# State of the Cure

## A Look at 2015's Progress Towards a Type 1 Diabetes Cure

Juvenile Diabetes Cure Alliance
*The Voice of the Donor For a Cure*

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# I. Introduction

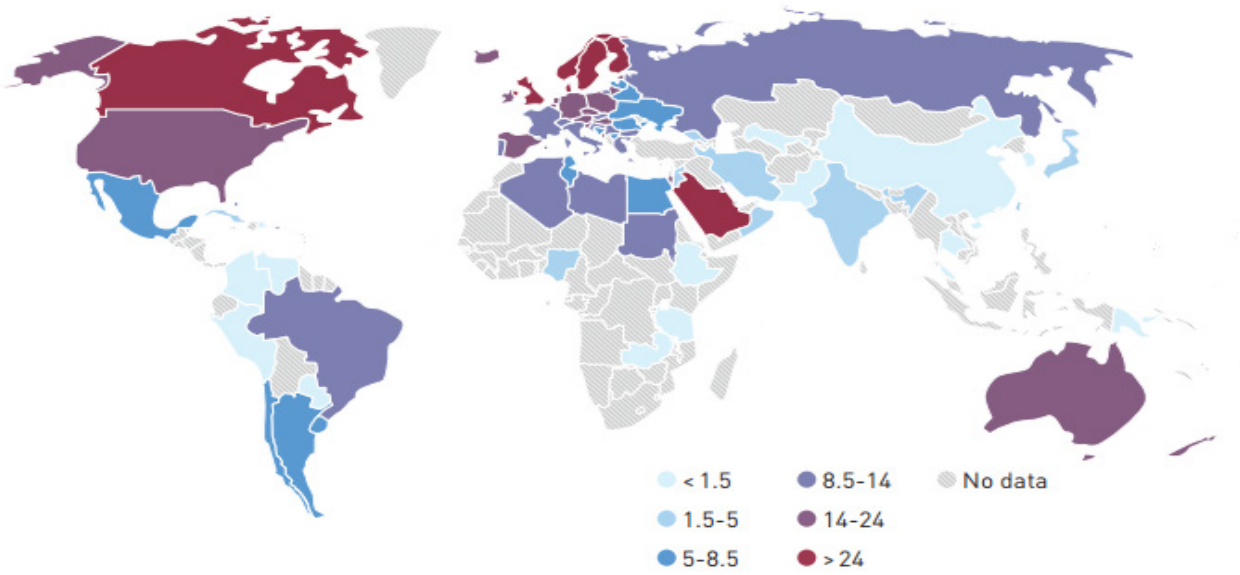
Welcome to the 2015 State of the Cure, the fourth annual edition of this report, which takes stock of the past year's progress toward a Practical Cure for type 1 diabetes.

Any review of progress to a Practical Cure must start with the sobering but obvious fact that we are not there yet. With a few notable exceptions, the past twelve months have yielded only modest progress. There are a limited number of Practical Cure projects in human trials, and only a few more on the horizon. At the same time, research spending by JDRF and the ADA has hit the lowest level in the past decade.

Macro trends continue to demonstrate the pressing need for a Practical Cure for T1D. The incidence of diagnosis is increasing among young people throughout world (Chart IA). In the U.S. alone, the annual cost of managing this disease amounts to $14.4 billion in medical costs and lost income.[1] More importantly, the physical and emotional toll borne by people with T1D and their immediate families cannot be understated.

For over a century, researchers have pursued a cure for type 1 diabetes with limited results. The last real game-changer was the discovery of insulin in 1922. It is time for a breakthrough for our generation—the kind that reduces injections, eliminates complications, and maintains regular blood sugars. It is time for a Practical Cure.

