#### **Revocation and Determination**

of

# Statement of Principles concerning

## **OSTEOPOROSIS**

ICD-10-AM CODES: M80.0 - M80.9, M81.0 - M81.9, M82.0, M82.1, M82.8

## 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.62 of 1997; and
  - (b) determines in its place the following Statement of Principles.

#### Kind of injury, disease or death

- 2. (a) This Statement of Principles is about osteoporosis and death from osteoporosis.
  - (b) For the purposes of this Statement of Principles, "osteoporosis" means a disease of the skeleton characterised by generalised reduction in bone density and microarchitectural deterioration of bone tissue with the normal ratio of mineral to organic content of bone retained, which leads to a propensity to fracture. Osteoporosis is considered to be present when:
    - (i) bone mineral density is 2.5 standard deviations below the mean bone mineral density of young adult sex-matched controls, and bone mineral density is 1.0 standard deviation below the mean bone mineral density of agematched and sex-matched controls; or

(ii) there is radiological evidence of a fracture together with radiological evidence of reduced bone density in the region of the fracture prior to or at the time of the fracture.

Osteoporosis attracts ICD-10-AM code M80.0 - M80.9, M81.0 - M81.9, M82.0, M82.1 or M82.8.

### 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 **osteoporosis** and **death from osteoporosis** 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, at least one of the factors set out 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, **osteoporosis** or **death from osteoporosis** is connected with the circumstances of a person's relevant service are:
  - (a) smoking at least 20 pack years of cigarettes or the equivalent thereof in other tobacco products before the clinical onset of osteoporosis and where smoking has ceased, the clinical onset has occurred within 10 years of cessation; or
  - (b) for men, consuming at least 220kg of alcohol within any 10 year period within the 20 years immediately before the clinical onset of osteoporosis; or
  - (c) for women, consuming at least 110kg of alcohol within any 10 year period within the 20 years immediately before the clinical onset of osteoporosis; or
  - (d) suffering from chronic renal failure or chronic cholestatic liver disease at the time of the clinical onset of osteoporosis; or
  - (e) being treated with a specified drug before the clinical onset of osteoporosis; or

- (f) suffering from, decreased or absent secretion of hormones from the ovaries or testes; or hyperprolactinaemia, for a continuous period of at least one year within the 10 years immediately before the clinical onset of osteoporosis; or
- (g) suffering from Cushing's syndrome, thyrotoxicosis or hyperparathyroidism, for a continuous period of at least one year within the 10 years immediately before the clinical onset of osteoporosis; or
- (h) suffering from rheumatoid arthritis at the time of the clinical onset of osteoporosis; or
- (i) suffering from systemic mastocytosis or disseminated malignancy at the time of the clinical onset of osteoporosis; or
- (j) undergoing renal, liver, cardiac or bone marrow transplantation before the clinical onset of osteoporosis; or
- (k) suffering from gastrointestinal malabsorption resulting from:
  - (i) total or partial gastrectomy,
  - (ii) short bowel syndrome,
  - (iii) contaminated small bowel syndrome,
  - (iv) pancreatic insufficiency,
  - (v) cholestasis, or
  - (vi) coeliac disease,

for a continuous period of at least one year within the 10 years immediately before the clinical onset of osteoporosis; or

- (l) suffering from anorexia nervosa at the time of the clinical onset of osteoporosis; or
- (m) being immobile for a continuous period of at least 120 days within the year immediately before the clinical onset of osteoporosis; or
- (n) suffering from Crohn's disease or ulcerative colitis before the clinical onset of osteoporosis; or
- (o) having an altered dietary pattern resulting in a decrease in average daily calcium intake to 450 mg/day or less for a period of two years within the four years immediately before the clinical onset of osteoporosis; or

