

Statement of Principles concerning PORTAL VEIN THROMBOSIS (Reasonable Hypothesis) (No. 107 of 2022)

The Repatriation Medical Authority determines the following Statement of Principles under subsection 196B(2) of the *Veterans' Entitlements Act 1986*.

Dated 21 October 2022.

The Common Seal of the Repatriation Medical Authority was affixed to this instrument at the direction of:

Professor Terence Campbell AM Chairperson

Contents

1	Name
2	Commencement
3	Authority
4	Application
5	Definitions
6	Kind of injury, disease or death to which this Statement of Principles relates
7	Basis for determining the factors4
8	Factors that must exist4
9	Relationship to service
10	Factors referring to an injury or disease covered by another Statement of Principles
Schedule 1 - Dictionary	
1	Definitions

1 Name

This is the Statement of Principles concerning *portal vein thrombosis* (*Reasonable Hypothesis*) (No. 107 of 2022).

2 Commencement

This instrument commences on 21 November 2022.

3 Authority

This instrument is made under subsection 196B(2) of the Veterans' Entitlements Act 1986.

4 Application

This instrument applies to a claim to which section 120A of the VEA or section 338 of the *Military Rehabilitation and Compensation Act 2004* applies.

5 Definitions

The terms defined in the Schedule 1 - Dictionary have the meaning given when used in this instrument.

6 Kind of injury, disease or death to which this Statement of Principles relates

(1) This Statement of Principles is about portal vein thrombosis and death from portal vein thrombosis.

Meaning of portal vein thrombosis

- (2) For the purposes of this Statement of Principles, portal vein thrombosis:
 - (a) means formation of a blood clot within the portal vein; and
 - (b) includes pylephlebitis and suppurative pylephlebitis; and
 - (c) excludes:
 - (i) intentional occlusion by intravascular embolisation of the affected portal vein, or a blood vessel or arteriovenous fistula that is contiguous with the affected portal vein; and
 - (ii) portal vein thrombosis occurring in the context of vaccineinduced thrombotic thrombocytopaenia.
 - Note 1: Typically, patients with portal vein thrombosis are asymptomatic, but clinical manifestations can include abdominal pain and fever. Gastrointestinal bleeding is common in patients with chronic portal vein thrombosis.
 - Note 2: *intravascular embolisation* and *pylephlebitis* are defined in the Schedule 1 Dictionary.

Death from portal vein thrombosis

(3) For the purposes of this Statement of Principles, portal vein thrombosis, in relation to a person, includes death from a terminal event or condition that was contributed to by the person's portal vein thrombosis.

Note: *terminal event* is defined in the Schedule 1 – Dictionary.

7 Basis for determining the factors

The Repatriation Medical Authority is of the view that there is sound medical-scientific evidence that indicates that portal vein thrombosis and death from portal vein thrombosis can be related to relevant service rendered by veterans, members of Peacekeeping Forces, or members of the Forces under the VEA, or members under the MRCA.

Note: MRCA, relevant service and VEA are defined in the Schedule 1 – Dictionary.

8 Factors that must exist

At least one of the following factors must as a minimum exist before it can be said that a reasonable hypothesis has been raised connecting portal vein thrombosis or death from portal vein thrombosis with the circumstances of a person's relevant service:

- (1) having cirrhosis of the liver at the time of the clinical onset of portal vein thrombosis;
- (2) having a disorder that is associated with a hypercoagulable state at the time of the clinical onset of portal vein thrombosis;

Note: *hypercoagulable state* is defined in the Schedule 1 - Dictionary.

(3) having an intra-abdominal malignant neoplasm or a myeloproliferative neoplasm at the time of the clinical onset of portal vein thrombosis;

Note: *myeloproliferative neoplasm* is defined in the Schedule 1 - Dictionary.

(4) having abdominal surgery within the 6 months before the clinical onset of portal vein thrombosis;

Note: Examples of abdominal surgery include bariatric surgery, colorectal surgery, hepatic resection, splenectomy and endoscopic treatment of gastro-oesophageal varices.

- (5) being at an altitude of at least 3,000 metres for a continuous period of at least the 28 days before the clinical onset of portal vein thrombosis;
- (6) having an autoimmune disease from the specified list of autoimmune diseases at the time of the clinical onset of portal vein thrombosis;

Note: *specified list of autoimmune diseases* is defined in the Schedule 1 - Dictionary.

(7) taking a drug from the specified list of drugs within the 30 days before the clinical onset of portal vein thrombosis;

Note: *specified list of drugs* is defined in the Schedule 1 - Dictionary.

- (8) taking didanosine for at least the 3 years before the clinical onset of portal vein thrombosis;
- (9) having compression of the portal vein at the time of the clinical onset of portal vein thrombosis;

Note: Examples of a mass or structure that can cause compression of the portal vein include an abscess or hydatid cyst in the liver, retroperitoneal haematomas and neoplasms, excluding pregnancy.

 (10) having infection or inflammation involving the portal vein or a contiguous tissue or organ at the time of the clinical onset of portal vein thrombosis;

Note: Examples of infection or inflammation involving a contiguous tissue or organ include acute and chronic pancreatitis, appendicitis, diverticulitis and liver abscess.

(11) having active tuberculosis disease involving the abdomen at the time of the clinical onset of portal vein thrombosis;

Note: active tuberculosis disease is defined in the Schedule 1 - Dictionary.

