RE: Proposal to fund recombinant varicella zoster virus vaccine (Shingrix®) for the prevention of shingles in immunocompromised people

Multiple Sclerosis New Zealand

Sent to: consult@pharmac.govt.nz

23 February 2024

Dear Dr Peter Bramley and the Pharmac Board,

We the undersigned are writing on behalf of the Multiple Sclerosis (MS) Community regarding the "Proposal to fund recombinant varicella zoster virus vaccine (Shingrix®) for the prevention of shingles in immunocompromised people."

While we support the principle of the proposal, we are extremely disappointed to see the narrow criteria and the exclusion of patients on immunocompromising therapies, particularly those with MS. We urge Pharmac to reconsider this exclusion and include people with Multiple Sclerosis on the inclusion list.

MS is a condition of young people, with the average age of diagnosis in NZ being 38, people are usually diagnosed between 20 and 50. Women are also three times more likely to be diagnosed with MS. Many treatments which are funded by Pharmac are immunosuppressive to varying degrees.

We are writing this submission together to highlight the strong consensus agreement between MS neurologists and Multiple Sclerosis NZ (MSNZ) as the patient advocacy organisation on this matter.

MS Disease Modifying Therapies (DMTs)

While MS itself does not weaken the immune system, several of the high efficacy treatments funded by Pharmac are immunocompromising to varying degrees.

Some people with MS are deemed to be severely immunocompromised because of medications they may be receiving to treat their MS. Currently, this group includes those on Ocrelizumab (Ocrevus – 449 NZ pts as at June 2023) and Fingolimod (Gilenya – 348 NZ pts as at June 2023).[i]

Patients on Dimethyl fumarate (Tecfidera – 415 NZ pts as at June 2023), Natalizumab (Tysabri – 562 NZ pts as at June 2023) and Teriflunomide (Aubagio – 50 NZ pts as at June 2023) are deemed to be mildly immunocompromised.

We are also conscious that several MS treatments under review by Pharmac would also be considered as immunocompromising Cladribine (Mavenclad)[ii],Ofatumumab (Kesimpta), and Siponimod (Mayzent).

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We are also aware of patients in NZ treated overseas with alemtuzumab (Lemtrada) who would fall into this category.

Rituximab (various trade names) and high dose corticosteroids, immunosuppressive medications, are also used to treat MS patients, the latter routinely for relapses.

Timing

Shingrix® has been shown to be safe and effective for most people, including those with MS. While the Shingrix® vaccine is not live attenuated, the optimal recommended time for patients to receive is prior to starting a disease modifying therapy which may compromise their immune system. The American Centre for Disease Control (CDC) states that in adults 50 – 69 years old, Shingrix® was 97% effective in preventing shingles. However, this efficacy was reduced to 68-91% for those immunocompromised.[iii]

Expert consensus recommends holding off starting disease modifying therapy until at least one month after the last Shingrix® dose to ensure patients get full benefit.[iv]

Complications of shingles for MS patients

People with MS who are immune compromised may be more at risk of experiencing severe complications from viruses, develop infections and require hospitalisation of shingles than the general population.[v]

The most common shingles complication is postherpetic neuralgia (PHN) - severe, long-term nerve pain in the area of the initial rash. In rare cases, shingles can lead to pneumonia, vision problems, hearing loss, hospitalization, and even death.

MS pain affects around two thirds of people with MS. Because MS affects the signals sent between the brain and spinal cord, people with MS may be more prone to nerve pain and PHN as a result of a shingles infection.[vi]

Economic Burden of MS

MS has a significant economic burden on those diagnosed and their families. We urge Pharmac to consider the economic impact to people diagnosed with MS of not including them in the eligibility criteria.

Living with a chronic, progressive condition is expensive. There are often substantial extra costs, such as, increased use of health and allied health services, non-funded medications, accessible transport, specialist equipment and help with household activities. Many people with MS are financially impacted by their condition and the added burden of paying for vaccinations prior to starting treatment is an unnecessary added pressure at a time of mental strain.

Link between Herpes Zoster Virus and MS

While there appears to be a link between shingles and MS, it is not yet entirely understood by researchers. In an international patient reported questionnaire, a substantial proportion of MS patients, estimated to be higher than an age-matched general population, report single or multiple episodes of zoster. Therefore, having had herpes zoster in the past may increase the risk of developing MS in the future.[vii]

Final Comment

Overall, while we applaud the news to consider the immunocompromised population over the age of 18, we urge you to reconsider including people with a diagnosis of MS, in particular those on MS DMTs. Shingrix® offers an effective, inactivated vaccine and access to this important vaccination should not be limited. We strongly support its inclusion on the Pharmac Schedule for the broader immunocompromised population over the age of 18 years with the recommended inclusions.

Yours Sincerely,

Amanda Rose – National Manager – Multiple Sclerosis NZ
Dr Jennifer Pereira – MS Neurologist – Te Whatu Ora Auckland
Dr Deborah Mason – MS Neurologist – Te Whatu Ora Canterbury
Dr Zoe Dyer– MS Neurologist – Te Whatu Ora Auckland

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[i] Arvin AM, Wolinsky JS, Kappos L, et al. Varicella-zoster virus infections in patients treated with fingolimod: risk assessment and consensus recommendations for management. *JAMA Neurol*. 2015;72(1):31-39. doi:10.1001/jamaneurol.2014.3065

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[iii] Shingles Vaccination: What Everyone Should Know | CDC

[iv] Shingles and MS: Vaccine Safety, Benefits, and Risks (verywellhealth.com)

[v] Lechner-Scott J, Waubant E, Levy M, Hawkes C, Giovannoni G. Is multiple sclerosis a risk factor for infections?. *Mult Scler Relat Disord*. 2020;41:102184. doi:10.1016/j.msard.2020.102184

[vi] Urits I, Adamian L, Fiocchi J, et al. Advances in the understanding and management of chronic pain in multiple sclerosis: a comprehensive review. *Curr Pain Headache Rep*. 2019;23(8):59.

[vii] Manouchehrinia A, Tanasescu R, Kareem H, et al. Prevalence of a history of prior varicella/herpes zoster infection in multiple sclerosis. *J Neurovirol*. 2017;23(6):839-844. doi:10.1007/s13365-017-0569-1