ORDER PROHIBITING PUBLICATION OF THE NAMES, ADDRESSES OR IDENTIFYING PARTICULARS OF THE MEDICAL PRACTITIONERS/RADIOLOGIST AND THE NAME OF THE MEDICAL CENTRE CONCERNED.

NOTE: DISTRICT COURT ORDER PURSUANT TO S 160(1) OF THE ACCIDENT COMPENSATION ACT FORBIDDING PUBLICATION OF THE NAME, ADDRESS AND/OR ANY PARTICULARS LIKELY TO LEAD TO THE IDENTIFICATION OF THE RESPONDENT REMAINS IN FORCE.

IN THE COURT OF APPEAL OF NEW ZEALAND

I TE KŌTI PĪRA O AOTEAROA

CA736/2021
[2023] NZCA 617

BETWEEN	ACCIDENT COMPENSATION CORPORATION Appellant
AND	AZ Respondent

Hearing:	16 March 2023
Court:	Cooper P, Collins and Mallon JJ
Counsel:	D A Laurenson KC and S L K Shaw for Appellant P G Schmidt and H J Peart for Respondent A H Waalkens KC and S R Courtney for Intervener
Judgment:	6 December 2023 at 9.30 am

JUDGMENT OF THE COURT

A The appeal is dismissed.

B We answer the question of law as follows:

Can a person born with spina bifida (claimant) obtain cover for treatment injury where:

(a) the existence of the claimant's spina bifida was not, but should have been, detected at the 20-week scan stage;

(b) had the spina bifida been detected, the claimant's mother would have elected termination; and

(c) the misdiagnosis meant that the opportunity to elect termination was lost to the claimant's mother?

Yes.

C There is no order for costs.

D We make an order permanently prohibiting publication of the names, addresses or identifying particulars of the medical practitioner/radiologist and the name of the medical centre concerned.

REASONS

COOPER P AND COLLINS J

Introduction

[1] AZ, who is now 20 years old, developed spina bifida in utero at approximately five weeks' gestation. AZ's mother underwent a 20-week ultrasound scan when she was almost 20 weeks pregnant. The spina bifida should have been detected by the health professional who read the scan. Unfortunately, the scan was misread and, as a consequence, AZ's spina bifida was not detected before she was born. AZ was born with spina bifida and several other related health conditions.

[2] At the time AZ's mother was pregnant, spina bifida could not be treated in utero. The options available to a mother whose unborn child was diagnosed with spina bifida were either to continue with the pregnancy or seek a termination. It is an accepted fact that had AZ's mother been informed the foetus had spina bifida, she would have sought and obtained a lawful termination of her pregnancy when she was about 20 weeks pregnant.

[3] AZ's mother qualified for cover under the Accident Compensation Act 2001 (the Act) for the period from the misdiagnosis of the 20-week scan until AZ's birth.

[4] In June 2019, a claim was made to the Accident Compensation Corporation (ACC) on behalf of AZ. It was contended AZ was entitled to cover in her own right for personal injury and to entitlements provided for under s 69 of the Act. In August 2019, ACC declined to accept AZ had cover. That decision was upheld on review and again on appeal to the District Court.[1] An appeal was then brought on behalf of AZ to the High Court on an agreed question of law:

> Can a person born with spina bifida (claimant) obtain cover for treatment injury where:
>
> (a) the existence of the claimant's spina bifida was not, but should have been, detected at the 20-week scan stage;
>
> (b) had the spina bifida been detected, the claimant's mother would have elected termination; and
>
> (c) the misdiagnosis meant that the opportunity to elect termination was lost to the claimant's mother?

[5] In the High Court, van Bohemen J concluded AZ had cover.[2] The High Court granted leave for ACC to appeal on a question of law pursuant to s 163(1) of the Act.[3] The question posed for our consideration is the same question that was addressed by the High Court.[4]

[6] For the reasons that follow we dismiss the appeal. In her concurring judgment Mallon J expresses similar conclusions, but with different emphases.

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1 *AZ v Accident Compensation Corporation* [2021] NZACC 45 [District Court judgment] at [46].
2 *AZ v Accident Compensation Corporation* [2021] NZHC 2752, [2021] 3 NZLR 791 [High Court judgment] at [128].
3 *AZ v Accident Compensation Corporation* HC Auckland CIV-2021-404-975, 18 November 2021 [High Court leave decision] at [8].
4 At [7].

Key legislative provisions

Statutory purpose

[7] The purpose of the Act is:[5]

> … to enhance the public good and reinforce the social contract represented by the first accident compensation scheme by providing for a fair and sustainable scheme for managing personal injury that has, as its overriding goals, minimising both the overall incidence of injury in the community, and the impact of injury on the community (including economic, social, and personal costs), …

Personal injury

[8] A prerequisite to obtaining cover under the Act is that the claimant must have suffered a personal injury as defined in the Act.[6]

[9] "Personal injury" is defined in broad terms in s 26(1) of the Act:

> (1) **Personal injury** means—
>
> (a) the death of a person; or
>
> (b) physical injuries suffered by a person, including, for example, a strain or a sprain; or
>
> (c) mental injury suffered by a person because of physical injuries suffered by the person; or
>
> (d) mental injury suffered by a person in the circumstances described in section 21; or
>
> (da) work-related mental injury that is suffered by a person in the circumstances described in section 21B; or
>
> (e) damage (other than wear and tear) to dentures or prostheses that replace a part of the human body.

[10] In this case we need only consider the definition of personal injury set out in s 26(1)(b) of the Act: "physical injuries suffered by a person".

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5 Accident Compensation Act 2001, s 3.
6 Section 20(1).

[11] Section 26(2) expressly provides that the definition of personal injury excludes "personal injury caused wholly or substantially by a gradual process, disease, or infection unless it is personal injury of a kind described in section 20(2)(e) to (h)".

[12] Section 20(2) identifies 10 categories of personal injury, saliently including:

> …
>
> (b) personal injury that is treatment injury suffered by the person:
>
> …
>
> (f) personal injury caused by a gradual process, disease, or infection that is treatment injury suffered by the person:
>
> …

Treatment injury

[13] "Treatment injury" is defined in s 32(1). For convenience we will set out only the relevant portions of the definition:

> (1) **Treatment injury** means personal injury that is—
>
> (a) suffered by a person—
>
> (i) seeking treatment from 1 or more registered health professionals; or
>
> (ii) receiving treatment from, or at the direction of, 1 or more registered health professionals; or
>
> … and
>
> (b) caused by treatment; and
>
> (c) not a necessary part, or ordinary consequence, of the treatment, taking into account all the circumstances of the treatment, including—
>
> (i) the person's underlying health condition at the time of the treatment; and
>
> (ii) the clinical knowledge at the time of the treatment.

(2) **Treatment injury** does not include the following kinds of personal injury:

(a) personal injury that is wholly or substantially caused by a person's underlying health condition:

…

(3) The fact that the treatment did not achieve a desired result does not, of itself, constitute **treatment injury**.

(4) **Treatment injury** includes personal injury suffered by a person as a result of treatment given as part of a clinical trial, in the circumstances described in subsection (5) or subsection (6).

…

[14] As can be seen, treatment injury is defined in s 32(1) as including personal injury that is suffered by a person receiving treatment,[7] and is "caused by treatment".[8] We note also that s 32(2)(a) explicitly excludes "personal injury that is wholly or substantially caused by a person's underlying health condition".

[15] Under s 33(1) of the Act, "treatment" includes:

(a) the giving of treatment:

(b) a diagnosis of a person's medical condition:

…

(d) a failure to provide treatment, or to provide treatment in a timely manner:

…

High Court judgment

[16] In his judgment, van Bohemen J derived support from the Supreme Court's judgment in *Allenby v H*,[9] and the decision of this Court in *Cumberland v Accident Compensation Corporation*,[10] when he concluded that AZ has cover under the provisions of the Act we have set out above at [7]–[15].[11]

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7 Section 32(1)(a)(ii).
8 Section 32(1)(b).
9 *Allenby v H* [2012] NZSC 33, [2012] 3 NZLR 425.
10 *Cumberland v Accident Compensation Corporation* [2013] NZCA 590, [2014] 2 NZLR 373.
11 High Court judgment, above n 2, at [128].

