NICE National Institute for Health and Care Excellence

Putting NICE guidance into practice

Resource impact report:
Nivolumab for unresectable, metastatic melanoma (TA384)

Published: March 2016

Summary

Nivolumab as monotherapy is recommended, within its marketing authorisation, as an option for treating advanced (unresectable or metastatic) melanoma in adults.

The eligible population for this technology is about 1,100 people per year.

This statement is supported by a local costing template, but unit costs are not included because the comparator drugs have discounts which are commercial in confidence. Once the cost of these drugs is obtained from the manufacturers, the user needs to input these costs into the light blue blank cells on the unit costs worksheet in the local costing template.

The costing template that supports this technical appraisal also includes the resource impact of pembrolizumab for treating advanced melanoma after disease progression with ipilimumab which published in October 2015 and Pembrolizumab for advanced melanoma not previously treated with ipilimumab which published in November 2015.

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

1 Introduction

1.1 The guidance states that:

> Nivolumab as monotherapy is recommended, within its marketing authorisation, as an option for treating advanced (unresectable or metastatic) melanoma in adults.

1.2 Nivolumab is part of the Early Access to Medicines Scheme (EAMS) and should be made available within 30 days of the guidance publication.

2 Background

2.1 Melanoma has an incidence of around 0.0211%, with around 11,366 cases in England each year.

2.2 The Committee noted that pembrolizumab was not included in the scope of this appraisal. However, following the recent positive NICE recommendations for pembrolizumab (pembrolizumab for advanced melanoma after disease progression with ipilimumab or not previously treated with ipilimumab) the Committee heard from the clinical experts that nivolumab and pembrolizumab would be considered for the same group of patients.

2.3 For the purpose of resource impact, pembrolizumab has been included in the cost template as an alternative treatment option to nivolumab within the PD1 inhibitor class of drugs.

2.4 Table 1 shows the estimated the number of people eligible for treatment in England with Nivolumab

Table 1 Number of people eligible for treatment in England with Nivolumab

Population	Proportion	Number of people

Total population		53,865,817
Incidence of melanoma	0.0211%	11,366
Advanced (unresectable, metastatic) melanomas	10.00%	1,137
Total number of people eligible for treatment with nivolumab		1,137

2.5 Therefore it is estimated that 1,137 people are eligible for treatment with nivolumab each year.

3 Resource impact

3.1 Nivolumab and pembrolizumab are both PD-1 cell death inhibitors and offer options for treatment of advanced (unresectable or metastatic) melanoma in adults.

3.2 Increases in resource use due to the introduction of PD1 inhibitors such as nivolumab as an additional treatment option will be partly mitigated by a reduction in the use of other therapies such as ipilimumab and dacarbazine.

Table 2 Estimated average annual patients treated with PD-1 inhibitors in all treatment lines

Year	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22

PD-1 inhibitors market share	57%	67%	69%	69%	69%	69%
Estimated number of people treated with PD-1 inhibitors	784	825	833	833	833	833
Estimated number of people treated with Nivolumab	392	412	417	417	417	417
Estimated number of people treated with pembrolizumab	392	412	417	417	417	417

4 Assumptions made

4.1 The following assumptions have been made in the production of the costing template:

- The average number of pembrolizumab cycles per person is 7.2 when used as a first line treatment, 5.3 when used as second or third line treatment
- The average number of nivolumab cycles per person is 15 as a first-line and 11.5 as a second/third-line treatment
- PD-1 inhibitors will achieve 69% market share as first, second or third line treatment, with nivolumab and pembrolizumab each having a 50% share of this market
- The respective market shares of vemurafenib and dabrafenib within the BRAF inhibitor class are 80% and 20% respectively.
- When all other treatment options have been exhausted and people are still well enough to undergo further treatment, cytoxic chemotherapy (dacarbazine) is the final treatment option.

4.2 The template should be amended to reflect local estimated prescribing proportions.

About this costing statement

This costing statement accompanies the NICE technology appraisal guidance on nivolumab for treating advanced (unresectable or metastatic) melanoma TA384 and should be read in conjunction with it. See terms and conditions on the NICE website.

This statement is written in the following context

This statement represents the view of NICE, which was arrived at after careful consideration of the available data and through consulting healthcare professionals. The statement is an implementation tool and focuses on the recommendations that were considered to have a significant impact on national resource use.

Assumptions used in the statement are based on assessment of the national average. Local practice may be different from this, and the impact should be estimated locally.

Implementation of the guidance is the responsibility of local commissioners and providers. Commissioners and providers are reminded that it is their responsibility to implement the guidance, in their local context, in light of their duties to have due regard to the need to eliminate unlawful discrimination, advance equality of opportunity and foster good relations. Nothing in this costing tool should be interpreted in a way that would be inconsistent with compliance with those duties.