

24 January 2025

Laydan Mortensen

Via email: fyi-request-29777-e1ff2801@requests.fyi.org.nz

Tēnā koe Laydan

Request for information: Trikafta health claims

Thank you for your request dated 17 January 2024 under the Official Information Act 1982 (the Act) for information relating to Trikafta. You requested:

On 15 August 2022, Pharmac made a press release (<https://pharmac.govt.nz/news-and-resources/news/2022-08-15-media-release-pharmac-shares-update-on-its-assessment-of-trikafta>) on the funding application for Trikafta (elexacaftor/texacaftor/ivacaftor) stating: "We also estimate that Trikafta could give people with cystic fibrosis who are aged 6 and over a longer and improved quality of life – specifically benefits equivalent to 27 more years at full health when compared to current funded treatments." The "27 more years at full health" figure has been widely publicised by advocacy groups and the media, but I can't seem to find a source or any form of calculation on how that figure was obtained. The closest I got was from the publicly-available technology assessment report, which show an incremental QALY gain of 9.8 years, just a third of the stated 27 years.

Can you please release information of how the "27 more years at full health" figure was calculated?

The incremental quality adjusted life year (QALY) gain of 9.8 years mentioned in your request represents the *discounted* QALY gain per individual expected if Trikafta were used instead of the treatments funded at that time. In contrast, the '27 more years at full health' reflects the *undiscounted* QALY gain per person. Pharmac does not routinely report undiscounted QALYs in the technology assessment reports (TARs), like the one you refer to which was published online.

Given that cystic fibrosis is a chronic, progressive disease and Trikafta is likely to provide health benefits over a long period (a person's lifetime), applying Pharmac's discount rate of 3.5% to both costs and outcomes in the economic model results in a significant difference between discounted and undiscounted QALY gains.

Pharmac aims to secure the best health outcomes reasonably achievable within the provided funding. To identify proposals that would deliver these outcomes if funded, Pharmac uses economic analysis, which is a valid, replicable, and scientific tool. The Prescription for Pharmacoeconomic Analysis (PFPA) outlines Pharmac's methodology for conducting economic analyses to assess the value for money of pharmaceuticals in New Zealand.

Most economic analyses are written up as Technology Assessment Reports (TARs), like the publicly available report you referenced. The economic assessment of Trikafta was conducted using a cost-utility analysis (CUA). A CUA compares the costs and outcomes (health benefits) of different treatment options. The quality-adjusted life-year (QALY) metric, which combines changes in both the quantity and quality of life (mortality and morbidity) into a single measure, is used to evaluate health benefits in a CUA.

In accordance with the PFPA, costs and benefits in a CUA are discounted at a rate of 3.5%. Discounting is used to compare treatments with costs and benefits occurring at different times by reflecting their present value. This approach assumes that immediate resources are more valuable than those in the distant future, a concept known as time preference. As a result of discounting, costs and health benefits occurring earlier in the economic model are given more weight than those occurring later. Consequently, when discounting is applied to interventions with costs and benefits accrued over many years, future costs and health benefits are heavily discounted. This means discounted health benefits (QALYs) are quite different to undiscounted QALYs, and likewise, discounted future costs of treatment and other health sector care are very different to undiscounted costs.

We trust that this information answers your queries. Please note, you have the right to make a complaint to the Ombudsman about our response to your OIA, under section 28(3) of the OIA. Details of [how to make a complaint](#) are on the Ombudsman's website.

To make information more freely available, we publish selected OIA responses (excluding personal details) on our website. Please get in touch with us if you have any questions about this.

Nāku noa, nā



Oliver Whitehead
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