

Putting NICE guidance into practice

**Resource impact report:
Pomalidomide for multiple myeloma
previously treated lenalidomide and
bortezomib (TA427)**

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Summary

Pomalidomide, in combination with low-dose dexamethasone, is recommended as an option for treating multiple myeloma in adults at third or subsequent relapse; that is, after 3 previous treatments including both lenalidomide and bortezomib, only when the company provides pomalidomide with the discount agreed in the patient access scheme.

This appraisal is a review of TA338, which did not recommend pomalidomide for this indication. Pomalidomide was available through the Cancer Drugs Fund until November 2015.

We estimate that around 740 people with multiple myeloma are eligible for pomalidomide at third or subsequent relapse. Around 540 people will have pomalidomide from 2017/18, when the guidance is implemented.

The number of people in England estimated to have pomalidomide each year based on the uptake in the resource impact assumptions is shown in table 1.

Table 1 Estimated number of people having pomalidomide in England each year

	2017/18	2018/19	2019/20	2020/21	2021/22
People having pomalidomide each year	540	540	540	540	540

This report is supported by a local resource impact template, because the list prices of pomalidomide and panobinostat have discounts that are commercial in confidence. The discounted price of pomalidomide and panobinostat can be put into the template and other variables may be amended.

This technology is commissioned by NHS England. Providers are NHS hospital trusts.

1 Introduction

- 1.1 This report looks at the resource impact of implementing the NICE guidance on [pomalidomide for multiple myeloma previously treated with lenalidomide and bortezomib](#) in England.
- 1.2 The guidance states that:
- Pomalidomide, in combination with low-dose dexamethasone, is recommended as an option for treating multiple myeloma in adults at third or subsequent relapse; that is, after 3 previous treatments including both lenalidomide and bortezomib, only when the company provides pomalidomide with the discount agreed in the patient access scheme.
- 1.3 The Department of Health and Celgene have agreed that pomalidomide will be available to the NHS with a patient access scheme, which makes it available with a discount. The size of the discount is commercial in confidence. It is the responsibility of the company to communicate details of the discount to the relevant NHS organisations. Any enquiries from NHS organisations about the patient access scheme should be directed James Farrell at jafarrell@celgene.com.
- 1.4 This report is supported by a resource impact template. The template aims to help organisations in England, Wales and Northern Ireland plan for the financial implications of implementing the NICE guidance by amending the variables.
- 1.5 This technology is commissioned by NHS England. Providers are NHS hospital trusts.

2 Background and epidemiology of multiple myeloma

- 2.1 Multiple myeloma is a form of cancer that arises from plasma cells in the bone marrow. Because multiple myeloma is a chronic and ultimately fatal condition, the main aims of therapy are to extend survival and maintain a good quality of life.
- 2.2 The committee experts highlighted that there is a clear unmet need in the current treatment pathway for an effective, well-tolerated treatment option for people with multiple myeloma at third or subsequent relapse who have had at least 3 previous treatments, including both lenalidomide and bortezomib.
- 2.3 NICE's previous technology appraisal guidance on pomalidomide (TA338) did not recommend pomalidomide within its marketing authorisation for treating relapsed and refractory multiple myeloma. However, the updated guidance recommends it as an option.
- 2.4 In England, around 4,650 people were diagnosed with multiple myeloma in 2014 ([Cancer registration statistics 2014](#), Office for National Statistics).
- 2.5 Table 2 shows the estimated number of people eligible for pomalidomide in England.

Table 2 Number of people eligible for pomalidomide in England

Population	Proportion of previous row (%)	Number of people
Total population		54,316,618
Incidence of multiple myeloma ^a	0.0086	4,700
People who progress on first-line treatment and receive second-line treatment ^b	88	4,100
People who have third-line treatment ^b	87	3,600
People who have fourth-line treatment and have previously had lenalidomide and bortezomib ^b	21	740
People eligible for pomalidomide	100	740
People estimated to have pomalidomide each year from 2017/18 ^b	72	540
a. Cancer registration statistics, England 2014 b. Company submission and clinical opinion.		

2.6 We estimate that approximately 740 people are eligible for pomalidomide each year.

2.7 We estimate that from 2017/18, when the guidance is implemented, around 540 people will have pomalidomide each year.

3 Assumptions made

3.1 The resource impact template makes the following assumptions:

- Around 740 people are eligible for pomalidomide after 3 previous treatments.
- Comparator treatments are:
 - bortezomib, panobinostat and dexamethasone
 - bendamustine, thalidomide and dexamethasone
 - conventional chemotherapy.
- The split of current market share is taken from the company submission and is based on clinical opinion.
- Uptake of pomalidomide after implementation of the guidance is 72%, based on the company submission and clinical opinion.

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- Pomalidomide was available on the Cancer Drugs Fund until November 2015 but it is not used in current clinical practice.
- People having bortezomib, panobinostat and dexamethasone need more monitoring appointments because of the requirement for frequent blood counts, ECG recording and blood electrolyte monitoring.
- Using pomalidomide will have no effect on adverse events (although pomalidomide is associated with less toxicity than the comparators, we do not anticipate the resource impact to be significant).
- VAT is applied to the drug cost only at a rate of 20%.

The resource impact template includes references for all dosage and regimen assumptions for all treatments.

4 Resource impact

- 4.1 The list price of pomalidomide has a discount that is commercial in confidence. The discounted price of pomalidomide and panobinostat (a comparator treatment) can be put into the template to calculate the resource impact of the guidance.
- 4.2 The current treatment and future uptake figure assumptions are based on the company submission and clinical expert opinion and are shown in the resource impact template. Table 3 shows the number of people that are estimated to have pomalidomide each financial year.

Table 3 Estimated number of people having pomalidomide in England each year

	2017/18	2018/19	2019/20	2020/21	2021/22
People having pomalidomide each year ^a	540	540	540	540	540
^a 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.					

5 Savings and benefits

- 5.1 Pomalidomide is an oral treatment and so is easier for patients compared with some of the current treatments that require IV administration at up to 4 hospital visits per month. Pomalidomide also has lower levels of toxicity than panobinostat, so may improve quality of life.
- 5.2 The MM-003 trial data showed a median overall survival gain with pomalidomide and low-dose dexamethasone of between 4.6 and 7.0 months compared with conventional chemotherapy.
- 5.3 Implementing the guidance may reduce current service requirements and healthcare resource use in terms of patients needing fewer IV treatments.

6 Implications for commissioners

- 6.1 Pomalidomide for multiple myeloma falls within programme budgeting category 102X – Multiple myeloma.

About this resource impact report

This resource impact report accompanies the NICE guidance on [pomalidomide for multiple myeloma previously treated with bortezomib and lenalidomide](#) and should be read in conjunction with it. See [terms and conditions](#) on the NICE website.

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