

Putting NICE guidance into practice

Resource impact report: Cabozantinib for untreated advanced renal cell carcinoma (TA542)

Published: October 2018

Summary

NICE has recommended [cabozantinib](#) for adults with untreated advanced renal cell carcinoma.

We estimate that:

- 1,750 adults with untreated advanced renal cell carcinoma are eligible for treatment with cabozantinib
- 870 adults will have cabozantinib from year 2022/23 onwards once uptake has reached 50% as shown in table 1.

Table 1 Estimated number of people in England having cabozantinib

	2018/19	2019/20	2020/21	2021/22	2022/23
Population having cabozantinib each year	180	350	520	700	870

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

- 1.1 NICE has recommended cabozantinib, within its marketing authorisation, for adults with untreated advanced renal cell carcinoma that is intermediate or poor risk as defined in the International Metastatic Renal Cell Carcinoma Database Consortium criteria.
- 1.2 People with newly diagnosed untreated advanced renal cell carcinoma would be offered 1 of 3 tyrosine kinase inhibitors; pazopanib, sunitinib or tivozanib, as recommended in NICE's technology appraisal guidance.
- 1.3 Cabozantinib is an oral, once-daily treatment and can be taken at home.

2 Resource impact of the guidance

- 2.1 We estimate that:
- 1,750 adults with untreated advanced renal cell carcinoma are eligible for treatment with cabozantinib each year.
 - 870 adults will have cabozantinib from year 2022/23 onwards once uptake has reached 50%.
- 2.2 The current treatment and future uptake figure assumptions are based on company submission and NHS England, and are shown in the resource impact template. Table 2 shows the number of people in England who are estimated to have cabozantinib by financial year.

Table 2 Estimated number of people having cabozantinib using NICE assumptions

	2018/19	2019/20	2020/21	2021/22	2022/23
Population having cabozantinib each year	180	350	520	700	870

- 2.3 This report is supported by a local resource impact template. The company has a commercial arrangement (simple discount patient access scheme). This makes cabozantinib 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. The discounted price of cabozantinib can be put into the template and other variables may be amended. For enquiries about the patient access scheme medical.information.uk@ipsen.com.

3 Implications for commissioners

- 3.1 This technology is commissioned by NHS England. Providers are NHS hospital trusts.
- 3.2 Cabozantinib for untreated advanced renal cell carcinoma falls within the programme budgeting category 2H: Cancer, Urological.

4 How we estimated the resource impact

The population

- 4.1 In 2016, around 9,100 new cases of adults with kidney cancer were recorded in England ([Office for National Statistics](#), 2017).
- 4.2 Table 3 shows the number of people with untreated advanced renal cell carcinoma eligible for treatment with cabozantinib.

Table 3 Number of people eligible for treatment in England

Population	Proportion of previous row (%)	Number of people
Adult population		43,482,790
Incidence of kidney cancer in England ¹	0.021	9,100
People with kidney cancer who have renal cell carcinoma ²	80	7,300
People with renal cell carcinoma diagnosed as advanced or metastatic ³	42	3,070
People with advanced or metastatic renal cell carcinoma eligible for first line systemic treatments ⁴	75	2,300
People with intermediate or poor risk as defined in the International Metastatic Renal Cell Carcinoma Database Consortium criteria eligible for treatment ⁵	76	1,750
People estimated to have cabozantinib each year from 2022/23 ⁴	50	870
<p>¹ Office for National statistics</p> <p>² Cancer Research UK: Types and grades Kidney cancer.</p> <p>³ The National Cancer Registration and Analysis Service. Public Health England.</p> <p>⁴ Company submission</p> <p>⁵ Gore M E, Szczylik C et al. Final results from the large sunitinib global expanded-access trial in metastatic renal cell carcinoma. <i>British Journal of Cancer</i> (2015) 113, 12–19 doi: 10.1038/bjc.2015.196. Available from: www.ncbi.nlm.nih.gov/pmc/articles/PMC4647545</p>		

Assumptions

4.3 The resource impact template assumes that:

- Sunitinib and pazopanib were considered as the relevant comparators.
- Tivozanib is included in the model because it is recommended by NICE technology appraisal guidance 512 as a treatment option for people with untreated advanced renal cell carcinoma.
- Clinical trials suggested pazopanib and sunitinib both had a significant number of people who needed dose reduction. The

model allows users to estimate treatment costs by factoring in dose reduction and using the weighted average cost.

- There are also dose reductions associated with cabozantinib. However, because of flat pricing for all cabozantinib doses, dose reductions do not have an impact on costs.
- Treatment costs for all technologies include oral chemotherapy delivery cost of £120 on day 1 of every treatment cycle ([NHS national tariff 2018/19](#)): Healthcare resource group SB11Z: Deliver exclusively oral chemotherapy).
- There are no additional tests or investigations needed for the selection of people for cabozantinib treatment.

About this resource impact report

This resource impact report accompanies the NICE guidance on [cabozantinib for untreated advanced renal cell carcinoma](#) and should be read with it.

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