

NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

Health Technology Evaluation

Brentuximab vedotin in combination for untreated advanced classical Hodgkin lymphoma

Final scope

Remit/evaluation objective

To appraise the clinical and cost effectiveness of brentuximab vedotin in combination with etoposide, cyclophosphamide, doxorubicin, dacarbazine, and dexamethasone within its marketing authorisation for previously untreated CD30+ stage 2B with risk factors, stage 3 or stage 4 Hodgkin lymphoma.

Background

Hodgkin lymphoma is a cancer of the lymphatic system. It can be classified into 2 main groups; the classical types, and the nodular lymphocyte-predominant type¹. Classical Hodgkin lymphomas contain the Reed–Sternberg cells (which are cancerous B lymphocyte cells). Nodular lymphocyte-predominant lymphoma contains lymphocyte-predominant cells, a variant of Reed–Sternberg cells¹. Reed–Sternberg cells typically express integral membrane antigen CD30². Advanced Hodgkin lymphoma typically includes people with stage 3 or 4 disease but people with stage 2B symptoms and bulk disease or extranodal sites are usually treated the same as advanced stage³. The most common symptom of Hodgkin lymphoma is often swelling of the lymph nodes in the neck, armpit or groin⁴. Other symptoms include recurring fever, night sweats, weight loss, cough, breathlessness, abdominal pain, and itching.

Around 2,200 people are diagnosed with Hodgkin lymphoma each year in the UK, and around 320 people die from Hodgkin lymphoma each year⁵. In England, around 1,800 people are diagnosed with Hodgkin lymphoma and around 250 people die from Hodgkin lymphoma each year⁵. The age-specific incidence of Hodgkin lymphoma shows two peaks, one in people aged 20 to 24 years and a second in people aged over 75 years⁵. Classical Hodgkin lymphoma accounts for approximately 95% of cases of Hodgkin lymphoma.

The goal of treatment for previously untreated Hodgkin lymphoma is to cure the disease while managing short- and long-term complications. Newly diagnosed Hodgkin lymphoma is generally treated with chemotherapy combinations alone. Up to 5-10% of the disease is refractory to these therapies and 10-30% will relapse after initial remission⁶. For people with untreated stage 3 or 4 CD30-positive Hodgkin lymphoma [NICE technology appraisal guidance TA1059](#) recommends brentuximab vedotin in combination with doxorubicin, dacarbazine and vinblastine. For people whose disease is relapsed or refractory, high-dose chemotherapy followed by autologous stem cell transplant is a potentially curative treatment that is effective in about 50% of people. However, autologous stem cell transplant may not be an option in some circumstances; for example, when the disease is refractory to high dose chemotherapy, or when the person's age or comorbidities prohibit this intervention.

The technology

Brentuximab vedotin (Adcetris, Takeda) in combination with etoposide, cyclophosphamide, doxorubicin, dacarbazine and dexamethasone has marketing authorisation in the UK for adults with previously untreated CD30+ stage 2B with risk factors, stage 3 or stage 4 Hodgkin lymphoma.

Brentuximab vedotin also has marketing authorisation in combination with doxorubicin, dacarbazine and vinblastine for adults with previously untreated CD30+ stage 3 or 4 Hodgkin lymphoma. It also has marketing authorisation as a monotherapy for adults with CD30+ Hodgkin lymphoma at increased risk of relapse or progression following autologous stem cell transplant, and adults with relapsed or refractory CD30+ Hodgkin lymphoma after autologous stem cell transplant or following at least two prior therapies when autologous stem cell transplant or multi-agent chemotherapy is not a treatment option.

Intervention(s)	Brentuximab vedotin with etoposide, cyclophosphamide, doxorubicin, dacarbazine and dexamethasone
Population(s)	Adults with previously untreated CD30+ stage 2B with risk factors, stage 3 or stage 4 classical Hodgkin lymphoma
Subgroups	If the evidence allows, the following subgroups will be considered: <ul style="list-style-type: none">• Age• Stage of disease• Eligibility for autologous stem cell transplant
Comparators	<ul style="list-style-type: none">• Brentuximab vedotin in combination with doxorubicin, dacarbazine and vinblastine (for stage 3 or 4 CD30-positive Hodgkin lymphoma)• Single or combination chemotherapy including but not limited to:<ul style="list-style-type: none">○ ABVD-based regimens (doxorubicin, bleomycin, vinblastine and dacarbazine)○ BEACOP-based regimens (bleomycin, etoposide, doxorubicin, cyclophosphamide, vincristine and prednisone)
Outcomes	The outcome measures to be considered include: <ul style="list-style-type: none">• overall survival• progression-free survival• response rates• adverse effects of treatment• health-related quality of life.

<p>Economic analysis</p>	<p>The reference case stipulates that the cost effectiveness of treatments should be expressed in terms of incremental cost per quality-adjusted life year. 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.</p>
<p>Other considerations</p>	<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>
<p>Related NICE recommendations</p>	<p>Related technology appraisals:</p> <p>Brentuximab vedotin in combination for untreated stage 3 or 4 CD30-positive Hodgkin lymphoma (2025) NICE technology appraisal guidance 1059</p> <p>Pembrolizumab for treating relapsed or refractory classical Hodgkin lymphoma in people 3 years and over (2024) NICE technology appraisal guidance 967</p> <p>Pembrolizumab for treating relapsed or refractory classical Hodgkin lymphoma after stem cell transplant or at least 2 previous therapies (2022) NICE technology appraisal guidance 772</p> <p>Brentuximab vedotin for treating CD30-positive Hodgkin lymphoma (2018) NICE technology appraisal 524.</p> <p>Nivolumab for treating relapsed or refractory classical Hodgkin lymphoma (2017) NICE technology appraisal 462.</p> <p>Related technology appraisals in development:</p> <p>Nivolumab in combination for untreated advanced classical Hodgkin lymphoma in people 12 years and over [ID6690] Expected publication date: TBC</p> <p>Related NICE guidelines:</p> <p>Haematological cancers: improving outcomes (2016) NICE guideline NG47.</p>

References

1. Lymphoma Action (2025). Hodgkin lymphoma. Accessed 19 January 2026
2. Haluska, F, Brufsky, A and Canellos, G (1994). The Cellular Biology of the Reed–Sternberg Cell. *Blood* Vol 84 (4): 1,005-1,019.
3. Cancer Research UK (2024). Hodgkin lymphoma: Stages of Hodgkin lymphoma. Accessed 22 April 2026
4. Cancer Research UK (2024). Hodgkin lymphoma: Symptoms. Accessed 21 January 2026
5. Cancer Research UK. Hodgkin lymphoma statistics. Accessed 21 January 2026
6. Qudus, F and Armitage, J O (2009). Salvage Therapy for Hodgkin's Lymphoma. *Cancer Journal* Vol 15 (2): 161-3.