

Metropolis Healthcare unveils NextGen HLA test for organ transplantation

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The use of next-generation sequencing (NGS) technology will aid in ensuring a higher percentage of Human Leukocyte Antigen (HLA) matches between donor and recipient



Metropolis Healthcare has launched 'NextGen HLA' Typing Test and is powered by the complex molecular technology 'Next Generation Sequencing NGS'. Metropolis' NextGen HLA Typing is a high-resolution molecular test, which is performed for Hematopoietic Stem Cell Transplant (HSCT) and solid organ transplantation. This test aids in the identification of a suitable donor for bone marrow, cord blood, or organ transplant by analysing the Human Leukocyte Antigen (HLA) genes that a person has inherited from the parents.

HLA encodes proteins found on the outer surface of cells that is part of our body's immune system. The immune system uses HLAs to differentiate self-cells and non-self-cells. HLA system is activated when the body encounters something foreign, such as transplants, and attempts to reject it leading to graft failure. Prior knowledge of HLA allelic genetic variants is clinically important for matching donor and recipient for Hematopoietic & organ transplantation. HLA allelic information can also be used to predict immune responses to a variety of infectious diseases, genetic and autoimmune disorders.

The HLA genes determine a person's unique HLA Type, which is critical for transplant success. The NGS-based HLA Typing test, widely regarded as the gold standard approach, eliminates the ambiguity in HLA Typing and provides the most accurate characterization of Alleles, making it one of the most advanced and reliable tests available in the market.

Metropolis' NextGen HLA Typing test ensures a higher percentage of HLA matches between donor and recipient, thus increasing the chances of successful transplant outcomes. This will reduce the risk of immune complications such as graft rejection, Graft vs Host Disease (GVHD) and improve the survival rate of patients undergoing HSCT.