**Chart IA:**
New Cases of type 1 diabetes (0-14 Years Per 100,000 children per year), 2013




Source: International Diabetes Federation. IDF Diabetes Atlas, 6th edn. Brussels, Belgium: International Diabetes Federation, 2013. http://www.idf.org/diabetesatlas

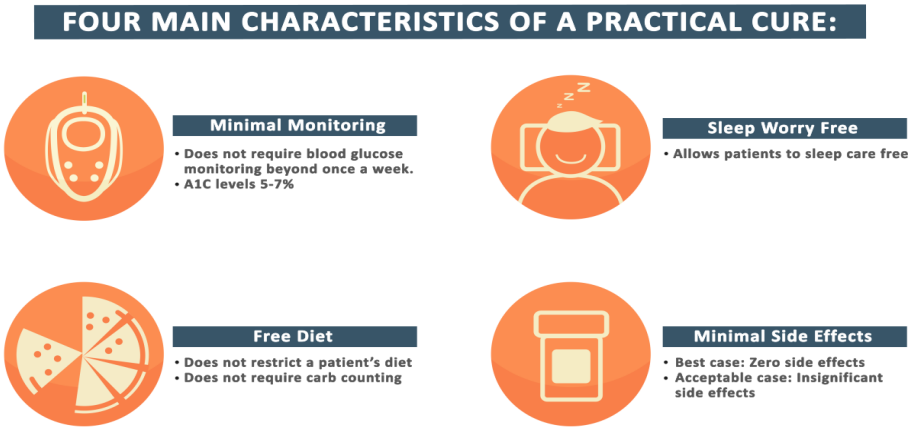
1. *Source: Tao B, Pietropaolo M, Atkinson M, Schatz D, Taylor D (2010) Estimating the Cost of Type 1 Diabetes in the U.S.: A Propensity Score Matching Method. PLoS ONE 5(7): e11501. doi:10.1371/journal.pone.0011501*

# II. Practical Cure Defined

A Practical Cure refers to any solution for type 1 diabetes that delivers a normal lifestyle and is available in the next 15 years. The time-bound component of the definition is vital because the Practical Cure concept is to benefit people who are currently living with T1D.

"The Practical Cure concept is to benefit people who are currently living with T1D."

- **A Practical Cure focuses on outcomes not research pathways**. The chart below shows four main outcome-based characteristics that a Practical Cure must deliver. Any research solution that meets this criteria is welcome. Later sections of this report identify the most promising research pathways and related projects currently active in human trials.




- **A Practical Cure does not need to be a 'perfect' solution**. A Practical Cure will dramatically improve the quality of life for anyone living with T1D but does not require complete elimination of the disease. While reversing and forever eradicating T1D would be ideal, Practical Cure requirements are not quite as demanding. They are broad enough to accommodate limited treatment and/or maintenance therapy that would facilitate a near-normal lifestyle with near-normal A1C levels. The broader range of potential solutions allows a greater range of projects that can be accomplished in a shorter time-frame, given sufficient resources and focus.

- **A Practical Cure has the potential to be available in the near term**.One essential objective of a Practical Cure is to impact the people who are currently living with the disease. A cure that is available only for future generations is not good enough, in our view. As a result, potential Practical Cure projects must be far enough in development to have a reasonable chance of being available within the next 15 years. Potential Practical Cure projects currently in human trials are listed later in this report.

# III. Donor Priorities

The people whose generosity fuels the diabetes charities are those living with T1D, as well as their parents, grandparents, spouses, children and friends. They donate time and money in the hope that their efforts will speed up a cure. We believe these donors' priorities should figure heavily in the agenda for the major diabetes charities.

The JDCA has been conducting surveys of T1D donor attitudes and intentions since 2012. We have heard from over two thousand donors in ten different surveys. All surveys were conducted by a third party and followed the best practices of market research and survey design. Statistical significance was at least 90% and the error range did not exceed +/- 10%.

One key finding that has been consistent throughout all the surveys is that donors overwhelmingly prioritize using their money for Practical Cure research. *When asked to choose from a number of areas their gifts could support, the top choice is a Practical Cure.*

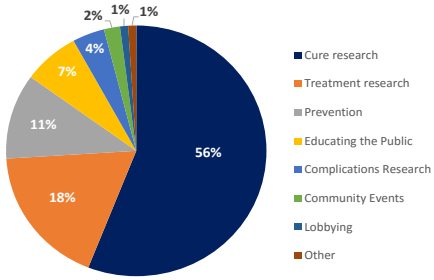
A summary of donor survey findings follows:

- **6 out of 10 donors choose cure research as their number one priority.** In each of the three years that we asked this question, a clear majority of donors stated that cure research is what they want their donation to fund (Chart IIIA).

