

## Putting NICE guidance into practice

### **Resource impact report: Nivolumab for previously treated unresectable advanced or recurrent oesophageal cancer (TA707)**

Published: June 2021

## Summary

NICE has recommended nivolumab for treating unresectable advanced, recurrent or metastatic oesophageal squamous cell carcinoma in adults after fluoropyrimidine and platinum-based therapy.

We estimate that:

- 450 people with unresectable advanced, recurrent or metastatic oesophageal squamous cell carcinoma who have been treated with fluoropyrimidine and platinum-based therapy are eligible for treatment with nivolumab each year
- 340 people will receive nivolumab from year 3 onwards once uptake has reached 75% as shown in table 1.

**Table 1 Estimated number of people in England having nivolumab**

	2021/22	2022/23	2023/24	2024/25	2025/26
Uptake rate for nivolumab (%)	50	65	75	75	75
Population receiving nivolumab each year	225	295	340	340	340

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

1.1 NICE has recommended nivolumab for treating unresectable advanced, recurrent or metastatic oesophageal squamous cell carcinoma in adults after fluoropyrimidine and platinum-based therapy.

1.2 Current practice is for people to be treated with a taxane such as docetaxel or paclitaxel or best supportive care alone.

## 2 Resource impact of the guidance

2.1 We estimate that:

- 450 people with unresectable advanced, recurrent or metastatic oesophageal squamous cell carcinoma who have been treated with fluoropyrimidine and platinum-based therapy are eligible for treatment with nivolumab each year.
- 340 people will receive nivolumab from year 3 onwards once uptake has reached 75%.

2.2 The current treatment and future uptake figure assumptions are based on clinical expert opinion and are shown in the resource impact template. Table 2 shows the number of people in England who are estimated to receive nivolumab by financial year.

**Table 2 Estimated number of people having nivolumab using NICE assumptions**

	2021/22	2022/23	2023/24	2024/25	2025/26
Uptake rate for nivolumab (%)	50	65	75	75	75
Population receiving nivolumab each year	225	295	340	340	340

- 2.3 This report is supported by a local resource impact template. nivolumab has an agreed patient access scheme which makes it available with a commercial-in-confidence discount to the list price. The discounted price of nivolumab can be put into the template and other variables may be amended.

### ***Savings and benefits***

- 2.4 Nivolumab is likely to extend overall survival in this population.

## **3 Implications for commissioners**

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

## **4 How we estimated the resource impact**

### ***The population***

- 4.1 There are around 7,570 cases of oesophageal cancer in England each year. Of these around 4,690 will have resectable disease stage I-IV(a) on diagnosis, 230 will have unresectable disease stage I-IV(a) and 2,650 will have unresectable disease stage IV(b) giving a total of 2,880 people with unresectable disease on diagnosis.
- 4.2 Of the people with resectable disease on diagnosis, 2,070 people (44%) will have a disease recurrence to unresectable disease.
- 4.3 This gives a total of around 4,950 people with unresectable and recurrent advanced disease.
- 4.4 Of people with unresectable and recurrent advanced disease, around 1,560 (31.5%) will have squamous cell disease and of these 1,090 (69.9%) will have a first line chemotherapy of which 450 (41.5%) will have a second line chemotherapy and be eligible for treatment with nivolumab.

**Table 3 Number of people eligible for treatment in England**

	Population	Proportion of previous row (%)	Number of people
a	Total population		56,286,961
b	Adult population		44,263,393
c	Incidence of oesophageal cancer <sup>1</sup>	0.02	7,570
d	Proportion of people with resectable disease stage I to IV(a) <sup>2</sup>	62	4,690
e	Proportion of people with unresectable advanced disease stage I to IV(a) <sup>2</sup>	3 of c	230
f	Proportion of people with disease stage IV(b) <sup>2</sup>	35 of c	2,650
g	Total people with unresectable disease on diagnosis	e + f	2,880
h	Proportion of people with resectable disease stage I to IV(a) who have a disease recurrence to unresectable disease <sup>2</sup>	44 of d	2,070
i	Total people with recurrent and unresectable advanced disease	g+h	4,950
	Proportion of people with oesophageal squamous cell disease <sup>2</sup>	31.5	1,560
	Proportion of people who choose to have first line chemotherapy <sup>2</sup>	69.9	1,090
	Proportion of people who choose to have second line chemotherapy and are eligible for nivolumab each year <sup>2</sup>	41.5	450
	Total number of people estimated to receive nivolumab each year from year 3 <sup>3</sup>	75	340
<sup>1</sup> Source: <a href="#">C15 Malignant neoplasm of oesophagus, Cancer registration statistics, England: final release, 2018</a> <sup>2</sup> Source: Company submission <sup>3</sup> Source: Clinical expert opinion			

## **Assumptions**

4.5 The resource impact template assumes that:

- The administration cost of nivolumab, docetaxel and paclitaxel is covered by HRG SB13Z 'Deliver more complex parenteral chemotherapy at first attendance'
- No cost for best supportive care is included as it is assumed that people will still receive best supportive care regardless of

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whether they have nivolumab, a taxane or best supportive care only

- Nivolumab is given every 2 weeks for the course of treatment.
- The mean number of cycles of nivolumab is academic commercial in confidence. The number of cycles of nivolumab required should be entered in the costing template to reflect local practice
- Docetaxel is given every 3 weeks for an average of 4.85 cycles
- Paclitaxel is given weekly for 3 weeks then a week off treatment for an average of 10 cycles
- The average weight of a person undergoing cancer treatment is 78.4kg
- The average body surface area of a person undergoing cancer treatment is 1.79m<sup>2</sup>

## About this resource impact report

This resource impact report accompanies the NICE guidance on [Nivolumab for previously treated unresectable advanced or recurrent oesophageal cancer](#) and should be read with it.

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