[17] In *Allenby*, the Court held that a woman who had become pregnant after a failed sterilisation procedure had cover under the Act for the duration of her pregnancy. The Court explained that the physical changes caused to a woman's body by pregnancy were physical injuries.[12] Where pregnancy followed a failed medical procedure designed to prevent impregnation, the pregnancy was personal injury to the mother caused by medical error for which the mother had cover under the Act.[13]

[18] The claim in *Cumberland* was identical to the claim for cover by AZ's mother which we referred to at [3]. In *Cumberland*, a scan conducted at 20 weeks' gestation was misread and the foetus' spina bifida not diagnosed. The pregnancy continued. This Court held the mother had cover for the period during which the pregnancy continued after the misdiagnosis.[14]

[19] Justice van Bohemen relied on the reasoning in *Allenby* and *Cumberland*, to support his conclusion that "the continued development" of AZ's spina bifida was "physical injury to the child once born", being very similar to the case of an undetected tumour.[15] The Judge was satisfied that AZ's spina bifida was a personal injury covered by a gradual process, disease, or infection that was treatment injury under s 20(2)(f) of the Act.[16]

[20] The Judge's conclusion was substantially based on the following propositions:

(a) from the perspective of AZ, the physical consequence of the continuation of the pregnancy was the continued development of the spina bifida;[17] and

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12 *Allenby*, above n 9, at [18]–[19] and [23] per Elias CJ, [72] per Blanchard, McGrath and William Young JJ and [88] per Tipping J.

13 At [26] and [29] per Elias CJ, [76] and [80] per Blanchard, McGrath and William Young JJ and [86] and [88] per Tipping J.

14 *Cumberland*, above n 10, at [34]–[35].

15 High Court judgment, above n 2, at [56]–[57].

16 At [60]–[61].

17 At [56].

(b) the continued development of spina bifida as a consequence of the continued pregnancy following the misdiagnosis at 20 weeks' gestation was a physical injury to AZ when she was born.[18]

Analysis

Approach to interpretation

[21] Orthodox principles of statutory interpretation require us to ascertain the meaning of the relevant provisions of the Act by reference to the text, purpose and context of the provisions in issue.[19] However, the purpose of the Act, which we have set out at [7], reinforces the appropriateness of erring on the side of allowing cover in marginal cases unless plainly excluded.[20]

The issues

[22] Assessment of the statutory scheme illustrates that cover in the case of AZ turns on whether:

(a) she is a person who suffered personal injury;

(b) she was receiving treatment; and

(c) the personal injury was caused by treatment.

[23] In order for AZ's spina bifida to be a qualifying personal injury, it must not fall within the specific exclusions made by the Act. Careful investigation is required into

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18 At [57].

19 Legislation Act 2019, s 10(1).

20 This approach has been referred to as a generous and unniggardly interpretation. See *Accident Compensation Corporation v Mitchell* [1992] 2 NZLR 436 (CA) at 438 per Richardson J; *Harrild v Director of Proceedings* [2003] 3 NZLR 289 (CA) at [19], [39] and [130]; and *Roper v Taylor* [2023] NZSC 49, [2023] 1 NZLR 1 at [94] and [102]–[103].

whether her spina bifida is a personal injury excluded by s 26(2) or by s 32(2). Two inquiries are required:

(a) whether the continuation of AZ's spina bifida following the misdiagnosis of the 20-week scan was caused wholly or substantially by a gradual process, disease or infection; and

(b) whether, in any event, AZ's continuing spina bifida after the misdiagnosis of the 20-week scan was "personal injury caused by a gradual process, disease, or infection that is treatment injury suffered by the person".[21]

[24] We will address both inquiries under the topic of causation.

[25] If it is found that AZ's continuing spina bifida was caused wholly or substantially by a gradual process, disease or infection, then cover may be excluded under s 26(2). That is so unless that gradual process, disease or infection is found to be a treatment injury under s 20(2)(f).[22] In this way, s 20(2)(f) overrides the exclusion contained in s 26(2). The comments of Mallon J in *Accident Compensation Corporation v D*, adopted by Elias CJ in *Allenby*,[23] discuss the exclusions of "gradual process" from treatment injury. Not all injuries caused by gradual process are excluded necessarily; the focus is on causation:[24]

> [79] The exclusion is not for natural processes per se. It is for gradual processes that are not of a certain kind. The focus is on the cause of the gradual process. Relevant for present purposes is that personal injury caused wholly or substantially by a gradual process is covered if the personal injury is caused by medical misadventure. …

[26] As will become apparent, the task of interpreting the relevant provisions of the Act and applying those provisions to AZ's case is not a straightforward exercise. This is because there is circularity in the key legislative provisions because of the way

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21 Accident Compensation Act, s 20(2)(f).

22 Section 26(2) provides that gradual processes, diseases and infections captured by s 20(2)(e) and (g) are also qualifying personal injuries, but those paragraphs are not relevant to this proceeding.

23 *Allenby*, above n 9, at [27] per Elias CJ citing *Accident Compensation Corporation v D* [2007] NZAR 679 (HC) at [77]–[79].

24 *Accident Compensation Corporation v D*, above n 23.

the exclusions in ss 26(2) and 32(2)(a) are countermanded by the extended definition of personal injury in s 20(2)(f) of the Act. As a consequence, the issues we have to examine under the heading of causation require us to revisit the meaning of personal injury.

[27] The statutory interpretation exercise is also clouded by a paradox, namely that to succeed AZ must demonstrate that she suffered a treatment injury when her mother was denied the opportunity to terminate her pregnancy which, if given, would have prevented AZ from being born.

Structure of the balance of this judgment

[28] We will approach our task in the following way:

(a) We will first deal with a preliminary point, namely the status of a foetus under the Act and, contingently, whether a foetus is capable of receiving treatment.

(b) We will then examine:

(i) the meaning of personal injury;

(ii) the meaning of treatment and treatment injury;

(iii) the misdiagnosis in this case; and

(iv) causation.

(c) Finally, we will analyse whether or not AZ has cover under either s 20(2)(b) or s 20(2)(f) of the Act.

Status of a foetus in relation to treatment

[29] Each of the sections we have examined above refers either to treatment of a "person" or personal injury suffered by a "person". ACC accepts that if AZ suffered a treatment injury at 20 weeks' gestation she would qualify for cover under the Act

once born. This is because, in *Harrild v Director of Proceedings*, McGrath J held the term "person" used throughout the Act does not include a foetus, unless and until it is born alive.[25] This has been affirmed in decisions following *Harrild*, and is referred to as the "born alive" principle: once born alive, a person may be eligible for cover for personal injuries suffered in utero.[26]

[30] Despite lacking legal personality until birth, a foetus is able to receive medical treatment, for example, by way of endoscopic foetal surgery. Such procedures constitute treatment for the purposes of the Act. A foetus that is harmed by medical treatment received in utero will, once born, live with the effects of an injury sustained from that medical treatment or lack thereof, and will consequently be entitled to cover under the Act.

[31] We therefore proceed on the basis that although the personal injury that underpins AZ's claim arose in utero, once she was born alive, she became "a person" and is entitled to cover provided her spina bifida was a personal injury caused by a treatment injury and regardless of the fact the injury in issue occurred before AZ became a person.

Personal injury

[32] There are two aspects to AZ's claim that engage the question as to whether or not her spina bifida is personal injury under s 26(1)(b) of the Act:

(a) first, whether spina bifida per se is personal injury; and

(b) second, whether spina bifida is excluded from the definition of personal injury on the basis that it is caused "wholly or substantially by a gradual process, disease, or infection"[27] and if so, whether spina bifida is nevertheless personal injury by reason of s 20(2)(f) of the Act.

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25 *Harrild v Director of Proceedings*, above n 20, at [134] per McGrath J.

26 See for example *Sam v Accident Compensation Corporation* [2009] 1 NZLR 132 (HC) at [38]–[42]; and *Abortion Supervisory Committee v Right to Life New Zealand Inc* [2011] NZCA 276, [2012] 1 NZLR 176 at [59].

27 Accident Compensation Act, s 26(2).

[33] As noted above, these are two closely interlinked inquiries. The second question is best dealt with when assessing causation and requires us to revisit the issue of whether or not AZ has suffered personal injury for the purposes of the Act.

[34] Spina bifida occurs when the spine of a foetus fails to develop properly during the early stages of pregnancy. Spina bifida causes physical defects in the spine as it develops in utero so that, when born, a baby with spina bifida has an abnormal spine. The spinal defects associated with spina bifida satisfy the natural and ordinary meaning of the term physical injury. This conclusion is reinforced by the fact that spina bifida has a far greater physical impact on the sufferer than "a strain or a sprain" which are given as examples of physical injury in s 26(1)(b) of the Act. If a strain or sprain qualifies as physical injury then, logically, spina bifida must also be regarded as a physical injury.

[35] Spina bifida satisfies the definition of personal injury in s 26(1)(b) of the Act.

Treatment injury

[36] AZ's spina bifida must also meet one of the criteria in s 20(2)(b) or (f). This in turn requires us to decide whether or not the failure to properly read the 20-week scan, thereby denying AZ's mother the opportunity to terminate her pregnancy, constituted treatment injury to AZ. This requires examination of the meanings of the terms "treatment" and "treatment injury" under the Act.

Definition of treatment

[37] We are satisfied that the terms "treatment" and "treatment injury" in ss 32 and 33 of the Act are broader than the traditional curative-focused definitions of treatment relied upon by ACC. This conclusion follows from our assessment of the definition of treatment under the Act in light of a number of considerations:

(a) the legislative text;

(b) the legislative context;

(c) the purpose of the accident compensation scheme including the avoidance of personal injury litigation;

(d) the internal statutory context;

(e) the applicability of the treatment injury regime to medical procedures ending life;

(f) current expressions of the obligations of medical practitioners; and

(g) the right of a mother to elect termination.

