5 April 2011

# Proposal to fund olanzapine depot injection, teriparatide and raloxifene

PHARMAC is seeking feedback on a proposal to fund a new depot antipsychotic injection and two new treatments for osteoporosis from 1 July 2011 through a provisional agreement with Eli Lilly and Company (NZ) Limited.

In summary, this proposal would result in the following funding changes (all changes from 1 July 2011):

- Olanzapine depot injection (Zyprexa Relprevv) would be funded subject to Special Authority restrictions for patients with schizophrenia who are non compliant with oral medications and who have been admitted to hospital or treated in respite care, or intensive outpatient or home-based treatment, for 30 days or more in the last 12 months;
- Teriparatide (Forteo) would be funded subject to Special Authority restrictions as a last-line treatment for osteoporosis; and
- Raloxifene (Evista) would be funded for patients with osteoporosis subject to Special Authority restrictions similar to those that currently apply to alendronate and zoledronic acid.

Details of the proposal and background information can be found on the following pages.

#### Feedback sought

PHARMAC welcomes feedback on this proposal. To provide feedback, please submit it in writing by **Friday**, **29 April 2011** to:

Geraldine MacGibbon	Email:	geraldine.macgibbon@pharmac.govt.nz
Therapeutic Group Manager	Fax:	04 460 4995
PHARMAC	Post:	PO Box 10 254, Wellington 6143

All feedback received before the closing date will be considered by PHARMAC's Board (or Chief Executive acting under delegated authority) prior to making a decision on this proposal.

## Details of the proposal

Olanzapine depot injection

• Olanzapine depot injection (Zyprexa Relprevv) would be listed in Section B, and in Part II of Section H, of the Pharmaceutical Schedule from 1 July 2011 at the following prices and subsidies (expressed ex-manufacturer, excluding GST):

Chemical	Form	Strength	Brand	Pack size	Price and subsidy
Olanzapine pamoate monohydrate	Injection	210 mg	Zyprexa Relprevv	1	\$280.00
Olanzapine pamoate monohydrate	Injection	300 mg	Zyprexa Relprevv	1	\$460.00
Olanzapine pamoate monohydrate	Injection	405 mg	Zyprexa Relprevv	1	\$560.00

• Olanzapine depot injection listed in Section B of the Pharmaceutical Schedule would be funded subject to the following Special Authority restrictions:

Initial application from any relevant practitioner. Approvals valid for 6 months for applications meeting the following criteria:

- All of the following:
- 1 The patient has schizophrenia or other psychotic disorder; and
- 2 The patient has tried but failed to comply with treatment using oral atypical antipsychotic agents; and
- 3 The patient has been admitted to hospital or treated in respite care, or intensive outpatient or home-based treatment for 30 days or more in the last 12 months.

Renewal from any relevant practitioner. Approvals valid for 12 months for applications meeting the following criteria:

- Either:
- 1 Both:
  - 1.1 The patient has had less than 12 months' treatment with olanzapine depot injection; or
  - 1.2 There is no clinical reason to discontinue treatment; or
- 2 The initiation of olanzapine depot injection has been associated with fewer days of intensive intervention than was the case during a corresponding period of time prior to the initiation of olanzapine depot injection.
- Zyprexa Relprevv would be subject to a confidential rebate.
- Please note that the proposal to list olanzapine depot injection in Part II of Section H of the Pharmaceutical Schedule would set the price at which DHB hospitals could purchase olanzapine depot injection for use within the hospital (including outpatient clinics). The proposal to list olanzapine depot injection in Section B of the Pharmaceutical Schedule relates to funding for community dispensing and administration of olanzapine depot injection only.

## Teriparatide

- Teriparatide (Forteo) injection 250 μg/ml would be listed in Section B, and in Part II of Section H, of the Pharmaceutical Schedule from 1 July 2011 at a price and subsidy of \$490.00 per injection (ex-manufacturer, excluding GST).
- Teriparatide listed in Section B of the Pharmaceutical Schedule would be funded subject to the following Special Authority restrictions:

Initial application from any relevant practitioner. Approvals valid for 18 months for applications meeting the following criteria:

Both:

- 1 The patient has severe, established osteoporosis; and
- 2 Either:
  - 2.1 Both:
    - 2.1.1 The patient has a documented T-score < -3 after at least 12 months' continuous treatment with funded antiresorptive agents, including an adequate trial of all of alendronate sodium, zoledronic acid and raloxifene at adequate doses (see Notes); and
    - 2.1.2 The bone mineral density (BMD) measurement used to derive the T-score must have been made no more than two months prior to the application (see Notes); or
  - 2.2 The patient has experienced at least one symptomatic new fracture after an adequate trial of all of alendronate sodium, zoledronic acid and raloxifene at adequate doses (see Notes).

