133 Molesworth Street
PO Box 5013
Wellington 6140
New Zealand
+64 4 496 2000

24 February 2020

[redacted]

Ref: H202000389

Dear [redacted]

Response to your request for official information

Thank you for your request for information under the Official Information Act 1982 (the Act), transferred to the Ministry of Health (the Ministry) on 28 January 2020. You requested:

a. *What testing has Med Safe done on the Logem drug?*
b. *What basis did MedSafe use to determine that Logem was bioequivalent to Lamictal?*

In response to part a of your request, Medsafe's medicines testing program includes routine testing of medicines that have consent for distribution in New Zealand. Medicines are selected for routine testing to cover a range of products, dose forms, manufacturers, and sponsors.

Medicines are tested against the monograph requirements specified in an international pharmacopeia, for example the British Pharmacopeia (BP) or the United States Pharmacopeia (USP) for the relevant substance and dose forms. In instances where medicines are subject to abridged testing, only the area of concern is tested.

Logem chewable/dispersible tablets 25 mg and 100mg were each selected for testing in Medsafe's testing program. Each strength was tested against BP and met the specification.

In response to part b of your request, the approval of a medicine by Medsafe is based on the balance of benefits and risk of harm for the population in which the medicine is intended to be used. For generic medicines, this risk assessment includes the evaluation of bioequivalence studies conducted between a generic medicine and the respective innovator (brand name) medicine.

In New Zealand, Logem and Arrow-Lamotrigine are generic medicines and the respective innovative medicine is Lamictal. All three medicines contain the active ingredient, lamotrigine. Medsafe's approval of Logem and Arrow-Lamotrigine included the evaluation of bioequivalence studies comparing the bioavailability of each product to Lamictal.

Bioequivalence studies are small clinical trials conducted to compare the bioavailability (extent and rate of absorption of the active ingredient) of a generic medicine to an appropriate reference product. A generic medicine is considered bioequivalent if a bioequivalence study can demonstrate that the 90% confidence interval for the geometric mean ratio for Cmax[1] and AUC[2] are within the range 80% to 125%. This

[1] Maximum concentration of the active ingredient in the blood.

[2] Area under the curve, a measure of total exposure to the active ingredient in the blood.

statistical analysis is used to account for variability in daily absorption in each patient and for variability in absorption between patients. In practice, the difference in clinical exposure between the innovator medicine and generic medicine is less than or equal to 5 percent.

This is similar to the difference in the daily exposure for an individual patient due to changes in diet (eg, fluid intake, alcohol consumption and exercise). This acceptance criteria is in accordance with international standards, particularly the European Medicines Agency (EMA) Guideline on the Investigation of Bioequivalence, against which Medsafe assesses the design and results of all bioequivalence studies.

Logem chewable/dispersible tablets have been approved in New Zealand since 28 September 2006. Logem has also been approved and supplied in a number of other countries, including Australia. No significant issues regarding product quality have been identified by regulators in these countries for Logem.

I trust this information fulfils your request. You have the right, under section 28 of the Act, to ask the Ombudsman to review any decisions made under this request.

Please note that the Ministry may publish this response (with your personal details removed) and any attachments on the Ministry's website.

Yours sincerely

Chris James
Group Manager
Medsafe