(a) The legislative text

[38] There is no prescriptive definition of "treatment" in the Act. Section 33(1) sets an expansive list of acts or omissions that may constitute treatment. The list is provided "[f]or the purposes of determining whether a treatment injury has occurred, or when that injury occurred".[28]

[39] The list is not exhaustive: it is expressly said to be inclusive.[29] The examples of treatment set out are cast broadly. Section 33(2) confirms that s 33(1) does not affect the application of the definition of treatment in s 6(1) for purposes other than those stated in s 33(1). Read together, s 33(1) and (2) provide for an expansive concept of treatment.

[40] The Review Authority and the District Court referred to a definition of treatment found in *Dorland's Illustrated Medical Dictionary*, which defines treatment as "the management and care of a patient for the purpose of combating [a] disease or disorder".[30] A similar definition is contained in *Taber's Cyclopedic Medical Dictionary*.[31] In an article discussing this case, Professor Stephen Todd referred to

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28 Section 33(1).
29 Section 33(1).
30 District Court judgment, above n 1, at [41] citing Newman Dorland *Dorland's Illustrated Medical Dictionary* (32nd ed, Elsevier, Philadelphia, 2011) at 1957.
31 Donald Venes (ed) *Taber's Cyclopedic Medical Dictionary* (2013, 22nd ed, FA Davis Company, Philadelphia) at 2371.

what he suggests is a definition of treatment set out in the *Oxford Dictionary* as "medical care given to a patient for an illness or injury".[32]

[41] Reliance on definitions in dictionaries, whether general or specialised, ignores nuances which are inherent in reading coherently a complicated statutory scheme. Judge Learned Hand famously cautioned against "mak[ing] a fortress out of the dictionary".[33] It is trite that a court's interpretive task is not accomplished by surveying dictionary definitions and choosing that which seems most apt.[34] Rather, the meaning of words found in statutory provisions must be ascertained from the text in light of its purpose and context.[35]

[42] In *New Health New Zealand Inc v South Taranaki District Council*, O'Regan and Ellen France JJ found dictionary definitions did "not necessarily" assist in interpreting the word "treatment" as it appears in s 11 of the New Zealand Bill of Rights Act 1990.[36] Rather, the appropriate interpretive exercise was purposive, and required regard to the specific words in the Act.[37]

[43] Interpreting the meaning of "treatment" under the Accident Compensation Act is no different; our reading must be informed by the scheme of the Act.

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32 Stephen Todd "Negligence by IVF providers: injury on being born?" (2023) JRSNZ at 5. We have not been able to find this definition in any version of the Oxford English Dictionaries, although a similar definition can be found on Google, supplied by Oxford Languages.

33 *Cabell v Markham* 148 F 2d 737 (2d Cir 1945) at 739.

34 *South Western Sydney Local Health District v Gould* [2018] NSWCA 69, (2018) 97 NSWLR 513 at [77]–[83].

35 Legislation Act, s 10(1).

36 *New Health New Zealand Inc v South Taranaki District Council* [2018] NZSC 59, [2018] 1 NZLR 948 at [74] per Ellen France and O'Regan JJ.

37 At [74], [77] and [90] per Ellen France and O'Regan JJ. Elias CJ agreed with Ellen France and O'Regan JJ that water fluoridation constituted medical treatment, holding there were no textual or purposive justifications to restrict or read down the definition of "treatment" as it appeared in that statute: at [212] and [228] per Elias CJ. Glazebrook J agreed with the reasons for Elias CJ and Ellen France and O'Regan JJ on this point: at [172] per Glazebrook J. William Young J dissented on the question of whether s 11 was engaged by the fluoridation of drinking water, but agreed the legislative background meant the word "treatment" as it appeared in s 11 should be construed broadly, and that the interpretive exercise required having regard to the particular words used in s 11: see [178] and [182]–[184] per William Young J dissenting.

(b) Legislative context: the policy underpinning the definition of "treatment injury"

[44] The definition of "personal injury by accident" in the Accident Compensation Act 1972 was particularly broad.[38] Before the accident compensation scheme came into force on 1 April 1974, the definition of "personal injury by accident" was refined.[39] The definition of "personal injury by accident" in the legislation provided in part:

> 'Personal injury by accident'—
>
> (a) Includes—
>
> (i) The physical and mental consequences of any such injury or of the accident:
>
> (ii) Medical, surgical, dental, or first aid misadventure:
>
> …

Excluded from the 1974 definition of "personal injury accident" was "[d]amage to the body or mind caused exclusively by disease, infection, or the ageing process".[40] These parts of the definition of "personal injury by accident" were carried into the Accident Compensation Act 1982.[41] In *Green v Matheson*, this Court held that the definition of "personal injury by accident" in the 1982 Act encompassed physical and mental harm arising from the plaintiff's unwitting participation in medical research without her consent.[42]

[45] Concerns that the earlier definitions of "personal injury by accident" risked undermining the financial viability of the accident compensation scheme led to the passing of the Accident Rehabilitation and Compensation Insurance Act 1992.[43] That Act provided cover for medical misadventure, which was defined by reference to personal injury resulting from medical error or medical mishap. The definition of

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38 Accident Compensation Act 1972, s 2(1) definition of "[p]ersonal injury by accident", under which the expression was defined as including "incapacity resulting from an occupational disease to the extent that cover extends in respect of the disease under sections 65 to 68 of this Act".

39 Accident Compensation Amendment Act 1974, s 2(1).

40 Section 2(1).

41 Accident Compensation Act 1982, s 2(1) definition of "[p]ersonal injury by accident".

42 *Green v Matheson* [1989] 3 NZLR 564 (CA) at 571–573.

43 WF Birch *Accident Compensation: A Fairer Scheme* (Department of Labour, Wellington, 31 July 1991) at 7–9.

"medical error" equated to negligence by a registered health professional. "Medical mishap" was defined by reference to the rarity and the severity of the personal injury in issue.[44] The 1992 version of the accident compensation scheme was designed to significantly reduce coverage for untoward medical events compared to previous iterations of the scheme. The essence of the medical misadventure provisions of the 1992 Act, with additional caveats, was subsequently incorporated into the Accident Insurance Act 1998,[45] and initially into the Injury Prevention, Rehabilitation, and Compensation Act 2001.[46]

[46] In 2005, Parliament revisited the medical misadventure threshold for cover and replaced it with cover for treatment injury.[47] It has been explained:[48]

> … [T]he first aim of the reform was to remove the need for claimants to establish an individual health professional's "fault" for the purposes of cover. A second and related reason for reform was to improve the timeliness of determining claims arising out of treatment. The third focus was cover for medical mishap, for which the "rarity" and "severity" criteria were confusing and considered too restrictive and arbitrary, resulting in claimants unfairly missing out on cover.

[47] This summary of the way treatment injury came to be incorporated into the Act demonstrates a deliberate intention by the legislature to expand the circumstances which would attract cover under the Act for untoward medical events. Parliament accepted that the comparatively restrictive cover afforded for medical misadventure under the 1992, 1998 and 2001 Acts led to injustices which needed to be remedied. This was achieved by relaxing the boundaries for cover for personal injury arising from treatment injury. Parliament has advocated a generous attitude to cover for those who suffer treatment injury. This in turn reinforces the approach to interpretation we have set out at [21].

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44 Accident Rehabilitation and Compensation Insurance Act 1992, s 5(1).
45 Accident Insurance Act 1998, s 35–37.
46 Injury Prevention, Rehabilitation, and Compensation Act 2001, s 32–34.
47 Injury Prevention, Rehabilitation, and Compensation Amendment Act (No 2) 2005, s 13.
48 Joanna Manning "Treatment Injury" in Peter Skegg and Ron Paterson (eds) *Health Law in New Zealand* (Thomson Reuters, Wellington, 2015) 997 at [31.5.1].

(c) The purpose of the accident compensation scheme including the avoidance of personal injury litigation

[48] It is important to bear in mind that the purpose of the Act is to reinforce the social contract that underpinned the first iteration of the accident compensation scheme.[49] That social contract could be found in s 5 of the Accident Compensation Act 1972, which enacted the vision of the Report of the Royal Commission of Inquiry into Compensation for Personal Injury in New Zealand (1967) (the Woodhouse Report) by abolishing common law claims for personal injury in exchange for comprehensive no fault cover under the scheme.[50]

[49] Denying AZ cover under the Act risks inviting common law personal injury claims being brought by persons in similar circumstances to those faced by AZ. This is because the scope of the Act is "coterminous with cover provided under the Act",[51] meaning that if there is no cover under the Act there is also no bar to a common law negligence claim against the relevant medical practitioner.