Notes:

a) An adequate dose of alendronate sodium (tab 70 mg or tab 70 mg with cholecalciferol 5,600 iu) is defined as 70 mg once weekly. An adequate dose of zoledronic acid (soln for infusion 5 mg in 100 ml) is defined as 5 mg per year. An adequate dose of raloxifene (tab 60 mg) is defined as 60 mg per day.

b) BMD must be measured using dual-energy x-ray absorptiometry (DXA). Quantitative ultrasound and quantitative computed tomography (QCT) are not acceptable.

c) A vertebral fracture is defined as a 20% or greater reduction in height of the anterior or mid portion of a vertebral body relative to the posterior height of that body, or a 20% or greater reduction in any of these heights compared to the vertebral body above or below the affected vertebral body.

d) A maximum of 18 months of treatment (18 cartridges) will be subsidised.

• Forteo would be subject to a confidential rebate.

## Raloxifene

- Raloxifene hydrochloride (Evista) 60 mg tablets would be listed in Section B, and in Part II of Section H, of the Pharmaceutical Schedule from 1 July 2011 at a price and subsidy of \$53.76 per 28 tablets (ex-manufacturer, excluding GST).
- Raloxifene hydrochloride listed in Section B of the Pharmaceutical Schedule would be funded subject to the following Special Authority restrictions:

Initial application from any relevant practitioner. Approvals valid without further renewal unless notified for applications meeting the following criteria: Any of the following:

- 1 History of one significant osteoporotic fracture demonstrated radiologically and documented bone mineral density (BMD) ≥2.5 standard deviations below the mean normal value in young adults (i.e. T-Score ≤ -2.5) (see Notes); or
- 2 History of one significant osteoporotic fracture demonstrated radiologically, and either the patient is elderly, or densitometry scanning cannot be performed because of major logistical, technical or pathophysiological reasons. It is unlikely that this provision would apply to many patients under 75 years of age; or
- 3 History of two significant osteoporotic fractures demonstrated radiologically; or
- 4 Documented T-Score  $\leq$  -3.0 (see Notes); or
- 5 A 10-year risk of hip fracture ≥ 3%, calculated using a published risk assessment algorithm (e.g. FRAX or Garvan) which incorporates BMD measurements (see Notes); or
- 6 Patient has had a prior Special Authority approval for zoledronic acid (Underlying cause Osteoporosis) or alendronate (Underlying cause Osteoporosis).

Notes:

a) BMD (including BMD used to derive T-Score) must be measured using dual-energy x-ray absorptiometry (DXA). Quantitative ultrasound and quantitative computed tomography (QCT) are not acceptable.

b) Evidence used by the UK National Institute for Health and Clinical Excellence (NICE) in developing its guidance indicates that patients aged 75 years and over who have a history of significant osteoporotic fracture demonstrated radiologically are very likely to have a T-Score  $\leq$  -2.5 and, therefore, do not require BMD measurement for raloxifene funding.

c) Osteoporotic fractures are the incident events for severe (established) osteoporosis, and can be defined using the WHO definitions of osteoporosis and fragility fracture. The WHO defines severe (established) osteoporosis as a T-score below -2.5 with one or more associated fragility fractures. Fragility fractures are fractures that occur as a result of mechanical forces that would not ordinarily cause fracture (minimal trauma). The WHO has quantified this as forces equivalent to a fall from a standing height or less.

d) A vertebral fracture is defined as a 20% or greater reduction in height of the anterior or mid portion of a vertebral body relative to the posterior height of that body, or a 20% or greater reduction in any of these heights compared to the vertebral body above or below the affected vertebral body.

• Evista would be subject to a confidential rebate.

## Background

#### Olanzapine depot injection

Olanzapine depot injection is a long-acting injectable antipsychotic. The tablet and orodispersible tablet forms of olanzapine are currently funded.

