NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

Health Technology Evaluation

Teclistamab for treating relapsed or refractory multiple myeloma after 3 therapies [ID6333]

Draft scope

Draft remit/evaluation objective

To appraise the clinical and cost effectiveness of teclistamab within its marketing authorisation for treating relapsed or refractory multiple myeloma after 3 therapies.

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 (due to anaemia), infections, hypercalcaemia (too much calcium in the blood) and kidney problems.

Approximately 5,000 people are diagnosed with multiple myeloma in England each year (2016 to 2018 data).[1] Five-year prevalence of multiple myeloma in the UK is 26 per 100,000.[2] It is most frequently diagnosed in older people, with 43% of new cases of multiple myeloma in England in people aged 75 years or older.[1] The 5-year survival rate for adults with multiple myeloma in England and Wales is estimated to be 52%.[3] Multiple myeloma is more common in men than in women.[4] The incidence rates are also reported to be lower in the Asian ethnic group, higher in the Black ethnic group, and similar in people of mixed or multiple ethnicity, compared with the White ethnic group, in England (2013-2017 data).[4]

The main aims of therapy are to prolong survival and maintain a good quality of life by controlling the disease and relieving symptoms. If the disease progresses after initial treatment, the choice of subsequent therapy is influenced by previous treatment and response to it, duration of remission, comorbidities and patient preference.

For people who have had at least 2 prior therapies:

- NICE technology appraisal guidance 171 recommends lenalidomide plus dexamethasone as a treatment option for people with multiple myeloma who have had at least 2 prior therapies.

- NICE technology appraisal guidance 380 recommends panobinostat plus bortezomib and dexamethasone as a treatment option for adults who have had at least 2 prior therapies including bortezomib and an immunomodulatory agent.

- NICE technology appraisal guidance 870 recommends ixazomib citrate plus lenalidomide and dexamethasone as a treatment option for adults who have had 2 or 3 previous therapies.

For people who have had at least 3 prior therapies:

- NICE technology appraisal guidance 427 recommends pomalidomide plus low-dose dexamethasone as a treatment option for adults who have had at least 3 previous treatments including both lenalidomide and bortezomib.

- NICE technology appraisal guidance 658 recommends isatuximab plus pomalidomide and dexamethasone for use within the Cancer Drugs Fund as a treatment option for adults who have had at least 3 previous treatments including lenalidomide and a proteosome inhibitor.

- NICE technology appraisal guidance 783 recommends daratumumab monotherapy for use as a treatment option for adults who have had 3 previous treatments including a proteasome inhibitor and an immunomodulator.

The technology

Teclistamab (Tecvayli, Janssen-Cilag) is indicated as a monotherapy for the treatment of adult patients with relapsed and refractory multiple myeloma, who have received at least three prior therapies, including an immunomodulatory agent, a proteasome inhibitor, and an anti-CD38 antibody and have demonstrated disease progression on the last therapy.

Intervention	Teclistamab
Population	People with relapsed or refractory multiple myeloma after at least 3 prior therapies including an immunomodulatory agent, a proteasome inhibitor, and an anti-CD38 antibody
Comparators	• Lenalidomide plus dexamethasone • Panobinostat plus bortezomib and dexamethasone • Pomalidomide plus low-dose dexamethasone • Daratumumab monotherapy • Ixazomib plus lenalidomide and dexamethasone • Cyclophosphamide plus dexamethasone • Belantamab mafodotin (subject to NICE evaluation) • Isatuximab plus pomalidomide and dexamethasone (subject to NICE evaluation) • Elranatamab (subject to NICE evaluation)

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. If the technology is likely to provide similar or greater health benefits at similar or lower cost than technologies recommended in published NICE technology appraisal guidance for the same indication, a cost comparison may be carried out. 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 commercial arrangements for the intervention, comparator and subsequent treatment technologies will be taken into account. The availability and cost of biosimilar and generic products should be taken into account.
Other considerations	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.
Related NICE recommendations	**Related Technology Appraisals:** Ixazomib with lenalidomide and dexamethasone for treating relapsed or refractory multiple myeloma (2023) NICE technology appraisal guidance 870. Daratumumab monotherapy for treating relapsed and refractory multiple myeloma (2022) NICE technology appraisal guidance 783. Isatuximab with pomalidomide and dexamethasone for treating relapsed and refractory multiple myeloma (2020) NICE technology appraisal guidance 658.

