

5th World Hematologists Congress

August 18-19, 2016 London, UK

A review of hematopoietic stem cell transplantation and future developments

Mario Frank Farrugia
University of Malta, Malta

Hematopoietic stem cell transplantation (HSCT) is a procedure which involves the replacement of multipotent hematopoietic stem cells, which can be obtained from umbilical cord blood, bone marrow or peripheral blood. It can be allogeneic or autologous. In this review, improvements in the donor and patient selection will be described as well as indications for stem cell transplantation which include malignancy, autoimmune, acquired and congenital disorders. Factors influencing the choice of stem cell source will also be alluded. Graft-versus-host disease (GvHD) is the main complication of allogeneic HSCT. Current regimens including prophylaxis against and treatment for acute and chronic forms of GvHD being administered will be reviewed. Better understanding of the pathophysiology underlying GvHD will enable the development of more effective drugs. Long term management and follow-up of patients who have undergone HSCT will also be described. Current and future developments of cellular therapy including the suicide gene approach, infusion with modified T-cell receptor and expansion of donor natural killer cells will be presented and discussed.

Biography

Mario Frank Farrugia is currently a Medical student at University of Malta, Malta.

mariofrankfar@gmail.com

Notes: