Multiple Sclerosis Research Australia
1300 356 467 • info@msra.org.au • www.msra.org.au
Level 19, Northpoint 100 Miller Street • North Sydney • NSW 2060
PO Box 625 • North Sydney • NSW 2059
ABN 34 008 581 431

MS Research Australia is writing to support the inclusion of siponimod tablets (Mayzent) on the Pharmaceutical Benefits Scheme (PBS) for people with secondary progressive MS.

As the largest national not-for-profit organisation dedicated to funding MS discoveries and coordinating MS research in Australia, we are proud to advocate on behalf of people affected by this disease. The affordable availability of evidence-based treatments for progressive forms of MS is the greatest un-met need facing the MS community worldwide.

Finding the right treatment option for every individual with MS is paramount as suboptimal treatment can lead to an increased symptom burden and irreversible accumulation of disability. This in turn leads to an increased burden on the healthcare system and a further reduction in the quality of life of patients and their families. MS costs the Australian community over $1.75 billion per year[1]. The impact of MS on quality of life can be equivalent to that experienced by people with terminal metastatic cancer, chronic kidney disease and severe heart disease[1].

Secondary progressive MS is the secondary phase of relapsing remitting MS that can develop years to decades following the initial onset of relapsing symptoms. Secondary progressive MS is characterised by a progressive worsening of symptoms (accumulation of disability) over time, with no obvious signs of remission. In March 2019, the US Food and Drug Administration (FDA) approved the use of siponimod in people with clinically isolated syndrome (first neurological attack), relapsing remitting MS and active secondary progressive MS. The inclusion of siponimod on the list of PBS-supported treatments for secondary progressive MS is vital as there are no other treatment options available in Australia. Inclusion of siponimod on the list of PBS-supported treatments will ensure that this evidence-based treatment will be affordable to those with secondary progressive MS.

Siponimod acts by targeting lymphocytes and retaining them in lymphoid tissues[2]. This retention prevents potentially auto-aggressive lymphocytes from moving into the central nervous system, the site of inflammation in MS, and contributing to the ongoing damage to myelin and nerves that occurs in secondary progressive MS. Siponimod is an oral tablet that involves an initial 6 day titration followed by a maintenance dose of either 2mg siponimod. Therefore, this treatment regime provides a potentially convenient option for people with secondary progressive MS, particularly to those whom are located rurally and face a geographical barrier.

Siponimod has been shown in clinical trials to be an effective treatment to significantly reduce the risk of disease progression. In the EXPAND trial, which involved 1,651 people with secondary progressive MS, people who were given siponimod were compared with those that were given a placebo tablet[3]. Participants of the clinical trial were treated for up to three years and their disability was tracked every three months. The trial showed that an initial titration of siponimod for 6 days followed by 2mg siponimod once daily as a maintenance dose resulted in a 21% reduction in the risk of disability

progression (p = 0.013). More people who received siponimod rather than placebo were free from gadolinium enhancing lesions (67% vs 89%) and from new or enlarging T2 lesions (37% vs 57%). Furthermore, siponimod also significantly reduced the rate of brain atrophy compared to placebo over a 24 month period (-0.50% vs -0.65%, p = 0.0002).

Siponimod has been shown to be largely well-tolerated by people with MS. In the EXPAND clinical trial, the most common adverse effects were lymphopenia, hypertension, elevated liver enzymes and cardiac abnormalities at treatment initiation, which are consistent with other MS treatments in this class[3].

MS Research Australia supports affordable access to all proven treatment options to increase the opportunity for people with MS and their doctors to find effective therapies suited to their individual circumstances. Reducing disease progression will improve quality for people with MS and their loved ones, enabling their full participation in social and family life, and employment.

MS Research Australia appreciates the opportunity to make this submission and applauds the Committee for seeking the views of patients and the wider community as part of the process of considering new MS treatments for inclusion on the PBS.

1) Health Economic Impact of MS in Australia in 2017. https://msra.org.au/wp-content/uploads/2018/08/health-economic-impact-of-ms-in-australia-in-2017_ms-research-australia_web.pdf
2) The selective sphingosine 1-phosphate receptor modulator BAF312 redirects lymphocyte distribution and has species-specific effects on heart rate. Gergely P, Nuesslein-Hildesheim B, Guerini D, Brinkmann V, Traebert M, Bruns C, Pan S, Gray NS, Hinterding K, Cooke NG, Groenewegen A, Vitaliti A, Sing T, Luttringer O, Yang J, Gardin A, Wang N, Crumb WJ Jr, Saltzman M, Rosenberg M, Wallström E. Br J Pharmacol. 2012 Nov:167(5):1035-47 doi: 10.1111/j.1476-5381.2012.02061.x.
3) Siponimod versus placebo in secondary progressive multiple sclerosis (EXPAND): a double-blind, randomised, phase 3 study. EXPAND Clinical Investigators. Lancet. 2018 Mar 31:391(10127):1263-1273. doi: 10.1016/S0140-6736(18)30475-6.
4) Siponimod for patients with relapsing-remitting multiple sclerosis (BOLD): an adaptive, dose-ranging, randomised, phase 2 study. Selmaj K, Li DK, Hartung HP, Hemmer B, Kappos L, Freedman MS, Stüve O, Rieckmann P, Montalban X, Ziemssen T, Auberson LZ, Pohlmann H, Mercier F, Dahlke F, Wallström E. Lancet Neurol. 2013 Aug: 12(8):756-67. doi: 10.1016/S1474-4422(13)70102-9.