Induction of Tolerance to Combined Kidney and Hematopoietic Progenitor Cell Transplants from HLA Haplotype Matched Living Donors

Grant Award Details

Induction of Tolerance to Combined Kidney and Hematopoietic Progenitor Cell Transplants from HLA Haplotype Matched Living Donors

Grant Type: Clinical Trial Stage Projects
Grant Number: CLIN2-09439

Project Objective: To manufacture living donor HLA haplotype matched cell therapy product and complete a Phase 1 Clinical Trial

Investigator:

<table>
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<tr>
<th>Name</th>
<th>Samuel Strober</th>
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<tr>
<td>Institution</td>
<td>Stanford University</td>
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<td>Type</td>
<td>PI</td>
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Disease Focus: Kidney Disease, Kidney Failure

Human Stem Cell Use: Adult Stem Cell

Award Value: $6,653,266

Status: Active

Grant Application Details

Application Title: Induction of Tolerance to Combined Kidney and Hematopoietic Progenitor Cell Transplants from HLA Haplotype Matched Living Donors
Public Abstract:  Therapeutic Candidate or Device

blood stem cells and T cells from organ transplant donors will be studied under this proposal to prevent rejection of kidney transplants

Indication
to withdraw immunosuppressant drugs from kidney transplant recipients

Therapeutic Mechanism
Injection of the donor blood stem cells into recipients will prevent recipient immune cells from rejecting the donor kidney transplant.

Unmet Medical Need
The proposed treatment eliminates the life long need of immunosuppressive drugs to prevent kidney transplant rejection. Immunosuppressive drugs increase the risks of cancer, infection, and heart disease.

Project Objective
Phase 1 trial completed

Major Proposed Activities
- Manufacture of the optimum donor cell product for injection into kidney transplant recipients
- Assess the clinical safety of the donor cell injection
- Assess the ability of the donor cell injection to eliminate the need for life long immunosuppressive drugs

Statement of Benefit to California:
The proposed research is designed to improve the health status of California citizens who have received kidney transplants. Transplant recipients currently need life long immunosuppressive drugs to prevent transplant rejection. Elimination of these drugs using donor blood stem cell injections will eliminate the need for these drugs and their attendant side effects and financial costs.

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