

Putting NICE guidance into practice

Resource impact report: Selinexor with bortezomib and dexamethasone for previously treated multiple myeloma (TA974)

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Summary

NICE has recommended selinexor with bortezomib and dexamethasone as an option for treating multiple myeloma in adults, if:

- they have only had 1 previous line of treatment, and their condition is refractory to both daratumumab and lenalidomide, or
- they have only had 2 previous lines of treatment and their condition is refractory to lenalidomide.

Selinexor is only recommended if the company provides it according to the commercial arrangement.

We estimate that around:

- 2,248 adults with multiple myeloma are eligible for second line treatment, of which 1,079 adults (48%) are eligible for selinexor with bortezomib and dexamethasone, after adjusting for expected population growth.
- 1,976 adults with multiple myeloma are eligible for third line treatment, of which 50% are eligible for treatment with selinexor with bortezomib and dexamethasone, after adjusting for expected population growth.
- 540 adults will start second line treatment with selinexor with bortezomib and dexamethasone each year by 2028/29 after adjusting for expected population growth. This is based on consultant haematologist opinion.
- 652 adults will start third line treatment with selinexor with bortezomib and dexamethasone each year by 2028/29 after adjusting for expected population growth. This is based on consultant haematologist opinion.

Table 1 Estimated number of people in England starting treatment with selinexor with bortezomib and dexamethasone each year

	2024/25	2025/26	2026/27	2027/28	2028/29
Uptake % (Second line)	6	12	18	24	24
Uptake % (Third line)	16	33	33	33	33
People starting second line treatment with selinexor with bortezomib and dexamethasone	119	262	397	534	540
People starting third line treatment with selinexor with bortezomib and dexamethasone	304	633	640	646	652
Total number of people	423	896	1,037	1,180	1,192
It is anticipated people continue treatment for 13.79 months on average at second line and 12.94 months on average at third line and therefore there will also be people receiving treatment who started treatment in previous years.					

This report is supported by a local resource impact template. This is because the company has a commercial arrangement. This makes selinexor 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.

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

1 **Selinexor with bortezomib and low-dose dexamethasone**

- 1.1 Multiple myeloma is an incurable, relapsing and remitting cancer of plasma cells. Relapsed multiple myeloma refers to previously treated myeloma that has progressed. Refractory refers to multiple myeloma that shows no response to treatment or that has progressed **on or** within 60 days of the last treatment.
- 1.2 The clinical experts emphasised that multiple myeloma is a highly complex cancer with a wide range of symptoms and severity. The patient experts explained that the condition has a large psychological impact because of the constant possibility of relapse. The condition can have a large impact on quality of life, affecting all aspects of life for both the individual and their carers.
- 1.3 Carfilzomib with dexamethasone was the relevant second-line comparator for selinexor with bortezomib and dexamethasone for the treatment of multiple myeloma that is refractory to daratumumab and lenalidomide. For multiple myeloma that is refractory to lenalidomide, the relevant third-line comparator would be panobinostat plus bortezomib and dexamethasone.
- 1.4 Most people who cannot have a stem cell transplant would be offered first-line treatment with daratumumab plus lenalidomide and dexamethasone. Carfilzomib plus dexamethasone is the only option available to people whose condition is refractory to both daratumumab and lenalidomide.
- 1.5 Evidence shows that second-line treatment with selinexor combination increases how long people have before their condition gets worse compared with bortezomib plus dexamethasone alone.

2 Resource impact of the guidance

- 2.1 The current treatment uptake figures are based on approximations of current usage provided by NHS England. Future uptake figure assumptions are based on estimates by consultant haematologists and are shown in the resource impact template.
- 2.2 This report is supported by a local resource impact template. This is because the company has a commercial arrangement which makes selinexor 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.

Savings and benefits

- 2.3 Clinical experts highlighted that there would be an increasing number of people whose condition is refractory to lenalidomide and daratumumab and that selinexor combination would provide an alternative treatment option with a novel mechanism of action.

