

Position Statement of the American Society for Blood and Marrow Transplantation:

**The Role of Cytotoxic Therapy with Hematopoietic Stem Cell Transplantation
in the Treatment of Diffuse Large Cell B-Cell Non-Hodgkin's Lymphoma**

Among the primary objectives of the American Society for Blood and Marrow Transplantation are to:

- define commonly accepted medical practice
- develop standards of medical care for autologous and allogeneic transplants
- provide recommendations and guidelines about the role of transplantation as a therapeutic approach for reimbursement by third-party payers.

To this end, the Society in 1999 began the development of evidence-based reviews of the scientific and medical literature to document when blood and marrow transplantation is indicated in the treatment of selected diseases.

Goals

The goals of the evidence-based reviews are to:

- assemble and critically evaluate all of the evidence regarding the role of cytotoxic therapy with hematopoietic stem cell transplantation in the treatment of each disease selected for review
- make treatment recommendations based on the available evidence
- identify discrepancies in study design or methodology among published studies that may impact the quality of the evidence
- identify needed areas of additional study

Guidelines

The following guidelines are offered for the role of stem cell transplantation as therapy for diffuse large cell B-cell non-Hodgkin's lymphoma (DLCL), and are based on consensus reached by an expert panel* following an evidence-based review of the literature.** Treatment recommendations were made by disease response and, where available, International Prognostic Index (IPI) risk:

1. Stem cell transplantation in the treatment of DLCL is more effective than conventional chemotherapy and is the recommended treatment for the following:
 - first chemotherapy-sensitive relapse
 - first complete remission in high/intermediate-high risk IPI patients
 - as high-dose sequential therapy in intermediate-high/high risk IPI untreated patients
2. Stem cell transplantation is not more effective than conventional chemotherapy and is not recommended for the following:
 - first complete remission in low/intermediate-low risk IPI patients

- after abbreviated induction therapy: 6 or fewer cycles of cyclophosphamide, doxorubicin, vincristine and prednisone (CHOP) or 12 or fewer cycles of methotrexate, doxorubicin, cyclophosphamide, vincristine, prednisone and bleomycin (MACOP-B) or etoposide, doxorubicin, cyclophosphamide, vincristine, prednisone and bleomycin (VACOP-B)
3. No treatment recommendations are made for indications which have not been evaluated adequately, but are recommended for comparative study, including:
 - Chemotherapy-resistant relapse/primary refractory disease
 - First partial remission after full-course induction therapy
 - As high-dose sequential therapy in low/intermediate-low risk IPI untreated patients
 4. Autologous stem cell transplantation is currently the standard of care and is preferred over allogeneic stem cell transplantation. Studies are ongoing, however, to further evaluate the role of allogeneic transplant.
 5. Autologous peripheral blood stem cell transplantation (PBSCT) is preferred over autologous bone marrow transplantation.
 6. No treatment recommendations are made for transplantation techniques which have not been evaluated adequately, but are recommended for comparative study, including:
 - double/tandem stem cell transplantation
 - myeloablative allogeneic stem cell transplantation
 - non- myeloablative allogeneic stem cell transplantation
 - purging
 - stem cell mobilization methods
 - conditioning regimens

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