NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

Health Technology Evaluation

Ribociclib with endocrine therapy for adjuvant treatment of hormone receptor-positive, HER2-negative early breast cancer

Draft scope

Draft remit/evaluation objective

To appraise the clinical and cost effectiveness of ribociclib with endocrine therapy within its marketing authorisation for adjuvant treatment of hormone receptor-positive, HER2-negative early breast cancer.

Background

Breast cancer arises from the tissues of the ducts or lobules of the breast. Breast cancer is described as 'early' if it is restricted to the breast or the breast and near lymph nodes, and has not spread to other parts of the body.

In 2017, there were about 45,908 new diagnoses of breast cancer in England.[1] Of these, 36,601 (80%) were diagnoses of early breast cancer.[1] Most (80%) breast cancers are hormone receptor-positive and around two-thirds are oestrogen receptor positive.[2] Between 80-85% of women with breast cancer will have HER2-negative tumours.[3]

Treatment may depend on whether the cancer cells have particular receptors (hormone receptor status or human epidermal growth factor receptor 2 [HER2] status), the extent of the disease, and previous treatments.

Adjuvant therapy is used to reduce the risk of the cancer coming back after surgery. The decision about whether to have adjuvant therapy is based on the assessment of the risk of the cancer coming back and the potential benefits and side effects of the treatment. NICE guideline 101 recommends adjuvant endocrine therapy (tamoxifen or aromatase inhibitors) for hormone receptor-positive early breast cancer. It also recommends considering ovarian function suppression for premenopausal women and extended endocrine therapy (total duration of endocrine therapy of more than 5 years). Adjuvant chemotherapy (a regimen containing both a taxane and an anthracycline), adjuvant radiotherapy and adjuvant bisphosphonate therapy (for post-menopausal women) are also recommended for early breast cancer. NICE technology appraisal 810 recommends abemaciclib with endocrine therapy, within its marketing authorisation, as an option for adjuvant treatment of hormone receptor-positive, HER2-negative, node-positive early breast cancer in adults whose disease is at high risk of recurrence. NICE technology appraisal 886 recommends olaparib (alone or with endocrine therapy), within its marketing authorisation, as an option for the adjuvant treatment of HER2-negative high-risk early breast cancer that has been treated with neoadjuvant or adjuvant chemotherapy in adults with germline BRCA1 or 2 mutations.

The technology

Ribociclib (Kisqali, Novartis) with endocrine therapy does not currently have a marketing authorisation in the UK for adjuvant treatment of hormone receptor-positive, HER2-negative early breast cancer. It has been studied in clinical trials in combination with endocrine therapy as adjuvant treatment in people with hormone receptor-positive, HER2-negative early breast cancer.

Ribociclib has a UK marketing authorisation for the treatment of women with hormone receptor-positive, human epidermal growth factor receptor 2 (HER2)-negative locally advanced or metastatic breast cancer in combination with an aromatase inhibitor or fulvestrant as initial endocrine-based therapy, or in women who have received prior endocrine therapy.

Intervention(s)	Ribociclib with endocrine therapy
Population(s)	Adults with hormone receptor-positive, HER2-negative early breast cancer after surgery of the primary breast tumour.
Subgroups	• Node-positive early breast cancer at high risk of recurrence • People with BRCA1 or 2 mutations
Comparators	• Standard endocrine therapy For node-positive early breast cancer at high risk of recurrence: • Abemaciclib (with endocrine therapy) For people with BRCA1 or 2 mutations: • Olaparib (with or without endocrine therapy)
Outcomes	The outcome measures to be considered include: • overall survival • invasive disease-free survival • distant disease-free survival • 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. The availability of any commercial arrangements for the intervention, comparator and subsequent treatment technologies will be taken into account. The availability and cost of biosimilar and generic products should be taken into account.
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	**Related technology appraisals:** Abemaciclib with endocrine therapy for adjuvant treatment of hormone receptor-positive, HER2-negative, node-positive early breast cancer at high risk of recurrence (2022). NICE technology appraisal guidance 810. Review 2025. Olaparib for adjuvant treatment of BRCA mutation-positive HER2-negative high-risk early breast cancer after chemotherapy (2023). NICE technology appraisal guidance 886. No review date. Intrabeam radiotherapy system for adjuvant treatment of early breast cancer (2018). NICE technology appraisal guidance 501. No review date. **Related NICE guidelines:** Early and locally advanced breast cancer: diagnosis and management (2018). NICE guideline NG101. **Related NICE guidelines in development:** Early and locally advanced breast cancer: diagnosis and management – Radiotherapy NICE guidance. Expected publication June 2023.
Related National Policy	The NHS Long Term Plan (2019) NHS Long Term Plan Department of Health and Social Care (2016) NHS outcomes framework 2016 to 2017 NHS Digital (2022) NHS Outcomes Framework England, March 2022 Annual Publication

Questions for consultation

Where do you consider ribociclib with endocrine therapy will fit into the existing care pathway for the adjuvant treatment of hormone receptor-positive, HER2-negative early breast cancer?

Have all relevant comparators for ribociclib been included in the scope?

Which treatments are considered to be established clinical practice in the NHS for the adjuvant treatment of hormone receptor-positive, HER2-negative early breast cancer?

Are the suggested subgroups appropriate for consideration?

Would ribociclib be a candidate for managed access?

Do you consider that the use of ribociclib can result in any potential 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 committee to take account of these benefits.

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 ribociclib 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.

NICE intends to evaluate this technology through its Single Technology Appraisal process. (Information on NICE's health technology evaluation processes is available at https://www.nice.org.uk/about/what-we-do/our-programmes/nice-guidance/nice-technology-appraisal-guidance/changes-to-health-technology-evaluation).

References

1. National Cancer Registration and Analysis Service (2019). Stage breakdown by CCG 2017. Accessed May 2023.

2. Dewis R and Gribbin J (2009) Breast cancer: diagnosis and treatment, an assessment of need. Cardiff: NCCC. Accessed May 2023

3. Macmillan Cancer Support Receptors for HER2 Accessed May 2023.