

this question we have to balance the burden of a local recurrence and the toxicity, especially late toxicity, of an irradiation given in vain. Secondly, we have to discuss whether before treatment we will be able to identify more precisely those patients likely or not to benefit from the treatment.

These questions will be discussed during the round table discussions.

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### Autografting for acute myelocytic leukemia (AML) in Europe

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As of November 2000, the EBMT Registry contained information on 12447 patients with AML treated according to various schemes, all including HSCT. We restricted our analysis to the 10972 patients transplanted after January 1987.

**1. Transplants in first remission (CR1):** 8739 patients, consisting of 7348 adults and 1369 children. Of the adult patients, 3674 received an autograft (2337 Bone marrow of which 302 were purged in vitro and 1337 Peripheral Blood); 3674 received an allograft (3375 genodentical, 91 family mismatches, 109 matched unrelated donors, 99 other). Of the children, 609 received an autograft (493 Bone marrow of which 140 were purged in vitro and 116 Peripheral Blood); 760 received an allograft (656 genodentical, 32 family mismatches, 42 matched unrelated donors, 30 other).

**2. Transplants in second remission (CR2):** 2233 patients, consisting of 1837 adults and 388 children. Of the adult patients, 925 received an autograft (703 Bone marrow of which 151 were purged in vitro and 222 Peripheral Blood); 912 received an allograft (652 genodentical, 68 family mismatches, 166 matched unrelated donors, 26 other). Of the children, 188 received an autograft (165 Bone marrow of which 42 were purged in vitro and 23 Peripheral Blood); 200 received an allograft (97 genodentical, 23 family mismatches, 72 matched unrelated donors, 8 other).

Overall results at five years will be presented: Results of ASCT have significantly improved after January 1994 (median date of the study), with marrow in CR1 and CR2 (LFS:  $52 \pm 2\%$  vs  $48 \pm 1\%$ ,  $p=0.05$ , in CR1; LFS:  $39 \pm 4\%$  vs  $33 \pm 2\%$ ,  $p=0.04$  in CR2) and with PBSC in CR1 (LFS:  $48 \pm 2\%$  vs  $42 \pm 4\%$ ,  $p=0.05$ ) in relation with a decrease in the relapse incidence.

**3. New approaches for autografting:** New developments include aggressive in vivo purging (first high dose consolidation), followed by autografting (second high dose intensification), combination of stem cells from bone marrow and from blood, both purged by mafosfamide, to constitute the graft, and tumor vaccination post transplant. Finally the sequential use of the high dose tumoricidal activity of autografting and the GVL effect provided by non myelo-ablative allogeneic stem cell transplantation is an option still to be investigated.

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### Autologous transplantation in CML

Abstract not received.

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### Allogeneic stem cell transplantation for patients with myelodysplastic syndromes and leukemias following MDS

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Most patients with myelodysplastic syndromes (MDS) are too old to be considered for intensive treatment such as stem cell transplantation (SCT). Allogeneic SCT from an HLA-identical sibling donor is the curative treatment option for a relatively young patient (younger than 60 years) with myelodysplastic syndrome or acute myeloid leukemia following a preceding phase of MDS. Age and lack of sibling donors limit this application. Alternative stem cell sources have been used more recently, such as unrelated donors, nonidentical family members or autologous transplants.

Most patients may benefit optimally from an allogeneic SCT when the transplant is performed as soon as an HLA-identical family member has been identified. Progression to more advanced leukemia conditions will be associated with a higher failure rate due to an increased relapse rate after SCT and a higher treatment-related mortality. Delay of the transplant may be justified in a minority of patients with refractory anemia or refractory anemia with ringsideroblasts without profound cytopenias or complex cytogenetic abnormalities, and no need for erythrocyte transfusions.

The present data from patients transplanted with sources of hematopoietic stem cells other than histocompatible sibling donors give an indication of the potentials of other forms of transplantation. The DFS of patients transplanted with histocompatible sibling donors was significantly better than the outcome of patients transplanted with other sources of stem cells. About one third of the patients transplanted with stem cells from histocompatible siblings and about one quarter of the patients with stem cells from other sources may be free of disease for three years or longer. The results of these treatment forms have improved considerably, but the continuing high treatment-related mortality warrants that these patients should be treated within investigational protocols.

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### Autologous transplantation in lymphoma

Abstract not received.

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### Autologous transplantation in myeloma

Abstract not received.