- (12) having cytomegalovirus infection of new onset within the 30 days before the clinical onset of portal vein thrombosis;
- (13) having infection with severe acute respiratory syndrome coronavirus 2
 (SARS-CoV-2) within the 2 months before the clinical onset of portal vein thrombosis;

Note: SARS-CoV-2 is the virus which causes coronavirus disease 2019 (COVID-19).

(14) having chronic infection with hepatitis B virus at the time of the clinical onset of portal vein thrombosis;

Note: chronic infection with hepatitis B virus is defined in the Schedule 1 – Dictionary.

(15) having chronic infection with hepatitis C virus at the time of the clinical onset of portal vein thrombosis;

Note: chronic infection with hepatitis C virus is defined in the Schedule 1 – Dictionary.

(16) having foreign body penetration or occlusion of the portal vein, splenic vein or superior mesenteric vein within the 30 days before the clinical onset of portal vein thrombosis;

Note: Examples of circumstances where foreign body penetration or occlusion of the portal vein, splenic vein or superior mesenteric vein may occur include the ingestion of fish bones, toothpicks or metal wires and the migration of a pancreatic stent.

(17) having blunt trauma to the abdomen within the 30 days before the clinical onset of portal vein thrombosis;

Note: Circumstances in which blunt trauma to the abdomen can occur include falls, motor vehicle accidents and a blow to the abdomen.

- (18) undertaking underwater diving with compressed air within the 24 hours before the clinical onset of portal vein thrombosis;
- (19) being obese at the time of the clinical onset of portal vein thrombosis;

Note: *being obese* is defined in the Schedule 1 - Dictionary.

- (20) undergoing a liver transplant or stem cell transplant within the 2 months before the clinical onset of portal vein thrombosis;
- (21) inability to obtain appropriate clinical management for portal vein thrombosis.

9 Relationship to service

- (1) The existence in a person of any factor referred to in section 8, must be related to the relevant service rendered by the person.
- (2) The factor set out in subsection 8(21) applies only to material contribution to, or aggravation of, portal vein thrombosis where the person's portal vein thrombosis was suffered or contracted before or during (but did not arise out of) the person's relevant service.

10 Factors referring to an injury or disease covered by another Statement of Principles

In this Statement of Principles:

- (1) if a factor referred to in section 8 applies in relation to a person; and
- (2) that factor refers to an injury or disease in respect of which a Statement of Principles has been determined under subsection 196B(2) of the VEA;

then the factors in that Statement of Principles apply in accordance with the terms of that Statement of Principles as in force from time to time.

Schedule 1 - Dictionary

Note: See Section 5

1 Definitions

In this instrument:

active tuberculosis disease means an illness in which tuberculosis bacteria are multiplying and inducing an inflammatory response.

being obese means:

- (a) having a Body Mass Index (BMI) of 30 or greater; or
- (b) for males, having a waist circumference exceeding 102 centimetres; or
- (c) for females, having a waist circumference exceeding 88 centimetres.

Note: **BMI** is also defined in the Schedule 1 - Dictionary.

BMI means W/H² where:

- (a) W is the person's weight in kilograms; and
- (b) H is the person's height in metres.

chronic infection with hepatitis B virus means infection with hepatitis B virus resulting in a chronic infection of at least 6 months duration, which has been confirmed by laboratory testing.

chronic infection with hepatitis C virus means infection with hepatitis C virus resulting in a chronic infection of at least 6 months duration, which has been confirmed by laboratory testing.

combined oral contraceptive pill means an oral contraceptive compound containing both estrogen and progestogen.

hypercoagulable state means an increased propensity to venous thrombosis due to an abnormality in the coagulation system.

Note: Examples of disorders that can be associated with a hypercoagulable state include antiphospholipid syndrome, nephrotic syndrome and paroxysmal nocturnal haemoglobinuria.

intravascular embolisation means the insertion of an embolic agent, such as gelatin foam, polyvinyl-alcohol particles or absolute alcohol, into a blood vessel to block blood flow.

menopausal hormone therapy means administration of estrogen preparations often in combination with a progestogen to offset a hormone deficiency following surgically induced or naturally occurring menopause.

MRCA means the Military Rehabilitation and Compensation Act 2004.

myeloproliferative neoplasm means:

- (a) chronic myeloid leukaemia;
- (b) essential thrombocythaemia;
- (c) polycythaemia vera; or
- (d) primary myelofibrosis.

portal vein thrombosis—see subsection 6(2).

pylephlebitis means inflammation and thrombosis of the portal vein.

relevant service means:

- (a) operational service under the VEA;
- (b) peacekeeping service under the VEA;
- (c) hazardous service under the VEA;
- (d) British nuclear test defence service under the VEA;
- (e) warlike service under the MRCA; or
- (f) non-warlike service under the MRCA.

Note: MRCA and VEA are also defined in the Schedule 1 – Dictionary.

specified list of autoimmune diseases means:

- (a) autoimmune hepatitis;
- (b) eosinophilic granulomatosis with polyangiitis (Churg-Strauss syndrome);
- (c) inflammatory bowel disease; or
- (d) systemic lupus erythematosus.

specified list of drugs means:

- (a) combined oral contraceptive pill;
- (b) menopausal hormone therapy;
- (c) protease inhibitors;
- (d) testosterone; or
- (e) thrombopoietin receptor agonists.

Note: *combined oral contraceptive pill* and *menopausal hormone therapy* are also defined in the Schedule 1 - Dictionary.

terminal event means the proximate or ultimate cause of death and includes the following:

- (a) pneumonia;
- (b) respiratory failure;
- (c) cardiac arrest;
- (d) circulatory failure; or
- (e) cessation of brain function.

VEA means the Veterans' Entitlements Act 1986.