NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

Health Technology Evaluation

Mezigdomide with dexamethasone and carfilzomib for treating relapsed or refractory multiple myeloma after at least 1 line of treatment ID6513

Draft scope

Draft remit/evaluation objective

To appraise the clinical and cost effectiveness of mezigdomide with dexamethasone and carfilzomib within its marketing authorisation for treating relapsed or refractory multiple myeloma after at least 1 line of treatment.

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 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.

In 2023, 5,706 people were diagnosed with multiple myeloma in England. 5-year prevalence in the UK is around 28 per 100,000.[1,2] 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.[3] The estimated 5-year net survival rate in England for adults with multiple myeloma is 55.5% (2016-2020). Multiple myeloma is more common in men than in women.[4] Incidence rates are reported to be lower among people from Asian ethnic groups, higher among people from Black ethnic groups, and similar among people of mixed or multiple ethnicities, compared with White ethnic groups, in England (2013-2017 data).[5]

The main aims of therapy are to prolong survival and maintain a good quality of life by controlling the condition and relieving symptoms. If the condition 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 whose condition is relapsed or refractory after 1 prior therapy, NICE recommends:

- bortezomib monotherapy for people who are at first relapse and who have undergone, or are unsuitable for, bone marrow transplantation (technology appraisal guidance 129), although this is rarely used in clinical practice.
- carfilzomib with dexamethasone for people who have not had bortezomib (technology appraisal guidance 657).
- lenalidomide with dexamethasone (technology appraisal guidance 586) and carfilzomib plus lenalidomide plus dexamethasone (technology appraisal guidance 695) for people who had bortezomib.

- daratumumab with bortezomib and dexamethasone for people who previously had lenalidomide or when lenalidomide is unsuitable as a second-line treatment (technology appraisal guidance 897).

- selinexor with bortezomib and dexamethasone for people whose condition is refractory to both daratumumab and lenalidomide (technology appraisal guidance 974).

- belantamab mafodotin plus pomalidomide and dexamethasone for people who previously had lenalidomide, or when lenalidomide is not tolerated or the condition is refractory to it treatment (technology appraisal guidance 1133).

- belantamab mafodotin plus bortezomib and dexamethasone for people who have only had 1 previous line of therapy (technology appraisal guidance 1149)

For people whose condition is relapsed or refractory after 2 prior therapies, NICE recommends:

- lenalidomide with dexamethasone (technology appraisal guidance 171).

- panobinostat with bortezomib and dexamethasone for people who had bortezomib and an immunomodulatory agent (technology appraisal guidance 380).

- ixazomib with lenalidomide and dexamethasone (technology appraisal guidance 870).

- selinexor with bortezomib and dexamethasone for people whose condition is refractory to lenalidomide (technology appraisal guidance 974).

For people whose condition is relapsed or refractory after 3 prior therapies, NICE recommends:

- lenalidomide with dexamethasone (technology appraisal guidance 171).

- panobinostat with bortezomib and dexamethasone for people who had bortezomib and an immunomodulatory agent (technology appraisal guidance 380).

- pomalidomide with low-dose dexamethasone for people who had both lenalidomide and bortezomib (technology appraisal guidance 427).

- isatuximab with pomalidomide and dexamethasone for use within the Cancer Drugs Fund for people who had both lenalidomide and a proteasome inhibitor (technology appraisal guidance 658).

- daratumumab monotherapy for people who had a proteasome inhibitor and an immunomodulator (technology appraisal guidance 783).

- ixazomib with lenalidomide and dexamethasone (technology appraisal guidance 870).

- teclistamab for people who had an immunomodulatory drug, a proteasome inhibitor and an anti-CD38 antibody (see technology appraisal guidance 1015).

- elranatamab for people who had an immunomodulatory drug, a proteasome inhibitor and an anti-CD38 antibody, for use with managed access (see technology appraisal guidance 1023).

- talquetamab for people who had an immunomodulatory drug, a proteasome inhibitor, and an anti-CD38 antibody (see technology appraisal guidance 1114).

For people whose condition is relapsed or refractory after 4 or more prior therapies, NICE recommends:

- lenalidomide with dexamethasone (technology appraisal guidance 171).

- panobinostat with bortezomib and dexamethasone for people who had bortezomib and an immunomodulatory agent (technology appraisal guidance 380).