[50] An example of a successful common law claim that is similar to AZ's case is *Meadows v Khan*,[52] a recent decision of the United Kingdom Supreme Court. The appellant in that case was a woman who wanted to determine whether she carried the haemophilia gene. She underwent genetic testing directed to whether she had haemophilia, but was not informed that she needed further testing to determine whether she was a genetic carrier. The appellant became pregnant and gave birth to a child with haemophilia and autism, which was unrelated to the haemophilia. If the appellant had been correctly advised to obtain further tests regarding her haemophilia, she would have undertaken those tests which in turn would have revealed she carried the haemophilia gene. She would then have known to test her foetus and, on those tests showing the haemophilia gene was being carried by the foetus, she would have terminated her pregnancy. The appellant contended she was entitled to damages for the continuation of the pregnancy and its consequences, including costs associated

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49 Accident Compensation Act, s 3.

50 See AO Woodhouse, HL Bockett and GA Parsons *Compensation for Personal Injury in New Zealand: Report of the Royal Commission of Inquiry* (Government Printer, December 1967) [Woodhouse Report].

51 *Queenstown Lakes District Council v Palmer* [1999] 1 NZLR 549 (CA) at 553.

52 *Meadows v Khan* [2021] UKSC 21, [2022] AC 852.

with both conditions. The respondent health practitioner contended her liability should be limited to the costs associated with the child's haemophilia.[53]

[51] The Supreme Court held that the health professional who failed to properly inform the appellant about the genetic tests that were available to her was liable for the costs associated with the care of the plaintiff's child, insofar as those costs were directly attributable to his haemophilia.[54] The Court found there was a clear causal link between the negligent failure to properly inform the plaintiff about the genetic tests that she should have undertaken, and the birth of her child.[55] Further, the health practitioner owed the appellant a duty of care to provide her with accurate information or advice about carrying the haemophilia gene, as that was the purpose for the consultation. But the practitioner owed no such duty in relation to any unrelated risks that might arise in the pregnancy. The additional costs associated with raising a child with haemophilia were therefore recoverable, whereas costs that were associated with the child being autistic were not.[56]

[52] *Meadows* reflected earlier decisions of the Court of Appeal of England and Wales in which damages were awarded against medical practitioners and health authorities whose negligence resulted in the birth of children with disabilities.[57]

[53] The English cases to which we have referred involved claims brought by the parents of children born with disabilities. We appreciate that in *McKay v Essex Area Health Authority*, the Court of Appeal for England and Wales rejected a "wrongful life" claim by a child born with disabilities caused by rubella suffered by the mother during pregnancy.[58] In those circumstances, it was alleged that the mother, once infected with rubella, would have terminated her pregnancy had the infection been properly managed by her doctor.

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53 At [13].

54 At [68] per Lord Hodge DP and Lord Sales SCJ (with whom Lord Reed P, Lord Kitchin and Lady Black SCJJ agreed), [73(iv)] per Lord Burrows SCJ and [86] per Lord Leggatt SCJ.

55 At [64] and [68] per Lord Hodge DP and Lord Sales SCJ, [73(iii)] per Lord Burrows SCJ and [85] per Lord Leggatt SCJ.

56 At [65] and [68] per Lord Hodge DP and Lord Sales SCJ, [77] per Lord Burrows SCJ and [92]–[93] per Lord Leggatt SCJ.

57 *Parkinson v St James and Seacroft University Hospital NHS Trust* [2001] EWCA Civ 560, [2002] QB 266; and *Groom v Selby* [2001] EWCA Civ 1522, 64 BMLR 47.

58 *McKay v Essex Area Health Authority* [1982] QB 1166 (CA).

[54] There are, however, also cases from common law jurisdictions which recognise claims brought by children born with disabilities caused by medical negligence.[59] We accept that wrongful life claims are not widely acknowledged.[60] We do not, however, have to consider whether such a claim would be recognised in New Zealand. What we can reasonably say is that inviting civil personal injury claims in cases similar to AZ's is difficult to reconcile with Parliament's intention to abolish personal injury claims in order to provide for a fair and sustainable scheme for managing personal injuries.

(d) Internal statutory context

[55] The meaning of "treatment" must be considered in light of the Act as a whole.[61] The internal statutory context of the Act suggests that Parliament intended that "treatment" extend to medical procedures which are not necessarily intended to alleviate a patient's condition.

[56] Clause 2 of sch 1 to the 2001 Act sets out the circumstances where ACC is liable to pay the cost of treatment:

> (1) The Corporation is liable to pay the cost of the claimant's treatment if the treatment is for the purpose of restoring the claimant's health to the maximum extent practicable, and the treatment—
>
> (a) is necessary and appropriate, and of the quality required, for that purpose; and
>
> (b) has been, or will be, performed only on the number of occasions necessary for that purpose; and
>
> (c) has been, or will be, given at a time or place appropriate for that purpose; and
>
> (d) is of a type normally provided by a treatment provider; and

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59 See for example *Curlender v Bio-Science Laboratories* 106 Cal App 3d 811 (Cal CA 1980); *Turpin v Sortini* 643 P 2d 954 (Cal 1982); *Harbeson v Parke-Davis, Inc* 656 P 2d 483 (Wn 1983); *Wuth v Lab Corp of Am* 359 P 3d 841 (Wn CA 2015); and *Procanik by Procanik v Cillo* 543 A 2d 985 (NJ Super AD 1988).

60 We note that Canadian and Australian jurisprudence does not currently recognise such claims. See for example *Florence v Benzaquen* 2021 ONCA 523, 462 DLR (4th) 251; and *Harriton v Stephens* [2006] HCA 15, (2006) 226 CLR 52.

61 Ross Carter *Burrows and Carter Statute Law in New Zealand* (6th ed, LexisNexis, Wellington, 2015) at 335.

(e) is provided by a treatment provider of a type who is qualified to provide that treatment and who normally provides that treatment; and

(f) has been provided after the Corporation has agreed to the treatment, unless clause 4(2) applies.

[57] We consider that the qualification that the Corporation is only liable "if the treatment is for the purpose of restoring the claimant's health to the maximum extent practicable" implies that in some cases "treatment" encompasses procedures which are not restorative or curative or at least not completely so. Otherwise cl 2 of sch 1, which serves to reduce the Corporation's liability for treatment, would be redundant. There is a presumption that the drafter has used words consistently throughout the Act.[62]

[58] Further, the text of s 32(4) of the Act recognises that a treatment injury can occur when a person without any medical condition suffers injury "as a result of *treatment* given as part of a clinical trial".[63] Clinical trials often involve participants who volunteer to test new drugs and medical procedures even though they have no medical condition that requires alleviation. Consequently, a healthy participant who suffers an adverse reaction during a clinical trial has cover under the Act.[64] The inclusion of "treatment" given as part of a trial,[65] suggests that Parliament intended that "treatment" include medical procedures which do not, and are not intended to, cure or alleviate a patient's condition.

(e) The applicability of the treatment injury regime to medical procedures ending life

[59] Mr Laurenson KC, for ACC, submitted that procedures aimed at the alleviation of suffering were treatment under the Act "to the extent that, when alive, the claimant suffered an adverse health consequence" from an underlying incurable terminal illness. These procedures are treatment because they have "the purpose of

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62 Carter, above n 61, at 337 citing *New Zealand Breweries Ltd v Auckland City Corp* [1952] NZLR 144 (CA) at 158 per Adams J; *Elders New Zealand Ltd v PGG Wrightson* [2008] NZSC 104, [2009] 1 NZLR 577; *Ka Hay Yeung v R* [2010] NZCA 605 at [24]; and *Houghton v Saunders* [2014] NZHC 2229, [2015] 2 NZLR 74 at [592]–[593].

63 Emphasis added.

64 Provided the personal injury is suffered in certain circumstances: Accident Compensation Act, s 32(4)–(6).

65 Accident Compensation Act, s 32(4).

ameliorating the effects of that condition even for a short time". He argued that there could be no cover for procedures which ultimately sought to cause death.

[60] Medical treatment may, towards the end of a patient's life, lawfully have the effect of accelerating a patient's death.[66] This is justified on the basis that medication which has the effect of accelerating a patient's death is administered to alleviate the patient's suffering.[67] There is ethical opinion which supports this consequence by invoking the rule of double effect, under which it is reasoned that causing a patient's death is morally justified where the primary aim of medical intervention is to reduce suffering, even in circumstances where it is appreciated that the intervention will hasten the patient's death.[68] The enactment of the End of Life Choice Act 2019 also demonstrates that medical procedures may have objectives beyond the curative.

[61] For the purposes of treatment injury cover, we do not find there is a logical distinction between procedures causing injury which are directed to the alleviation of suffering in a patient with an incurable illness, and those which are aimed at alleviating suffering through ending a life. The administration of "assisted dying" medication under s 20 of the End of Life Choice Act is likely to be viewed as treatment even though the sole objective of the medical procedure is to end the patient's life.[69]

(f) Current obligations on medical practitioners

[62] The Declaration of Geneva, adopted by the General Assembly of the World Medical Association at Geneva in 1948, is a physician's declaration to adhere to the humanitarian goals of medicine, intended as a reformulation of the Hippocratic Oath.

