

Putting NICE guidance into practice

Resource impact report: Sorafenib for treating advanced hepatocellular carcinoma (Cancer Drugs Fund reconsideration of TA189) (TA474)

Published: September 2017

Summary

NICE has recommended [sorafenib](#) as an option for treating advanced hepatocellular carcinoma only for people with Child-Pugh grade A liver impairment, only if the company provides sorafenib within the agreed commercial access arrangement.

We estimate that:

- 1,200 people with Child-Pugh grade A liver impairment are eligible for treatment with sorafenib
- around 440 of these people currently have sorafenib. This is based on Cancer Drugs Fund (CDF) records
- 900 people will have sorafenib from year 2018/19 onwards once uptake has reached 100% as shown in table 1.

Table 1 Estimated number of people in England having sorafenib

	2017/18	2018/19	2019/20	2020/21	2021/22
Population having sorafenib each year	600	900	900	900	900

This report is supported by a local resource impact template because sorafenib will be available to the NHS with a commercial access agreement which makes it available with a discount that is commercial in confidence. The discounted price of sorafenib 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 Sorafenib

1.1 NICE has recommended [sorafenib](#) as an option for treating advanced hepatocellular carcinoma only for people with Child-Pugh grade A liver impairment, only if the company provides sorafenib within the agreed commercial access arrangement.

1.2 The extent of hepatic dysfunction limits treatment options. The only potentially curative treatment for hepatocellular carcinoma is surgery, which implies hepatic resection or liver transplantation. Only a small proportion of patients will be eligible for either of these treatments.

2 Resource impact of the guidance

2.1 We estimate that:

- 1,200 people with Child-Pugh grade A liver impairment are eligible for treatment with sorafenib
- around 440 of these people currently have sorafenib. This is based on CDF records
- 900 people will have sorafenib from year 2018/19 onwards once uptake has reached 100% as shown in table 2.

2.2 The current treatment and future uptake figure assumptions are based on the CDF activity and clinical expert opinion and are shown in the [resource impact template](#).

Table 2 Estimated number of people in England having sorafenib

	2017/18	2018/19	2019/20	2020/21	2021/22
Population having sorafenib each year	600	900	900	900	900

2.3 This report is supported by a local resource impact template. Sorafenib will be available to the NHS with a commercial access agreement which makes it available with a discount that is

commercial in confidence. The discounted price of sorafenib can be put into the template and other variables may be amended. For enquiries about the commercial access agreement contact access.team@bayer.com.

Savings and benefits

- 2.4 The committee considered that evidence from the clinical studies of sorafenib plus best supportive care suggested that it increased median survival by more than 2.8 months compared with placebo plus best supportive care, and the company's economic model predicted a mean gain in overall survival of 6.1 months, although this depended on the method of extrapolation.

3 Implications for commissioners

- 3.1 This technology is commissioned by NHS England. Providers are NHS hospital trusts.
- 3.2 Sorafenib will be available through routine commissioning and there will be a resource impact for specialised commissioning. The technology was previously funded from the CDF, but this will stop from 90 days after the publication of the guidance.
- 3.3 Sorafenib falls within the programme budgeting category 02B malignant neoplasm, liver cell carcinoma, Cancer, UGI.

4 How we estimated the resource impact

The population

- 4.1 In 2015, around 4,800 cases of liver cancer were recorded in England ([Office for National Statistics](#), 2017).
- 4.2 Table 3 shows the number of people eligible for treatment with sorafenib.

Table 3 Number of people eligible for treatment in England

Population	Proportion of previous row (%)	Number of people
Total population		54,786,327
Total liver cancers registrations in England in 2015 ¹	0.01	4,800
People with liver cancer who have hepatocellular carcinoma ²	85	4,000
People with advanced hepatocellular carcinoma ³	50	2,000
Total number of people with Child-Pugh grade A liver impairment and eligible for treatment with sorafenib ⁴	77	1,500
People with Child-Pugh grade A liver impairment with good performance status ⁵	80	1,200
People with Child-Pugh grade A liver impairment with good performance status referred for treatment ⁵	75	900
Total number of people estimated to have sorafenib each year from 2018/19 ⁵	100	900

¹ The incident population is based on the Cancer Registration Statistics, England, 2015. [Office for National statistics](http://www.ons.gov.uk/cancer)

² Hashem B. El-Serag and Jessica A. Davila. Surveillance for hepatocellular carcinoma: in whom and how? Therapeutic advances in gastroenterology. (2011) 4(1) 5 1.

³ Colagrande S, Inghilesi AL, Aburas S, Taliani GG, Nardi C, Marra F. Challenges of advanced hepatocellular carcinoma. World J Gastroenterol 2016; 22(34): 7645-7659 Available from: <http://www.wjgnet.com/1007-9327/full/v22/i34/7645.htm>.

⁴ J King et al. Sorafenib for the Treatment of Advanced Hepatocellular Cancer - A UK Audit. Clinical Oncology (Royal College Radiology) 29 (4), 256-262. 2016 Dec 10.

⁵ Clinical expert opinion.

Assumptions

4.3 The resource impact template assumes that:

- Best supportive care was considered as the relevant comparator.
- People with Child-Pugh grade A liver impairment eligible but not suitable for sorafenib will be on best supportive care. This is

because clinical experts suggest that people need both adequate liver function and good performance status to receive sorafenib in clinical practice in England.

- Treatment duration of 5.3 months was used to calculate the cost of treatment. This is in line with clinical trials used in the appraisal, accounting for dose reductions or temporary treatment stops.

About this resource impact report

This resource impact report accompanies the NICE guidance on [sorafenib for treating advanced hepatocellular carcinoma](#) and should be read with it.

© NICE 2017. All rights reserved. See [Notice of rights](#).