#### **Revocation and Determination**

of

# Statement of Principles concerning

### **ACUTE PANCREATITIS**

ICD CODES: 577.0, 577.2

#### Veterans' Entitlements Act 1986

- 1. The Repatriation Medical Authority under subsection **196B(3)** of the *Veterans' Entitlements Act 1986* (the Act):
  - (a) revokes Instrument No.112 of 1995; and
  - (b) determines the following Statement of Principles.

#### Kind of injury, disease or death

- 2. (a) This Statement of Principles is about acute pancreatitis and death from acute pancreatitis.
  - (b) For the purposes of this Statement of Principles, "acute pancreatitis" means an acute inflammatory condition due to auto-digestion of pancreatic tissue by its own enzymes, typically presenting with abdominal pain, and usually associated with raised levels of pancreatic enzymes in blood or urine, attracting ICD code 577.0 or 577.2.

#### **Basis for determining the factors**

3. On the sound medical-scientific evidence available, the Repatriation Medical Authority is of the view that it is more probable than not that acute pancreatitis and death from acute pancreatitis can be related to relevant service rendered by veterans or members of the Forces.

#### Factors that must be related to service

4. Subject to clause 6, the factors set out in at least one of the paragraphs in clause 5 must be related to any relevant service rendered by the person.

#### **Factors**

- 5. The factors that must exist before it can be said that, on the balance of probabilities, acute pancreatitis or death from acute pancreatitis is connected with the circumstances of a person's relevant service are:
  - (a) suffering cholelithiasis at the time of the clinical onset of acute pancreatitis; or
  - (b) having evidence of prolonged and heavy alcohol consumption before, and continuing at least until, the clinical onset of acute pancreatitis; or
  - (c) suffering an acute infection with an organism from the specified list at the time of the clinical onset of acute pancreatitis; or
  - (d) suffering from ascariasis or clonorchiasis at the time of the clinical onset of acute pancreatitis; or
  - (e) being infected with human immunodeficiency virus (HIV) at the time of the clinical onset of acute pancreatitis; or
  - (f) suffering from pancreatic outflow obstruction due to a disorder from the specified list at the time of the clinical onset of acute pancreatitis; or
  - (g) undergoing a course of therapeutic drugs as outlined in Table 1 or Table 2 of the Schedule where:
    - (i) the therapeutic drug is being consumed immediately before the clinical onset of acute pancreatitis; and
    - (ii) the time frame of the drug consumption is consistent with the relevant Table in the Schedule; or
  - (h) undergoing surgery to the abdomen or thorax (including cardiopulmonary bypass surgery) within the thirty days immediately before the clinical onset of acute pancreatitis; or
  - (j) undergoing renal, hepatic or cardiac transplantation before the clinical onset of acute pancreatitis; or

- (k) suffering penetrating or major blunt trauma to the upper abdomen within the seven days immediately before the clinical onset of acute pancreatitis; or
- (m) undergoing endoscopic retrograde cholangio-pancreatography (ERCP), endoscopic sphincterotomy (of the sphincter of Oddi) or manometry of the sphincter of Oddi within the seven days immediately before the clinical onset of acute pancreatitis; or
- (n) evidence of hypertriglyceridemia resulting in triglyceride levels above 1,000 milligrams per decilitre (or 11.3 mmol per litre) at the time of the clinical onset of acute pancreatitis; or
- (o) evidence of hypercalcaemia at the time of the clinical onset of acute pancreatitis; or
- (p) suffering systemic vasculitis at the time of the clinical onset of acute pancreatitis; or
- (q) being bitten by the scorpion *Tityus trinitatis* within seven days immediately before the clinical onset of acute pancreatitis; or
- (r) suffering acute toxicity after oral ingestion of methyl alcohol or alpha-amanitin within the seven days immediately before the clinical onset of acute pancreatitis; or
- (s) suffering acute toxicity after oral ingestion of organophosphorus or carbamate insecticides, or after paracetamol overdose within the seven days immediately before the clinical onset of acute pancreatitis; or
- (t) suffering from a disorder resulting in disseminated intravascular coagulation and/or profound systemic hypotension with pancreatic acinar damage within the seven days immediately before the clinical onset of acute pancreatitis; or
- (u) inability to obtain appropriate clinical management for acute pancreatitis.

#### Factors that apply only to material contribution or aggravation

6. Paragraph **5(u)** applies only to material contribution to, or aggravation of, acute pancreatitis where the person's acute pancreatitis was suffered or contracted before or during (but not arising out of) the person's relevant service; paragraph 8(1)(e), 9(1)(e) or 70(5)(d) of the Act refers.

#### Other definitions

- 7. For the purposes of this Statement of Principles:
  - "acute infection with an organism from the specified list" means serological and/or clinical evidence of acute infection with one or more of the following:
  - (i) hepatitis A; or
  - (ii) mumps; or
  - (iii) cytomegalovirus; or
  - (iv) coxsackievirus;
  - "a disorder resulting in disseminated intravascular coagulation and/or profound systemic hypotension" means a range of diseases and/or injuries and/or operative procedures which may act through altered coagulation and haemostasis, hypovolaemia or vasogenic hypotension to diminish the blood supply to the pancreas, causing damage to this organ. Disseminated intravascular coagulation due to activation of the coagulation cascade pathway is associated with evidence of thrombosis and later fibrinolysis and haemorrhage. It is most frequently associated with obstetric catastrophes, massive trauma, metastatic malignancy or bacterial sepsis. Profound systemic hypotension may, for example, occur in the setting of myocardial infarction and cardiac pump failure, severe haemorrhage, or snake envenomation;
  - **"alpha-amanitin"** means the cyclopeptide toxin present in some mushrooms such as *Amanita phalloides* which produces amanita poisoning;
  - "ascariasis" means an intestinal parasitic infection caused by the nematode *Ascaris lumbricoides*, attracting ICD code 127.0;
  - "being infected with human immunodeficiency virus (HIV)" means serological evidence of infection with human immunodeficiency virus, attracting ICD code 042 or 079.53;
  - "cholelithiasis" or gallstones means calculus of the gall bladder or bile ducts formed by accretion or concretion of bile constituents, attracting ICD code 574;
  - "clonorchiasis" means an infection of the biliary system by the trematode *Clonorchis sinensis*, attracting ICD code 121.1;
  - "endoscopic retrograde cholangio-pancreatography (ERCP)" means a radiological investigation of the hepatobiliary-biliary and pancreatic ducts using endoscopic access to the descending duodenum. The ampulla

