NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

Final appraisal document

Lenalidomide plus dexamethasone for multiple myeloma after 1 treatment with bortezomib

1 Recommendations

1.1 Lenalidomide plus dexamethasone is recommended as an option for treating multiple myeloma in adults only if:

- they have had only 1 previous therapy, which included bortezomib, and
- the company provides it according to the commercial arrangement.

1.2 This recommendation is not intended to affect treatment with lenalidomide that was started in the NHS before this guidance was published. People having treatment outside this recommendation may continue without change to the funding arrangements in place for them before this guidance was published, until they and their NHS clinician consider it appropriate to stop.

Why the committee made these recommendations

Currently, multiple myeloma is first treated with thalidomide-based therapy but, if a person can't have thalidomide, bortezomib-based therapy can be given. For people who have had bortezomib as a first treatment, the second treatment would be with cytotoxic chemotherapy. However, clinical evidence shows that lenalidomide plus dexamethasone is more effective than cytotoxic chemotherapy.

The most plausible cost-effectiveness estimate for lenalidomide plus dexamethasone may be above the range that NICE normally considers to be a cost-effective use of

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NHS resources. However, lenalidomide has been recommended for use as a first treatment (for which it is cost effective). Therefore, the need for lenalidomide as a second treatment will likely decrease because people are more likely to have it as a first treatment in the future. However, some people who are currently taking bortezomib as a first treatment will value access to lenalidomide as an effective next treatment option. Given that NICE already recommends lenalidomide as both a first and third treatment for multiple myeloma, it is appropriate to recommend lenalidomide for this small patient group as a second treatment.

2 Information about lenalidomide

Marketing authorisation	Lenalidomide (Revlimid; Celgene) in combination with dexamethasone has a marketing authorisation for treating 'multiple myeloma in adult patients who have received at least one prior therapy.' It also has a marketing authorisation for 'previously untreated multiple myeloma in people who are not eligible for transplant'.
Dosage in the marketing authorisation	The recommended starting dosage is 25 mg orally once daily on days 1 to 21 of repeated 28-day cycles.
Price	Lenalidomide is available as a 21-capsule pack. The cost per pack (excluding VAT; British National Formulary online, accessed April 2019) varies according to capsule size: £3,426.00 (2.5 mg), £3,570.00 (5 mg), £3,675.00 (7.5 mg) , £3,780.00 (10 mg), £3,969.00 (15 mg), £4,168.50 (20 mg) and £4,368.00 (25 mg). The company has a commercial arrangement (simple discount patient access scheme). This makes lenalidomide available to the NHS with a discount. The size of the discount is commercial in confidence. It is the company's responsibility to let relevant NHS organisations know details of the discount.

3 Committee discussion

This is a partial review of NICE's technology appraisal guidance on lenalidomide for the treatment of multiple myeloma in people who have received at least one prior therapy. The appraisal committee (section 6) considered evidence from a number of sources, including a review by the

evidence review group (ERG). See the committee papers for full details of the evidence.

Pathway, population and comparators

The relevant population is people who cannot have a stem cell transplant or first-line thalidomide, and who have already had bortezomib

3.1 The committee acknowledged that the treatment pathway differs depending on whether the person can have a stem cell transplant. The committee understood that the population relevant to this appraisal includes people for whom neither a stem cell transplant nor thalidomide is suitable. The committee discussed who would have lenalidomide plus dexamethasone after first relapse. It recognised that although lenalidomide and thalidomide are structurally similar, some people who cannot have thalidomide can have lenalidomide. The committee noted that people who could not have thalidomide first line would have a bortezomib-based therapy (for example, bortezomib plus melphalan and prednisolone), as recommended in NICE's technology appraisal guidance on bortezomib. It agreed that the relevant population includes people who cannot have a stem cell transplant or first-line thalidomide, and who instead will have had at least 1 previous treatment with a bortezomib-based therapy.