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66 See Henry Palmer "Dr Adams' Trial for Murder" [1957] Crim LR 365.

67 At 375.

68 Tom L Beauchamp and James F Childress *Principles of Biomedical Ethics* (7th ed, Oxford University Press, New York, 2013) at 164–168 and 178.

69 Although it would be unusual for an end of life procedure to go wrong thereby triggering a claim under the Act, there are many reported instances from the United States of "death row" prisoners suffering from adverse medical events, such as the collapsing of veins, during the intravenous administration of lethal drugs. In some of those cases, the execution has had to be deferred: see Austin Sarat *Gruesome Spectacles: Botched Executions and America's Death Penalty* (Stanford University Press, Stanford, 2014). If such an event occurred during an attempt to terminate a patient's life under the End of Choice Act, the patient would likely have cover under the Act at least for the physical injuries caused by the failure to properly administer the end of life medication.

[63] Amongst other things, the original iteration of the Declaration included the pledges that:[70]

> THE HEALTH OF MY PATIENT will be my first consideration;
>
> …
>
> I WILL MAINTAIN the utmost respect for human life from the time of its conception; …

[64] The Declaration has been amended over time to ensure "sustainability in light of modern developments in medicine and medical ethics".[71] The most recent version of the Declaration now reads:[72]

> THE HEALTH *AND WELL-BEING* OF MY PATIENT will be my first consideration;
>
> *I WILL RESPECT the autonomy and dignity of my patient*;
>
> I WILL MAINTAIN the utmost respect for human life;
>
> …

[65] These changes are indicative of modern attitudes towards what medical care is and should be, highlighting both the importance of patient well-being and self-determination, in addition to health outcomes.

(g) The right of the mother to choose termination

[66] Finally, there are policy factors that favour a broad approach when interpreting the meaning of treatment in ss 32 and 33 of the Act. It is not necessary to dissect the interests of AZ's mother from the yet-to-be-realised interests of the 20-week-old foetus and then place the interests of the mother to one side if she wishes to have her pregnancy ended.

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70 World Medical Association *Declaration of Geneva* (adopted by the 2nd General Assembly of the World Medical Association, Geneva, September 1948).

71 World Medical Association "Public consultation opens on WMA Declaration of Geneva" (press release, 8 May 2017).

72 World Medical Association *Declaration of Geneva* (amended by the 68th General Assembly of the World Medical Association, Chicago, October 2017) (amendments italicised).

[67] Only the mother can consent to a termination of her pregnancy and, if she does so, it would be either on her own behalf, or on behalf of the foetus and herself.[73] Under either of these scenarios, denying AZ's mother the right to choose to have a termination severely sabotages her autonomy.

[68] Such an outcome would not reflect contemporary social values. The right to opt for termination is a right that can only be exercised by the mother. A result that suggests that the mother cannot choose to terminate her pregnancy because of the unrealised interests of the foetus would be anomalous.

[69] We therefore conclude that the definition of "treatment", and therefore "treatment injury" under the Act, must have a meaning which respects the autonomy of a pregnant woman to determine what happens to her body.

The misdiagnosis in this case

[70] The administration of the scan at 20 weeks' gestation involved treatment of both AZ's mother and the foetus. The mother gave her consent for the scan which could only be performed by accessing the mother's body to achieve its primary purpose, namely to assess the development of the foetus.

[71] The whole purpose of the scan was to detect any foetal abnormalities so as to either assure AZ's mother that her pregnancy was normal or provide AZ's mother with advice on what options were available to her in the event foetal abnormalities were detected.

[72] As we have already explained at [30], if a foetal abnormality was detected that was capable of being cured or mitigated through in utero medical procedures (such as surgery or medication) then such procedures would be treatment of the foetus. The scan, which is an essential pre-requisite to an in utero medical procedure, forms part of the treatment of the foetus.

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73 See generally *Harrild v Director of Proceedings*, above n 20, at [20] per Elias CJ and [120]–[129] per McGrath J.

[73] The fact spina bifida was not detected in this case when it ought to have been does not detract from the conclusion that the scan itself constituted treatment of the foetus and the mother. This is because it was part of a "diagnosis of a person's medical condition" under s 33(1)(b) and/or "a failure to provide treatment" under s 33(1)(d).

[74] We accept therefore that the misdiagnosis of the scan at 20 weeks was treatment of AZ that potentially could give rise to a treatment injury for the purposes of the Act.

Causation

[75] To establish causation between the relevant treatment and the personal injury, s 32(1)(b) uses the simple language of "caused by". The Supreme Court in *Roper v Taylor* used the "material cause" test in situations of "personal injuries that have more than one cause",[74] and we have also followed this test.

[76] AZ's central submission is that the failure to correctly diagnose spina bifida at the 20-week scan meant that the opportunity to treat the spina bifida in utero was lost, and therefore the misdiagnosis was the material cause of AZ's spina bifida from that point on. The primary submission in response was that termination could not constitute treatment of a foetus under the Act, so the loss of the opportunity to terminate was not a lost opportunity to provide treatment that would have prevented or mitigated the injury, and therefore the misdiagnosis was not the material cause of AZ's spina bifida.

[77] As we have previously explained, had the 20-week scan been properly interpreted, AZ's mother's options were to continue with her pregnancy (which would preclude cover for AZ) or to seek a termination (which would also preclude cover for AZ because she would never have been born). As we have noted at [2] there were, at the time AZ's mother was pregnant, no in utero medical interventions that could have ameliorated spina bifida. The only option to prevent the birth of a child with spina bifida was termination of the pregnancy.

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74 *Roper v Taylor*, above n 20, at [62] citing *W v Accident Compensation Corporation* [2018] NZHC 937, [2018] 3 NZLR 859 at [44]–[68].

[78] Therefore, termination of the pregnancy would have been treatment of AZ which operated to prevent the continuation of spina bifida even though the outcome of the termination would have been to prevent AZ's birth.

[79] Where the purpose of the scan was to identify and allow for the prevention of foetal abnormalities, such as spina bifida, and foetal abnormalities ensued because of missed diagnosis and a failure to provide treatment, those foetal abnormalities are rightly seen as caused by the failure to provide treatment. This reasoning is consistent with the majority judgment of the Supreme Court in *Allenby*.[75]

[80] There is a material and predominant causal link between the misdiagnosis and AZ's personal injury of being born with spina bifida. If the 20-week scan had been properly performed, AZ's mother would have had and exercised the opportunity to terminate the pregnancy of AZ. The misdiagnosis meant that this opportunity was lost, thus allowing the continued development of spina bifida in utero where it would otherwise have been halted by treatment, namely termination of the pregnancy. Expressed in conventional causation language, but for the failure to detect the spina bifida in utero, AZ would not have been born with spina bifida. We observe this mirrors the reasoning of the United Kingdom Supreme Court in *Meadows*.[76]

[81] We will now return to the topic of personal injury and discuss whether AZ has established personal injury under either s 20(2)(b) or 20(2)(f).

Personal injury under the Act

[82] As explained at [22], AZ needs to prove that she suffered a personal injury under the Act. We have already concluded that spina bifida per se, is a personal injury as defined in s 26(1)(b) of the Act. AZ also needs to prove that the personal injury of spina bifida is either a treatment injury under s 20(2)(b) or a gradual process, disease or infection that is a treatment injury under s 20(2)(f). We now address each of those provisions.

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75 *Allenby*, above n 9, at [29] per Elias CJ, [80] per Blanchard, McGrath and William Young JJ and [86] per Tipping J.

76 See *Meadows v Khan*, above n 52, at [64] and [68] per Lord Hodge DP and Lord Sales SCJ, [73(iii)] per Lord Burrows SCJ and [85] per Lord Leggatt SCJ.

Personal injury by treatment injury (s 20(2)(b))

[83] As we have set out at [13], treatment injury is defined in s 32 of the Act as including personal injury that is suffered by a person receiving treatment and which is caused by the treatment.[77] Excluded from the definition of "treatment injury" is "personal injury that is wholly or substantially caused by a person's underlying health condition".[78]

[84] By the time she was born with spina bifida, AZ's personal injury was materially caused by the misdiagnosis of the scan conducted at 20 weeks' gestation. This is because, had the spina bifida been detected in utero, AZ's mother would have exercised her choice to terminate the pregnancy and AZ would not have been born with that condition. Thus, the exclusion in s 32(2)(a) does not apply.

[85] The misdiagnosis of the 20-week scan led to the loss of AZ's mother's opportunity to elect to undergo a termination. This would have been treatment for the purposes of the Act that would have prevented AZ's personal injury, namely being born with spina bifida. Logically therefore, the misdiagnosis (which constitutes treatment of AZ) and subsequent failure to enable AZ's mother to terminate her pregnancy is a treatment injury which caused AZ's personal injury.

