



Potential Benefits of JDRF's Research and Advocacy For People with Other Diseases

JDRF has always had a singular mission: to find a cure for type 1 diabetes and its complications through the support of research. Our sole focus is improving the lives of people with type 1 diabetes and ultimately delivering a cure. However, many of the research projects that JDRF funds also have the potential to benefit people with other diseases. In particular, JDRF-funded research may advance the understanding and treatment of diseases that:

- Are caused by diabetes
- Are a result of autoimmune activity
- Have the potential to be cured through stem cell therapies
- Benefit from transplantation therapies

Below are some specific examples of how JDRF-funded research is advancing scientific knowledge for people with diseases other than type 1 diabetes.

Complications Therapies: Because type 1 diabetes is a major cause of diseases of the eyes, nerves, kidneys, and blood vessels, a sizable portion of the JDRF research portfolio includes studies of these complications. Yet conditions like heart disease, kidney failure and eye problems affect millions of people nationwide who do not have type 1 diabetes. For this reason, JDRF research on type 1 complications has the potential to make a significant impact on a wide group of people beyond just those with type 1.

Immune Therapies: JDRF-funded research of the autoimmune attack that causes type 1 diabetes is advancing scientific understanding of the human immune system and shedding light on the genetic and environmental factors that cause it to malfunction. This research will have a beneficial impact on the understanding and treatment of other autoimmune diseases including lupus, rheumatoid arthritis, multiple sclerosis, Crohn's disease, psoriasis, and autoimmune thyroid disease.

Beta Cell Therapies: JDRF research findings on the regeneration of insulin-producing beta cells can be applied to many diseases where cell regeneration has the potential to make a difference. These diseases and conditions include Alzheimer's disease, Parkinson's disease, heart disease, and spinal cord injury. Additionally, JDRF's work on improving islet transplantation to replace destroyed beta cells may lead to improvements in other types of transplantation therapies as well. The knowledge gained will enhance our understanding of related issues like immunosuppression (suppressing the immune system so that it does not attack the transplanted tissue) and encapsulation (encapsulating transplanted beta cells in a substance that protects them from immune attack). If strong and effective techniques can be developed to minimize the rejection process, then the same diseases that could be treated by regenerative therapies (where rejection is less of a problem) could be candidates for treatment by replacement therapies.