3 Implications for commissioners and providers

- 3.1 Selinexor with bortezomib and dexamethasone is commissioned by NHS England. Providers are NHS hospital trusts.
- 3.2 Selinexor with bortezomib and dexamethasone falls within the programme budgeting category 021 cancer, Haematological.
- 3.3 The average treatment durations for selinexor with bortezomib and dexamethasone and its comparators are uncertain. The resource impact template allows commissioners to assess the resource impact of any additional attendances required at provider services.

4 How we estimated the resource impact

The population

- 4.1 In 2019, around 5,521 adults were diagnosed with multiple myeloma in England ([Cancer Registration Statistics, England 2019](#)). Applying population growth, around 5,792 adults in England are expected to be diagnosed with multiple myeloma in 2028/29.
- 4.2 Approximations of current usage from NHS England estimated 41% of people receiving first line treatment go on to receive second line treatment and of these 88% reach third line treatment.
- 4.3 Table 2 shows the number of people eligible for treatment with selinexor with bortezomib and dexamethasone at second line and third line.

Table 2 Number of people eligible for treatment in England

Population	Proportion of previous row ⁴ (%)	Number of people
Adult population forecast at 2028/29		48,417,016
Incidence of multiple myeloma ¹	0.01%	5,792
Proportion of people who have first line treatment ²	95%	5,502
Proportion of people who have second line treatment ³	41%	2,248
Proportion of people who have third line treatment ³	88%	1,976

¹ [Cancer Registration Statistics, England 2019](#).

² Yong K, Delforge M, Driessen C, et al.[2016] Multiple myeloma: patient outcomes in real-world practice. Br J Haematol. 2016;175(2):252-264.

³ Approximations of current usage from NHS England.

⁴ Percentages are rounded.

Assumptions

4.4 The resource impact template assumes that:

- Carfilzomib with dexamethasone is the relevant second-line comparator for selinexor with bortezomib and low-dose dexamethasone for the treatment of multiple myeloma that is refractory to daratumumab and lenalidomide. For multiple myeloma that is refractory to lenalidomide, the relevant third-line comparator is panobinostat plus bortezomib and dexamethasone. Some people who currently receive panobinostat plus bortezomib and dexamethasone are not expected to be refractory to lenalidomide, and are therefore not eligible for selinexor with bortezomib and dexamethasone.
- No additional infrastructure is expected to be required to deliver this treatment.
- Due to TA917 daratumumab with lenalidomide and dexamethasone for untreated multiple myeloma when a stem cell transplant is unsuitable publishing in October 2023, the use of selinexor with bortezomib and dexamethasone is expected to increase over time as the number of people becoming refractory to daratumumab and lenalidomide increases.
- Approximate current usage from NHS England estimates that 1,967 people will start first line treatment with daratumumab with lenalidomide and dexamethasone each year.
- [The Phase 3 Maia Study](#) highlighted that after a follow up for 47.9 months, 48% of patients would discontinue treatment due to progressive disease and therefore would fit the criteria of being refractory and be eligible for selinexor with bortezomib and dexamethasone.
- Of those patients' refractory to daratumumab and lenalidomide the market share at second line is assumed to be split evenly between selinexor with bortezomib and dexamethasone and

carfilzomib and dexamethasone. Users can amend to reflect local practice.

- The average costs of adverse events are based on a simplistic weighting between primary care and secondary care use.
- The recommended dose of selinexor is 100mg orally once weekly on days 1, 8, 15, 22, and 29 of each 5-week cycle.
- The mean treatment duration is estimated to be 13.79 months at second line and 12.94 months at third line.
- Administration costs in clinic are based on the [2023 to 25 NHS Payment Scheme, 2024/25 prices workbook](#).

About this resource impact report

This resource impact report accompanies the [NICE guidance on selinexor with bortezomib and low-dose dexamethasone for treating relapsed refractory multiple myeloma](#) and should be read with it. See [terms and conditions](#) on the NICE website.

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