- (p) smoking at least 20 pack years of cigarettes or the equivalent thereof in other tobacco products before the clinical worsening of osteoporosis and where smoking has ceased, the clinical worsening has occurred within 10 years of cessation; or
- (q) for men, consuming at least 220kg of alcohol within any 10 year period within the 20 years immediately before the clinical worsening of osteoporosis; or
- (r) for women, consuming at least 110kg of alcohol within any 10 year period within the 20 years immediately before the clinical worsening of osteoporosis; or
- (s) suffering from chronic renal failure or chronic cholestatic liver disease at the time of the clinical worsening of osteoporosis; or
- (t) being treated with a specified drug before the clinical worsening of osteoporosis; or
- (u) suffering from, decreased or absent secretion of hormones from the ovaries or testes; or hyperprolactinaemia, for a continuous period of at least one year within the 10 years immediately before the clinical worsening of osteoporosis; or
- (v) suffering from Cushing's syndrome, thyrotoxicosis or hyperparathyroidism, for a continuous period of at least one year within the 10 years immediately before the clinical worsening of osteoporosis; or
- (w) suffering from rheumatoid arthritis at the time of the clinical worsening of osteoporosis; or
- (x) suffering from systemic mastocytosis or disseminated malignancy at the time of the clinical worsening of osteoporosis; or
- (y) undergoing renal, liver, cardiac or bone marrow transplantation before the clinical worsening of osteoporosis; or

- (z) suffering from gastrointestinal malabsorption resulting from:
  - (i) total or partial gastrectomy,
  - (ii) short bowel syndrome,
  - (iii) contaminated small bowel syndrome,
  - (iv) pancreatic insufficiency,
  - (v) cholestasis, or
  - (vi) coeliac disease,

for a continuous period of at least one year within the 10 years immediately before the clinical worsening of osteoporosis; or

- (za) suffering from anorexia nervosa at the time of the clinical worsening of osteoporosis; or
- (zb) being immobile for a continuous period of at least 120 days within the year immediately before the clinical worsening of osteoporosis; or
- (zc) suffering from Crohn's disease or ulcerative colitis before the clinical worsening of osteoporosis; or
- (zd) having an altered dietary pattern resulting in a decrease in average daily calcium intake to 450 mg/day or less for a period of two years within the four years immediately before the clinical worsening of osteoporosis; or
- (ze) inability to obtain appropriate clinical management for osteoporosis.

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

6. Paragraphs 5(p) to 5(ze) apply only to material contribution to, or aggravation of, osteoporosis where the person's osteoporosis 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.

#### **Inclusion of Statements of Principles**

7. In this Statement of Principles if a relevant factor applies and that factor includes an injury or disease in respect of which there is a Statement of Principles then the factors in that last mentioned Statement of Principles apply in accordance with the terms of that Statement of Principles.

#### Other definitions

**8.** For the purposes of this Statement of Principles:

"alcohol" is measured by the alcohol consumption calculations utilising the Australian Standard of 10 grams of alcohol per standard alcoholic drink;

"anorexia nervosa" means a mental disorder characterised by refusal to maintain a normal minimal body weight; intense fear of becoming obese that is undiminished by weight loss; disturbance of body image resulting in a feeling of being fat even when extremely emaciated; and amenorrhoea (in females);

"being immobile" means continuous restriction to a lying or sitting position for a prolonged period, from strict bed rest, quadriplegia, or spinal traction;

**"being treated with a specified drug"** means being treated with any of the drugs (including where those drugs are contained in preparations) listed in the following Table of Drugs, under the circumstances as specified in the Table, with regard to the mode of administration, dose level, minimum duration of treatment, and temporality (time relationship between the administration of the drug and the onset of the disease):

**Table of Drugs** 

Drug or Group of Drugs	Mode *	Dose	Minimum Duration of	Temporality
prednisolone or pharmacologic equivalent glucocorticoid	IV, IM, O	0.5 gm over a period of 6 months	Treatment 6 months	within the five years immediately before
		3 gm	NS	within the 10 years immediately before
beclomethasone, budesonide, fluticasone	Inhal.	≥ 750 µg /day on average	12 months	within the five years immediately before
		3 gm	NS	within the 10 years immediately before
corticotrophins	NS	at least weekly	12 months	within the 10 years immediately before
heparin	IV, SC	at least 20,000 units/day	3 months	within the five years immediately before
thyroxine, Liothyronine	О	suppressive dose	6 months	within the two years immediately before.

