

SUMMARY OF COHERE FINLAND'S RECOMMENDATION CONCERNING THE USE OF ECULIZUMAB IN THE TREATMENT OF NEUROMYELITIS OPTICA SPECTRUM DISORDER (NMOSD)

The Council for Choices in Health Care in Finland (COHERE Finland) adopted the recommendation at its meeting on 5 May 2021.

COHERE Finland recommends that the treatment of relapsing neuromyelitis optica spectrum disorder (NMOSD) using eculizumab in patients who test positive for antibodies against aquaporin 4 be excluded from the services financed from public funds. It has not been possible to reliably demonstrate the effectiveness of eculizumab, and its cost is too high given the uncertainty surrounding the clinical evidence.

Eculizumab is a monoclonal antibody designated as an orphan drug for the treatment of NMOSD. It binds to and inhibits a specific complement protein in the body (C5) that causes inflammation and thus prevents the body's systems from attacking and destroying vulnerable blood cells, kidneys, muscles or eye nerves and spinal cord.

Eculizumab also has other indications. The drug is administered by intravenous infusion once a week initially, followed by infusions at two-week intervals during the maintenance phase.

Current data on the effectiveness of eculizumab in the treatment of NMOSD are mostly based on a single phase-III double-blind study called PREVENT. According to the results, eculizumab effectively reduced relapses, i.e. the occurrence of new neurological symptoms or worsening of previous neurological symptoms, compared to a placebo. Due to the hierarchical structure of statistical testing, the study failed to demonstrate any effects on patients' functional capacity or quality of life. Effects on life expectancy are not known. No comparisons between eculizumab and other currently available treatments have been performed.

The cost of eculizumab therapy in the treatment of NMOSD is approximately EUR 500,000 per year. How long the therapy would continue for individual patients is not yet known, but the therapy is, in theory, a lifelong treatment. Cost-effectiveness has not been analysed. New alternative treatments for NMOSD are expected in the near future.

Neuromyelitis optica spectrum disorder (NMOSD) is an inflammatory disease of the central nervous system predominantly characterised by acute inflammation of the optic nerve and the spinal cord. Permanent impairments include vision loss and reduced mobility. Around 60 patients per year suffer from the condition in Finland. How many of these would be eligible for eculizumab therapy depends on the patient criteria that would apply.

This is a summary of a recommendation adopted by the Council for Choices in Health Care in Finland (COHERE Finland). The actual recommendation and the related background material are available in Finnish on the website of COHERE Finland under [Recommendations](#).

The summary of the recommendation is also available in [Swedish](#) and [Finnish](#) on the website.

The Council for Choices in Health Care in Finland (COHERE Finland) works in conjunction with the Ministry of Social Affairs and Health, and its task is to issue recommendations on services that should be included in the range of public health services. Further information about service choices in healthcare is available on [the COHERE Finland website](#).