

NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

Health Technology Appraisal

Vemurafenib for the adjuvant treatment of resected BRAF V600 mutation-positive melanoma with high risk of recurrence

Draft scope

Draft remit/appraisal objective

To appraise the clinical and cost effectiveness of vemurafenib within its marketing authorisation for adjuvant treatment of resected BRAF V600 mutation-positive melanoma with high risk of recurrence.

Background

Melanoma is a cancer of the skin. In its early stages, melanoma is normally asymptomatic and can often be cured by surgery (resection). However, it can spread or metastasise to nearby lymph nodes (stage III) or to other parts of the body (stage IV). Most melanomas occur in people with pale skin. The risk factors are skin that tends to burn in the sun, having many moles, intermittent sun exposure and sunburn.

There were 12,993 new diagnoses of melanoma in 2014 and 2,080 deaths registered in England¹. In the UK in 2012-2014, on average half of cases were diagnosed in people aged 65 and over¹.

A mutated form of the BRAF gene (called BRAF V600) is found in about 50% of melanomas. The mutated gene means that the cells produce too much BRAF protein, leading to uncontrolled cell division and growth of the tumour.

The stage of melanoma describes how deeply it has grown into the skin, and whether it has spread. At stage I and II, there is no evidence that the tumour has spread anywhere else in the body, although there is a possibility of microscopic spread. Stage III melanoma means that the melanoma cells have spread into skin, lymph vessels, or lymph glands close to the melanoma. Stage III melanomas are considered intermediate to high risk as they more likely to spread to other distant parts of the body (stage IV melanoma) than in earlier melanoma stages. In 2012, the proportion of people in the UK diagnosed with melanoma at stage III disease was 3%². Five-year survival rates are approximately 50-55% for stage III disease³. Advanced melanoma (stage IV) means the cancer has spread from where it started to another part of the body.

Surgery (tumour removal and wide local excision) is the main treatment for early (stage I) and medium stage (stage II and III) melanoma. Surgical removal of the nearby lymph nodes is also considered if there is evidence of microscopic spread. Early recognition of melanoma and accurate diagnosis

present the best opportunities for cure. Although adjuvant chemotherapy and immunotherapy following tumour removal are not widely used in UK practice, high-dose interferon is used as adjuvant therapy following complete resection in some cases.

The technology

Vemurafenib (Zelboraf, Roche Products) inhibits the oncogenic BRAFV600 protein kinase. BRAF is part of the RAS/MAPK signalling pathway, which helps to control the proliferation, differentiation and apoptosis of cells. Vemurafenib is administered orally.

Vemurafenib does not currently have a marketing authorisation in the UK for treating people with resected BRAF V600 mutation-positive melanoma. It has been studied in a clinical trial in people with completely resected, cutaneous BRAF mutation-positive melanoma at high risk for recurrence.

Vemurafenib has a marketing authorisation in the UK for treating adults with BRAF V600 mutation-positive unresectable or metastatic melanoma.

Intervention	Vemurafenib
Population	People with completely resected, cutaneous BRAF mutation-positive melanoma with high risk of recurrence
Comparators	<ul style="list-style-type: none"> • Routine surveillance
Outcomes	<p>The outcome measures to be considered include:</p> <ul style="list-style-type: none"> • Overall survival • Disease-free survival • Distant metastases free survival • Adverse effects of treatment • Health-related quality of life.

<p>Economic analysis</p>	<p>The reference case stipulates that the cost effectiveness of treatments should be expressed in terms of incremental cost per quality-adjusted life year.</p> <p>The reference case stipulates that the time horizon for estimating clinical and cost effectiveness should be sufficiently long to reflect any differences in costs or outcomes between the technologies being compared.</p> <p>Costs will be considered from an NHS and Personal Social Services perspective.</p> <p>The availability of any patient access schemes for the intervention or comparator technologies will be taken into account.</p>
<p>Other considerations</p>	<p>Guidance will only be issued in accordance with the marketing authorisation. Where the wording of the therapeutic indication does not include specific treatment combinations, guidance will be issued only in the context of the evidence that has underpinned the marketing authorisation granted by the regulator.</p>
<p>Related NICE recommendations and NICE Pathways</p>	<p>Related Technology Appraisals in development (including suspended appraisals)</p> <p>‘Ipilimumab for the adjuvant treatment of completely resected high risk stage III or IV melanoma’ NICE technology appraisals guidance [ID721]. Publication date to be confirmed.</p> <p>‘Dabrafenib with trametinib for adjuvant treatment of resected BRAF V600 positive malignant melanoma’ NICE technology appraisals guidance [ID1226]. Expected publication date December 2018.</p> <p>Related Guidelines:</p> <p>‘Melanoma: assessment and management of melanoma’. (2015) NICE guidelines NG14.</p> <p>Related Interventional Procedures:</p> <p>‘Electrochemotherapy for metastases in the skin from tumours of non-skin origin and melanoma’ (2013) NICE interventional procedure guidance 446</p> <p>Related Diagnostics Guidance:</p> <p>VivaScope 1500 and 3000 imaging systems for detecting skin cancer lesions (2015) NICE diagnostics guidance 19</p> <p>Related Quality Standards:</p>

