NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

Proposed Health Technology Appraisal

Lenalidomide for the treatment of multiple myeloma in people who have received at least one prior therapy with bortezomib (partial review of TA171)

Draft scope

Remit/appraisal objective

To appraise the clinical and cost effectiveness of lenalidomide within its licensed indication for treating multiple myeloma previously treated with bortezomib[1] [2].

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 capacity to fight infection. Myeloma cells supress 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 (because of anaemia), infections, hypercalcaemia (too much calcium in the blood) and kidney problems.

In 2009, 4270 people were diagnosed with multiple myeloma in England and Wales. The condition is most frequently diagnosed in older people, with 71% of people diagnosed aged 65 years and over. Multiple myeloma is more common in men than in women and the incidence is also reported to be higher in people of African and Caribbean family origin. The 5-year survival rate for adults with multiple myeloma in England is estimated to be 37.1%.

Multiple myeloma is an incurable disease. The main aims of therapy are to prolong survival and maintain a good quality of life by controlling the disease and relieving symptoms. For people with multiple myeloma who are not considered suitable for stem-cell transplantation, NICE TA228 recommends thalidomide given with alkylating agents (such as melphalan or cyclophosphamide) and corticosteroids (such as prednisolone or dexamethasone) or, if thalidomide is contraindicated, bortezomib given with alkylating agents and corticosteroids, as first-line treatment options. TA129 recommends bortezomib monotherapy as an option for the treatment of

[1] This is a part-review of TA171 (the rest of the appraisal will be placed on the static list).
[2] The remit for TA171 was: 'To appraise the clinical and cost effectiveness of lenalidomide in combination with dexamethasone for the treatment of multiple myeloma in people who have received at least one prior therapy'.

progressive multiple myeloma in people who are at first relapse having received one prior therapy and who have undergone, or are unsuitable for, bone marrow transplantation (if the response to bortezomib is measured using serum M protein after a maximum of four cycles of treatment, and treatment is continued only in people who have a complete or partial response). TA171 recommends lenalidomide in combination with dexamethasone as an option for the treatment of multiple myeloma only in people who have received two or more prior therapies. First-line treatment of multiple myeloma with bortezomib was not an option during the development of TA171, therefore recommendations on treatment of multiple myeloma with lenalidomide in people who had received first-line line treatment with bortezomib are being developed in the current part-review.

The technology

Lenalidomide (Revlimid, Celgene) is a structural analogue of thalidomide. It has anti-neoplastic, anti-angiogenic, pro-erythropoeitic, and immunomodulatory properties.

Lenalidomide in combination with dexamethasone has a UK marketing authorisation for the treatment of multiple myeloma in adults who have received at least one prior therapy.

Intervention(s)	Lenalidomide in combination with dexamethasone.
Population(s)	Adults with multiple myeloma whose disease has progressed after at least 1 prior treatment with bortezomib.
Comparators	• High dose dexamethasone • Bortezomib monotherapy and bortezomib in combination with high dose dexamethasone • Chemotherapy including regimens based on mephalan, vincristine, cyclophosphamide and doxorubicin
Outcomes	The outcome measures to be considered include: • progression-free survival • overall survival • response rates • adverse effects of treatment • health-related quality of life

Economic analysis	The reference case stipulates that the cost effectiveness of treatments should be expressed in terms of incremental cost per quality-adjusted life year. 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. Costs will be considered from an NHS and Personal Social Services perspective. The availability of any patient access schemes for the intervention or comparator technologies should be taken into account.
Other considerations	Guidance will only be issued in accordance with the marketing authorisation.

Related NICE recommendations and NICE pathways	Related Technology Appraisals: Technology Appraisal No. 129, October 2007, 'Bortezomib monotherapy for relapsed multiple myeloma'. Static list. Technology Appraisal No. 171, June 2009, 'Lenalidomide for the treatment of multiple myeloma in people who have received at least one prior therapy'. Static list. Technology Appraisal No. 228, July 2011, 'Bortezomib and thalidomide for the first-line treatment of multiple myeloma'. Review proposal date July 2014. Suspended Technology Appraisal 'Multiple myeloma - lenalidomide (maintenance, post autologous stem cell transplantation)'. Suspended Technology Appraisal, 'Vorinostat in combination with bortezomib for the treatment of multiple myeloma in people who have received at least one prior therapy'. Suspended Technology Appraisal, 'Lenalidomide for the treatment of newly diagnosed multiple myeloma' Related Guidelines: Clinical Guideline in Preparation, 'Multiple myeloma: diagnosis and management of multiple myeloma'. Earliest anticipated date of publication January 2016. Cancer Service Guidance, October 2003, 'Improving Outcomes in Haematological Cancer'.
Related NHS England policy	National service framework: 'Improving outcomes: a strategy for cancer', Jan 2011. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/135516/dh_123394.pdf.pdf

Questions for consultation

Have the most appropriate comparators for lenalidomide for the treatment of multiple myeloma in people who have received at least one prior therapy with bortezomib been included in the scope? Are the comparators listed routinely used in clinical practice? Specifically:

- Would patients who have already received prior treatment with bortezomib receive an additional line of therapy with bortezomib?

- What alternative chemotherapy regimens would be used following treatment with bortezomib?

Are there any subgroups of people in whom the technology is expected to be more clinically effective and cost effective or other groups that should be examined separately?

NICE is committed to promoting equality of opportunity, eliminating unlawful discrimination and fostering good relations between people with particular protected characteristics and others. Please let us know if you think that the proposed remit and scope may need changing in order to meet these aims. In particular, please tell us if the proposed remit and scope:

- could exclude from full consideration any people protected by the equality legislation who fall within the patient population for which lenalidomide is licensed;

- could lead to recommendations that have a different impact on people protected by the equality legislation than on the wider population, e.g. by making it more difficult in practice for a specific group to access the technology;

- could have any adverse impact on people with a particular disability or disabilities.

Please tell us what evidence should be obtained to enable the Committee to identify and consider such impacts.

Do you consider the technology to be innovative in its potential to make a significant and substantial impact on health-related benefits and how it might improve the way that current need is met (is this a 'step-change' in the management of the condition)?

Do you consider that the use of the technology can result in any potential significant and substantial health-related benefits that are unlikely to be included in the QALY calculation?

Please identify the nature of the data which you understand to be available to enable the Appraisal Committee to take account of these benefits.

NICE intends to appraise this technology through its Single Technology Appraisal (STA) Process. We welcome comments on the appropriateness of appraising this topic through this process. (Information on the Institute's Technology Appraisal processes is available at http://www.nice.org.uk/aboutnice/howwework/devnicetech/technologyappraisalprocessguides/technology_appraisal_process_guides.jsp).