

## Putting NICE guidance into practice

### **Resource impact report: Everolimus and sunitinib for treating unresectable or metastatic neuroendocrine tumours in people with progressive disease (TA449)**

Published: June 2017

## Summary

Everolimus and sunitinib are recommended as options for treating unresectable or metastatic neuroendocrine tumours (NETs) in adults with progressive disease, subject to the criteria set out in the recommendations.

We estimate that around 780 people are eligible to receive treatment each year with a forecast uptake of 90% (700 people).

The number of people in England estimated to have everolimus or sunitinib each year based on the uptake in the resource impact assumptions is shown in table 1.

**Table 1 Estimated number of people in England having everolimus or sunitinib**

	2017/18	2018/19	2019/20	2020/21	2021/22
People having everolimus each year	410	550	620	620	620
People having sunitinib each year	60	70	80	80	80
<b>Total</b>	<b>470</b>	<b>620</b>	<b>700</b>	<b>700</b>	<b>700</b>

This report is supported by a local resource impact template because the list price of everolimus has a discount that is commercial in confidence.

These technologies are commissioned by NHS England. Providers are NHS hospital trusts.

## Introduction

- 1.1 This report looks at the resource impact of implementing the NICE guidance on [everolimus and sunitinib for treating unresectable or metastatic neuroendocrine tumours in people with progressive disease](#) in England.
- 1.2 The guidance states that:
- Everolimus and sunitinib are recommended, within their marketing authorisations, as options for treating well- or moderately-differentiated unresectable or metastatic neuroendocrine tumours (NETs) of pancreatic origin in adults with progressive disease.
  - Everolimus is recommended, within its marketing authorisation, as an option for treating well-differentiated (grade 1 or grade 2) non-functional unresectable or metastatic NETs of gastrointestinal or lung origin in adults with progressive disease.
  - Everolimus is recommended only when the company provides it with the discount agreed in the patient access scheme.
- 1.3 The Department of Health and Novartis have agreed that everolimus 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@novartis.com](mailto:commercial.team@novartis.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 neuroendocrine tumours**

- 2.1 NETs are a mixed group of cancers with different clinical presentations and growth rates. The guidance relates to tumours that are pancreatic, lung or gastrointestinal in origin.
- 2.2 Sunitinib is currently available through the Cancer Drugs Fund (CDF) for people who have pancreatic NETs. Based on 2016 data from the CDF, there are estimated to be 52 people taking the drug. Current alternative treatment options for lung NETs and pancreatic NETs are limited to best supportive care. When the appraisal commenced, everolimus was not available through the CDF and the resource impact report and template reflect this. Everolimus has been available through the CDF since May 2017.
- 2.3 The estimated population eligible for treatment with everolimus and sunitinib for unresectable or metastatic NETs in England is set out in table 2 below.

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

Population	%	Pancreatic NETs	Lung NETs	GI NETs	Number of people
Adult population in England <sup>a</sup>	–				43,108,471
Prevalence of NETs <sup>b</sup>	0.035				15,100
People who have pancreatic NETs <sup>c</sup>	10	1,500			
People who have lung NETs <sup>c</sup>	25		3,800		
People who have gastrointestinal NETs <sup>c</sup>	65			9,800	
<b>People with unresectable or metastatic neuroendocrine tumours that are:</b>					
Pancreatic NETs (65% × 1,500) <sup>c</sup>	65	980			
Lung NETs <sup>c</sup> (28% × 3,800)	28		1,100		
Gastrointestinal NETs <sup>c</sup> (21% × 9,800)	21			2,100	
<b>Marketing authorisation criteria:</b>					
People who have pancreatic NETs that are well- or moderately-differentiated (95% × 980) <sup>c</sup>	95	930			
People who have lung NETs that are both non-functional and well-differentiated (93% × 1,100) <sup>c</sup>	93		980		
People who have gastrointestinal NETs that are both non-functional and well-differentiated (58% × 2,100) <sup>c</sup>	58			1,200	
<b>People with progressive disease who are eligible for treatment</b>					
Pancreatic NETs <sup>c</sup> (20% × 930)	20	180			
Lung NETs <sup>c</sup> (20% × 980)	20		200		
Gastrointestinal NETs <sup>c</sup> (33% × 1,200)	33			400	
<b>Total number of people eligible for treatment</b>		180	200	400	780
<b>Estimated number of people who take up treatment</b>	<b>90</b>	<b>160</b>	<b>180</b>	<b>360</b>	<b>700</b>
a. <a href="#">Clinical Commissioning Group Mid-Year Population Estimates 2015</a> b. <a href="#">[Oberg K et al. 2012]</a> -Updated source reference for England population c. Company submission (Novartis) Table 3.1 Abbreviations: NETs, neuroendocrine tumours; GI, gastrointestinal					