The only relevant comparator is cytotoxic chemotherapy

3.2 In the final scope issued by NICE, potential comparators were bortezomib-based therapies, cytotoxic chemotherapy (such as melphalan) and bendamustine. The committee discussed each of these in turn.

- The committee had previously heard from a clinical expert that, at second line, some patients are offered bortezomib plus an alkylating agent and corticosteroids. However, the committee understood that, since 2015, retreatment with bortezomib has no longer been available through the Cancer Drugs Fund. The committee also heard that NHS

England had advised NICE that it would no longer commission retreating multiple myeloma with a bortezomib-based therapy. The committee concluded that a bortezomib-based therapy was not an appropriate comparator in this appraisal.

- The clinical experts explained that cytotoxic chemotherapy with an alkylating agent is a treatment option after bortezomib-based first-line therapies, with an alternative alkylating agent taken after disease progression on bortezomib-based therapy. The committee concluded that cytotoxic therapy was a relevant comparator because it is used in clinical practice in the absence of lenalidomide plus dexamethasone.
- The clinical experts stated that they bendamustine is usually offered later in the treatment pathway, as a fourth- or fifth-line treatment. The committee concluded that bendamustine was not an appropriate comparator.

The committee considered whether dexamethasone alone (the comparator in the lenalidomide trials, see section 3.4) was an appropriate comparator. The company explained that patients often have corticosteroids as part of their first treatment, and that clinicians do not usually offer dexamethasone alone as a second-line treatment. Because dexamethasone alone is not used in the NHS, the committee concluded that it was not a relevant comparator.

Clinical and patient perspective

There is an unmet need for an effective second-line treatment for multiple myeloma after bortezomib

3.3 Comments received during consultation suggested an unmet need for an effective treatment after first-line bortezomib-based therapy. The committee noted that, if lenalidomide plus dexamethasone were not available for use after only 1 previous treatment, people would need to have cytotoxic chemotherapy before being eligible for treatments such as

lenalidomide and panobinostat and, later in the treatment pathway, pomalidomide and daratumumab. The committee was aware that NICE is currently appraising lenalidomide plus dexamethasone as a first-line treatment. It also noted other comments received during consultation that cytotoxic chemotherapy may have limited effectiveness at this point in the treatment pathway. It also heard from a patient expert that using lenalidomide plus dexamethasone earlier in the treatment pathway may provide more benefit than using it later. The committee recognised that patients value oral treatments such as lenalidomide plus dexamethasone because some people find it difficult to travel to hospital for repeated treatment with intravenous or subcutaneous therapies. It acknowledged that many patients' preferred treatment with lenalidomide plus dexamethasone. The committee concluded that there is an unmet need for a more effective second-line treatment for multiple myeloma after bortezomib, and that patients and clinicians would value lenalidomide plus dexamethasone as an option early in the treatment pathway for multiple myeloma.

Clinical effectiveness

There is no clinical trial evidence directly comparing lenalidomide plus dexamethasone with cytotoxic chemotherapy

3.4 The company did not identify any randomised controlled trials that compared lenalidomide plus dexamethasone with cytotoxic chemotherapy (the only relevant comparator). For lenalidomide plus dexamethasone, the company presented a pooled analysis of 2 randomised controlled trials: MM-009 and MM-010 (see table 1). For cytotoxic chemotherapy (melphalan plus prednisolone), the company presented data from a small single-arm trial (Petrucci et al., 1989).

