

# NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

## Single Technology Appraisal

### Elotuzumab for previously treated multiple myeloma [ID855]

#### Final scope

#### Remit/appraisal objective

To appraise the clinical and cost effectiveness of elotuzumab within its marketing authorisation for previously treated multiple myeloma.

#### Background

Multiple myeloma is a form of cancer that arises from plasma cells (a type of white blood cell) in the bone marrow. Myeloma cells produce large quantities of an abnormal antibody, known as paraprotein. Unlike normal antibodies, paraprotein has no useful function and lacks the ability to fight infection. Myeloma cells suppress the development of normal blood cells that are responsible for fighting infection (white blood cells), carrying oxygen around the body (red blood cells) and blood clotting (platelets). The term multiple myeloma refers to the presence of more than one site of affected bone at the time of diagnosis. People with multiple myeloma can experience bone pain, bone fractures, tiredness (due to anaemia), infections, hypercalcaemia (too much calcium in the blood) and kidney problems.

In 2012, 4190 people were diagnosed with multiple myeloma in England<sup>1</sup>. Forty three percent of people diagnosed are aged 75 years and over<sup>1</sup>. Multiple myeloma is more common in men than in women and the incidence is also reported to be higher in people of African family origin<sup>1</sup>. The 5-year survival rate for adults with multiple myeloma in England is estimated to be 37%<sup>1</sup>.

Multiple myeloma is an incurable disease. The main aims of therapy are to prolong survival and maintain quality of life by controlling the disease and relieving symptoms. Following initial treatment, subsequent therapy is influenced by previous treatment and response to it, duration of remission, comorbidities and patient preference. NICE technology appraisal guidance 129 recommends bortezomib monotherapy as an option for treating progressive multiple myeloma in people who are at first relapse having received 1 prior therapy and who have undergone, or are unsuitable for bone marrow transplantation. However, in clinical practice bortezomib is often given in combination with dexamethasone. NICE technology appraisal guidance 171 recommends lenalidomide in combination with dexamethasone as a treatment option for people with multiple myeloma who have received at least 2 prior therapies, and is under part-review by NICE for people with multiple myeloma who have received 1 prior treatment with bortezomib. However, lenalidomide is available through the Cancer Drugs Fund for people with multiple myeloma who have received 1 prior therapy.

NICE is developing guidance for panobinostat for treating multiple myeloma after at least 2 prior therapies. NICE has not developed technology appraisal guidance for bortezomib for people with multiple myeloma who have received 2 prior therapies, but it is available through the Cancer Drugs Fund for bortezomib naïve relapsed multiple myeloma.

### The technology

Elotuzumab (brand name unknown, Bristol-Myers Squibb) is an intravenous humanised recombinant monoclonal antibody that kills multiple myeloma cells.

Elotuzumab does not currently have a marketing authorisation in the UK for previously treated multiple myeloma. It has been studied in clinical trials in combination with lenalidomide plus dexamethasone, and in combination with bortezomib plus dexamethasone, in people with multiple myeloma previously treated with 1 to 3 therapies, compared with lenalidomide plus dexamethasone alone, and bortezomib plus dexamethasone alone, respectively.

<b>Intervention(s)</b>	<ul style="list-style-type: none"> <li>• elotuzumab in combination with lenalidomide and dexamethasone</li> <li>• elotuzumab in combination with bortezomib and dexamethasone</li> </ul>
<b>Population(s)</b>	People with multiple myeloma who have received at least 1 therapy
<b>Comparators</b>	<ul style="list-style-type: none"> <li>• bortezomib (with or without dexamethasone)*</li> <li>• lenalidomide in combination with dexamethasone**</li> <li>• panobinostat in combination with bortezomib and dexamethasone (subject to ongoing NICE appraisal)</li> </ul>

\* NICE recommends bortezomib monotherapy as an option for treating multiple myeloma at first relapse. In clinical practice, bortezomib is often given in combination with dexamethasone. NICE has not developed guidance for bortezomib for multiple myeloma after 2 therapies, but it is available through the Cancer Drugs Fund.