#### **Table of Drugs Continued**

Drug or Group of Drugs	Mode *	Dose	Minimum Duration of Treatment	Temporality
Chemotherapy for cancer	Not topical	NS	NS	NS
Medroxyprogesterone acetate, without any oestrogen supplementation †	O, IM	NS	12 months	within the 10 years immediately before
GnRH analogues	NS	NS	12 months	within the 10 years immediately before
Antiandrogen therapy ‡	NS	NS	12 months	within the 10 years immediately before
Oral anticoagulant	oral		12 months	within the 10 years immediately before
Anti-HIV therapy	oral	NS	12 months	within the 10 years immediately before
Anticonvulsants	oral	NS	60 months	within the 10 years immediately before

<sup>\*</sup> Abbreviations: IV = intravenous; IM = intramuscular; SC = subcutaneous; O = oral; Inhal. = inhalation; NS = not specified.

- (i) that results in a TSH level below the normal range in the assay, or
- (ii) that results in a suppressed response to thyrotrophin test, or
- (iii) that the measured daily dose of T4 (or equivalent) is greater than 200 μg.

"chronic renal failure" means renal injury of a sustained nature that is not reversible and leads to destruction of nephron mass and is associated with a demonstrable functional abnormality of the kidney which raises the level of creatinine;

"chronic cholestatic liver disease" means any chronic intrahepatic or extrahepatic disorder which inhibits bile secretion into the gastrointestinal tract, allowing accumulation of biliary substances particularly bile acids in the plasma and which is associated with conjugated hyperbilirubinemia and resultant jaundice;

"death from osteoporosis" in relation to a person includes death from a terminal event or condition that was contributed to by the person's osteoporosis;

<sup>†</sup> in premenopausal women only. ‡ In males only. GnRH means Gonadotrophin Releasing Hormone.

<sup>&</sup>quot;Suppressive dose" means the treatment with thyroxine (or equivalent)

#### "disseminated malignancy" means:

- (i) the presence of secondary deposits of neoplastic cells at multiple sites distant from the primary malignancy in the case of solid malignancies (eg breast cancer); or
- (ii) involvement of multiple sites in the body in the case of haemopoietic malignancies (eg lymphomas);

"hyperparathyroidism" means increased levels of parathyroid hormone in the blood;

"hyperprolactinaemia" means increased levels of prolactin in the blood;

"ICD-10-AM code" means a number assigned to a particular kind of injury or disease in The International Statistical Classification of Diseases and Related Health Problems, 10th revision, Australian Modification (ICD-10-AM), Second Edition, effective date of 1 July 2000, copyrighted by the National Centre for Classification in Health, Sydney, NSW, and having ISBN 1 86487 271 3. Where in this Statement of Principles an ICD code is referenced, such reference is not to constrain or limit the proper meaning of the definition or words preceding the alphanumeric code reference;

"pack years of cigarettes or the equivalent thereof, in other tobacco products" means a calculation of consumption where one pack year of cigarettes equals twenty tailor made cigarettes per day for a period of one calendar year, or 7 300 cigarettes. One tailor made cigarette approximates one gram of tobacco or one gram of cigar or pipe tobacco by weight. One pack year of tailor made cigarettes equates to 7 300 cigarettes, or 7.3kg of smoking tobacco by weight. Tobacco products means either cigarettes, pipe tobacco or cigars smoked, alone or in any combination;

#### relevant service" means:

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

"systemic mastocytosis" means a mast cell hyperplasia that is generally detected in the bone marrow, skin, gastrointestinal mucosa, liver or spleen;

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

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

"thyrotoxicosis" means a condition caused by excessive quantities of thyroid hormones.

# **Application**

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

Dated this **7enth** day of **October** 2002

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