Table 1 Summary of clinical studies

Study characteristics	Pooled MM-009 and MM-010 trials		Petrucci et al. (1989)
Study design	Multinational randomised controlled trial		Single-arm trial
Patients in the trial	About 35% of patients had 1 prior therapy and about 65% had had at least 2 prior therapies		Patients had disease that had relapsed or was refractory to chemotherapy. The number of prior therapies was not reported.
Sample size	353	351	34
Intervention	Lenalidomide plus dexamethasone	Placebo plus dexamethasone	Melphalan plus prednisolone
Median progression-free survival (months)	11.1	4.6	Not reported
Median overall survival (months)	38.0	31.6	8.0

Lenalidomide plus dexamethasone is more effective than dexamethasone alone in the relevant population

3.5 The committee agreed that MM-009 and MM-010 had shown that lenalidomide plus dexamethasone was more effective than placebo plus dexamethasone for extending progression-free and overall survival (see table 1). However, it recognised that dexamethasone alone was not a relevant comparator in this appraisal (see section 3.2). The committee also recognised that the population in the trials did not match the population for this appraisal because:

- only 2 out of 353 patients in the pooled lenalidomide group had had 1 previous bortezomib-based therapy
- the trials' inclusion criteria did not specify that thalidomide treatment was inappropriate, contraindicated or could not be tolerated
- the trials' patients were younger than the multiple myeloma population addressed in this appraisal

- the trials included a high proportion of patients who had had 2 or more previous therapies.

The clinical experts explained that, based on their experience, the results from MM-009 and MM-010 were generalisable to the population of interest despite the differences. The committee concluded that, for treating multiple myeloma in the population relevant to this appraisal, lenalidomide plus dexamethasone was more effective than dexamethasone alone.

Lenalidomide plus dexamethasone is more effective than chemotherapy

3.6 The committee was aware that the company estimated the effectiveness of cytotoxic chemotherapy using data from a small single-arm trial without a control group. It noted that a crude comparison suggested that median survival times were substantially longer for patients having lenalidomide than for patients having cytotoxic chemotherapy (see table 1). The committee had concerns about confounding, and it was aware that this non-randomised comparison was at high risk of bias. It was also concerned that it was unclear how patients were chosen for the Petrucci et al. (1989) trial. The clinical experts explained that, despite the lack of robust comparative evidence, in their experience lenalidomide plus dexamethasone was more effective than cytotoxic chemotherapy. The committee agreed that the evidence was very uncertain, but noted the size of effect in favour of lenalidomide plus dexamethasone compared with melphalan shown by the difference in survival times, and the opinion of several clinical experts. The committee therefore concluded that lenalidomide plus dexamethasone was likely to be more effective than cytotoxic chemotherapy for treating multiple myeloma in the population relevant to this appraisal.

The company's modelling: overview

The committee considered the company's multistate modelling from February and June 2016

3.7 This section describes the committee's consideration of the company's multistate modelling submitted in February and June 2016, rather than the modelling submitted before this. The company used 'multistate' modelling in the 2016 modelling because it meant that the survival curves for progression-free and overall survival did not cross (this had been a problem in previous versions of the model). The committee's discussion of previous model versions (that is, before February 2016) is described in the second appraisal consultation document.

- The February 2016 modelling compared lenalidomide plus dexamethasone with cytotoxic chemotherapy (melphalan) using a crude indirect comparison, based on the Petrucci et al. (1989) trial of melphalan (see sections 3.9 to 3.13).
- The June 2016 modelling used direct trial data from MM-009 and MM-010 and assumed that melphalan had the same clinical effectiveness as dexamethasone (see sections 3.14 to 3.16).

The committee used the June 2016 model for decision making.

The company's approach to modelling survival with lenalidomide plus dexamethasone is appropriate

3.8 In both 2016 models, the company chose a multistate-modelling approach to calculate the probability of moving between model states. The committee noted that the lenalidomide trials had a maximum follow up of 3.6 years and heard that the company no longer collected data from MM-009 and MM-010. It agreed that there was uncertainty about outcomes after the trial follow up in the extrapolated portion of the survival curves, which covered a further 20 years. The clinical experts explained that the company's predicted survival times with lenalidomide plus

dexamethasone seemed reasonable. The committee concluded that, although there was some uncertainty about long-term outcomes with lenalidomide plus dexamethasone, the company's approach to modelling survival in both 2016 models was appropriate.