of Vater is cannulated and contrast medium ('dye') is injected allowing radiological visualisation;

"endoscopic sphincterotomy (of the sphincter of Oddi)" means use of an endoscopic technique to visualise and surgically divide the sphincter;

"hypercalcaemia" means biochemical evidence of an elevated total serum calcium, attracting ICD code 275.4. Hypercalcaemia may arise acutely due to iatrogenic administration such as in total parenteral nutrition or other administration of intravenous calcium preparations. Hypercalcaemia may also be caused by a number of disease processes which are listed below:

- (i) parathyroid hormone excess: for example, primary hyperparathyroidism, parathyroid carcinoma, familial hypocalciuric hypercalcaemia, advanced secondary hyperparathyroidism (eg after renal transplantation); or
- (ii) humoral hypercalcaemia of malignancy: for example, malignancy with hypercalcaemia in absence of bone metastases; or
- (iii) malignancy with bone metastases: for example, carcinoma, leukaemias, lymphomas, myeloma; or
- (iv) hyperthyroidism; or
- (v) vitamin D intoxication or vitamin A intoxication; or
- (vi) milk-alkali syndrome; or
- (vii) sarcoidosis and other chronic granulomatous diseases;

**"ICD code"** means a number assigned to a particular kind of injury or disease in the Australian Version of The International Classification of Diseases, 9th revision, Clinical Modification (ICD-9-CM), effective date of 1 July 1996, copyrighted by the National Coding Centre, Faculty of Health Sciences, University of Sydney, NSW, and having ISBN 0 642 24447 2;

"manometry of the sphincter of Oddi" means use of an endoscopic technique to measure the pressure differentials about the sphincter of Oddi to study the pressure dynamics of the sphincter in the basal state;

"methyl alcohol" or methanol means a clear colourless liquid, the chemical formula of which is CH<sub>3</sub>OH; and which is used as a solvent. Accidental or purposeful ingestion of methanol has occurred after attempts to produce 'bootleg' liquor;

"organophosphorus or carbamate insecticides" means a range of chemicals used to eradicate insect pests. Organophosphorous compounds contain phosphorous bound to an organic molecule and act as

acetylcholinesterase inhibitors, this group includes such agents as parathion, melathion, difonate, coumaphos, mevinphos and dimethoate;

"pancreatic outflow obstruction due to a disorder from the specified list" means a demonstrated obstruction to the pancreatic ductal system and may be caused by the following disorders:

- (i) choledocholithiasis; or
- (ii) ampullary, duodenal or pancreatic tumors (primary or secondary tumors); or
- (iii) choledococoele; or
- (iv) periampullary duodenal diverticula;

"penetrating or major blunt trauma" means an injury to the pancreas caused by the force of an extraneous mechanical or physical agent (for example, as a result of a serious motor vehicle accident);

"prolonged and heavy alcohol consumption" means excess alcohol consumption evidenced by medical recognition of such excess, and which is defined as:

- (i) consumption of at least 180kg of alcohol within any five year period; or
- (ii) complications attributable to alcohol abuse, including fractures, falls and/or polyneuritis; or
- (iii) hospitalisation(s) for alcohol-related illness; or
- (iv) at least one admission to a facility for alcohol detoxification;

#### "relevant service" means:

- (a) eligible war service (other than operational service); or
- (b) defence service (other than hazardous service);

"systemic vasculitis" means an inflammation of blood vessels and may be due to one of several acute, subacute or chronic inflammatory disorders of the arterial or venous wall including:

- (i) systemic lupus erythematosus, attracting ICD code 710.0; or
- (ii) polyarteritis nodosa, attracting ICD code 446.0;
- (iii) thrombotic thrombocytopenic purpura (TTP), attracting ICD code 446.6:
- (iv) necrotizing angiitis, attracting ICD code 446.0.

#### **SCHEDULE**

Therapeutic agents implicated in causation of acute pancreatitis:

Table 1 Table 2

### Agents where acute pancreatitis has occurred within one month of commencing therapy

## Agents where acute pancreatitis has occurred within one year of commencing therapy

6-mercaptopurine
azathioprine
erythromycin
frusemide
metronidazole
nitrofurantoin
sulphamethazole
sulphasalazine
tetracycline

ACE inhibitors: captopril, enalapril. lisinopril cimetidine/ranitidine didanosine diclofenac ketoprofen methyl dopa naproxen oestrogens pentamidine phenformin sulindac thiazide diuretics

#### **Application**

**8.** This Instrument applies to all matters to which section 120B of the Act applies.

valproic acid

Dated this Second day of May 1997

The Common Seal of the	)
Repatriation Medical Authority	)
was affixed to this instrument	)
in the presence of:	)
	KEN DONALD
	CHAIRMAN