	Pomalidomide for multiple myeloma previously treated with lenalidomide and bortezomib (2017) NICE Technology appraisal guidance 427. Panobinostat for treating multiple myeloma after at least 2 previous treatments (2016) NICE Technology appraisal guidance 380. Lenalidomide for the treatment of multiple myeloma in people who have received at least 2 prior therapies (2019) NICE Technology appraisal guidance 171. **Related appraisals in development:** Belantamab mafodotin for treating relapsed or refractory multiple myeloma after 4 or more therapies. NICE technology appraisal guidance [ID2701]. Publication expected August 2023. Selinexor with bortezomib and low-dose dexamethasone for treating relapsed refractory multiple myeloma NICE technology appraisal guidance [ID3797]. Publication date to be confirmed. Ciltacabtagene autoleucel for treating relapsed and lenalidomide-refractory multiple myeloma after 1 to 3 therapies NICE technology appraisal guidance [ID4012]. Publication date to be confirmed. Elranatamab for treating refractory multiple myeloma after 3 standard therapies. NICE technology appraisal guidance [ID4026]. Publication expected February 2024. Isatuximab with pomalidomide and dexamethasone for treating relapsed and refractory multiple myeloma [Review of TA658] NICE technology appraisal guidance [ID4067]. Publication date to be confirmed. Talquetamab for treating relapsed or refractory multiple myeloma after 3 therapies NICE technology appraisal guidance [ID5082]. Publication date to be confirmed. **Related Guidelines:** Myeloma: diagnosis and management (2018) NICE guideline 35. 'Haematological cancers: improving outcomes' (2016). NICE guidance 47. **Related Quality Standards** Haematological cancers (2017) NICE quality standard 150.
Related National Policy	The NHS Long Term Plan, 2019. NHS Long Term Plan NHS England (2018/2019) NHS manual for prescribed specialist services (2018/2019)

	NHS England (2020) Bendamustine for relapsed multiple myeloma (all ages). Clinical Commissioning Policy. Reference: 200604P

Questions for consultation

What treatments are established clinical practice in the NHS for people with relapsed or refractory multiple myeloma after 3 therapies?

Where do you consider teclistamab will fit into the existing care pathway for multiple myeloma?

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

Would teclistamab be a candidate for managed access?

Do you consider that the use of teclistamab can result in any potential 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 committee to take account of these benefits. 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 teclistamab will be 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.

NICE intends to evaluate this technology through its Single Technology Appraisal process. We welcome comments on the appropriateness of appraising this topic through this process. (Information on NICE's health technology evaluation processes is available at https://www.nice.org.uk/about/what-we-do/our-programmes/nice-guidance/nice-technology-appraisal-guidance/changes-to-health-technology-evaluation).

NICE's health technology evaluations: the manual states the methods to be used where a cost comparison case is made.

- Would it be appropriate to use the cost-comparison methodology for this topic?

- Is the new technology likely to be similar in its clinical efficacy and resource use to any of the comparators?

- Is the primary outcome that was measured in the trial or used to drive the model for the comparator(s) still clinically relevant?

- Is there any substantial new evidence for the comparator technology/ies that has not been considered? Are there any important ongoing trials reporting in the next year?

References

1. Cancer Research UK . Myeloma incidence statistics. Accessed 17 October 2022.

2. United Kingdom Fact sheet, International Agency for Research on Cancer. Accessed 17 October 2022.

3. Cancer Research UK. Myeloma survival statistics. Accessed 17 October 2022.

4. Cancer Research UK. Myeloma statistics. Accessed 17 October 2022.