[86] Thus, AZ has cover under s 20(2)(b) of the Act.

Personal injury by gradual process, disease, or infection that is treatment injury (s 20(2)(f))

[87] Alternatively, the gradual process of continued development of spina bifida is a treatment injury under s 20(2)(f) of the Act.

[88] As all accept, the misdiagnosis of the 20-week scan led to the loss of AZ's mother's opportunity to elect on behalf of herself and/or AZ to undergo a termination. Therefore, the termination would have been treatment for the purposes of the Act that would have prevented the continuation of the development of spina bifida which is

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77 Accident Compensation Act, s 32(1)(a)(ii) and (b).
78 Section 32(2)(a).

undoubtedly a gradual process. This gradual process led to the personal injury that occurred when AZ was born with spina bifida.

[89] Thus, AZ has established that she suffered a personal injury, namely being born with spina bifida. This personal injury resulted from a gradual process, namely the continuation of development of spina bifida following the 20-week scan. This gradual process was a treatment injury because it was a personal injury wholly or substantially caused by treatment, namely the misdiagnosis of the 20-week scan which denied AZ's mother the opportunity to terminate her pregnancy, and it was not wholly or substantially caused by AZ's underlying health condition for the reasons we have set out at [84].

[90] Thus, AZ has cover for a personal injury under s 20(2)(f).

Conclusions

[91] When Parliament enacted the treatment injury provisions of the Act, it deliberately expanded the scope for cover under the Act for persons who suffer personal injury arising from an untoward medical event. The terms treatment and therefore treatment injury have been cast broadly and encompass injuries arising from medical procedures that extend beyond those that aim to cure a condition. Had AZ's spina bifida been properly diagnosed in utero it would have been treated by AZ's mother terminating her pregnancy, thereby ensuring AZ would never have been born with spina bifida. The failure to detect AZ's spina bifida in utero caused her to be born with that condition. Having been born with spina bifida, AZ is entitled to cover for personal injury caused by treatment failure.

Result

[92] The appeal is dismissed.

[93] We answer the question of law as follows:

> Can a person born with spina bifida (claimant) obtain cover for treatment injury where:
>
> (a) the existence of the claimant's spina bifida was not, but should have been, detected at the 20-week scan stage;
>
> (b) had the spina bifida been detected, the claimant's mother would have elected termination; and
>
> (c) the misdiagnosis meant that the opportunity to elect termination was lost to the claimant's mother?
>
> Yes.

[94] Recognising the public importance of this appeal, ACC has properly agreed to pay AZ's costs, regardless of the outcome of the appeal. We therefore make no order as to costs.

[95] We make an order permanently prohibiting publication of the names, addresses or identifying particulars of the medical practitioner/radiologist and the name of the medical centre concerned.

MALLON J

[96] I agree with the judgment of Cooper P and Collins J. I add the following in support of the reasons in that judgment.

Spina bifida as a gradual process injury

[97] Cooper P and Collins J refer to spina bifida as a gradual process injury in that the condition continues to develop after the 20-week scan. That leads to the analysis that AZ has cover either under s 20(2)(b) or (f), the latter route being applicable to a gradual process condition.

[98] In the High Court, van Bohemen J recorded that it was accepted that AZ's injury (her spina bifida) was caused wholly or substantially by a gradual condition.[79] On appeal ACC takes no position on this — it says there is no evidence before the Court that spina bifida is a gradual process condition — the agreed facts on which the appeal proceeded referred only to spina bifida being "a condition that typically develops in the 4 to 6-week stage of pregnancy and was well developed by the time of the 20-week scan".

[99] ACC did not take a position on whether spina bifida continued to develop after the 20-week scan because its focus in the courts below was only on whether there was a treatment injury. Specifically, and reflected in the question of law before us, its focus was and remains on whether a misdiagnosis of the 20-week scan qualified as a treatment injury to AZ when there was no treatment that could cure spina bifida or halt its development if it had been detected in the 20-week scan. Its contention is that AZ's injuries do not qualify as treatment injury because those injuries (the physical consequences of spina bifida) are "wholly or substantially caused by [her] underlying health condition",[80] that is, her spina bifida.

[100] It is important in my view to consider, as Cooper P and Collins J have done, all the components of the route to cover for treatment injury before considering the exclusion on which ACC relies. That is because its meaning may be coloured by the criteria in the route to cover for treatment injury.

[101] It is a reasonable inference on the material before us that spina bifida is a gradual process condition. The agreed facts for the appeal refer to spina bifida developing in the four- to six-week stage and being "well developed" by 20 weeks. The inference is that it is a developing condition that is well but not fully developed by 20 weeks' gestation. This is supported by two medical papers provided to us by the respondent. The results of one of these papers found "clear-cut evidence" for the fact that the continued exposure of spinal cord tissue to the amniotic-fluid environment

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79 High Court judgment, above n 2, at [61].
80 Accident Compensation Act, s 32(2)(a).

in utero lead to neurodegeneration that progressed at "later" stages of gestation.[81] The other similarly refers to a process of neurodegeneration which occurs in utero as gestation progresses.[82] Both discuss this in the context of the prospect of foetal surgery in utero at 19 to 25 weeks to attenuate the neurological consequences of the spine damage.[83]

[102] I proceed on the basis that spina bifida is a gradual process condition that continues beyond 20 weeks in utero but, as I will discuss, ultimately the route to cover for treatment injury on that basis overlaps with s 20(2)(b).

Section 20(2)(b) or (f)

[103] As Cooper P and Collins J discuss, *Allenby* and *Cumberland* were the key cases on which the High Court judgment was based.[84]

[104] As was accepted by the Supreme Court in *Allenby*, there is cover for the physical impacts of cancer (pain and suffering) which spread following the misdiagnosis of a tumour.[85] In such a case, the pain and suffering are caused by disease, but that pain and suffering would have ended if the tumour had been correctly diagnosed and treated in time to prevent its spread. The exclusion from treatment injury for personal injury that is "wholly or substantially caused by [the] person's underlying health condition" does not apply,[86] even though the person had cancer and continues to have cancer after the treatment. The cause of the pain and suffering after treatment is the misdiagnosis, so it is a "treatment injury".

[105] Similarly, as was held in *Allenby*, although a person who is pregnant suffers physical effects from and because of pregnancy, when pregnancy has occurred because a medical professional has incorrectly performed a sterilisation procedure, the physical

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81 Dorothea Stiefel, Andrew J Copp and Martin Meuli "Fetal spina bifida: Loss of neural function *in utero*" (Author Manuscript, PubMed Central, May 2013) at 6. This article was published in final edited form as "Fetal spina bifida in a mouse model: loss of neural function in utero" (2007) 106 J Neurosurg 213.

82 Andrew J Copp and others "Spina bifida" (2015) 1 Nat Rev Dis Primers at 1–3.

83 Copp and others, above n 82, at 9–11; and Stiefel, Copp and Meuli, above n 81, at 7. It is not suggested that in utero surgery was an available treatment for AZ.

84 Above at [16]–[19] citing *Allenby*, above n 9; and *Cumberland*, above n 10.

85 *Allenby*, above n 9, at [66] per Blanchard, McGrath and William Young JJ.

86 Accident Compensation Act, s 32(2)(a).

effects of pregnancy are a personal injury caused by medical misadventure (now treatment injury).[87] The exclusion for a person's underlying condition does not apply.

[106] As Cooper P and Collins J discuss, *Cumberland* concerned an expectant mother who went on to give birth to a child with spina bifida.[88] If the medical professionals had correctly read the 20-week scan, that condition would have been picked up. The Court held that the "analytical focus for the purposes of cover must be on the physical consequences to the [mother] in the period post the misdiagnosis".[89] Following the misdiagnosis, the pregnancy continued and from this point constituted a personal injury caused by treatment injury (subject to evidence that the pregnancy would have been terminated but for the misdiagnosis).[90]

[107] These cases illustrate the need for care in identifying the cause of physical injuries when the claimed basis for cover is treatment injury. When personal injury is caused by treatment injury, the focus is on the physical consequences suffered by the person claiming cover following the treatment. Underlying physical injuries before the treatment that continue after the treatment can be treatment injury if their continuation is caused by a treatment failure (for example, a misdiagnosed scan). A gradual process condition in such circumstances is not the same as an underlying health condition that is wholly or substantially the cause of the personal injury.

[108] The analytical route to cover taken by the majority in *Allenby* was s 20(2)(b) (the ongoing pregnancy gave rise to physical impact which was caused by the misdiagnosis) and it was unnecessary to consider s 20(2)(f).[91] Elias CJ in *Allenby* considered further personal injuries during the pregnancy were covered under s 20(2)(f) (the physical consequences of the pregnancy were caused by a gradual process suffered by the mother that is treatment injury) or s 20(2)(g).[92] In *Cumberland* this Court took the view that there would be cover for the mother's pregnancy beyond

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87 *Allenby*, above n 9, at [29] per Elias CJ, [80] per Blanchard, McGrath and William Young JJ and [86] per Tipping J.
88 Above at [18].
89 *Cumberland*, above n 10, at [35].
90 At [54]–[57].
91 *Allenby*, above n 9, at [76] per Blanchard, McGrath and William Young JJ.
92 At [20]–[26] and [31] per Elias CJ.

