Advances in Hematology

Hindawi

Special Issue on

Haploidentical Family Donor Transplantation: At the Crossroads of a Changing Paradigm 2017

CALL FOR PAPERS

Allogeneic Hematopoietic Stem Cell Transplantation (HSCT) has been the treatment of choice for many hematological malignancies, either in first remission or following relapse. The major stumbling block for patients requiring an allogeneic HSCT has been the availability of HLA matched family donor, which due to biological compulsions could be available to 25% of the patients only. Whilst volunteer unrelated donors and unrelated cord blood units provide an alternative source of graft for HSCT, this is inadequate for the global needs. Recent developments in the field of haploidentical family donor (HFD) HSCT have challenged the existing paradigm in the choice of alternative donors for allogeneic transplantation. The success of haploidentical HSCT could be largely attributable to the two major developments in this field. First, the advances in graft manipulation and cellular therapy and, second, the unique concept of employment of posttransplantation cyclophosphamide (PTCy).

Although hematological malignancies continue to be the major indications for allogeneic HSCT, nonmalignant disorders are not lagging behind. The major reasons behind this are the success of reduced intensity conditioning, reduction in transplant-related mortality, and improvements in GVHD prophylaxis. Hemoglobinopathies such as beta-thalassemia major and sickle cell disease account for over 300,000 births per anum. Despite improvements in the supportive care in developed countries, the majorities of such children are born in less privileged societies and most die within the first 2 decades of life. Allogeneic HSCT from a matched family donor results in 90% disease-free survival if carried out early. However, very few of such children are fortunate enough to have a matched sibling donor. With the increasing popularity of HFD, there is urgency amongst the researchers to extend the developments in the field of haploidentical HSCT to nonmalignant disorders.

Apart from hemoglobinopathies, bone marrow failure syndromes, both acquired and inherited, comprise the other major bulk of nonmalignant indications for allogeneic HSCT. Early successes of haploidentical HSCT in these conditions have encouraged the researchers in this field. The same holds true for primary immunodeficiencies and inherited metabolic disorders. In the midst of the exciting developments, further exploration of different pathways and methods of inducing transplantation tolerance remains the key to the success of haploidentical HSCT for nonmalignant disorders.

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 in nonmalignant disorders, novel strategies for graft manipulation, and reports of novel clinical trials in this area. 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 the following:

- Transplantation tolerance
- Graft manipulation in haploidentical HSCT
- Posttransplantation cyclophosphamide in haploidentical HSCT
- NK cell biology and therapy
- Gamma delta T cells and NKT cells
- Haploidentical HSCT in hemoglobinopathies/severe aplastic anemia/primary immunodeficiencies/inherited metabolic disorders
- Haploidentical HSCT in children
- Newer approaches to haploidentical HSCT
- Comparison of alternative stem cell sources

Authors can submit their manuscripts through the Manuscript Tracking System at http://mts.hindawi.com/submit/journals/ah/hfdt17/.

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Friday, 31 March 2017

First Round of Reviews
Friday, 23 June 2017

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