

12 December 2025 EMA/385732/2025 EMEA/H/C/006475

Refusal of the marketing authorisation for Blarcamesine Anavex (blarcamesine)

The European Medicines Agency has recommended the refusal of the marketing authorisation for Blarcamesine Anavex, a medicine intended for the treatment of Alzheimer's disease.

The Agency issued its opinion on 11 December 2025. The company that applied for authorisation, Anavex Germany GmbH, may ask for re-examination of the opinion within 15 days of receiving the opinion.

What is Blarcamesine Anavex and what was it intended to be used for?

Blarcamesine Anavex was developed as a medicine for the treatment of adults with Alzheimer's disease and dementia (cognitive impairment).

During the evaluation, the company proposed to restrict the indication to adults with early Alzheimer's disease with mild cognitive impairment (MCI) due to Alzheimer's disease or early-stage mild dementia due to Alzheimer's disease, in people who do not have a mutation (change) in a gene called *SIGMAR1*. *SIGMAR1* is the gene that gives the instructions for making the sigma-1 receptor protein, which is involved in cellular processes that contribute to the health and survival of nerve cells. The medicine was to be used in addition to other treatments.

Blarcamesine Anavex contains the active substance blarcamesine and was to be available as hard capsules.

How does Blarcamesine Anavex work?

In people with early Alzheimer's disease, cognitive impairment is caused by a loss of nerve cells in the brain. The active substance in Blarcamesine Anavex, blarcamesine, activates the sigma-1 receptor protein. By activating the sigma-1 receptor protein, blarcamesine was expected to help nerve cells function properly and protect them from damage due to inflammation. This was expected to slow the loss of cognitive function.



What did the company present to support its application?

The company presented results from a main study involving 462 adults aged between 60 and 85 years with early Alzheimer's disease. Patients in the study were given either Blarcamesine Anavex or placebo (a dummy treatment). The main measures of effectiveness were the reduction in cognitive decline and in the ability to perform daily activities over 48 weeks. Cognitive decline was measured using the Alzheimer's Disease Assessment Scale-Cognitive Subscale (ADAS-Cog13) and the ability to perform daily activities was measured using the Alzheimer's Disease Cooperative Study – Activities of Daily Living Scale (ADCS-ADL). The company also presented results from analyses of data from a subgroup of patients from the main study, namely adults with early Alzheimer's disease who did not have a mutation in the SIGMAR1 gene.

What were the main reasons for refusing the marketing authorisation?

The Agency concluded that the main study failed to demonstrate effectiveness and safety of Blarcamesine Anavex in patients with early Alzheimer's disease who do not have a mutation in the *SIGMAR1* gene.

The main study failed to meet its main objective, which was to show an improvement in both main measures of effectiveness. In addition, the analysis had methodological issues which raised concerns about the validity of the results. Given the failure of the main study and the methodological issues, and based on the analysis of the data for the subgroup of patients without *SIGMAR1* mutations, it was not possible to reach a positive conclusion regarding the effectiveness of the medicine.

In terms of safety, limitations of the safety database and the way safety data were collected did not allow a sufficient characterisation of the safety profile of Blarcamesine Anavex. The Agency noted that a high proportion of patients stopped treatment during the main study, mainly due to side effects related to the central nervous system, which raised concerns about how well the medicine is tolerated.

Concerning quality, the Agency considered that, based on the information provided, it was not possible to rule out the formation of nitrosamine impurities (impurities that could potentially cause cancer).

In reaching its conclusion on the effectiveness and safety of Blarcamesine Anavex, the Agency acknowledged the unmet medical need for treatment of Alzheimer's disease and took into consideration the views of patients and healthcare professionals who shared their needs and experiences related to living with or treating the condition.

Although the company applied for a conditional marketing authorisation during the procedure, the medicine did not meet the criteria for granting this type of authorisation. As a result, the Agency recommended refusing the conditional marketing authorisation.

Does this refusal affect patients in clinical trials or compassionate use programmes?

The company informed the Agency that there are no consequences for patients in clinical trials or in compassionate use programmes with Blarcamesine Anavex.

If you are in a clinical trial or compassionate use programme and need more information about your treatment, speak with your clinical trial doctor.