20 weeks' gestation under either s 20(2)(b), in accordance with the majority reasoning in *Allenby*, or s 20(2)(f), in accordance with Elias CJ's reasoning in *Allenby*.[93]

[109] As *Allenby* and *Cumberland* discuss and demonstrate, the Act provides an expanded definition of "personal injury" for injury caused by gradual process (or disease or infection) when the claimed basis for cover is "treatment injury".[94] As Cooper P and Collins J note, in such a case the key provisions are circular and reach the same result.[95] To summarise the routes to cover that their judgment finds:

(a) Did AZ suffer a personal injury under ss 20(2)(b) and 26(1)(b)? Yes, AZ has physical injuries that cause her pain and suffering.

(b) Is the personal injury one not caused wholly or substantially by gradual process or disease in accordance with s 26(2)?

(i) Yes, AZ's physical injuries are caused by gradual process because they are caused by her having spina bifida which is a gradual process condition. AZ's personal injury is not covered unless the personal injury is caused by gradual process *that is a treatment injury* (s 20(2)(f)).

(ii) Alternatively, no, AZ's physical injuries are not caused by gradual process because, from the point of misdiagnosis, they are caused by *treatment injury* (s 20(2)(b)).

(c) Does AZ's birth with spina bifida qualify as a treatment injury under s 32?

(i) Was the personal injury suffered by a person receiving *treatment* from a registered health professional in accordance with s 32(1)(a)? Yes, *treatment* includes "a diagnosis of a person's medical condition",[96] and here the health professional failed to

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93 *Cumberland*, above n 10, at [57] referring to *Allenby*, above n 9, at [20]–[26] per Elias CJ.
94 *Cumberland*, above n 10, at [37]; and *Allenby*, above n 9, at [18] per Elias CJ.
95 Above at [26].
96 Accident Compensation Act, s 33(1)(b).

diagnose an abnormality consistent with the foetus having spina bifida.

(ii) Was the personal injury caused by treatment in accordance with s 32(1)(b)? Yes, due to the misdiagnosis, AZ's mother was unable to terminate her pregnancy as she would have done if the ultrasound scan had been read correctly. Terminating the pregnancy would have brought an end to the physical consequences of AZ's condition.

(iii) Is the personal injury one that is wholly or substantially caused by AZ's underlying health condition as excluded by s 32(2)? No, because the cause of AZ's physical disabilities upon birth (the qualifying personal injury) was the misdiagnosis. Had that ultrasound been read correctly, the mother would have terminated the pregnancy and AZ would not have had those physical consequences.

[110] From the above summary, it can be seen that s 20(2)(b) and (f) both require analysis of the definition of "treatment injury" and whether AZ's physical injuries were caused by the misdiagnosis, and that both routes have the same ultimate answer. As William Young P said in *Accident Compensation Corporation v D* (the precursor to the Supreme Court's decision in *Allenby*) it is not clear that there is any practical difference between s 20(2)(b) and (f) when the personal injury is caused by medical misadventure (the predecessor of treatment injury).[97]

Treatment of AZ

[111] ACC takes issue with the analysis under s 32(1)(b) and (2)(a) ([109(c)(ii)–(iii)] above). It says the issue of treatment for AZ should be looked at from her perspective as she is the one who is seeking cover. It says that, because there is no in utero treatment of spina bifida it is not possible to have life without spina bifida if the

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[97] *Accident Compensation Corporation v D* [2008] NZCA 576 at [75]–[78] per William Young P dissenting.

condition exists in the foetus. It submits that termination is not treatment because it is not curative, does not confer a benefit on the foetus, and only serves to end its life. It says this means that AZ has suffered a personal injury because she has spina bifida, and since this is an underlying condition, her injury is not a treatment injury.

[112] ACC contrasts this with *Allenby* and *Cumberland*.[98] It notes that both of those cases were only concerned with causation from the perspective of the mother. In those cases, the treatment (had it been performed correctly) would have ameliorated the mother's personal injury (the physical impacts of pregnancy would not have been suffered in *Allenby* or continued in *Cumberland*). If performed correctly, the respective treatments (the failed sterilisation and the misdiagnosed scan) were carried out in connection with the physical injuries and would have brought an end to those injuries. The claimants therefore had cover for those injuries. Similarly, ACC notes that, in the example of a misdiagnosis of a cancer tumour, referred to in *Allenby* and *Cumberland*,[99] the treatment performed correctly would have halted the spread of the cancer.

[113] ACC refers to the following passage in *Cumberland*:[100]

> [50] If the "traditional" or standard approach to causation is applied to cases of failure to diagnose resulting in personal injury, the relevant question is: if the diagnosis had been properly made, and proper treatment had followed, was the patient more likely than not to have recovered? If the answer is "yes", it can be said that the misdiagnosis "caused" the resulting injury.

[114] In contrast, there is no in utero treatment of spina bifida leading to a life without spina bifida. ACC submits that failed treatment (the misread scan) did not cause an injury because the treatment would not have treated the underlying condition and so would not have resulted in a better outcome for AZ in terms of the physical consequences of the condition. It says this recognises the practical issue that failure to diagnose did not bring about the underlying condition. It says that, in cases of

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98 *Allenby*, above n 9; and *Cumberland*, above n 10.

99 *Allenby*, above n 9, at [66] per Blanchard, McGrath and William Young JJ; and *Cumberland*, above n 10, at [36].

100 *Cumberland*, above n 10.

misdiagnosis, cover has only been awarded where the underlying condition would have been treatable if it had been correctly diagnosed at that time.

[115] The passage quoted from *Cumberland* should not be read as the only way in which causation can be established in failure to diagnose cases. It was illustrative of the causation issue considered in that case. More importantly, it is wrong in my view to say that a mother's decision to terminate her pregnancy cannot be in the interests of her unborn child. While it is obviously quite wrong to think that a severely disabled child cannot have a fulfilling and rewarding life, it will nevertheless be a life with substantial physical difficulties. It is for the mother to decide (involving others as she may consider appropriate in her circumstances), on behalf of her unborn child, what is in the interests of the child. A scan providing a proper diagnosis gives the mother the opportunity to make that decision and, where termination would have been elected, is treatment preventing further development of the injury.

[116] The contrary view, that it is against the interests of the unborn child to end the life of the foetus, introduces value judgments that are not for this Court to make. As van Bohemen J put it in the High Court, "treatment" is "value neutral".[101] As Cooper P and Collins J say, the definition in s 32 is for the purposes of determining whether there is "treatment injury" under s 33, and ss 32 and 33 of the Act are much broader than the traditional curative definitions relied on by ACC.[102]

Common law position

[117] Cooper P and Collins J set out several matters that support the conclusion reached. The one on which I wish to add further supporting reasons is the prospect of a common law claim if AZ's personal injury is not covered under the Act. I do so because ACC drew support from common law cases, in particular *McKay v Essex Area Health Authority* and *Harriton v Stephens*,[103] for its submission that a failure to diagnose is not causative if there is no effective treatment for the underlying condition. This submission rests on the assumption that "treatment" under the Act is not

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101 High Court judgment, above n 2, at [87].
102 Above at [36]–[69].
103 *McKay*, above n 58; and *Harriton*, above n 60.

"neutral". However, like Cooper P and Collins J, I consider the common law position supports an interpretation that provides cover for AZ.

[118] The common law has distinguished between what are called "wrongful birth" claims and "wrongful life" cases. Wrongful birth claims are claims brought by parents in their own right for loss incurred by them by reason of the birth of the child. Wrongful life cases are claims brought by or on behalf of the child in their own right for their own losses — seeking general and/or special damages.[104] *McKay* and *Harriton* are both wrongful life cases.

[119] There is less controversy about wrongful birth claims than wrongful life claims.[105] *Meadows v Khan* is an example of the former.[106] In that case, the medical professional had been consulted for the purposes of establishing whether the mother was a carrier of the haemophilia gene. It was not in dispute that the mother could recover compensatory damages for the additional costs associated with rearing a child with that gene. As she would have terminated the pregnancy if the medical professional had properly advised her that genetic testing would establish whether she was a carrier, these additional costs were caused by the medical professional's negligence.[107]

[120] The more controversial issue in wrongful birth claims is what else may be recovered. In *Meadows* the child was born with haemophilia and an unrelated disability. The issue was whether the mother could also recover compensatory damages for the additional costs associated with the child being autistic. The Court

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104 *Harriton*, above n 60, at [12].

105 See for example Prue Vines, Peter Handford and Carol Harlow "Duty of Care" in Carolyn Sappideen and Prue Vines (eds) *Fleming's: The Law of Torts* (10th ed, Thomson Reuters, Sydney, 2011) 151 at [8.220].