The company's modelling: February 2016

The crude indirect comparison is not suitable for decision making

3.9 The company's model from February 2016 used observational data from Petrucci et al. (1989) to estimate the effectiveness of melphalan. The committee agreed that there were 4 fundamental problems with the crude indirect comparison:

- it was at high risk of bias and the statistical techniques may not have been technically correct (see sections 3.10, 3.11 and 3.13)
- the melphalan data came from only 34 patients (see section 3.4)
- the model predictions lacked external validity (see section 3.12).

The committee concluded that, taking all these issues into account, the crude indirect comparison was not suitable for decision making.

There is a high risk of bias and the statistical methods are incorrect

3.10 In its base-case assumptions, the company calculated a crude hazard ratio for survival with lenalidomide relative to melphalan by taking the ratio of median survival times with melphalan (estimated from Petrucci et al., 1989) compared with lenalidomide (estimated from MM-009 and MM-010). It then applied this hazard ratio to the modelled survival for patients having lenalidomide to predict progression-free and overall survival with melphalan. The committee had 2 major concerns about this approach to modelling:

- The model was based on a crude indirect comparison using non-randomised data, meaning that there was a high risk of bias (see section 3.6).
- Calculating hazard ratios using medians is only valid when using an exponential distribution to extrapolate outcomes. The model did not use a single exponential distribution; instead, it used a multistate model that was similar to several exponential distributions fitted to different time periods. In its response to the committee's request for additional evidence, the company accepted that this method had limitations, and explained that a single exponential curve did not fit the data well for lenalidomide.

The committee concluded that the company's model based on a crude indirect comparison was at high risk of bias and relied on statistical techniques that are not technically correct.

The company's adjustment for subsequent treatments gives illogical results

3.11 The committee considered the company's approach to modelling subsequent treatments (that is, third- and fourth-line therapies) after relapsing on second-line treatment. The committee agreed that it was important to consider subsequent treatments and to include both their costs and effectiveness in the model. It noted that the company's model assumed that all patients having melphalan would go on to have third-line lenalidomide; for this reason, the company extended the survival times for melphalan patients to reflect the benefit of third-line treatment. The committee expressed concerns that including third-line lenalidomide in the comparator arm had produced implausible results. The company agreed that the model produced illogical results, but only when using bortezomib as a comparator, and said that this was not the case for the comparison with melphalan. In contrast, the ERG advised that the results for retreatment with bortezomib (even though the committee no longer consider it a comparator) suggested that the company's method for

adjusting for subsequent treatments was unsuitable and should not be used. The committee concluded that the company's model based on a crude indirect comparison was further limited because the adjustment for subsequent treatments gave illogical results.

The February 2016 model lacks external validity

3.12 The committee had further concerns about the external validity of the model. This was because the model predicted a mean survival benefit of 34.2 months (2.7 years) for lenalidomide plus dexamethasone compared with melphalan, whereas MM-009 and MM-010 showed a median survival benefit of only 6.4 months for lenalidomide plus dexamethasone compared with dexamethasone alone. The committee was concerned that these results were not plausible because, based on clinical advice, it would be expected that the difference in survival compared with melphalan would be less than the survival benefit of lenalidomide plus dexamethasone compared with dexamethasone alone (see section 3.6). To explore this issue further, the committee asked the company to use its model to predict survival times with dexamethasone alone. Although dexamethasone was not a comparator, the committee used this analysis to assess the external validity of the model. The company's model predicted that the mean survival time for patients having dexamethasone (informed by MM-009 and MM-010) was 4.9 years, compared with only 3.2 years with melphalan (informed by Petrucci et al., 1989). In this analysis, the company assumed that only 48% of patients on dexamethasone had third-line lenalidomide (informed by MM-009 and MM-010), but that all patients on melphalan had third-line lenalidomide, which was expected to increase survival times. The committee agreed that these results were not plausible; based on clinical advice, it expected survival times with melphalan to be similar to or better than with dexamethasone, whereas these results showed the opposite effect. The committee concluded that the company's model based on a crude indirect comparison lacked external validity.

