 4 line 3.

[\[note: 24\]](#) Transcript, 26 August 2020, p 4 lines 3–20.

[\[note: 25\]](#) Transcript, 26 August 2020, p 5 lines 2–3.

[\[note: 26\]](#) Transcript, 1 September 2020, p 7 line 15 to p 8 line 7.

[\[note: 27\]](#) Transcript, 4 September 2020, p 48 line 13 to p 49 line 13.

[\[note: 28\]](#) 4PB 3090.

[\[note: 29\]](#) Transcript, 3 February 2017, p 58 line 11 to p 60 line 1.

[\[note: 30\]](#) Transcript, 1 September 2020, p 156 line 13 to p 157 line 3.

[\[note: 31\]](#) Prof Goh's 2nd AEIC p 6 at [7]; Transcript, 3 September 2020, p 79 lines 6–14.

[\[note: 32\]](#) Transcript, 25 August 2020, p 74 lines 18–25.

[\[note: 33\]](#) Transcript, 4 September 2020, p 61 lines 21–23.

[\[note: 34\]](#) Transcript, 1 September 2020, p 83 lines 23–25.

[\[note: 35\]](#) Transcript, 25 January 2017, p 35 lines 10–11.

[\[note: 36\]](#) Transcript, 4 September 2020, p 61 line 24 to p 62 line 12.

[\[note: 37\]](#) Transcript, 1 September 2020, p 83 lines 10–17.

[\[note: 38\]](#) Transcript, 27 April 2017, p 102 line 5 to p 103 line 8.

[\[note: 39\]](#) Transcript, 4 September 2020, p 8 line 21 to p 9 line 7.

[\[note: 40\]](#) Transcript, 4 September 2020, p 41 line 24 to p 42 line 15.

[\[note: 41\]](#) Transcript, 1 September 2020, p 29 line 8 to p 30 line 9.

[\[note: 42\]](#) Transcript, 25 January 2017, p 35 line 7 to p 36 line 13.

[\[note: 43\]](#) DCS at [76]; Transcript, 27 April 2017, p 8 lines 4–24.

[\[note: 44\]](#) Transcript, 3 September 2020, p 20 line 17 to p 21 line 8, p 22 line 25 to p 27 line 7;
Transcript, 4 September 2020, p 31 lines 10–20.

[\[note: 45\]](#) Transcript, 1 September 2020, p 79 line 12 to p 81 line 7.

[\[note: 46\]](#) Transcript, 25 January 2017, p 28 lines 14–18; Transcript, 1 September 2020, p 82 lines 5–9.

[\[note: 47\]](#) DCS at [80].

[\[note: 48\]](#) Transcript, 25 January 2017, p 135 line 1 to p 138 line 9.

[\[note: 49\]](#) Transcript, 18 January 2017, p 58 line 16 to p 65 line 22.

[\[note: 50\]](#) 1st Plaintiff's AEIC dated 20 September 2016 ("P1 2016 AEIC") at [81]–[84].

[\[note: 51\]](#) P1 2016 AEIC at [85] and p 551.

[\[note: 52\]](#) Transcript, 1 September 2020, p 22 line 1 to p 25 line 4.

[\[note: 53\]](#) P1 2016 AEIC at [86]–[87].

[\[note: 54\]](#) Transcript, 27 January 2017, p 18 lines 5–6.

[\[note: 55\]](#) Transcript, 25 January 2017, p 73 line 11 to p 75 line 6 and p 83 lines 4–8; DCS at [101]–[102].

[\[note: 56\]](#) Transcript, 25 January 2017, p 84 line 15 to p 85 line 11.

[\[note: 57\]](#) PCS at [247(a)].

[\[note: 58\]](#) P1 2016 AEIC at [97] and pp 658–669; See also SOC Amd 2 at [16].

[\[note: 59\]](#) 1st Defendant's Opening Statement dated 14 August 2020, Annex A.

[\[note: 60\]](#) SOC Amd 2 at [17(a)]; Transcript, 17 January 2017, p 103 line 5 to p 105 line 14.

[\[note: 61\]](#) SOC Amd 2 at [17(b)].

[\[note: 62\]](#) Transcript, 19 January 2017, p 65 lines 1–3.

[\[note: 63\]](#) Transcript, 19 January 2017, p 67 lines 1–2.

[\[note: 64\]](#) Azizah bt Yahya's AEIC dated 19 July 2016 at [5].

[\[note: 65\]](#) Transcript, 19 January 2017, p 66 lines 6–8.

[\[note: 66\]](#) PCS at [268].

[\[note: 67\]](#) PCS at [266]–[273].

[\[note: 68\]](#) PCS at [271]–[277].

[\[note: 69\]](#) PCS at [277(a)].

[\[note: 70\]](#) PCS at [277(b)].

[\[note: 71\]](#) P1 2016 AEIC at [97]–[100]; PCS at [279]–[280].

[\[note: 72\]](#) P1 2016 AEIC at [98].

[\[note: 73\]](#) Transcript, 17 January 2017, p 85 line 18 to p 87 line 15.

[\[note: 74\]](#) P1 2016 AEIC at [99].

[\[note: 75\]](#) SOC Amd 2 at Schedule C; PCS at [281].

[\[note: 76\]](#) Transcript, 18 January 2017, p 67 line 3 to p 69 line 16; p 70 line 3 to p 71 line 10; DCS at [122].

[\[note: 77\]](#) Transcript, 18 January 2017, p 66 line 4 to p 71 line 10; DCS at [122].

[\[note: 78\]](#) 1st Defendant’s reply submissions dated 16 October 2020 at [41].

[\[note: 79\]](#) PCS at [282].

[\[note: 80\]](#) DCS at [124].