

Introduction: 20th Anniversary of the NMDP

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Transplantation of hematopoietic stem and progenitor cells provides opportunity to restore lifesustaining blood and marrow function, and more importantly, rebuild immunologic competence to protect transplant recipients from infection and harness the immunologic antineoplastic potency of an allogeneic graft. Although allografts from related donors were first tested beginning over 40 years ago, only 20 years have passed since the National Marrow Donor Program (NMDP) initiated the organized multisite approach to searching and identifying donors for unrelated allogeneic hematopoietic cell transplantation. This exciting altruistic experiment has helped thousands of potential recipients of which over 30,000 have received transplants, currently more than 3500 each year. These collective efforts, which include transplant centers to identify the need, and donor centers to recruit, tissue type, educate, track, and communicate with nearly 10 million donors, as well as develop guidelines for their safety and protection, have been a collaborative and complex success.

Directed from the NMDP Coordinating Center in Minneapolis, the NMDP personnel assist patients with their concerns, personal and financial stressors, and help transplant centers with the logistics of search, the complexities of the immunogenetics, and provide guidance to find the best donor for each searching patient. The NMDP and the Donor Center Network focus efforts toward careful and noncoercive donor recruitment as well as establishing procedures to maximize donor safety and maintain the effectiveness of this complex, multi-institutional collaboration.

In this volume we review the 20-year history of this magnificent human experiment, combining the best of science and translational medicine with the anonymous generosity representing the best of human charity and spirit. We present papers outlining an overview of the NMDP and the growth in transplant activity over the 2 decades of experience followed by a detailed description of transplant outcomes for both adults and children. Details of growth in donor activity, collections, and trends in donation experience over time are followed by a detailed assessment of health outcomes in donors that verify the relative safety and prompt recovery most donors experience.

Finally, advances in HLA typing technology, scientific understanding, and tools to ensure the best donor selection are presented. Despite the incredible polymorphism of the HLA complex, the opportunity to search among millions of potential donors has provided impetus to improve international cooperation in finding the best donor for each patient. The NMDP's efforts to bring expertise and logistics to donor searching has brought new advances to the field and generated guidelines to improve transplant outcome.

As patients and their donors are brought together, their physicians, care providers, laboratory scientists, donor center personnel, community recruiters and the millions of volunteer potential donors who built the Network should feel immense pride in all these accomplishments. We celebrate these experiences and anticipate new successes for the future to give more patients another chance for recovery.

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