The February 2016 model implies that treatment benefit with lenalidomide continues after stopping treatment

3.13 The committee discussed the long-term survival benefit of lenalidomide plus dexamethasone compared with melphalan in the company's model based on a crude indirect comparison. It noted that the company applied the hazard ratios throughout the model, which implied that the relative survival benefit of lenalidomide continued after patients stopped treatment. The committee was concerned that there was no evidence of an ongoing survival benefit after patients stopped treatment. The committee was aware of scenarios from the company and the ERG that explored different assumptions about long-term survival. The committee agreed this was an additional uncertainty associated with this modelling approach.

The company's modelling: June 2016

The June 2016 model has limitations but assuming equivalence between melphalan and dexamethasone is preferable to the February 2016 model

3.14 In June 2016, the company submitted an alternative approach. This used the same model structure but assumed that melphalan had the same clinical effectiveness as dexamethasone. In the analyses assuming equivalence of melphalan to dexamethasone, the company used data from the dexamethasone group of MM-009 and MM-010 to predict clinical outcomes with melphalan. The company, ERG and committee agreed that this approach to modelling offered several advantages over the previous approach using a crude indirect comparison. Specifically, the analyses assuming equivalence:

- used a large, randomised data set; this meant the comparison was at low risk of bias
- captured the effect of third-line lenalidomide in the melphalan arm because 48% of patients in the dexamethasone group had subsequent lenalidomide in MM-009 and MM-010; this meant it was not necessary

to adjust the comparator arm to reflect the benefit of third-line lenalidomide

- did not need hazard ratios to be calculated using median survival times because patient-level data for both arms of the model were available from MM-009 and MM-010.

The ERG noted that it did not have access to the Kaplan–Meier data for patients having second-line dexamethasone in MM-009 and MM-010. So, it was unable to assess whether the model predictions were a good fit to the mortality data from the MM-009 and MM-010 trials. The committee agreed that this added uncertainty to the analysis. While acknowledging this shortcoming, the committee concluded that the analysis assuming equivalence was preferable to the previous approach based on a crude indirect comparison.

The June 2016 model may underestimate the ICER for lenalidomide plus dexamethasone compared with melphalan

3.15 The company stated that the assumption of equivalence was supported by a randomised controlled trial comparing 4 treatments, including melphalan plus prednisolone and including dexamethasone in patients who had not had previous treatment (Facon et al., 2006). The trial showed no difference in overall survival (the primary endpoint) between dexamethasone and melphalan. The committee was not convinced that melphalan had the same clinical effectiveness as dexamethasone because Facon et al. showed that progression-free survival was longer with melphalan. It was also aware that Facon et al. did not recruit enough patients, based on the sample size calculations, to detect a difference in survival. It also noted that clinical opinion suggested that melphalan might be more effective, in which case the analysis assuming equivalence would be biased in favour of lenalidomide plus dexamethasone. The committee concluded that the analysis assuming equivalence may have

underestimated the incremental cost-effectiveness ratio (ICER) for lenalidomide plus dexamethasone compared with melphalan.

There is uncertainty about the modelling of progression-free survival, but it has a modest effect on the ICER

3.16 The ERG observed that, in the modelling of progression-free survival with dexamethasone (used as a proxy for melphalan), the company's extrapolation had a 'long tail'. This meant that some patients survived for several years without their disease progressing. The ERG advised that this extrapolation was implausible. Its analyses used the company's progression-free survival curve for the first 1.5 years but, after that time, the ERG chose an exponential distribution. The committee found it difficult to identify a preferred extrapolation curve because it did not have access to the Kaplan–Meier curves from the trial that showed the number of patients at risk. Without this information, its best estimate was that the true curve was likely to be somewhere between the company's and ERG's approaches. The committee concluded that the ERG's approach was reasonable, but also noted that the cost-effectiveness results were not very sensitive to the choice of curve for progression-free survival.

