Mepolizumab in severe asthma: Added benefit not proven

May 2 2016

The monoclonal antibody mepolizumab has been approved since the end of 2015 for the treatment of adults with severe refractory eosinophilic asthma. The German Institute for Quality and Efficiency in Health Care (IQWiG) now examined in an early benefit assessment whether the drug offers an added benefit for patients in comparison with the appropriate comparator therapy.

According to the findings, the specifications of the appropriate comparator therapy were not implemented in the two studies of direct comparisons cited by the drug manufacturer; and the indirect comparison conducted by the manufacturer was unsuitable for the benefit assessment. IQWiG therefore sees no hint of an added benefit of mepolizumab in comparison with the appropriate comparator therapy.

Treatment escalation as comparator therapy

The Federal Joint Committee (G-BA) specified individual treatment escalation as appropriate comparator therapy, which can take three forms: increased administration of medium-dose to high-dose inhaled corticosteroids and long-acting bronchodilators as well as, if applicable, additional oral corticosteroids, the use of tiotropium or additional administration of omalizumab if IgE antibodies play a role in the patient's disease.

Placebo alone not specified as comparator therapy

According to the G-BA, the administration of placebo alone and an unchanged continuation of the ongoing insufficient asthma therapy were not an option as long as treatment escalation was still possible. However, exactly this was the case in the studies of direct comparisons MENSA and SIRIUS, data of which the manufacturer submitted in its dossier: Placebo was administered in the comparator arms of both studies; the required treatment escalation was not conducted. Hence no added benefit could be derived from these study data.

Indirect comparison: preconditions not fulfilled

For the comparison of mepolizumab with the third form of comparator therapy, omalizumab, the manufacturer presented data for an indirect comparison - with placebo as common comparator. The mepolizumab side was covered by MENSA; data from two studies were submitted on the omalizumab side.

However, the study Chavez was below the minimum study duration of 24 weeks. No individual patient data were available to the manufacturer from the study INNOVATE so that it could not determine the patients who fulfilled the preconditions of the relevant therapeutic indication.

Hence no conclusion on greater benefit or harm could be derived from this indirect comparison either. An added benefit of mepolizumab in comparison with the appropriate comparator therapy is therefore not proven.

G-BA decides on the extent of added benefit

The dossier assessment is part of the early benefit assessment according to the Act on the Reform of the Market for Medicinal Products (AMNOG) supervised by the G-BA. After publication of the dossier assessment, the G-BA conducts a commenting procedure and makes a

final decision on the extent of the added benefit.

Provided by Institute for Quality and Efficiency in Health Care