A Randomized Study of Interferon α -2b Versus No Treatment as Consolidation After High Dose Therapy and Autologous Stem Cell Transplantation for Patients With Relapsed Lymphoma

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AUTHOR SUMMARY

ABSTRACT

Background. Patients with lymphoma who have experienced a first relapse or progression and have disease deemed sensitive to salvage chemotherapy nevertheless have a high likelihood of having a second relapse. To decrease the likelihood of a second relapse after high-dose therapy (HDT) and autologous stem cell transplantation (ASCT), interferon (IFN) α -2b was given in a prospective randomized international trial.

Methods. In this trial, 221 patients with varying histologic diagnoses (8 small lymphocytic, 37 follicular, 9 mantle, 90 diffuse large B-cell, 20 peripheral T-cell, 3 high-grade B-cell non-Hodgkin lymphoma, and 54 Hodgkin lymphoma) were randomly assigned to receive no further treatment (arm A: 117 patients) or IFN α -2b, 3 MU three times weekly, for 18 months (arm B: 104 patients).

Results. In arm B, 21 patients (20%) did not receive IFN α -2b because of early progression or absence of hematologic recovery, 29 patients (28%) completed the 18 months of treatment, and 54 patients (52%) interrupted treatment because of progression (23%) or toxicity (29%). Event-free survival and overall survival were not different between the two arms on an intent-to-treat analysis and also if analysis was restricted to patients who were alive and had not experienced disease progression three months after transplantation. The study was not sufficiently powered to evaluate effects in histologic subtypes.

Conclusion. In this trial, post-autograft IFN α -2b did not improve outcomes in a heterogeneous group of patients with lymphoma.

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DISCUSSION

This study failed to demonstrate any advantage of interferon consolidation treatment after HDT plus ASCT. The event-free survival, according to an intent-to-treat analysis of randomly assigned patients,

Figure 1. Event-free survival according to arm: intent-to-treat analysis of randomly assigned patients.

Abbreviations: ARM with IFN, arm B; ARM without IFN, arm A; NS, not significant.

showed no difference between the two arms (Fig. 1). However, only a minority of patients were able to receive IFN α -2b treatment for the planned 18 months after ASCT. Thus, it is not clear whether the absence of a demonstrable advantage reflects a lack of intrinsic activity of interferon in this context or whether it indicates the inability to administer an adequate dose of interferon to patients for sustained periods.

According to data in the literature, many other trials evaluating recombinant IL-2 plus IFN, cyclosporine, recombinant IL-2 plus γ IFN, and rituximab have likewise not been able to improve prognosis after HDT plus ASCT.

DISCLOSURES

Author disclosures available online.

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