IL-12 COMPOSITIONS AND METHODS OF USE IN HEMATOPOIETIC RECOVERY

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] This application claims the priority benefits of U.S. provisional patent application 62/073,197, filed October 31, 2014, the entire contents of which are incorporated herein by reference.

FIELD

[0002] The present disclosure relates generally to novel methods and compositions for transplantation. In particular, methods and compositions for promoting hematopoietic recovery following stem cell transplantation comprising administering to a subject in need thereof a therapeutically effective amount of a pharmaceutical composition comprising IL-12.

BACKGROUND

[0003] The following includes information that may be useful in understanding various aspects and embodiments of the present disclosure. It is not an admission that any of the information provided herein is prior art, or relevant, to the presently described or claimed inventions, or that any publication or document that is specifically or implicitly referenced is prior art.

[0004] Stem cell transplantation is a medical procedure in the fields of hematology and oncology, which may be performed for people with diseases of the blood, bone marrow, or certain cancers. Hematopoietic stem cell transplantation remains a risky procedure with many possible complications, and has traditionally been reserved for patients with life-threatening diseases. While occasionally used experimentally in nonmalignant and non-hematologic indications such as severe disabling auto-immune disease and cardiovascular disease, the risk of fatal complications appears too high to gain wider acceptance.

[0005] A total of 50,417 first hematopoietic stem cell transplants were reported as taking place worldwide in 2006, according to a global survey of 1327 centers in 71 countries conducted by the Worldwide Network for Blood and Marrow Transplantation. Of these, 28,901 (57%) were autologous and 21,516 (43%) were allogeneic (11,928 from family donors and 9,588 from unrelated donors). The main indications for transplant were