

A novel HLA loss assay revealing partial HLA loss

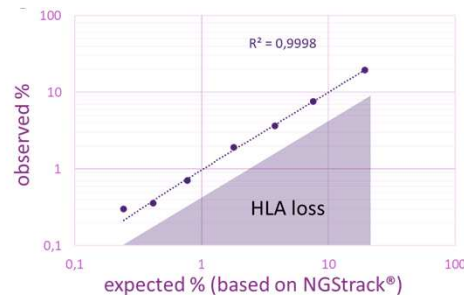
Maaïke Rijkers¹, Job Geerligs¹, Thijs Finnegan¹, Lisa Rond¹, Pedro Mikel Requejo Olaizola², David Monzón Casado², María Dolores de Juan Echavarri², Loes van de Pasch¹, Maarten Penning¹, Sake van Wageningen¹.

¹GenDx, Utrecht, The Netherlands

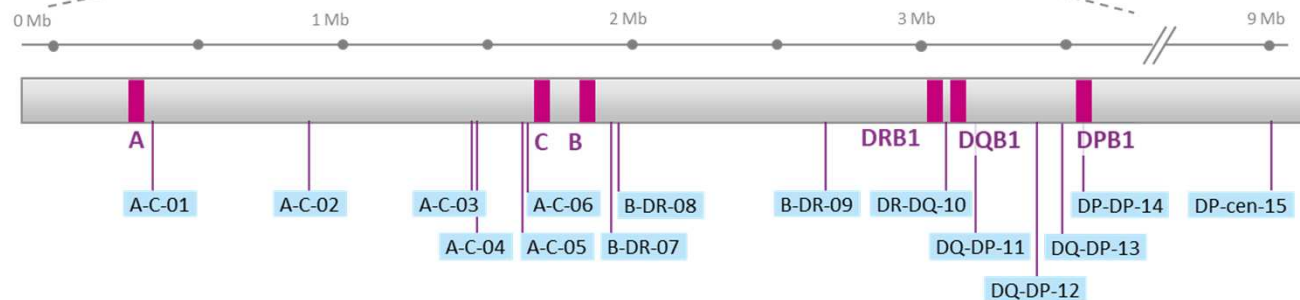
²Immunology Laboratory, Hospital Universitario Donostia, Spain

Aim:

Genomic loss of mismatched HLA alleles is a possible driver of relapse after hematopoietic stem cell transplantation (HSCT), especially in a haploidentical transplant. Early detection of HLA loss is needed for comprehensive clinical decision making. Here, we present a Next-Generation Sequencing (NGS) based method for sensitive HLA loss detection in combination with GenDx NGStrack® chimerism measurements.



6p21
HLA locus



Conclusion:

In this poster we show that STR markers within the MHC region can be used as highly informative and specific markers to detect HLA loss using NGS. We showed that the NGStrack HLA loss assay can be used to study samples from haploidentical, partial and fully matched donor recipient pairs.