- **Eight out of ten donors want their money used for Practical Cure research rather than idealized cure research.** The type 1 community wants a cure in time to benefit people who are currently living with the disease. A Practical Cure that would be available in the next 15 years is preferable to an 'idealized' cure that would arrive decades from now. This result is consistent year after year (Chart IIIB).

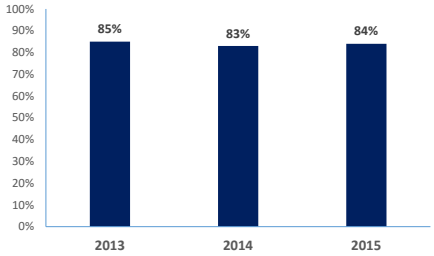
- **Donors unanimously want to give for a Practical Cure.** In each survey, nearly every donor indicates that they would give money for Practical Cure research if that option were made easily available. Despite donors' overwhelming interest in Practical Cure research, neither the ADA nor JDRF offer donors a way to specifically fund these types of projects. We continue to believe that providing this option to donors would be a win-win: for donors, it would ensure their money is being used for near-term cure research, and for the charities, it would open an engaging avenue for fundraising (Chart IIIC).

**Chart IIIA:**
*What is the top priority you would like your donation used for?*



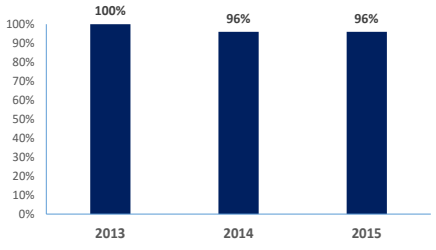

Source: "Cure Research Remains Number 1 Priority in T1D Community", JDCA, March 5, 2015

**Chart IIIB:**
*Percentage of respondents who chose using their money for Practical Cure research versus Idealized Cure research*




Sources:"Cure Research Remains Number 1 Priority in T1D Community", JDCA, March 5, 2015
"Cure Attitudes and Trends Survey: Donors Value Speed and Focus", JDCA, March 3, 2014
"Do Donors Feel that Practical Cure Research is Valuable?", JDCA, January 31, 2013

**Chart IIIC:**
*How likely would you be to donate to Practical Cure research projects if that option was made easily available to you? Percentage of respondents who answered "substantially" or "very much" :*



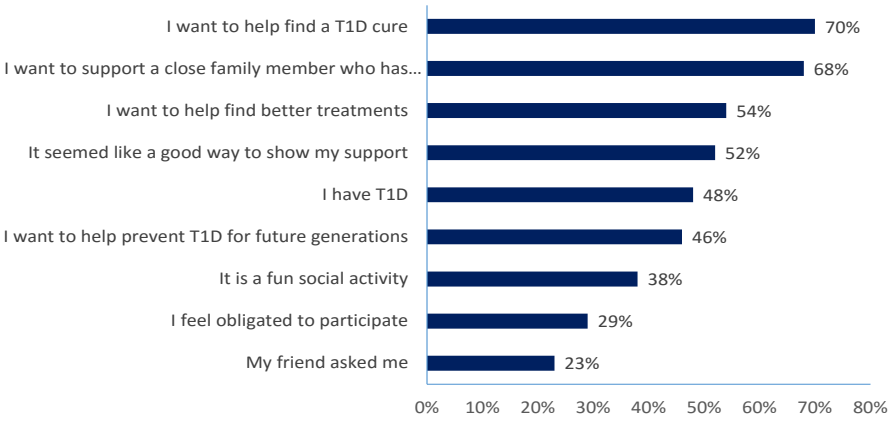

2013 N=352; 2014 N=297; 2015 N=255

Sources:"Cure Research Remains Number 1 Priority in T1D Community", JDCA, March 5, 2015
"Cure Attitudes and Trends Survey: Donors Value Speed and Focus", JDCA, March 3, 2014
"Do Donors Feel that Practical Cure Research is Valuable?", JDCA, January 31, 2013

- **People participate in fundraising walks to help find a cure.** There is no ambiguity: the main reason people participate in fundraising walks, galas, and rides is to aid in finding a cure for T1D. 70% of respondents stated that they participate in fundraising events "because I want to help find a cure." Other reasons people participate include to support family members, to fund better treatments, to prevent T1D for future generations, and because it is a fun social activity. However, none of these reasons is given as commonly or consistently as finding a cure. (Chart IIIE) We believe the charities that sponsor these walks, galas, and rides have a fiduciary responsibility to utilize event proceeds, as much as possible, for cure research as their donors intend.