106 *Meadows v Khan*, above n 52.

107 At [68] per Lord Hodge DP and Lord Sales SCJ, [73(iv)] per Lord Burrows SCJ and [86] per Lord Leggatt SCJ. That was consistent with earlier decisions of the Court of Appeal holding that a claimant could recover compensation for the extra costs associated with child's disability where the child was born following a negligently-performed sterilisation, and where a claimant lost the ability to terminate a pregnancy because her doctor had negligently failed to examine or test her for pregnancy: see *Parkinson*, above n 57; and *Groom v Selby*, above n 57.

held that she could not as it was beyond the scope of the duty of care given the purpose for which the doctor had been consulted.[108]

[121] As indicated, wrongful life claims have met with much less success although that is not a unanimous position across jurisdictions.[109] ACC submits that *McKay* and *Harriton* support its submission that the "treatment" in this case did not cause AZ's injuries. That is because it says that, in each case, the medical professional's negligence, while causing the child to be born, did not cause the child's disabilities (hence the term "wrongful life" claims). Each child had become disabled in utero through no fault of the medical professional and was claiming a duty to prevent their birth (via diagnosis of the rubella suffered by their mothers and the option to terminate).

[122] It is correct that in both *McKay* and *Harriton* the duty of care was analysed through this framework. In that context, policy factors were viewed as negating a cause of action. Principally in *McKay*, those policy factors were the sanctity of life,[110] and the impossibility of assessing damages (since damages would involve comparing the value of non-existence against the value of existence with a disability).[111] In *Harriton* the majority judgment was concerned with the potential conflict for the medical practitioner between the interests of the foetus and the mother;[112] the lack of a logical distinction between the proposed duty of care and a correlative duty on a mother who might decline to terminate the pregnancy;[113] and, importantly, the fact that damages would require an assessment between life with disabilities and non-existence, which was an impossible comparison.[114]

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108 At [68] per Lord Hodge DP and Lord Sales SCJ, and [77] per Lord Burrows SCJ. But see James Edelman *McGregor on Damages* (21st ed, Sweet & Maxwell, London, 2021) at [40-308]–[40-311] (pre-dating the United Kingdom Supreme Court decision in *Meadows v Khan*, above n 52), suggesting that "[t]here might be something to be said for the proposition" that the full basic costs of the child's care (not just the additional costs associated with the disability) should be recoverable when a child is born with a disability that the medical professional was engaged to advise on, noting that there was a difference between failed sterilisation cases and those where the basis of the claim is "a failure to warn of impending disability".

109 As discussed by Cooper P and Collins J, above at [53]–[54].

110 *McKay*, above n 58, at 1180–1181.

111 At 1181–1182.

112 *Harriton*, above n 60, at [249] per Crennan J (with whom Gleeson CJ, Gummow and Heydon JJ agreed: at [2] per Gleeson CJ, [4] per Gummow J and [208] per Heydon J).

113 At [250] per Crennan J.

114 At [252] per Crennan J.

[123] In *Harriton*, Kirby J dissented. He would have allowed the child's claim for damages, both general damages for pain and suffering as well as special damages associated with the disability.[115] His judgment responded to the policy factors against recognising a duty of care.[116] Of most relevance for present purposes is his response to the point on the impossibility of damages.[117] As to that he said:

> [101] The judicial discourse in the State Supreme Court in the present case and in other like Australian and overseas cases has been permeated by a search for the appropriate "comparator". … It has resulted in a conclusion that such a "comparator" does not exist because the posited "comparator" is a foetus whose life would have been terminated by a medical practitioner acting with due care. To this apparently logical argument … [there are] two answers … First, the comparator contemplated in this case, non-existence, is purely hypothetical – a fiction, a creature of legal reasoning only. No one is now suggesting the actual death of the appellant. Indeed, it is her very existence that gives rise to the pain, suffering and expense for which she brings her action. And secondly, there are limits to the insistence on this fictitious comparator where doing so takes the law into other inconsistencies and to a conclusion that is offensive to justice and the proper purpose of the law of negligence. A medical practitioner who has been neglectful and caused damage escapes scot-free. The law countenances this outcome. It does nothing to sanction such carelessness. It offers no sanction to improve proper standards of care in the future.

[124] Whatever the prospects of success of such a claim in New Zealand in the future in the absence of cover under the Act, a key rationale for the accident compensation scheme was the disadvantages of the common law, including the uncertainty, delay and expense of litigation and its impact on the claimant's rehabilitation. Here AZ exists with her physical injuries. She would not have had the physical consequences of her condition if the medical professional had read the ultrasound scan correctly.

[125] It is an advantage of the accident compensation scheme that AZ does not have to establish a duty of care owed to her (as distinct from that owed to her mother) or the tort concept of damages (that she is worse off for having been born which involves the difficult/impossible comparator between life with disabilities and non-existence). There is nothing in the Act, which has its own specific definition of treatment injury, that imports the concerns in the common law wrongful life claims onto that definition. If AZ has personal injuries that are a treatment injury, she has cover under the Act.

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115 At [109] and [153]–[155] per Kirby J dissenting.
116 At [110]–[152] per Kirby J dissenting.
117 See [95]–[102] per Kirby J dissenting.

Having cover entitles her to claim the "entitlements" provided under the Act as they relate to her injury.[118]

[126] Conversely, if there was no accident compensation scheme, AZ's mother would likely be able to recover at common law the additional costs of AZ's upbringing because of her disability — established as being recoverable loss in a wrongful birth claim in the United Kingdom.[119] However, here, AZ's mother received compensation only for the injury to her (her pregnancy) for the period from the time the 20-week scan was misread until when AZ was born.[120] As the Act provides cover only for the person who has suffered personal injury, if AZ does not have a claim under the Act, no further entitlements are available under the scheme.

[127] A restrictive reading of "treatment" would mean AZ is only eligible for care through the public health and social welfare systems. AZ can only access entitlements, such as treatment, therapy, attendant care, weekly compensation, and lump sum compensation if she has cover under the Act. This means that AZ's mother would have been worse off than she would have been under the common law, and AZ similarly would have been worse off to the extent that she would benefit if her mother received compensation for the additional costs associated with her disability.[121]

[128] To the extent that there is a gap in cover for AZ on ACC's interpretation of the Act, relative to the common law position, that gap would, as Cooper P and Collins J say, invite civil personal injury claims and that is difficult to reconcile with Parliament's intention and the social contract that the Act entails. As it was put in the

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118 Accident Compensation Act, s 67. We did not receive submissions about what these entitlements would likely be in AZ's case. With that caveat, relevant entitlements under the Act might include health care costs associated with her condition, social rehabilitation entitlements such as home help or home modifications, and a lump sum for permanent impairment.

119 *Meadows v Khan*, above n 52.

120 In accordance with *Cumberland*, above n 10, at [35].

121 I note that a concern with wrongful birth claims under which damages are paid to the parent is that, as there is no obligation to apply those damages for the benefit of the child, they can be dissipated in a manner that does not benefit the child. In response, I note the response of Kirby J in *Harriton*, above n 60, at [96], citing *Procanik by Procanik v Cillo*, above n 59, at 762, in which it was said: "[w]hatever logic inheres in permitting parents to recover for the cost of extraordinary medical care incurred by a birth-defective child, but in denying the child's own right to recover those expenses, must yield to the injustice of that result".

majority judgment in *Allenby* in relation to cover for pregnancy following a failed sterilisation:[122]

> [77] To hold that there was no cover in the circumstances of this case would be to create what the Court of Appeal majority in *Accident Compensation Corporation v D* recognised would be an "odd" gap in the general coverage for medical misadventure which would be detrimental for the woman patient (in that she could not recover compensation without litigation) and might cause the registered health professional either to have to pay for additional insurance cover, over and above the compulsory accident compensation levies, or to decline to perform sterilisations because of the risk of being sued. And if common law damages claims were to be permitted they would, based on the experience in other jurisdictions, give rise to very difficult issues in the assessment of damages, as is demonstrated by the cases to which Mallon J referred.
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> [78] … Denial of coverage for her pregnancy consequent upon medical misadventure would not be consistent with the overall spirit of the statute which appears to us still, after 1992, intended to provide universal coverage for accidents and for the consequences of medical misadventure.

[129] The same points apply to cover for AZ's personal injury. The Medical Protection Society Ltd, as intervener, submits that, if people in AZ's position do not have cover, the end result will be medical practitioners and medical centres who undertake scanning procedures having little interest in undertaking the work due to their exposure to common law actions. No evidence was provided in support of the submission. Regardless, as *Allenby* accepted, there will likely be consequences if there is a gap in cover for medical misdiagnosis in this particular area relative to other treatment injuries for which there will be cover, and this seems contrary to the public interest given the social contract on which the accident compensation scheme is premised. I conclude excluding cover is not what must have been intended by the Act.

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122 *Allenby*, above n 9 (footnotes omitted).