	<p>http://www.nice.org.uk/guidance/qualitystandards/qualitystandards.jsp</p> <p>'Skin cancer' (2016) NICE quality standard QS130Related</p> <p>NICE Pathways:</p> <p>Melanoma (2017) NICE pathway NICE pathway</p> <p>http://pathways.nice.org.uk/</p>
<p>Related National Policy</p>	<p>Department of Health (2016) NHS outcomes framework 2016 to 2017</p> <p>Department of Health (2014) The national cancer strategy: 4th annual report</p> <p>Department of Health (2011) Improving outcomes: a strategy for cancer</p> <p>Department of Health (2009) Cancer commissioning guidance</p> <p>Department of Health (2007) Cancer reform strategy</p> <p>NHS England (2013/14) NHS standard contract for cancer: skin (adult) A12/S/b</p> <p>NHS England (2013/14) NHS standard contract for cancer: chemotherapy (children, teenagers and young adults). B12/S/b</p> <p>NHS England Manual for Prescribed Specialised Services 2016/17. Chapter 105. Specialist cancer services (adults)</p> <p>https://www.england.nhs.uk/commissioning/wp-content/uploads/sites/12/2016/06/pss-manual-may16.pdf</p> <p>Department of Health, NHS Outcomes Framework 2016-2017 (published 2016): Domains 1–5.</p> <p>https://www.gov.uk/government/publications/nhs-outcomes-framework-2016-to-2017</p>

Questions for consultation

Are there any treatments considered to be established clinical practice in the NHS for adjuvant treatment following complete resection of cutaneous BRAF mutation-positive melanoma?

Is vemurafenib intended to be used in people with high risk of recurrence?

How is high risk recurrence defined?

Are the outcomes listed appropriate?

Are there any subgroups of people in whom vemurafenib is expected to be more clinically effective and cost effective or other groups that should be examined separately?

Where do you consider vemurafenib will fit into the existing NICE pathway, [Melanoma](#)?

NICE is committed to promoting equality of opportunity, eliminating unlawful discrimination and fostering good relations between people with particular protected characteristics and others. Please let us know if you think that the proposed remit and scope may need changing in order to meet these aims. In particular, please tell us if the proposed remit and scope:

- could exclude from full consideration any people protected by the equality legislation who fall within the patient population for which vemurafenib will license;
- could lead to recommendations that have a different impact on people protected by the equality legislation than on the wider population, e.g. by making it more difficult in practice for a specific group to access the technology;
- could have any adverse impact on people with a particular disability or disabilities.

Please tell us what evidence should be obtained to enable the Committee to identify and consider such impacts.

Do you consider vemurafenib to be innovative in its potential to make a significant and substantial impact on health-related benefits and how it might improve the way that current need is met (is this a 'step-change' in the management of the condition)?

Do you consider that the use of vemurafenib can result in any potential significant and substantial health-related benefits that are unlikely to be included in the QALY calculation?

Appendix B

Please identify the nature of the data which you understand to be available to enable the Appraisal Committee to take account of these benefits.

To help NICE prioritise topics for additional adoption support, do you consider that there will be any barriers to adoption of this technology into practice? If yes, please describe briefly.

NICE intends to appraise this technology through its Single Technology Appraisal (STA) Process. We welcome comments on the appropriateness of appraising this topic through this process. (Information on the Institute's Technology Appraisal processes is available at <http://www.nice.org.uk/article/pmg19/chapter/1-Introduction>).

References

1. Cancer Research UK (2014) Skin cancer statistics. Accessed August 2017
<http://www.cancerresearchuk.org/health-professional/cancer-statistics/statistics-by-cancer-type/skin-cancer>
2. National Cancer Intelligence Network and Cancer Research UK (2015) Routes to diagnosis by stage 2012-2013 workbook. Accessed August 2017
http://www.ncin.org.uk/publications/routes_to_diagnosis
3. Cancer Research UK (2014) Skin cancer survival statistics. Accessed August 2017
<http://www.cancerresearchuk.org/health-professional/cancer-statistics/statistics-by-cancer-type/skin-cancer/survival#heading-Three>