Utility values

The utility values in both models are uncertain because they are based on limited evidence

3.17 The committee discussed the company's choice of utility values. It noted that the company took EQ-5D utility values from a model by van Agthoven et al. (2004). The original source of these utility values was a 2002 PhD thesis which, to the committee's knowledge, had not been published in a peer-reviewed journal when discussed at the committee's first meeting. The committee also noted that the utility values were derived from a population younger than the population in this appraisal, and the values were higher than the average population of the same age. In addition, the company took the utility decrements for adverse events from several

different sources that used different methods, were from other countries and included people with different types of cancer. The committee concluded that there was a limited evidence base to support the utility values and this added to the uncertainty in the model.

The most plausible ICER

The ICER for lenalidomide plus dexamethasone compared with melphalan may be higher than £30,000 per QALY gained

3.18 The committee preferred an analysis that included:

- using data from the dexamethasone arm of the MM-009 and MM-010 trials as a proxy for the clinical effectiveness of melphalan (see section 3.14)
- a correction of an error in the model identified by the ERG and agreed by the company.

The company's ICER was between £20,000 and £30,000 per quality adjusted life year (QALY) gained. The committee was aware that this ICER included the new, simple-discount PAS in the intervention arm and the existing complex PAS (cost capped after 26 cycles) in the comparator arm to reflect the assumption that the new PAS would take effect only if NICE produces positive guidance. However, the committee was aware that because NHS England had concerns about the operation of the complex PAS, it had renegotiated this scheme with the company. Therefore, the committee considered that there was merit in considering ICERs with the simple-discount PAS applied in both the intervention and comparator arms. The company's ICER corresponding with this scenario exceeded £30,000 per QALY. The committee took into account the ERG's different estimate of progression-free survival with dexamethasone (see section 3.16), noting that this resulted in a broadly similar ICER to the company's. The committee was aware that both the company's and ERG's analyses still assumed that melphalan had the same clinical

effectiveness as dexamethasone, and the committee agreed that melphalan was likely to be more effective than dexamethasone. This meant that the ICERs were underestimated (see section 3.15). Therefore, the committee considered that the most plausible ICER for lenalidomide plus dexamethasone compared with melphalan was higher than the company's and ERG's ICERs, although how much higher was uncertain. It concluded that the most plausible ICER may be higher than £30,000 per QALY gained.

Innovation

Lenalidomide is not a step change in treatment and most benefits are included in the QALY calculations

3.19 The committee discussed whether lenalidomide could be defined as a step change in treatment, and whether it offered health-related benefits not captured in the modelling. The committee did not consider lenalidomide a step change in treatment because it is already offered to patients with myeloma at a later stage of the disease. However, it agreed that lenalidomide would be convenient as an oral treatment, and could save time and resources for people with multiple myeloma. It concluded that this benefit may not have been captured in the QALY calculations, but it was unlikely to alter the committee's conclusions on the cost effectiveness of lenalidomide given the high ICER.

End-of-life considerations

Lenalidomide does not meet the end-of-life criteria

3.20 The committee considered whether lenalidomide meets the end-of-life criteria for people with multiple myeloma who have had 1 previous treatment including bortezomib, and for whom thalidomide and a stem cell transplant are not suitable. It was aware that the company had not presented data to support considering lenalidomide as an end-of-life therapy, and that the company did not consider that lenalidomide met the

end-of-life criteria for this population. The committee noted that the model predicted that patients in the comparator arms lived longer than 24 months, and therefore concluded that lenalidomide in this indication did not meet the criterion for life expectancy. Because it did not meet this criterion, the committee agreed that it did not need to discuss the end-of-life criteria further.

