Pharmaceutical Benefits Advisory Committee (PBAC) consultation on Edaravone

Please find an overview on Edaravone and the process of this therapeutic coming to Australia below. On the following page you can find MND Australia's draft answers to the PBAC consultation. We encourage you to read this document and to get involved in the submission process.

Edaravone was discovered and developed for ALS by Mitsubishi Tanabe Pharma Corporation (MTPC) and commercialized in Australia by Teva Pharma Australia Pty Ltd. The MTPC group companies began researching ALS in 2001 through an iterative clinical platform over a 13-year period. In 2015, RADICAVA® was approved for the treatment of ALS in Japan and South Korea. Market authorizations were subsequently granted in U.S.A. (May 2017), Canada (Oct 2018), Switzerland (January 2019), China (July 2019), Indonesia (July 2020), Thailand (April 2021) and Malaysia (December 2021).

Edaravone is known as a free radical scavenger, meaning it extracts the reactive molecules that contribute to oxidative stress, a type of cellular damage implicated in ALS. Neurons are especially sensitive to oxidative stress. By removing them, the therapy should mitigate nerve damage and slow disease progression.

The TGA approved RADICAVA® (edaravone) on the 15th February 2023, for the treatment of amyotrophic lateral sclerosis (ALS) in Australia. RADICAVA® is indicated:

- In adults with a diagnosis of amyotrophic lateral sclerosis who are independent in activities of daily living with normal respiratory function and where treatment is initiated within two years of disease onset.
- Efficacy has not been demonstrated in patients outside of this defined population.

RADICAVA® is administered via intravenous infusion. The recommended dosage of RADICAVA® is 60 mg of edaravone (two ampoules) diluted with 100 mL of 0.9% sodium chloride for infusion and administered as an intravenous infusion over a 60-minute period according to the following schedule2:

- An initial treatment cycle with daily dosing for 14 days, followed by a 14-day drug-free period.
- Subsequent treatment cycles with daily dosing for 10 days out of 14-day periods, followed by 14-day drug-free periods

Teva Pharma Australia has applied to the Pharmaceutical Benefits Advisory Committee (PBAC) to have RADICAVA® listed on the Pharmaceutical Benefit Scheme (PBS) for eligible people with ALS in Australia. They have stated RADICAVA® will be available only after it is listed on the Pharmaceutical Benefits Scheme (PBS).

As part of the application process, the PBAC welcomes input from patients, carers, health professionals, consumer groups or organisations and members of the public on medicines submitted for PBAC consideration. Public consultation is now open for the November 2023 Pharmaceutical Benefits Advisory Committee (PBAC) agenda which will include the consideration of Edaravone (RADICAVA®) for listing on the Pharmaceutical Benefits Scheme (PBS). This therefore provides an avenue for those with lived experience of MND to provide direct input into the process of consideration of Edaravone (RADICAVA®) for listing on the Pharmaceutical Benefits Scheme (PBS).

The PBAC considers these public consultation inputs when considering the clinical and economic evidence presented by the applicant.

The consultation is an online survey process and the consultation portal can be found online here. We encourage you to get involved in this process if you have Lived Experience of MND.

Submissions will be accepted until 20 September 2023.

MND Australia will be providing a submission to the consultation in support of adding Edaravone to the PBS. Below are draft answers that will be included in the submission to the main questions:

3. Please choose a category that best describes the primary reason for your input.

- Consumer group/organisation submission

4. Please outline your experience with the medical/health condition

- MND Australia together with the six State MND Associations and its research arm, MND Research Australia, forms the only national network focused on improving the lives of all Australians living with motor neurone disease (MND) and advancing research to end MND. For over 35 years this national network has helped increase understanding of the disease and advocated for improvements in its treatment and care to ensure people living with MND have the best quality-of-life possible.

5. How is the medical/health condition currently treated?

- MND, also termed Amyotrophic Lateral Sclerosis (ALS), is a degenerative disorder of motor neurones of the central nervous system. MND is one of the most rapidly progressive and devastating neurological disorders, typically resulting in death within 2-3 years. MND currently carries a 1 in 300 lifetime risk with approximately 2000 people currently living with MND in Australia. The prevalence of MND is anticipated to worsen globally, with a 69% increase forecast in the next 25 years.

- At present the only therapeutic available to address progression of the disease in Australia is Riluzole (Rilutek or Teglutik). Riluzole is available on the PBS and is considered frontline therapy for MDN patients. Clinical trials showed Riluzole could slow disease progression and prolong median survival by two to three months. More recently, a 2020 study using real-world data showed that this survival benefit is greater than originally thought with 6-19 months survival benefit seen - https://pubmed.ncbi.nlm.nih.gov/32573277/.

- Other than riluzole, the best practice for caring for patients involves care delivery through a multi-disciplinary clinic involving multiple allied health approaches. This approach helps to reduce the impact of symptoms but does not slow or reverse disease progression, merely making the decline less unbearable.

6. What do you see as the advantages of this proposed medicine, in particular for those with the medical condition and/or family and carers?

There are several compelling reasons to consider including Radicava on the PBS for MND treatment:

- Radicava has been demonstrated to have clinical benefit through clinical trial (https://www.thelancet.com/journals/laneur/article/PIIS1474-4422(17)30115-1/fulltext) and also in the associated extension study (https://onlinelibrary.wiley.com/doi/10.1002/mus.27946).

- Radicava was shown to be safe in the original trial and this was further supported in a real-world data study (https://link.springer.com/article/10.1007/s40268-022-00391-6).

- Radicava has been approved for MND treatment is a number of other countries including the US, Canada and Japan.
- Subsequent real-world data analysis has confirmed the benefit with a risk of death 27% lower in cases than in controls and median overall survival time 29.5 months with edaravone and 23.5 months without (https://www.thelancet.com/journals/eclinm/article/PIIS2589-5370(22)00320-0/fulltext).
- A systematic review and meta-analysis which pooled data from 12 studies involving 2845 participants showed a significant increase in survival rate at 18, 24 and 30 months and no increase in adverse events (https://www.aan.com/MSA/Public/Events/AbstractDetails/54324).
- Patients in Australia have previously accessed edaravone through the Special Access Scheme and have reported minimal side effects and anecdotal reports of it helping their disease.
- Radicava can be taken in conjunction with riluzole so will not compromise current treatment best practice and has the potential to have an additive effect. In the real-world studies cited above, most patients were also receiving riluzole.

7. What do you see as the main disadvantages of this proposed medicine?

There are no significant disadvantages to approving Radicava for reimbursement.

8. Please provide any additional comments you would like the PBAC to consider.

No additional comments