HEMATOLOGY

Rituximab in follicular lymphoma

There is currently no standard first-line chemotherapy regimen for the treatment of patients with follicular lymphoma. A recent study by Gilles Salles *et al.* has shown that the combination of rituximab and chemotherapy plus interferon-alpha provides superior disease control when compared with chemotherapy plus interferon-alpha alone in the first-line treatment of patients with follicular lymphoma and high tumor burden.

Follicular lymphoma is the second most common lymphoma to occur in adults and several studies have shown that the combination of interferon-alpha with anthracycline-containing chemotherapy can improve survival. The humanized monoclonal anti-CD20 antibody, rituximab, has shown promise to treat follicular lymphoma—when used as a single agent, and also when used in combination with chemotherapy. Preliminary data have also suggested that interferon-alpha could further enhance the activity of rituximab. This finding led the Groupe d'Etude des Lymphomes de l'Adulte (GELA) and the Groupe Ouest Est des Leucémies et Autres Maladies du Sang (GOELAMS) to investigate the potential benefit of rituximab in combination with chemotherapy and interferon in patients with follicular lymphoma.

This multicenter, randomized study included patients aged between 18 and

75 years with a diagnosis of follicular lymphoma by a lymph node biopsy. The researchers randomly assigned patients to receive either 12 courses of the chemotherapy regimen consisting of cyclophosphamide, adriamycin, etoposide and prednisolone (CHVP, $n = 183$) plus interferon-alpha over 18 months, or 6 courses of the same CHVP regimen combined with 6 infusions of rituximab and interferon-alpha for the same time period ($n = 175$). Salles *et al.* presented their analysis of this study after a median of 5 years of follow-up.

Between May 2000 and May 2002, 358 patients were considered eligible for inclusion, and data from these patients were analyzed. After 5 years of follow-up, event-free survival was estimated to be 37% in the chemotherapy arm and 53% in the rituximab arm; there was no statistically significant difference in overall survival between the two treatment arms. Despite the shorter duration of treatment, the combination of CHVP plus rituximab improved the outcome of patients with follicular lymphoma compared with treatment with CHVP plus interferon alone. The long follow-up period in this study confirms that the response to the rituximab treatment regimen is also substantially prolonged. “One of the most significant findings from the FL2000 study is the durability of the benefit observed in patients receiving the combination of rituximab

Image supplied by G. Salles

with chemotherapy plus interferon,” says Salles. “Indeed, more than 3 years after the last infusion of the anti-CD20 monoclonal antibody, more patients are experiencing a sustained response with this combination as compared to those that received chemotherapy plus interferon only.”

The authors suggest that the use of rituximab in combination with chemotherapy should become the new standard for patients with follicular lymphoma with a high tumor burden.

Mandy Aujla

Original article Salles, G. *et al.* Rituximab combined with chemotherapy and interferon in follicular lymphoma patients: results of the GELA-GOELAMS FL2000 study. *Blood* 112, 4824–4831 (2008).