

List of Histocompatibility Tests performed in Clinical Immunogenetic's Laboratory

N	Name of the Test	Description	Method	Results	Note
1.	HLA Typing: a. High Resolution (HR) b. Intermediate/Low Resolution (LR)	Detects the major HLA genes a person has inherited and the corresponding antigens that are present on the surface of their cells	-HR typing by Next Generation Sequencing (NGS) -LR typing by rSSOP	-HR: Allele level result -Antigen level result	Due to nature of the complexity in HLA system and the limitation of reagents to identify one unambiguous genotype, certain ambiguities are still cannot be resolved by NGS
2.	Antibody (Ab) Screening test	Detects the presence or absence of anti-HLA antibody	Solid phase assay by Luminex technology using Mixed Antigen Beads.	Negative or Positive. Positive cut-off: 1000 MFI	Do not report antibody specificity
3.	Antibody Identification test	Identifies the specificity of detectable anti-HLA antibody	Solid phase assay by Luminex technology using Single Antigen Beads.	Specific anti-HLA antibody Positive cut-off: 1000 MFI	Provisional: Antibodies detected in gray zones around cut-off and some allele specific antibodies
4.	Crossmatch Testing a. Flow Crossmatch b. CDC Crossmatch	Determines the presence or absence of Donor Specific Antibody (DSA)	a. By Flow Cytometry b. By Complement Dependent Cytotoxicity	Positive or Negative	a. Detects Ab with IgG isotype. Do not distinguish cytotoxic or non-cytotoxic b. Detects Ab with both IgG and IgM isotypes. Detects cytotoxic Abs.
5.	Chimerism Testing /Engraftment Analysis	Chimerism test after Hematopoietic Stem Cell Transplantation involves identifying the genetic profiles of the recipient and of the donor and then evaluating the extent of mixture in the recipient's blood, bone marrow or other tissue.	DNA based methodology used in human identity testing is accomplished by the analysis of genomic polymorphisms called short tandem repeat (STR) loci.	Detect the level of cell mixture derived from recipient or donor. The sensitivity of the method is 1-5%.	Routine post-transplant documentation of the donor/recipient origin of white blood cells in peripheral blood and/or marrow. Documentation of engraftment may include testing lineage-specific cell subsets, such as CD3 positive T cells and CD33 positive myeloid cells.