

NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

Health Technology Evaluation

Durvalumab with gemcitabine and cisplatin for treating unresectable or advanced biliary tract cancer [ID4031]

Final scope

Final remit/evaluation objective

To appraise the clinical and cost effectiveness of durvalumab with gemcitabine and cisplatin within its marketing authorisation for treating unresectable or advanced biliary tract cancer.

Background

The biliary tract includes the organs and ducts that make and store bile. The liver and gallbladder are connected to the small bowel by a network of small tubes called ducts which carry bile.^{1,2} Biliary tract cancer (BTC) includes bile duct cancer, gallbladder cancer and ampullary cancer.³ Cancer of the bile ducts is called cholangiocarcinoma and is classified depending on which part of the bile duct the cancer originates. The main types of cholangiocarcinoma include intrahepatic (affects bile ducts inside the liver) and extrahepatic (affects the bile ducts outside the liver and includes perihilar and distal cholangiocarcinoma).^{4,5}

In England, around 2,800 people are diagnosed with cholangiocarcinoma each year.⁴ In 2019, there were 2,754 deaths from cholangiocarcinoma in England.⁶ Currently, there are no UK wide statistics available for bile duct cancer and gallbladder cancer survival by stage.

Surgery remains the curative intent treatment option leading to long-term survival for people diagnosed with resectable BTC. Most people with BTCs are diagnosed with unresectable locally advanced or metastatic disease.^{7,8} People with unresectable tumours are offered palliative treatment. The treatments vary depending on Eastern Cooperative Oncology Group (ECOG) performance status (PS), molecular profiling and disease distribution.⁹

Chemotherapy is typically used in the first-line treatment of BTC that cannot be surgically removed. People with unresectable BTC are typically offered chemotherapy with a combination of cisplatin and gemcitabine.³ For some BTCs, oxaliplatin might be offered instead of cisplatin, especially if there are any concerns over kidney function.⁵ Frailer people might be offered single-agent chemotherapy with gemcitabine, fluorouracil (5-FU) or capecitabine alone.³ For disease that has progressed following first-line treatment, further chemotherapy is recommended. Radiotherapy in addition to chemotherapy may also be offered to some people to relieve symptoms.⁸

The technology

Durvalumab (Imfinzi, AstraZeneca) with gemcitabine and cisplatin does not currently have a marketing authorisation in the UK for treating biliary tract cancer. It has been studied in a clinical trial compared with placebo in adults with unresectable advanced or metastatic biliary tract cancer.

Intervention	Durvalumab with gemcitabine and cisplatin
Population	Adults with unresectable advanced or metastatic biliary tract cancer, including people with recurrent disease after treatment with curative intent
Subgroups	If evidence allows, results by type of biliary tract cancer and level of PD-L1 expression will be considered
Comparators	Established clinical management without durvalumab including: <ul style="list-style-type: none"> • Gemcitabine with cisplatin • For people with poor kidney function: <ul style="list-style-type: none"> ○ Gemcitabine with oxaliplatin • For frailer people: <ul style="list-style-type: none"> ○ Gemcitabine alone ○ Fluorouracil (5-FU) alone ○ Capecitabine alone
Outcomes	The outcome measures to be considered include: <ul style="list-style-type: none"> • overall survival • progression-free survival • response rates (including overall response rates) • time to treatment discontinuation • adverse effects of treatment • health-related quality of life

Economic analysis	<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>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 commercial arrangements for the intervention, comparator and subsequent treatment technologies will be taken into account.</p> <p>The availability and cost of biosimilar and generic products should be taken into account.</p>
Other considerations	<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>
Related NICE recommendations	<p>Related technology appraisals:</p> <p>Pemigatinib for treating relapsed or refractory advanced cholangiocarcinoma with FGFR2 fusion or rearrangement (2021). NICE technology appraisal guidance 722.</p> <p>Related technology appraisals in development:</p> <p>Pembrolizumab with gemcitabine and cisplatin for untreated advanced biliary tract cancer NICE technology appraisal guidance [ID4034]. Publication expected March 2024.</p> <p>Infigratinib for treating relapsed or refractory advanced cholangiocarcinoma with FGFR2 fusion or rearrangement NICE technology appraisal guidance [ID3992]. Publication date to be confirmed.</p> <p>Related interventional procedures:</p> <p>Melphalan chemosaturation with percutaneous hepatic artery perfusion and hepatic vein isolation for primary or metastatic cancer in the liver (2021) NICE interventional procedures guidance 691.</p> <p>Irreversible electroporation for primary liver cancer (2019) NICE interventional procedures guidance 664.</p> <p>Selective internal radiation therapy for unresectable primary intrahepatic cholangiocarcinoma (2018) NICE interventional procedures guidance 630.</p>

	<p>Endoscopic bipolar radiofrequency ablation for treating biliary obstruction caused by cancer (2018) NICE interventional procedures guidance 614.</p> <p>Cryotherapy for the treatment of liver metastases (2010) NICE interventional procedures guidance 369</p> <p>Photodynamic therapy for bile duct cancer (2005) NICE interventional procedures guidance 134.</p> <p>Endoscopic bipolar radiofrequency ablation for treating biliary obstruction caused by cholangiocarcinoma or pancreatic adenocarcinoma NICE interventional procedures guidance. Publication date to be confirmed.</p>
<p>Related National Policy</p>	<p>The NHS Long Term Plan, 2019 NHS Long Term Plan</p> <p>NHS England (2019) Selective internal radiation therapy (SIRT) for the treatment of chemotherapy refractory or intolerant, unresectable primary intrahepatic cholangiocarcinoma (all ages) Clinical Commissioning Policy. Reference 170112P</p> <p>NHS England (2018/2019) NHS manual for prescribed specialist services (2018/2019) Chapter 105. Specialist cancer services (adults)</p> <p>Department of Health and Social Care (2016) NHS outcomes framework 2016 to 2017: Domain 1</p> <p>NHS England (2013/2014) Hepatobiliary and Pancreas (Adult) NHS Standard Contract. Reference A02/S/a.</p>

References

1. National Health Services (NHS). [What is bile duct cancer? - Bile duct cancer \(cholangiocarcinoma\)](#). Accessed 17 November 2022.
2. Macmillan Cancer Support. [Bile duct cancer \(cholangiocarcinoma\)](#). Accessed 17 November 2022.
3. ESMO. [Biliary tract cancer: a guide for patients](#). Accessed 17 November 2022.
4. Cancer Research UK. [What is bile duct cancer?](#) Accessed 17 November 2022.
5. Valle, Juan W., et al. "Biliary cancer: ESMO Clinical Practice Guidelines for diagnosis, treatment and follow-up." *Annals of Oncology* 27 (2016): v28-v37.
6. AMMF. [Introduction to Cholangiocarcinoma](#). Accessed 17 November 2022.
7. Valle, Juan W., et al. "Biliary tract cancer." *The Lancet* 397.10272 (2021): 428-444.
8. BMJ Best Practice. [Cholangiocarcinoma](#). Accessed 17 November 2022.
9. Lamarca, A., J. Edeline, and L. Goyal. "How I treat biliary tract cancer." *ESMO open* 7.1 (2022): 100378.