

## Putting NICE guidance into practice

# **Resource impact report: Carfilzomib for previously treated multiple myeloma (TA457)**

Published: July 2017

## Summary

NICE has recommended carfilzomib, in combination with dexamethasone, as an option for treating multiple myeloma in adults, subject to the criteria set out in the [guidance](#).

We estimate that around 2,200 people with multiple myeloma will be eligible for carfilzomib based on the recommendations in the guidance. Around 1,100 people will have carfilzomib each year from 2019/20, when uptake reaches a steady state.

**Table 1 Estimated number of people in England having carfilzomib**

	2017/18	2018/19	2019/20	2020/21	2021/22
People having carfilzomib each year	200	780	1,100	1,100	1,100

This report is supported by a local resource impact template because the list price of carfilzomib has a discount that is commercial in confidence. The discounted price of carfilzomib 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 NICE's technology appraisal guidance on [carfilzomib for previously treated multiple myeloma](#) in England.

1.2 The guidance states that:

Carfilzomib in combination with dexamethasone is recommended as an option for treating multiple myeloma in adults, only if:

- they have had only 1 previous therapy, which did not include bortezomib and
- the company provides carfilzomib with the discount agreed in the patient access scheme

1.3 The Department of Health and Amgen have agreed that carfilzomib 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 to [commercial-team@amgen.com](mailto:commercial-team@amgen.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 In England, around 4,600 people were diagnosed with multiple myeloma in 2015 ([Cancer registration statistics 2015, Office for National Statistics](#)).

**Table 2 Number of people eligible for carfilzomib in England**

Population	Proportion of previous row (%)	Number of people
Total adult population		43,108,471
Incidence of multiple myeloma <sup>a</sup>	0.011	4,600
People ineligible for stem cell transplant who have thalidomide first-line <sup>b</sup>	65	3,000
People eligible for second-line therapy who have not had bortezomib <sup>b</sup>	74	2,200
People eligible for carfilzomib <sup>b</sup>	100	2,200
People estimated to have carfilzomib each year from 2019/20 <sup>c</sup>	50	1,100
a. Cancer registration statistics, England 2015 b. Company submission c. Clinical expert opinion		

2.3 We estimate that approximately 2,200 people are eligible for treatment with carfilzomib each year.

2.4 From year 2019/20 it is estimated that 1,100 people will have treatment with carfilzomib each year once uptake has reached 50%.

### **3 Assumptions made**

3.1 The resource impact template makes the following assumptions:

- The proportion of people who are ineligible for stem cell transplant is taken from the company submission.
- The proportion of people likely to have second-line treatment but who have not had bortezomib is taken from the company submission.
- The comparator treatment is bortezomib plus dexamethasone at second-line.
- The median and mean number of cycles was taken from the ENDEAVOR study, submitted within the company submission.
- The current market share is taken from the company submission.
- Uptake of carfilzomib after implementation of the guidance is estimated to be 50% from 2019/20, based on the mid-point of clinical expert opinions.
- Gradual uptake is anticipated during the 3 years after implementation.

### **4 Resource impact**

4.1 The list price of carfilzomib has a discount that is commercial in confidence. The discounted price of carfilzomib can be put into the template to calculate the resource impact of the guidance.

4.2 Future uptake assumptions are based on clinical expert opinion and are shown in the resource impact template. Table 3 shows the number of people that are estimated to have carfilzomib each financial year.

**Table 3 Population estimated to have carfilzomib in England using NICE assumptions**

	2017/18	2018/19	2019/20	2020/21	2021/22
Population having carfilzomib each year <sup>a</sup>	200	780	1,100	1,100	1,100
<sup>a</sup> 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.					

4.3 The resource impact template includes a sensitivity analysis to show the estimated resource impact if the uptake is 25% or 75%.

## **5 Savings and benefits**

5.1 The committee noted that, compared with bortezomib and dexamethasone, carfilzomib plus dexamethasone doubled progression-free survival to 18.7 months.

## **6 Implications for commissioners**

6.1 Carfilzomib for previously treated multiple myeloma falls within the programme budgeting category 02I – cancer, haematological.

## **7 About this resource impact report**

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

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