"There is no ambiguity: the main reason people participate in fundraising walks, galas, and rides is to aid in finding a cure for T1D."

**Chart IIIE:**
*Why do you participate in diabetes fundraising walks? Percentage who select each reason.*

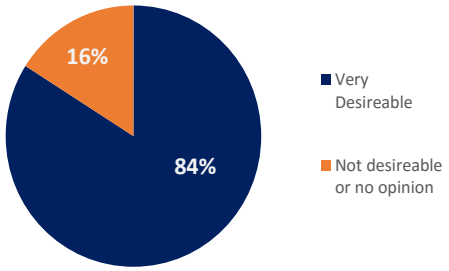



N=110

Source: "Why Do We Walk", JDCA, October 21, 2014

- **There is an overwhelming desire for JDRF to put focus back on research.** In 2014, for the first time on record, JDRF spent less than half its budget on research grants (which will be discussed in greater detail in Section VII). We asked donors if this was acceptable, and 84% said they want JDRF to return their focus to research (Chart IIID). The JDCA believes that research funding should return to 60% or more of JDRF's annual budget, with half of that allocated to cure research.

**Chart IIID:**
*How much do you desire the JDRF to restore research as their top priority?*

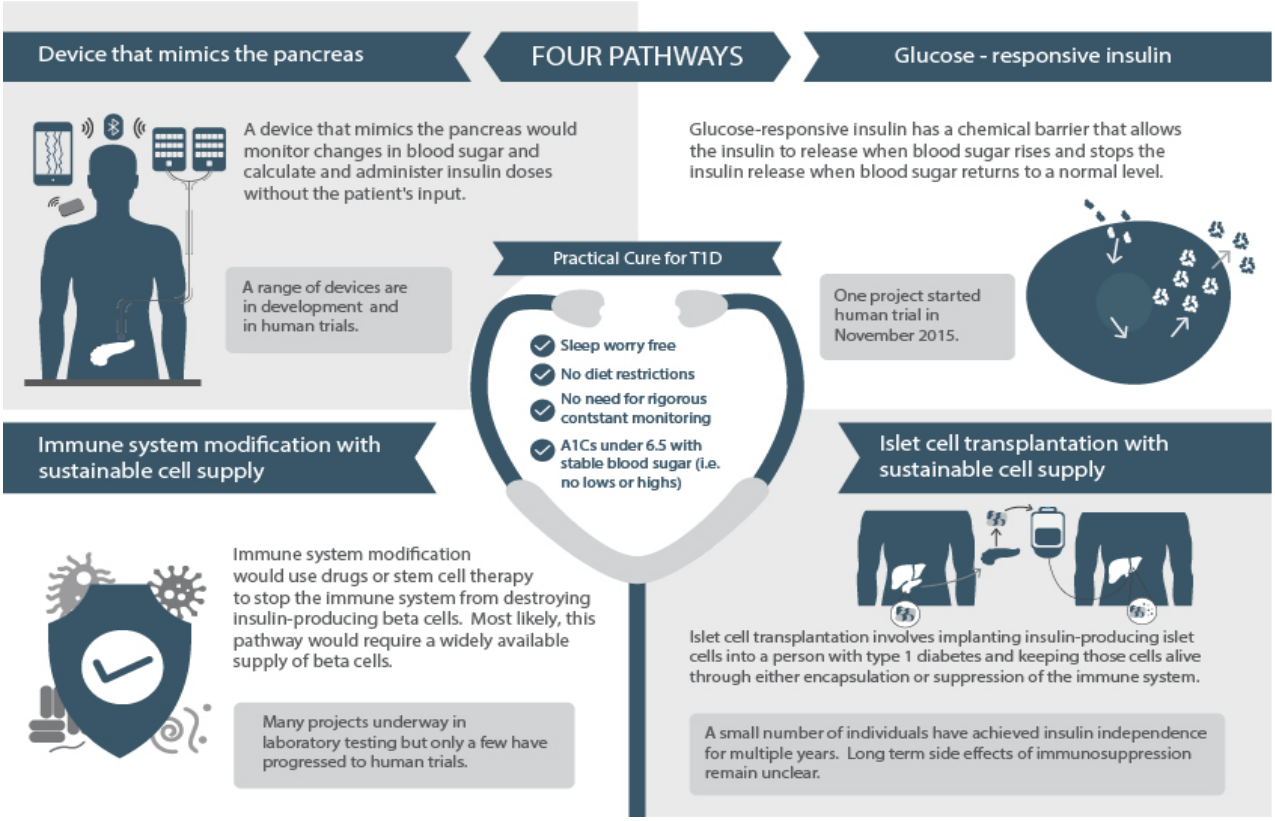



N=68

Source: "Cure Research Remains Number 1 Priority in T1D Community", JDCA, March 5, 2015

# IV. Practical Cure Pathways

At this time, there are four broad research pathways that have the potential to result in a Practical Cure within the next 15 years. While each pathway has the potential to deliver a Practical Cure on its own, it is also possible that a complete solution will require a combination of multiple pathways.




## THE FOUR PATHWAYS

**1.Islet Cell Transplantation** involves implanting insulin-producing islet cells into a person with type 1 diabetes. It has three major components:

- *Cell protection:* The islet cells must be protected from immune attack after they have been implanted in the body. Various encapsulation approaches have been tested in humans with no breakthrough to date. Immune-suppressing drugs are another alternative, but current side effects would have to be reduced to qualify as part of a Practical Cure.
- *Cell supply:* The only existing source of Islet cells is cadavers, which have very limited availability. Only about 100 islet cell transplantations can be done annually in the United States due to limits in cell supply. Research into deriving a sustainable supply from human stem cells has seen recent advances. Two well known examples of cell supply research are Viacyte's work with progenitor cells, currently in human trials, and Douglas Melton's work at Harvard University, which produces beta cells from an embryonic stem cell line but is several years away from human trials.
- *Site selection:* Islet cells require large supplies of oxygen and nutrients to survive. The current protocol is to transplant islet cells into the liver, where the majority do not survive. Other transplantation sites, including the stomach lining and the area under the skin, are being tested as alternatives.

