ASCO/ASH Recommended Criteria for the Performance of Bone Marrow Transplantation

Both autologous and allogeneic bone marrow transplantation (BMT) involve the management of severely immunosuppressed patients for extended periods of time. Both the extent and the duration of the immunosuppression and certain unique technical issues (eg, cryopreservation and the management of graft-versus-host disease) require special preparation and commitment in any organization undertaking bone marrow transplantation. Participation in clinical trials is important. The following criteria are those minimally necessary for the safe and successful performance of the procedure:

1. **Patient Volume**
   A sufficient number of patients must be treated each year to allow the development of a designated transplant unit with an experienced, full-time nursing team. This would require, in general, at least 10 to 20 transplants per year. Sufficient transplants must be performed to never have the unit empty. If both allogeneic and autologous transplants are performed, at least 10 of each should be performed annually to allow sufficient experience in the technical aspects of both procedures to remain current. For new units, compliance with these volume goals should be reached within 2 years of operation.

2. **Facilities**
   - **A. Transplant Physicians**
     Although the management of patients undergoing BMT is in many ways not much different from those patients being treated for acute leukemia, physicians who actually perform BMT should have documentable experience with the procedure. If both autologous and allogeneic transplants are being performed, the treating physicians should have documentable experience with both types of procedures.
   - **B. Consulting Physicians**
     A broad range of subspecialty consultations in both medical and surgical specialties needs to be immediately available.
   - **C. Nursing Team**
     This is the most important single aspect of a successful BMT unit. There need to be nurses committed to this program full-time. There should be a high ratio of nurses to patients with the nurse-to-patient ratio not more than 1:2 on average. The number of patients transplanted must be sufficient to develop and maintain a full-time nursing team.
   - **D.** There must be a commitment from the institution to have full-time BMT coordinators and adequate support from social work and other needed services.

3. **Personnel**
   - **A. Transplant Physicians**
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   - **D.** There must be a commitment from the institution to have full-time BMT coordinators and adequate support from social work and other needed services.

4. **Treatment Outcome**
   A sufficient number of patients in each disease group undergoing treatment at the center is necessary to be able to compare the results with those published from very experienced centers. An occasional patient from any disease group being transplanted should be discouraged. The unit must maintain a registry of all transplants performed, and compare outcomes with results in other centers. There should be a policy in place for identifying deficiencies in results, and for analyzing causes and implementing changes aimed at improving results.

5. **Data Reporting**
   BMT is a rapidly evolving therapeutic modality. Physicians performing this procedure should report their data to available registries (eg, International Bone Marrow Transplant Registry) and, when appropriate, publish important observations in the medical literature.

The preceding criteria have been endorsed by the Executive Committee of the American Society of Hematology and the Governing Board of the American Society of Clinical Oncology.