NATIONAL INSTITUTE FOR HEALTH AND CLINICAL EXCELLENCE

Proposed Health Technology Appraisal

Rituximab for the first-line treatment of stage III-IV follicular lymphoma (Review of TA 110)

Final scope

Appraisal objective

To appraise the clinical and cost effectiveness of rituximab, within its licensed indication, for the first line treatment of stage III-IV follicular lymphoma (review of existing guidance 110).¹

Background

Lymphomas are cancers of the lymphatic system. They are broadly divided into Hodgkin's lymphoma and non-Hodgkin's lymphomas (NHL). NHL can be divided into low grade and aggressive lymphomas. Low-grade (also called 'indolent') lymphomas are slow growing, with long median survival times but are less likely to be cured by treatment. Follicular lymphoma is a low-grade lymphoma of B-lymphocytes and accounts for approximately 30% of all lowgrade lymphomas.

Precise identification of the type of lymphoma and accurate staging of the disease is crucial both for choosing the optimum treatment and for monitoring disease progression. The stage of NHL reflects how many groups of lymph nodes are affected, where they are in the body, and whether other organs such as the bone marrow or liver are affected. One of the most common systems for classifying NHL identifies four stages. Early follicular lymphoma includes stages I and II, and advanced disease includes stages III and IV. In stage I, only one group of lymph nodes in one organ of the body is affected. In stage II, the disease has spread to two lymph groups on the same side of the diaphragm. Stage III disease includes lymph nodes affected on both sides of the diaphragm, and stage IV of the disease usually involves multiple internal organs, for example, the liver, bone marrow, or blood.

NHL accounts for approximately 4% of all cancers diagnosed in the UK, with 9431 new cases registered in England and Wales in 2006, and 4011 registered deaths in 2007. Depending on the classification system used, between 22% and 40% of NHLs are follicular. The incidence of follicular lymphoma increases with age, with the median age at diagnosis between 60 and 65 years. Over 70% of people with follicular lymphoma are still alive 5

¹ The remit from the Department of Health is to appraise the clinical and cost effectiveness of rituximab in combination with other drugs as a first line treatment for low grade non-Hodgkin's lymphoma.

years after the diagnosis, with median survival over 10 years. Most people will have disease at stage III or IV at the time of diagnosis.

For many people regular check-ups are the most appropriate clinical management (known as active surveillance or watchful waiting) until active treatment is needed when symptoms develop. There may be many episodes of remission and relapse, and the nature of the disease can change at relapse, sometimes transforming to a more aggressive type. Treatment for low-grade NHL can lead to partial remission (decrease the size of the lymphoma, or reduce the extent of lymphoma in the body) or to complete remission (when the disease is not detectable anymore).

The aim of management is to achieve the longest possible remission and improve quality of life. Despite a long median survival, follicular lymphoma is generally considered incurable. First-line treatment options for stage III or IV follicular lymphoma include single-agent or combination (immuno-) chemotherapy regimens based on alkylating agents, with or without steroids. Common chemotherapy regimens used as first line treatment for follicular lymphoma are cyclophosphamide, vincristine and prednisolone (CVP), cyclophosphamide, doxorubicin, vincristine and prednisolone (CHOP) and fludarabine-based regimens. Treatments should be considered on an individual basis to take account of a patient's co-morbidities.

The technology

Rituximab (Mabthera, Roche Products) is a genetically engineered monoclonal antibody that targets the CD-20 surface marker of mature B-cell lymphocytes. This marker is expressed on almost all B-cell lymphomas and testing for its presence is part of the normal diagnostic procedure.

Rituximab has a UK marketing authorisation for the first-line treatment of previously untreated patients with stage III-IV follicular lymphoma in combination with any chemotherapy regimen. This indication has replaced the previous marketing authorisation for rituximab where it was only licensed for use in combination with a specific chemotherapy regimen of cyclophosphamide, vincristine and prednisolone (R-CVP).

Rituximab also has a UK marketing authorisation for maintenance therapy for patients with relapsed/refractory follicular lymphoma responding to induction chemotherapy with or without rituximab. It is also licensed as monotherapy for patients with stage III-IV follicular lymphoma who are resistant to chemotherapy or are in their second or subsequent relapse after chemotherapy. Rituximab in combination with cyclophosphamide, vincristine and prednisolone (R-CVP regimen) is recommended in NICE technology appraisal guidance 110 'Rituximab for the treatment of follicular lymphoma' as a first-line treatment option for symptomatic stage III or IV follicular lymphoma.

Intervention(s)	Rituximab in combination with chemotherapy
Population(s)	Adults with stage III-IV follicular lymphoma who are symptomatic and have not received previous chemotherapy
Comparators	Chemotherapy without rituximab
Outcomes	 The outcome measures to be considered include: overall survival progression free survival response rates duration of disease remission 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	If the evidence allows, subgroup analyses by type of chemotherapy regimen received will be considered. Guidance will only be issued in accordance with the marketing authorisation

Related NICE recommendations	Related Technology Appraisals:
	Technology Appraisal No 137, September 2008, Rituximab for the treatment of relapsed or refractory stage III or IV follicular non-Hodgkin's lymphoma (review of technology appraisal guidance 37).
	Technology Appraisal No 110, September 2006, Rituximab for the treatment of follicular lymphoma. Currently under review.
	Technology Appraisal in Preparation. Rituximab for the maintenance treatment of follicular non-Hodgkin's lymphoma following response to first-line chemotherapy. Earliest anticipated date of publication January 2011.
	Related Guidelines:
	Clinical Guideline No. CSGHO, October 2003, "Improving outcomes in haemato-oncology cancer".