

NATIONAL INSTITUTE FOR HEALTH AND CLINICAL EXCELLENCE

Single Technology Appraisal

Pralatrexate for the treatment of relapsed or refractory peripheral T-cell lymphoma

Final scope

Remit/appraisal objective

To appraise the clinical and cost effectiveness of pralatrexate within its licensed indication for the treatment of relapsed or refractory peripheral T-cell lymphoma.

Background

Lymphomas are cancers of the lymphatic system, which are broadly described as either Hodgkin's lymphoma or non-Hodgkin's lymphoma (NHL). Peripheral T-cell lymphoma (PTCL) comprises a group of rare and aggressive non-Hodgkin lymphomas that develop from T-cells in different stages of maturity.

In 2008, approximately 10,000 people were diagnosed with NHL in England and Wales. It is estimated that around 10% of NHL is classified as PTCL. It generally affects people over 60 years of age and incidence is slightly higher in men than in women. People with PTCL usually develop lumps, which may grow quite rapidly. Although these lumps most often form in the lymph nodes (nodal PTCL), they can occur in other body sites (extranodal PTCL), including the stomach, skin and small intestine. By the time the condition is diagnosed, most people have widespread disease, and experience fever, fatigue, weight loss and night sweats, and will require aggressive treatment to manage their condition.

In 2007, there were 4533 deaths due to NHL in the UK. Only 25% of people with aggressive PTCL will survive for five years after first-line therapy.

Combination chemotherapy with a CHOP-based regimen (cyclophosphamide, doxorubicin, vincristine, prednisolone) is often used for the first-line treatment of PTCL. People with relapsed or refractory PTCL receive a variety of second-line treatments, most commonly multi-agent chemotherapy that may be platinum-based. If disease is unresponsive to therapy, best supportive care (which may include single-agent chemotherapy for symptomatic relief) is provided.

The technology

Pralatrexate (Folotyn, Allos Therapeutics) is a folate analogue that inhibits the activity of the enzyme dihydrofolate reductase, which is necessary for cell growth and multiplication. It is administered by intravenous infusion.

Appendix B – Final Scope

Pralatrexate does not have a UK marketing authorisation for the treatment of peripheral T-cell lymphoma. It has been studied in single-arm clinical trials in adults with relapsed or refractory peripheral T-cell lymphoma in combination with vitamin B12 and folic acid supplementation. People were considered to have relapsed or refractory disease if they had no response to their most recent treatment or to any prior therapies, including CHOP-based chemotherapy and other multi-agent chemotherapy regimens.

Intervention(s)	Pralatrexate
Population(s)	Adults with relapsed or refractory peripheral T-cell lymphoma
Comparators	Single and combination treatment regimens that may include platinum-based chemotherapy (such as carboplatin or cisplatin) and/or other chemotherapeutic agents (such as cyclophosphamide, cytarabine, epirubicin, etoposide, fludarabine, gemcitabine, ifosfamide or lomustine) and/or corticosteroids
Outcomes	The outcome measures to be considered include: <ul style="list-style-type: none"> • overall survival • progression-free survival • response rate • duration of response • time to response • 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. 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.
Related NICE recommendations	Related Guidelines: Cancer Service Guidance, Oct 2003, 'Improving outcomes in haematological cancers – the manual'.