2.4 Therefore it is estimated that approximately 780 people are eligible for treatment each year. This comprises 180 people with pancreatic

NETs who are eligible to have either everolimus or sunitinib, around 200 people who have lung NETs who are eligible to have everolimus and around 400 people who have gastrointestinal NETS who are eligible to have everolimus. Uptake is estimated at 90% for each group and likely to be reached within 2 years.

### **3 Assumptions made**

3.1 The resource impact template makes the following assumptions:

- The comparator for both everolimus and sunitinib is best supportive care.
- Current practice for people with pancreatic NETs reflects the uptake of sunitinib from the Cancer Drugs Fund.
- In future, the number of people having best supportive care will fall to 10% of the number eligible for treatment.
- Uptake of the treatments is estimated to be 90% from 2019/20.
- For people who have pancreatic NETs, the 90% uptake is assumed to be split equally between everolimus and sunitinib.
- Both everolimus and sunitinib are given orally as monotherapies, so no drug administration costs have been included.

### **4 Resource impact**

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

4.2 The template enables users to calculate the resource impact of sunitinib transferring from the Cancer Drugs Fund into routine commissioning at national and local level.

4.3 The population estimated to have everolimus each year is higher because the treatment is indicated for the 3 types of NETs covered in the guidance, whereas sunitinib is indicated for pancreatic NETs

only. This is consistent with the marketing authorisation and the recommendations for the technologies.

4.4 The current uptake for sunitinib is based on Cancer Drugs Fund activity in 2016 from NHS England. The future uptake in specialised commissioning is based on clinical expert opinion that uptake is likely to increase because the other options are limited and because of the extension to life offered by the treatment. This is shown in the resource impact template.

4.5 Table 3 shows the number of people who are estimated to have everolimus or sunitinib by financial year.

**Table 3 Population estimated to have everolimus or sunitinib in England using NICE assumptions**

	2017/18	2018/19	2019/20	2020/21	2021/22
People having everolimus each year	410	550	620	620	620
People having sunitinib each year	60	70	80	80	80
<b>Total</b>	<b>470</b>	<b>620</b>	<b>700</b>	<b>700</b>	<b>700</b>

## 5 Savings and benefits

5.1 For people who have pancreatic NETs, there is an overall survival gain with everolimus and sunitinib of over 3 months compared with best supportive care.

5.2 For people who have gastrointestinal NETs and lung NETs, for whom life expectancy is expected to be more than 24 months, everolimus compared with best supportive care is considered to be cost effective.

5.3 There is a particularly high unmet clinical need for people who have pancreatic, lung and gastrointestinal NETs. Everolimus and

sunitinib, in accordance with their respective licensed indications, offer valuable treatment options.

## **6 Implications for commissioners**

6.1 The technologies will be available through routine commissioning and there will be a resource impact for specialised commissioning.

6.2 Sunitinib for the treatment of pancreatic NETS and everolimus for the treatment of pancreatic or gastrointestinal NETs falls within programme budgeting category 2B 'Cancers and tumours – upper GI'. Everolimus for the treatment of lung NETs falls within programme budgeting category 2D 'Cancers and tumours – lung'.



## About this resource impact report

This resource impact report accompanies the NICE guidance on [everolimus and sunitinib for treating unresectable or metastatic neuroendocrine tumours in people with progressive disease](#) and should be read in conjunction with it. See [terms and conditions](#) on the NICE website.

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