- pomalidomide with low-dose dexamethasone for people who had both lenalidomide and bortezomib (technology appraisal guidance 427).

- selinexor with dexamethasone for people whose condition is refractory to at least 2 proteasome inhibitors, 2 immunomodulatory agents and an anti-CD38 monoclonal antibody (technology appraisal guidance 970).

- teclistamab for people who had an an immunomodulatory drug, a proteasome inhibitor and an anti-CD38 antibody (see technology appraisal guidance 1015).

- Elranatamab, for use with managed access, for people who had an immunomodulatory drug, a proteasome inhibitor and an anti-CD38 antibody (see technology appraisal guidance 1023).

- talquetamab for people who have had an immunomodulatory drug, a proteasome inhibitor, and an anti-CD38 antibody (see technology appraisal guidance 1114).

The technology

Mezigdomide (brand name unknown, Bristol Myers Squibb), does not currently have a marketing authorisation in the UK for relapsed or refractory multiple myeloma after 1 or more treatments. Mezigdomide has been studied in combination with dexamethasone and carfilzomib compared to carfilzomib plus dexamethasone in adults with relapsed or refractory multiple myeloma who have had at least 1 prior line of treatment including a lenalidomide-containing regimen.

Intervention(s)	Mezigdomide with dexamethasone and carfilzomib

Population(s)	People with relapsed or refractory multiple myeloma who have had at least 1 prior line of treatment
Comparators	For people who have had 1 prior therapy: • bortezomib monotherapy • carfilzomib plus dexamethasone • daratumumab plus bortezomib and dexamethasone • selinexor plus bortezomib and dexamethasone • belantamab mafodotin plus pomalidomide and dexamethasone • belantamab mafodotin with bortezomib and dexamethasone • lenalidomide with dexamethasone • carfilzomib plus lenalidomide plus dexamethasone • ciltacabtagene autoleucel (subject to NICE evaluation) For people who have had 2 prior therapies: • lenalidomide plus dexamethasone • ixazomib plus lenalidomide and dexamethasone • panobinostat plus bortezomib and dexamethasone • selinexor plus bortezomib and dexamethasone • ciltacabtagene autoleucel (subject to NICE evaluation) For people who have had 3 prior therapies: • lenalidomide plus dexamethasone • ixazomib plus lenalidomide and dexamethasone • panobinostat plus bortezomib and dexamethasone • pomalidomide plus low-dose dexamethasone • daratumumab monotherapy • teclistamab • talquetamab • elranatamab (subject to NICE evaluation) • isatuximab plus pomalidomide and dexamethasone (subject to NICE evaluation) • ciltacabtagene autoleucel (subject to NICE evaluation) • linvoseltamab (subject to NICE evaluation) For people who have had 4 or more prior therapies: • lenalidomide plus dexamethasone • panobinostat plus bortezomib and dexamethasone

	• pomalidomide plus low-dose dexamethasone • selinexor plus dexamethasone • teclistamab • talquetamab • elranatamab (subject to NICE evaluation) • isatuximab plus pomalidomide and dexamethasone (subject to NICE evaluation) • linvoseltamab (subject to NICE evaluation) For people who have had any number of prior therapies: • conventional chemotherapy regimens • best supportive care
Outcomes	The outcome measures to be considered include: • overall survival • progression-free 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 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**

	Belantamab mafodotin with bortezomib and dexamethasone for treating relapsed or refractory multiple myeloma after 1 or more treatments (2026) NICE technology appraisal guidance 1149. Belantamab mafodotin with pomalidomide and dexamethasone for previously treated multiple myeloma (2026) NICE technology appraisal guidance 1133. Talquetamab for treating relapsed and refractory multiple myeloma after 3 or more treatments (2025) NICE technology appraisal guidance 1114. Elranatamab for treating relapsed and refractory multiple myeloma after 3 or more treatments (2024) NICE technology appraisal guidance 1023. Teclistamab for treating relapsed and refractory multiple myeloma after 3 or more treatments (2024) NICE technology appraisal guidance 1015. Selinexor with bortezomib and dexamethasone for previously treated multiple myeloma (2024) NICE technology appraisal guidance 974. Selinexor with dexamethasone for treating relapsed or refractory multiple myeloma after 4 or more treatments (2024) NICE technology appraisal guidance 970. . Daratumumab with bortezomib and dexamethasone for previously treated multiple myeloma (2023) NICE technology appraisal guidance 897. 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. Carfilzomib with dexamethasone and lenalidomide for previously treated multiple myeloma (2021) NICE technology appraisal guidance 695. Review date not stated. Carfilzomib for previously treated multiple myeloma (2020) NICE technology appraisal guidance 657. Isatuximab with pomalidomide and dexamethasone for treating relapsed and refractory multiple myeloma (2020) NICE technology appraisal guidance 658. Lenalidomide plus dexamethasone for multiple myeloma after 1 treatment with bortezomib (2019) NICE technology appraisal guidance 586.