\*\*NICE recommends lenalidomide as an option for treating multiple myeloma after 2 prior therapies. It is available through the Cancer Drugs Fund after 1 prior therapy. Please see the 'background' section for further details

<b>Outcomes</b>	<p>The outcome measures to be considered include:</p> <ul style="list-style-type: none"> <li>• progression-free survival</li> <li>• overall survival</li> <li>• response rates</li> <li>• adverse effects of treatment</li> <li>• health-related quality of life.</li> </ul>
<b>Economic analysis</b>	<p>The reference case stipulates that the cost effectiveness of treatments should be expressed in terms of incremental cost per quality-adjusted life year.</p> <p>The reference case stipulates that the time horizon for estimating clinical and cost effectiveness should be sufficiently long to reflect any differences in costs or outcomes between the technologies being compared.</p> <p>Costs will be considered from an NHS and Personal Social Services perspective.</p> <p>The availability of any patient access schemes for the intervention or comparator technologies should be taken into account.</p>
<b>Other considerations</b>	<p>Guidance will only be issued in accordance with the marketing authorisation. Where the wording of the therapeutic indication does not include specific treatment combinations, guidance will be issued only in the context of the evidence that has underpinned the marketing authorisation granted by the regulator.</p> <p>If the evidence allows, subgroup analyses based on number of lines of previous therapy will be considered.</p>
<b>Related NICE recommendations and NICE Pathways</b>	<p>Related Technology Appraisals:</p> <p>Technology Appraisal No. 129, October 2007, 'Bortezomib monotherapy for relapsed multiple myeloma'. Guidance on Static list.</p> <p>Technology Appraisal No. 171, June 2009, 'Lenalidomide for the treatment of multiple myeloma in people who have received at least one prior therapy'. Guidance on Static list.</p> <p>Technology Appraisal No. 338, March 2015, 'Pomalidomide for relapsed and refractory multiple myeloma previously treated with lenalidomide and bortezomib'. Review proposal date March 2018.</p> <p>ID663, Technology Appraisal in Preparation,</p>

	<p>‘Panobinostat for treating multiple myeloma in people who have received at least one prior therapy’. Earliest anticipated date of publication January 2016.</p> <p>ID677, Technology Appraisal in Preparation, ‘Carfilzomib in combination with lenalidomide and dexamethasone for previously treated multiple myeloma’. Earliest anticipated date of publication September 2016.</p> <p>ID667, Suspended Technology Appraisal, ‘Lenalidomide for the treatment of multiple myeloma in people who have received at least one prior therapy with bortezomib (partial review of NICE technology appraisal guidance 171)’.</p> <p>Related Guidelines:</p> <p>Clinical Guideline in Preparation, ‘Myeloma: diagnosis and management of myeloma’. Earliest anticipated date of publication January 2016.</p> <p>Cancer Service Guidance, October 2003, ‘Improving Outcomes in Haematological Cancer’.</p> <p>Related NICE Pathways:</p> <p>NICE pathway: Blood and bone marrow cancers, pathway last updated 24 February 2015</p> <p><a href="http://pathways.nice.org.uk/blood-and-bone-marrow-cancers">http://pathways.nice.org.uk/blood-and-bone-marrow-cancers</a></p>
<p><b>Related National Policy</b></p>	<p>NHS England Manual for prescribed specialised services 2013/2014. Blood and marrow transplantation services (all ages) [section 29, page 78–79]:</p> <p><a href="http://www.england.nhs.uk/wp-content/uploads/2014/01/pss-manual.pdf">http://www.england.nhs.uk/wp-content/uploads/2014/01/pss-manual.pdf</a></p> <p>Department of Health, NHS Outcomes Framework 2014-2015, Nov 2013. Domains 1, 4–5.</p> <p><a href="https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/256456/NHS_outcomes.pdf">https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/256456/NHS_outcomes.pdf</a></p>

## References

1. Cancer Research UK (2014). Multiple myeloma incidence statistics. Accessed April 2015.