Neurological Subcommittee of PTAC
Meeting held 27 August 2014

(minutes for web publishing)

Neurological Subcommittee minutes are published in accordance with the *Terms of Reference for the Pharmacology and Therapeutics Advisory Committee (PTAC) and PTAC Subcommittees 2008*.

Note:

- that this document is not necessarily a complete record of the Neurological Subcommittee meeting; only the relevant portions of the minutes relating to Neurological Subcommittee discussions about an Application or PHARMAC staff proposal that contain a recommendation are generally published.

The Neurological Subcommittee may:

(a) recommend that a pharmaceutical be listed by PHARMAC on the Pharmaceutical Schedule and the priority it gives to such a listing;

(b) defer a final recommendation, and give reasons for the deferral (such as the supply of further information) and what is required before further review; or

(c) recommend that PHARMAC decline to list a pharmaceutical on the Pharmaceutical Schedule.

These Subcommittee minutes were reviewed by PTAC at its meeting on 6 & 7 November 2014, the record of which will be available in January 2015.

_____Chair

Record of the Neurological Subcommittee of the Pharmacology and Therapeutics Committee (PTAC) meeting held at PHARMAC on 27 August 2014

1 Pregabalin

1.1 The Subcommittee noted that PHARMAC had received a number of NPPA applications for pregabalin, and that PHARMAC staff were seeking advice on the benefits of pregabalin, compared with gabapentin, as a second-line agent for patients who have not received adequate therapeutic benefit from gabapentin and for patients who have received benefit from gabapentin but were unable to tolerate it at therapeutic doses due to adverse effects.

1.2 The Subcommittee noted the gabapentin is fully funded for patients with neuropathic pain.

1.3 Members considered that in many of the NPPA applications patients had self-funded a trial of pregabalin without reporting the same level of side effects and were considered by the applying clinician to have received therapeutic benefit. The Subcommittee considered the published evidence that was submitted by applicants to support their applications.

1.4 The Subcommittee noted that some of the NPPA applications were for pregabalin at doses lower than the recommended daily dose.

1.5 The Subcommittee **recommended** that pregabalin only be listed for neuropathic pain, if cost-neutral to gabapentin, subject to the same restrictions.

The Decision Criteria particularly relevant to this recommendation were: *(i) The health needs of all eligible people within New Zealand; (ii) The particular health needs of Maori and Pacific peoples; (iii) The availability and suitability of existing medicines, therapeutic medical devices and related products and related things; (iv) The clinical benefits and risks of pharmaceuticals; (v) The cost-effectiveness of meeting health needs by funding pharmaceuticals rather than using other publicly funded health and disability support services; (vi) The budgetary impact (in terms of the pharmaceutical budget and the Government's overall health budget) of any changes to the Pharmaceutical Schedule; (vii) The direct cost to health service users.*

1.6 The Subcommittee considered that gabapentin and pregabalin had similar mechanisms of action but there were some differences in pharmacokinetic properties. Members considered that pregabalin exhibited approximately 90% bioavailability and gabapentin, where the dose is not proportional to bioavailability, has a bioavailability of about 30-60%. The Subcommittee considered pregabalin to have approximately 6 times the potency of gabapentin and had a faster onset of action. Members noted that both products were renally excreted.

_____Chair

1.7 The Subcommittee considered that pregabalin is typically dosed twice daily compared with gabapentin which is dosed three times daily, and that the lower dosing frequency associated with pregabalin may improve patient adherence.

1.8 The Subcommittee noted that 150 mg, 300mg, 600 mg, and 900 mg doses of pregabalin would be therapeutically equivalent to approximately 600 mg, 900 mg, 1800 mg, and 2400 mg of gabapentin respectively.

1.9 The Subcommittee considered that theoretically gabapentin could have more gastrointestinal side effects compared with pregabalin because of the higher dose required and this may be partly because of the amount of excipients (such as lactose) in the gut may be greater.

1.10 The Subcommittee noted that there were no head-to-head trials comparing pregabalin with gabapentin. Members considered that pregabalin has a similar therapeutic effect to gabapentin. The Subcommittee considered that the side effects of pregabalin were similar to gabapentin including drowsiness, dizziness, and somnolence, and considered that although the lack of direct comparative data for the two agents rendered it not possible to reliably assess their extent of side effects relative to each other; the two agents had similar discontinuation rates.

1.11 The Subcommittee considered that at this time there was no evidence to support the use of pregabalin for patients who have received no therapeutic benefit from gabapentin.

1.12 The Subcommittee considered that if a patient experienced an allergic reaction (e.g. rash) to gabapentin, this would be a valid reason support a trial of pregabalin due to the different chemical structures of the drugs. Members however, considered that true allergies to gabapentin would be rare.

1.13 The Subcommittee considered pregabalin did not provide any additional health benefit compared with gabapentin and that should pregabalin be listed it should be subject to the same restrictions as gabapentin.

1.14 The Subcommittee considered that chronic pain is a long term condition requiring trials of many different agents and therefore its management is often difficult.

1.15 The Subcommittee estimated that should funded pregabalin be available that approximately 80-90% of patients receiving gabapentin would trial pregabalin.

1.16 The Subcommittee considered that funded alternative treatments for patients who could not tolerate gabapentin or who received no therapeutic benefit from it included baclofen, clonazepam, topiramate, venlafaxine, lamotrigine, capsaicin cream, sodium valproate, selective serotonin reuptake inhibitors (SSRIs), and tricyclic antidepressants (TCAs).

1.17 The Subcommittee considered that duloxetine may also be effective for neuropathic pain. The Subcommittee noted that this was not funded but would welcome a funding application.