



Biological treatment is approved for severe eosinophilic asthma

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Draft guidance from the National Institute for Health and Care Excellence (NICE) recommends the monoclonal antibody mepolizumab as an option to treat adult patients with severe refractory asthma and raised eosinophil levels.¹

The decision follows an agreement by the manufacturer, GlaxoSmithKline (GSK), to reduce the price of the drug—which has a list price of £840 (€992; \$1046) for a once monthly dose—to a lower, but undisclosed, cost to the NHS.

Mepolizumab is a humanised monoclonal antibody that binds to interleukin 5 (IL 5), preventing the cytokine from binding to its receptor on the surface of eosinophils. IL 5 promotes eosinophil growth and activation, and it is a key signalling molecule for the movement of eosinophils from bone marrow to the lungs.

Asthma is a heterogeneous condition but can involve accumulation of eosinophils in the lungs. Mepolizumab, which is given as a subcutaneous injection (100 mg subcutaneously every four weeks), reduces the number of eosinophils in blood, tissue, and sputum. Clinical trials have shown that it reduces clinically significant exacerbations and the use of oral corticosteroids in people with severe eosinophilic asthma.

After reviewing the available evidence on clinical and cost effectiveness, NICE has recommended mepolizumab as an add-on to optimised standard therapy for treating severe refractory eosinophilic asthma in adults with blood eosinophil counts of 300 cells/microlitre or more in the previous 12 months. Patients must also have had four or more asthma exacerbations

needing systemic corticosteroids in the previous 12 months or have required continuous oral corticosteroids over the previous six months.

“People with severe asthma have had limited treatment options,” said Carole Longson, director of NICE’s centre for health technology evaluation. “Many end up taking oral corticosteroids for prolonged periods, which can cause further complications such as diabetes, high blood pressure, and mood swings.”

Around 100 000 people in England and Wales have severe asthma that cannot be controlled by regular use of currently available medicines. Longson said, “Many of these people will soon have access to an extra treatment option to help them take control of their asthma.”

The new guidance overturns NICE’s previous appraisal recommending that mepolizumab should not be used in the NHS, which was based on evidence presented by GSK suggesting that the drug would be used in less severe cases of asthma and so would not be cost effective.

GSK has now provided further analyses on its use in people with severe asthma and has offered to reduce the price.

1 National Institute for Health and Care Excellence. Final appraisal determination: mepolizumab for treating severe refractory eosinophilic asthma. Dec 2016. www.nice.org.uk.

Figure

