

NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

Health Technology Appraisal

**Cabozantinib for previously treated advanced hepatocellular carcinoma  
(review of TA582)**

**Final scope**

**Remit/appraisal objective**

To appraise the clinical and cost effectiveness of cabozantinib within its marketing authorisation for previously treated advanced hepatocellular carcinoma.

**Background**

Hepatocellular carcinoma (HCC) is the most common form of liver cancer in England, accounting for 55% of primary liver cancer diagnoses in men and 28% of diagnoses in women<sup>1</sup>. There were 4,975 people diagnosed with liver cancer in England in 2017<sup>2</sup>. HCC is commonly associated with cirrhosis (scarring of the liver), which can develop following long periods of chronic liver disease.

Treatment for HCC depends on the location and stage of the cancer, and how well the liver function is preserved.

For people with advanced disease and those whose disease has progressed while on locoregional therapy or for whom locoregional therapy is not suitable, first-line systemic treatment options include sorafenib ([NICE technology appraisal guidance 474](#)), lenvatinib ([NICE technology appraisal guidance 551](#)) and atezolizumab plus bevacizumab ([NICE technology appraisal guidance 666](#)). For people with disease progression on atezolizumab plus bevacizumab, sorafenib may be given as second-line treatment. For people with disease progression on sorafenib, [NICE technology appraisal 555](#) recommends regorafenib. For some people, regorafenib may not be suitable because sorafenib was poorly tolerated and they may have best supportive care instead.

**The technology**

Cabozantinib (Cabometyx, Ipsen) is a small molecule tyrosine kinase inhibitor. This inhibits multiple receptor tyrosine kinases implicated in tumour growth and angiogenesis, pathologic bone remodelling and metastatic progression of cancer. It is administered orally.

Cabozantinib has a marketing authorisation for treating hepatocellular carcinoma in adults who have previously been treated with sorafenib.

<b>Intervention(s)</b>	Cabozantinib
<b>Population(s)</b>	Adults with advanced hepatocellular carcinoma who have had sorafenib
<b>Comparators</b>	<ul style="list-style-type: none"> <li>• Regorafenib</li> <li>• Best supportive care</li> </ul>
<b>Outcomes</b>	<p>The outcome measures to be considered include:</p> <ul style="list-style-type: none"> <li>• overall survival</li> <li>• progression-free survival</li> <li>• response rates</li> <li>• time to treatment discontinuation</li> <li>• adverse effects of treatment</li> <li>• health-related quality of life</li> </ul>
<b>Economic analysis</b>	<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>If the technology is likely to provide similar or greater health benefits at similar or lower cost than technologies recommended in published NICE technology appraisal guidance for the same indication, a cost-comparison may be carried out.</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, comparator or subsequent treatment technologies will be taken into account.</p>
<b>Other considerations</b>	<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>
<b>Related NICE recommendations and NICE</b>	<p>Related Technology Appraisals:</p> <p><a href="#">Atezolizumab with bevacizumab for treating advanced or unresectable hepatocellular carcinoma</a> (2020) NICE</p>

<b>Pathways</b>	<p>technology appraisal guidance 666.</p> <p><a href="#">Regorafenib for previously treated unresectable hepatocellular carcinoma</a> (2019) NICE technology appraisal guidance 555.</p> <p><a href="#">Lenvatinib for untreated advanced hepatocellular carcinoma</a> (2018) NICE technology appraisal guidance 551.</p> <p><a href="#">Sorafenib for treating advanced hepatocellular carcinoma</a> (2017) NICE technology appraisal guidance 474.</p> <p>Appraisals in development (including suspended appraisals)</p> <p><a href="#">Nivolumab for untreated advanced hepatocellular carcinoma</a> NICE technology appraisal guidance [ID1248]. Publication date to be confirmed</p> <p><a href="#">Selective internal radiation therapies for treating hepatocellular carcinoma</a> NICE technology appraisal guidance [ID1276]. Publication date to be confirmed</p> <p>Related NICE Pathways:</p> <p><a href="#">Liver cancers</a> (2021) NICE pathway.</p>
<b>Related National Policy</b>	<p>The NHS Long Term Plan, 2019. <a href="#">NHS Long Term Plan</a></p> <p>NHS England (2018/2019) <a href="#">NHS manual for prescribed specialist services (2018/2019)</a> chapter 131 (page 357): Specialist services for complex liver, biliary and pancreatic diseases in adults.</p> <p>Department of Health (2016) <a href="#">NHS Outcomes Framework 2016-2017</a>. Domains 1 and 2.</p>

## References

1. National Cancer Registration and Analysis Service (2010) Trends in incidences in primary liver cancer subtypes. Accessed April 20212.
2. Office for National Statistics [Cancer registration statistics, England: 2017](#) (April 2019)