

Applicant

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Project Title

HLA Epitope Frequencies in the Canadian Population

Project Summary

Our goal is to prevent rejection of kidney transplants and to promote lifetime survival of each kidney transplant. When a kidney from a donor is transplanted into a recipient's body, the recipient's immune system may recognize it as a foreign body and attack it. We believe that the risk of rejection can be decreased if donors are matched with compatible transplant candidates. Donor and recipient compatibility is determined based on proteins that are present on the surface of cells. These proteins are called human leukocyte antigens. When donor proteins are recognized by the recipient's immune system as different from their own, the recipient can develop antibodies against the donor and rejection occurs. To verify the likelihood of matching donors with compatible transplant candidates, we will use information from the Canadian Longitudinal Study on Aging to calculate the frequency of these proteins in the Canadian population.

Keywords

Kidney transplant, Rejection, Donor, Matching