The Pharmacology & Therapeutics Advisory Committee (PTAC) and the Mental Health Subcommittee of PTAC have reviewed olanzapine depot injection on several occasions. The most recent recommendation, from PTAC, was that olanzapine depot injection be funded subject to Special Authority restrictions for the treatment of patients with schizophrenia and related disorders who have tried but been unable to comply with treatment using oral antipsychotic agents and who have been admitted to hospital or treated in respite care, or intensive outpatient or home-based treatment, for 30 days or more in the last 12 months, only if it was no cost to the Pharmaceutical Budget over the cost of risperidone depot injection (Risperdal Consta). The Committee further recommended that if olanzapine depot injection was funded at a higher price than risperidone depot injection it

would be reasonable to add an additional requirement for patients to have first tried risperidone depot injection.

This proposal is to fund olanzapine depot injection subject to Special Authority criteria in line with the first recommendation.

Published PTAC and Mental Health Subcommittee minutes relating to olanzapine depot injection can be found on PHARMAC's website at: <u>www.pharmac.govt.nz/2009/07/15</u>, <u>www.pharmac.govt.nz/2009/07/01</u>, <u>www.pharmac.govt.nz/2010/01/29</u>, <u>www.pharmac.govt.nz/2010/04/20</u>

#### Teriparatide

Teriparatide is a recombinant fragment of human parathyroid hormone. Teriparatide, in combination with calcium and vitamin D, is indicated for the treatment of osteoporosis in postmenopausal women and in men at high risk of fracture. It is also indicated for the treatment of osteoporosis associated with sustained systemic glucocorticoid therapy in patients at high risk for fracture.

PTAC reviewed teriparatide at its May 2010 meeting. The Committee recommended that teriparatide be funded as a last-line treatment for osteoporosis subject to Special Authority criteria restricting its use to patients with evidence of ongoing fractures and/or T-scores < -3 after trying all funded osteoporosis treatments with a low priority and only if a significant price reduction could be achieved. The proposed Special Authority criteria are in line with PTAC's recommendations. The published PTAC minute relating to teriparatide can be found on PHARMAC's website at <a href="https://www.pharmac.govt.nz/2010/06/29">www.pharmac.govt.nz/2010/06/29</a>.

#### Raloxifene

Raloxifene hydrochloride is a selective oestrogen receptor modulator. It has agonistic effects at some oestrogen receptors and antagonistic effects at other oestrogen receptors. It exerts the positive effects of oestrogen on bone and lipid metabolism, while specifically antagonising some of the potentially negative effects of oestrogen on uterine and breast tissues. Raloxifene hydrochloride is indicated for the prevention and treatment of osteoporosis in post-menopausal women; for the reduction in the risk of invasive breast cancer in postmenopausal women with osteoporosis; and for the reduction in the risk of invasive breast cancer.

PTAC and the Osteoporosis Subcommittee of PTAC have reviewed raloxifene hydrochloride on several occasions. The most recent recommendation, from PTAC, was that raloxifene hydrochloride be funded as a second-line treatment for osteoporosis subject to Special Authority criteria restricting its use to patients intolerant to alendronate with a low priority. The Committee further recommended that raloxifene hydrochloride be funded as a first-line treatment for osteoporosis subject to the same Special Authority criteria that apply to alendronate (underlying cause osteoporosis only) only if it was cost-neutral or cost-savings versus alendronate.

This proposal is to fund raloxifene hydrochloride subject to Special Authority criteria in line with the first recommendation.

Published PTAC minutes relating to raloxifene hydrochloride can be found on PHARMAC's website at: <a href="http://www.pharmac.govt.nz/2003/05/01">www.pharmac.govt.nz/2003/05/01</a>, <a href="http://www.pharmac.govt.nz/2005/11/01">www.pharmac.govt.nz/2003/05/01</a>, <a href="http://www.pharmac.govt.nz/2005/11/01">www.pharmac.govt.nz/2003/05/01</a>, <a href="http://www.pharmac.govt.nz/2005/11/01">www.pharmac.govt.nz/2003/05/01</a>, <a href="http://www.pharmac.govt.nz/2005/11/01">www.pharmac.govt.nz/2003/05/01</a>, <a href="http://www.pharmac.govt.nz/2005/11/01">www.pharmac.govt.nz/2005/11/01</a>, <a href="http://www.pharmac.govt.nz/2005/11/01">www.pharmac.govt.nz/2005/11/01</a>, <a href="http://www.pharmac.govt.nz/2005/11/01">www.pharmac.govt.nz/2005/11/01</a>, <a href="http://www.pharmac.govt.nz/2010/06/29">www.pharmac.govt.nz/2010/06/29</a>.