NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

Health Technology Appraisal

Sacituzumab govitecan for treating unresectable locally advanced or metastatic triple-negative breast cancer after two or more therapies

Draft scope

Draft remit/appraisal objective

To appraise the clinical and cost effectiveness of sacituzumab govitecan within its marketing authorisation for treating unresectable locally advanced or metastatic triple-negative breast cancer after two or more therapies.

Background

Breast cancer arises from the tissues of the ducts or lobules of the breast. 'Locally advanced' breast cancer generally refers to cancer that has spread from the breast to lymph nodes close to the breast, to the skin of the breast, or to the chest wall (stage 3). When the cancer has spread beyond the breast to other parts of the body such as the bones, liver, lung, and brain, it is known as metastatic breast cancer (stage 4).

Over 46,100 people were diagnosed with breast cancer in England in 2017 and there were approximately 9,600 deaths from breast cancer in England in 2018.[1,2] Around 15% of breast cancers are triple-negative breast cancers whereby the cancer cells test negative for oestrogen receptors, progesterone receptors (hormone-receptor-negative cancer) and human epidermal growth factor receptor 2 (HER2-negative cancer).[3,4]

Triple-negative breast cancer is associated with poor prognosis with high risk of relapse and short progression-free survival and overall survival. It can be particularly aggressive, is more likely to recur than other subtypes of breast cancer and is associated with poorer survival. It is diagnosed more frequently in younger women, and it is more frequent amongst women with BRCA1 mutations (a gene on chromosome 17 that normally helps to supress cell growth, which is an inherited gene mutation that may increase the risk of breast cancer).[4,5]

NICE clinical guideline 81 (CG81) recommends systemic sequential therapy for most patients with advanced breast cancer having chemotherapy. Where anthracyclines are not suitable (because they are contraindicated or because of prior anthracycline treatment) the sequencing should follow: single-agent docetaxel as a first-line treatment; single-agent vinorelbine or capecitabine as second line treatment, and single-agent capecitabine or vinorelbine (whichever was not used as second line treatment) as third line treatment. In addition, NICE technology appraisal 423 recommends eribulin as an option for treating locally advanced or metastatic breast cancer in adults when it has progressed after at least two chemotherapy regimens.

The technology

Sacituzumab govitecan (Trodelvy, Gilead Sciences) is a Trop-2-directed antibody and topoisomerase inhibitor drug conjugate. It is administered by intravenous infusion.

Sacituzumab govitecan does not currently have a marketing authorisation in the UK for treating locally advanced or metastatic triple-negative breast cancer. It has been studied in a clinical trial, compared with treatment of physician's choice (that is, eribulin, capecitabine, gemcitabine or vinorelbine), in adults with unresectable locally advanced or metastatic triple negative breast cancer previously treated with at least two systemic chemotherapy regimens.

Intervention(s)	Sacituzumab govitecan
Population(s)	Adults with unresectable locally advanced or metastatic triple-negative breast cancer who have had at least two prior therapies
Comparators	• capecitabine • vinorelbine • eribulin
Outcomes	The outcome measures to be considered include: • overall survival • progression free survival • response rate • adverse effects of treatment • health-related quality of life.
Economic analysis	The reference case stipulates that the cost effectiveness of treatments should be expressed in terms of incremental cost per quality-adjusted life year. 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. 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. Costs will be considered from an NHS and Personal Social Services perspective.

Other considerations	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.
Related NICE recommendations and NICE Pathways	Related Technology Appraisals: Eribulin for treating locally advanced or metastatic breast cancer after 2 or more chemotherapy regimens (2016) technology appraisal guidance 423. Reviewed October 2019 Atezolizumab with nab-paclitaxel for untreated PD-L1-positive, locally advanced or metastatic, triple-negative breast cancer (2020) technology appraisal guidance 639. Review date 2023. Appraisals in development Atezolizumab with chemotherapy for neoadjuvant treatment of resectable early or locally advanced invasive triple-negative breast cancer [ID1574]. Publication expected 15 December 2021. Pembrolizumab in combination for untreated, locally recurrent inoperable or metastatic, triple negative breast cancer [ID1546]. Publication date: TBC. Pembrolizumab in combination with chemotherapy for neoadjuvant treatment of triple negative breast cancer [ID1500]. Publication date TBC. Atezolizumab with paclitaxel for untreated advanced triple-negative breast cancer [ID2705]. Publication date: Suspended. Pembrolizumab for previously treated metastatic triple negative breast cancer [ID1246]. Publication date: Suspended. Related Guidelines: Advanced breast cancer: diagnosis and treatment (2009, updated 2017) NICE guideline CG81 Related Quality Standards: Breast cancer (2011) NICE quality standard 12. http://www.nice.org.uk/guidance/qualitystandards/qualitystandards.jsp