Conclusion

The changing treatment pathway for multiple myeloma should be taken into account in decision making

3.21 The committee was aware that there was an ongoing separate NICE appraisal for lenalidomide as a first-line treatment for multiple myeloma. It understood that the most plausible ICER for lenalidomide in this indication was within the range normally considered a cost-effective use of NHS resources for a subgroup of people who cannot have thalidomide. Recommending lenalidomide first line for people who cannot have thalidomide would change the treatment pathway, and the committee agreed that it was appropriate to take this into account when making its recommendations for lenalidomide as a second-line treatment option. The clinical experts stated that they would prefer to use lenalidomide earlier rather than later in the treatment pathway, and that retreatment with lenalidomide is unlikely. It agreed that because lenalidomide would be used as a first-line treatment option, the population likely to have lenalidomide second line (and therefore the unmet need) would decrease over time. The committee also noted that there remained an unmet need for a more effective next treatment than cytotoxic therapy for people who are currently taking bortezomib as their first treatment for multiple myeloma. It concluded that the changing multiple myeloma treatment pathway, and the potential availability of lenalidomide earlier in the treatment pathway should be taken into account in its decision making. The committee further concluded that these changes to the treatment

pathway would reduce but not eliminate the unmet need for a more effective second-line treatment than cytotoxic chemotherapy for some people.

Lenalidomide plus dexamethasone is recommended in this indication despite the high ICERs

3.22 The committee noted that the most plausible ICER may be above the range usually considered a cost-effective use of NHS resources. However, when making its decision, the committee took into account:

- the unmet need for an alternative treatment option to cytotoxic chemotherapy for people who had 1 previous treatment, which included bortezomib
- that lenalidomide is a cost-effective first-line treatment for people who cannot have thalidomide in a separate parallel appraisal
- that the treatment pathway for multiple myeloma is likely to change and, if lenalidomide were to be available as a first-line treatment for people who cannot have thalidomide, fewer people would have lenalidomide as a second-line treatment after bortezomib
- that, if it did not recommend lenalidomide for use after 1 previous treatment including bortezomib, people currently having bortezomib first line would continue to have less effective cytotoxic chemotherapy before moving on to more effective treatments, which it agreed was inappropriate.

Taking all these factors into account, the committee concluded that it was appropriate to recommend lenalidomide plus dexamethasone for treating multiple myeloma in adults who have had only 1 previous therapy, which included bortezomib.

4 Implementation

4.1 Section 7(6) of the National Institute for Health and Care Excellence (Constitution and Functions) and the Health and Social Care Information Centre (Functions) Regulations 2013 requires clinical commissioning groups, NHS England and, with respect to their public health functions, local authorities to comply with the recommendations in this appraisal within 3 months of its date of publication.

4.2 The Welsh ministers have issued directions to the NHS in Wales on implementing NICE technology appraisal guidance. When a NICE technology appraisal recommends the use of a drug or treatment, or other technology, the NHS in Wales must usually provide funding and resources for it within 2 months of the first publication of the final appraisal determination.

4.3 When NICE recommends a treatment 'as an option', the NHS must make sure it is available within the period set out in the paragraphs above. This means that, if a patient has multiple myeloma and the doctor responsible for their care thinks that lenalidomide is the right treatment, it should be available for use, in line with NICE's recommendations.

5 Review of guidance

5.1 The guidance on this technology will be considered for review 3 years after publication. The guidance executive will decide whether the technology should be reviewed based on information gathered by NICE, and in consultation with consultees and commentators.

Dr Amanda Adler
Chair, appraisal committee
May 2019

6 Appraisal committee members and NICE project team

Appraisal committee members

The 4 technology appraisal committees are standing advisory committees of NICE. This topic was considered by committee B.

Committee members are asked to declare any interests in the technology to be appraised. If it is considered that there is a conflict of interest, the member is excluded from participating further in that appraisal.

The minutes of each appraisal committee meeting, which include the names of the members who attended and their declarations of interests, are posted on the NICE website.

NICE project team

Each technology appraisal is assigned to a team consisting of 1 or more health technology analysts (who act as technical leads for the appraisal), a technical adviser and a project manager.

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