	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 (2009, updated 2019) NICE technology appraisal guidance 171. Bortezomib monotherapy for relapsed multiple myeloma (2007) NICE technology appraisal guidance 129. **Related appraisals in development** Isatuximab with pomalidomide and dexamethasone for treating relapsed and refractory multiple myeloma [review of TA658] NICE technology appraisal guidance [ID4067] Publication expected TBC Ciltacabtagene autoleucel for treating relapsed and lenalidomide-refractory multiple myeloma after 1 to 3 therapies [ID4012] NICE technology appraisal guidance [ID4012]. Publication expected TBC Elranatamab for treating relapsed and refractory multiple myeloma after 3 or more treatments (managed access review of TA1023) NICE technology appraisal guidance [ID6653]. Publication expected TBC Linvoseltamab for treating relapsed or refractory multiple myeloma after 3 or more treatments NICE technology appraisal guidance [ID6609]. Publication expected TBC. **Related NICE Guidelines** Myeloma: diagnosis and management (2016; last updated October 2018) NICE guideline NG35 **Related Quality Standards** Haematological cancers (2017) NICE quality standard 150

Questions for consultation

Where do you consider mezigdomide with dexamethasone and carfilzomib will fit into the existing care pathway for relapsed or refractory multiple myeloma?

Please select from the following, will mezigdomide with dexamethasone and carfilzomib be:

A. Prescribed in primary care with routine follow-up in primary care
B. Prescribed in secondary care with routine follow-up in primary care
C. Prescribed in secondary care with routine follow-up in secondary care

D. Other (please give details):

For comparators and subsequent treatments, please detail if the setting for prescribing and routine follow-up differs from the intervention.

Would mezigdomide with dexamethasone and carfilzomib be a candidate for managed access?

Do you consider that the use of mezigdomide with dexamethasone and carfilzomib 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.

Please indicate if any of the treatments in the scope are used in NHS practice differently than advised in their Summary of Product Characteristics. For example, if the dose or dosing schedule for a treatment is different in clinical practice. If so, please indicate the reasons for different usage of the treatment(s) in NHS practice. If stakeholders consider this a relevant issue, please provide references for data on the efficacy of any treatments in the pathway used differently than advised in the Summary of Product Characteristics.

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 mezigdomide with dexamethasone and carfilzomib 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. (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).

Would a cost comparison route be appropriate for this topic? Please provide 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).

Technologies can be evaluated through the cost-comparison process if they are expected to provide similar or greater health benefits, at a similar or lower cost,

compared with technologies that have been previously recommended (as an option) in published NICE guidance for the same indication. Companies can propose cost-comparison topics to NICE at any stage during topic selection and scoping. NICE will route technologies for evaluation through the cost-comparison process if it is agreed during scoping that the process is an appropriate route to establish the clinical and cost effectiveness of the technology.

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

- Is the technology likely to be similar in its clinical effectiveness and resource use to any of the comparators? Or in what way is it different to the comparators?
- Will the intervention be used in the same place in the treatment pathway as the comparator(s)? Have there been any major changes to the treatment pathway recently? If so, please describe.
- Will the intervention be used to treat the same population as the comparator(s)?
- Overall is the technology likely to offer similar or improved health benefits compared with the comparators?
- Would it be appropriate to use the cost-comparison methodology for this topic?

References

1. NHS Digital (2025) Cancer registration statistics, England, 2023. Accessed April 2026.
2. World Health Organisation International Agency for Research on Cancer (2021) United Kingdom population fact sheet. Accessed April 2026.
3. Cancer Research UK. Myeloma incidence statistics. Accessed April 2026.
4. NHS Digital (2023) Cancer Survival in England, cancers diagnosed 2016 to 2020, followed up to 2021. Accessed April 2026.
5. Cancer Research UK. Myeloma statistics . Accessed April 2026.