	Related NICE Pathways: Advanced breast cancer (updated 2020) NICE pathway.
Related National Policy	The NHS Long Term Plan, 2019. NHS Long Term Plan NHS England (2018/2019) NHS manual for prescribed specialist services (2018/2019): Specialist cancer services (adults) Department of Health and Social Care, NHS Outcomes Framework 2016-2017: Domains 1, 2, 4 and 5

Questions for consultation

Have all relevant comparators for sacituzumab govitecan been included in the scope? Is a comparison with best supportive care relevant for this population?

Which treatments are considered to be established clinical practice in the NHS for treating unresectable locally advanced or metastatic triple-negative breast cancer after two or more therapies?

Are the outcomes listed appropriate?

Are there any subgroups of people in whom sacituzumab govitecan is expected to be more clinically effective and cost effective or other groups that should be examined separately?

Where do you consider sacituzumab govitecan will fit into the existing NICE pathway, Managing advanced breast cancer - NICE Pathways?

NICE is committed to promoting equality of opportunity, eliminating unlawful discrimination and fostering good relations between people with particular protected characteristics and others. Please let us know if you think that the proposed remit and scope may need changing in order to meet these aims. In particular, please tell us if the proposed remit and scope:

- could exclude from full consideration any people protected by the equality legislation who fall within the patient population for which sacituzumab govitecan will be licensed;
- could lead to recommendations that have a different impact on people protected by the equality legislation than on the wider population, e.g. by making it more difficult in practice for a specific group to access the technology;
- could have any adverse impact on people with a particular disability or disabilities.

Please tell us what evidence should be obtained to enable the Committee to identify and consider such impacts.

Do you consider sacituzumab govitecan to be innovative in its potential to make a significant and substantial impact on health-related benefits and how it might improve the way that current need is met (is this a 'step-change' in the management of the condition)?

Do you consider that the use of sacituzumab govitecan can result in any potential significant and substantial health-related benefits that are unlikely to be included in the QALY calculation?

Please identify the nature of the data which you understand to be available to enable the Appraisal Committee to take account of these benefits.

To help NICE prioritise topics for additional adoption support, do you consider that there will be any barriers to adoption of this technology into practice? If yes, please describe briefly.

NICE intends to appraise this technology through its Single Technology Appraisal (STA) Process. We welcome comments on the appropriateness of appraising this topic through this process. (Information on the Institute's Technology Appraisal processes is available at http://www.nice.org.uk/article/pmg19/chapter/1-Introduction).

NICE has published an addendum to its guide to the methods of technology appraisal (available at https://www.nice.org.uk/Media/Default/About/what-we-do/NICE-guidance/NICE-technology-appraisals/methods-guide-addendum-cost-comparison.pdf), which states the methods to be used where a cost comparison case is made.

- Would it be appropriate to use the cost comparison methodology for this topic?
- Is the new technology likely to be similar in its clinical efficacy and resource use to any of the comparators?
- Is the primary outcome that was measured in the trial or used to drive the model for the comparator(s) still clinically relevant?
- Is there any substantial new evidence for the comparator technology/ies that has not been considered? Are there any important ongoing trials reporting in the next year?

References

1 Office for National Statistics (2019) Cancer registration statistics, England, 2017. Accessed April 2021.

2 Cancer research UK (2018) Breast cancer mortality statistics. Accessed April 2021.

3 The Institute of Cancer Research (2016) Promising drug target for aggressive 'triple negative' breast cancers identified. Accessed April 2021.

4 Cancer research UK (2020) Triple negative breast cancer. Accessed April 2021

5 Couch FJ, Hart SN, Sharma P et al. Inherited mutations in 17 breast cancer susceptibility genes among a large triple-negative breast cancer cohort unselected for family history of breast cancer. Journal of Clinical Oncology 2015;33(4):304-311