NICE National Institute for Health and Care Excellence

Putting NICE guidance into practice

Resource impact report:
Daratumumab in combination for untreated multiple myeloma when stem cell transplant is suitable (TA763)

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Summary

NICE has recommended daratumumab plus bortezomib, thalidomide and dexamethasone within its marketing authorisation, as induction and consolidation treatment for untreated multiple myeloma in adults, when an autologous stem cell transplant is suitable. It is recommended only if the company provides daratumumab according to the commercial arrangement.

We estimate that:

- around 1,650 people with previously untreated multiple myeloma who are eligible for a stem cell transplant are eligible for treatment with daratumumab plus bortezomib, thalidomide and dexamethasone each year.
- around 1,500 newly diagnosed people will receive daratumumab plus bortezomib, thalidomide and dexamethasone from year 2023/24 onwards once uptake has reached 90% as shown in table 1.

Table 1 Estimated number of people in England receiving daratumumab plus bortezomib, thalidomide and dexamethasone

	2022/23	2023/24	2024/25	2025/26	2026/27
Uptake %	75	90	90	90	90
People receiving daratumumab plus bortezomib, thalidomide and dexamethasone	1,241	1,489	1,489	1,489	1,489
Total number of people	**1,241**	**1,489**	**1,489**	**1,489**	**1,489**

This report is supported by a local resource impact template because the list price of daratumumab has a discount that is commercial in confidence. The discounted price of daratumumab 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 Daratumumab plus bortezomib, thalidomide and dexamethasone

1.1 NICE has recommended daratumumab plus bortezomib, thalidomide and dexamethasone within its marketing authorisation, as induction and consolidation treatment for untreated multiple myeloma in adults, when an autologous stem cell transplant is suitable. It is recommended only if the company provides daratumumab according to the commercial arrangement.

1.2 Before having an autologous stem cell transplant, most people with untreated multiple myeloma receive bortezomib plus thalidomide and dexamethasone as the first treatment. This appraisal recommends adding daratumumab to bortezomib plus thalidomide and dexamethasone (daratumumab in combination) before transplant (induction) and for a short time after transplant (consolidation).

1.3 Treatment aims to prolong survival and maintain a good quality of life by controlling the disease and relieving symptoms.

2 Resource impact of the guidance

2.1 We estimate that:

- around 1,650 people with previously untreated multiple myeloma who are eligible for a stem cell transplant are eligible for treatment with daratumumab plus bortezomib, thalidomide and dexamethasone each year.
- around 1,500 newly diagnosed people will receive daratumumab plus bortezomib, thalidomide and dexamethasone from year 2023/24 onwards once uptake has reached 90%.
- The current treatment and future uptake figure assumptions are based on clinical expert opinion and are shown in the local resource impact template. Table 2 shows the number of people

in England who are estimated to receive daratumumab plus bortezomib, thalidomide and dexamethasone by financial year.

Table 2 Estimated number of people receiving daratumumab plus bortezomib, thalidomide and dexamethasone using NICE assumptions

	2022/23	2023/24	2024/25	2025/26	2026/27
Uptake %	75	90	90	90	90
People receiving daratumumab plus bortezomib, thalidomide and dexamethasone	1,241	1,489	1,489	1,489	1,489
Total number of people	**1,241**	**1,489**	**1,489**	**1,489**	**1,489**

2.2 This report is supported by a local resource impact template because the company has a commercial arrangement (simple discount patient access scheme). This makes daratumumab 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 trial results show that, compared with bortezomib plus thalidomide and dexamethasone, daratumumab in combination increases how long people live and extends the time before the condition worsens.

2.4 The patient experts noted that more people receiving daratumumab in combination have no minimal residual disease (a measure of residual tumour cells in bone marrow) than those having other treatments; this signifies a deep response.

3 Implications for commissioners

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

3.2 Daratumumab falls within the programme budgeting category 02I – cancer, haematological.

4 How we estimated the resource impact

The population

4.1 In 2019, around 5,520 adults were diagnosed with multiple myeloma in England (Cancer Registration Statistics, England 2019).

4.2 Of these, expert clinical opinion is that around 90% would choose to receive treatment and the company submission states that 33% of those people would be eligible for autologous stem cell transplant. This gives a total eligible population of around 1,650 people.

4.3 Table 3 shows the number of people eligible for treatment with daratumumab in combination.

Table 3 Number of people eligible for treatment in England

Population	Proportion of previous row (%)	Number of people
Adult population		44,263,393
Incidence of multiple myeloma[1]	0.01%	5,520
Proportion of people who choose to receive treatment[2]	90%	5,000
Proportion of people eligible for autologous stem cell transplant[3]	33%	1,650
Estimated uptake of daratumumab, bortezomib, thalidomide and dexamethasone[4]	90%	1,500

[1] Cancer Registration Statistics, England 2019
[2] TA680 & expert clinical opinion
[3] Company submission
[4] Expert clinical opinion

Assumptions

4.4 The resource impact template assumes that:

- Bortezomib plus thalidomide and dexamethasone is the most relevant comparator.
- Clinical experts advised that when an autologous stem cell transplant is suitable, people with untreated multiple myeloma would currently have an induction (first treatment) regimen of bortezomib plus thalidomide and dexamethasone.
- Daratumumab has a recommended dose of 1,800 mg by subcutaneous injection once a week for the first 8 weeks and then every two weeks.
- The average treatment duration for daratumumab is 6 cycles (4 induction and 2 consolidation), each lasting 28 days.
- Administration costs in clinic are based on 2021/22 National Tariff Payment System.
- Daratumumab is available with a patient access scheme simple discount off the list price in the UK. It is the company's responsibility to let relevant NHS organisations know details of the discount.
- There are discounts for bortezomib and dexamethasone agreed with the Commercial Medicines Unit. The prices agreed through the framework are commercial in confidence.
- A relative dose intensity of 90% has been applied to both daratumumab plus bortezomib, thalidomide and dexamethasone (DBTd) and bortezomib plus thalidomide and dexamethasone (BTd).
- Use of daratumumab plus bortezomib, thalidomide and dexamethasone may increase attendances for the treatment to be administered.

About this resource impact report

This resource impact report accompanies the NICE guidance on Daratumumab in combination for untreated multiple myeloma when stem cell transplant is suitable and should be read with it. See terms and conditions on the NICE website.