

3rd International Conference and Exhibition on Cell & Gene Therapy

October 27-29, 2014 Embassy Suites Las Vegas, USA

Allogeneic hematopoietic cell transplantation for solid tumors

Alauldeen Alqasim

Al-Mustansiriya University, Iraq

Hematopoietic stem-cell transplantation (HSCT) refers to a procedure in which hematopoietic stem cells are infused to restore bone marrow function in cancer patients who receive bone-marrow-toxic doses of cytotoxic drugs, with or without whole-body radiation therapy. Stem cells may be obtained from the transplant recipient (autologous HSCT) or can be harvested from a donor (allogeneic HSCT). Stem cells may be harvested from bone marrow, peripheral blood, or umbilical cord blood shortly after delivery of neonates. Our perception of the mechanisms through which malignant cells are eradicated following allogeneic hematopoietic cell transplantation (HCT) has evolved substantially over the past four decades. No longer merely thought of as a means to rescue hematopoietic function following myelo-ablative conditioning, allogeneic transplantation is now known to be a powerful type of immunotherapy capable of curing patients with other-wise fatal malignant diseases. This conceptual evolution has translated into a diversification of the indications for allotransplants and led to the development of reduced intensity transplant approaches whose beneficial anti-neoplastic effects occur as a consequence of the transplanted donor immune system. Recently, investigators have begun to test whether non-hematologic malignancies might likewise be susceptible to allogeneic immune attack.

Biography

Alauldeen Alqasim is Associate Professor of Hematopathology at the Department of Pathology-Al-Mustansiriya University-College of Medicine- Baghdad-Iraq. He is also a consultant physician. He is board certified in hematopathology since 2002. He supervises many Postgraduate students and has published many papers locally and internationally. He is an Associate Editor for international journal: *Clinical Case Reports*.

aladinalqasim@yahoo.com