Advances in Hematology

Special Issue on

Haploidentical Family Donor Transplantation: At the Crossroads of a Changing Paradigm

CALL FOR PAPERS

Allogeneic Hematopoietic Stem Cell Transplantation (HSCT) has evolved in the last 5 decades from being a salvage treatment of end-stage leukemia to first line treatment option for both malignant and nonmalignant diseases alike. The biological limitation of finding a HLA-matched family donor compromises the wide-spread utilization of the developments in this field. The last three decades have witnessed some major developments in the field of alternate donor HSCT. Development of volunteer unrelated donor registries across the globe has enabled donor availability to 50–60% of patients lacking a HLA-matched family donor. Unfortunately, the ethnic minorities and less developed countries have been left out of the ambit of this development. This has been compensated to an extent by growth of public cord blood banks and developments in unrelated donor cord blood transplants for both adults and children. Despite all these developments in the field of alternate donor transplantation, a significant proportion of patients do not undergo a HSCT due to reasons ranging from the time to procurement of a donor to the expenses involved in the process of procurement.

Whilst complete or near complete HLA matching has been a prerequisite for the success of both related and unrelated donors, almost every patient has a HLA-half-matched or haploidentical family member. HSCT from a haploidentical family donor was not considered to be feasible proposition until the late 1990s when it was demonstrated in both animal models as well as in clinical studies that "megadose of CD34+ cells" can overcome the barrier of HLA-mismatch. This was followed a decade later by the use of posttransplantation high dose cyclophosphamide in overcoming both rejection and GVHD following haploidentical HSCT. At the same time newer modalities of graft selection have raised the hope of achieving the same, preserving the antileukemic cells in the graft. These developments have resulted in a renewed interest in haploidentical family donor transplantation challenging the established paradigm of the primacy of HLA-matched donors in hierarchy of donor selection.

We invite authors to present original research articles as well as review articles that will stimulate the continuing efforts in defining the factors involved in mechanisms of transplantation tolerance, haploidentical family donor as alternative stem cell sources for allogeneic stem cell transplantation, novel strategies for graft manipulation, and reports of clinical trials of adoptive therapy. Reviews that summarize the results of latest discoveries and their implications for the outcome of haploidentical HSCT are particularly welcome.

Potential topics include, but are not limited to:

- Transplantation tolerance
- Graft manipulation in haploidentical HSCT
- Posttransplantation cyclophosphamide in haploidentical HSCT
- Haploidentical HSCT: the Chinese way
- Choice of graft in haploidentical HSCT
- Adoptive immunotherapy
- NK cell biology and therapy
- Gamma delta T cells and NKT cells
- Haploidentical HSCT in hematological malignancies
- Managing relapse following haploidentical HSCT
- Haploidentical HSCT in hemoglobinopathies/severe aplastic anemia/primary immunodeficiencies
- Haploidentical HSCT for solid tumors
- Haploidentical HSCT in children
- Newer approaches to haploidentical HSCT
- Comparison of alternative stem cell sources

Authors can submit their manuscripts via the Manuscript Tracking System at http://mts.hindawi.com/submit/journals/ah/hfdt/.

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Friday, 29 January 2016

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