**2. Immune System Modification** would use drugs or treatments to stop the body's immune system from attacking the insulin-producing beta cells. There are three modification approaches: 1) blocking, 2) retraining, or 3) balancing. Blocking would most likely use a drug to stop the autoimmune attack. Retraining refers to approaches that seek to correct the autoimmune response, for example, through exposure to properly functioning T Cells. Balancing seeks to restore a healthy ratio between the immune system's Killer T cells and Regulatory T cells. To date, there has been only limited progress along this pathway.

**3. Glucose-Responsive Insulin,** aka "smart insulin," is chemically activated in response to changes in blood glucose. Once injected under the skin, "smart insulin" acts as a biological artificial pancreas, maintaining even blood sugars with no other intervention required. Insulin is bound to a protein structure that acts as a gate for insulin release, closing when blood sugar is low and opening as blood sugars rise. To qualify as a Practical Cure, smart insulin would have to last long enough to require no more than a single injection per day. Additionally, the risks of having excess insulin (present but not yet activated) in the body must be well understood. The best known example of this pathway is the Merck project, which has been in human trials for over a year, but utilizing a study design that still needs multiple injections per day. In the current study format, it does not yet fulfill the Practical Cure vision but we are hopeful that it will iterate and progress. We will address any changes to this outlook in future reports.

**4. A Device that Mimics the Pancreas,** often referred to as an artificial pancreas, is under development at several commercial and academic centers. To be a Practical Cure, a device that mimics the pancreas would require an exceptionally reliable closed-loop system that adapts to each individual. It also must be small enough to be forgotten about. The most well know projects are the Artificial Pancreas work led by JDRF and the Bionic Pancreas work led by Ed Damiano at Boston University. Progress on the devices has been encouraging with some excellent results in human trials. However, several important hurdles remain, including a proven shelf-stable glucagon, adequate fail-safe back-up systems, and a device size that is truly small enough to be worn without bother.

# V. Practical Cure Projects In Human Clinical Trials

Twice a year the JDCA reviews all T1D projects in human trials. There are currently 384 T1D research projects in human trials. The 11 listed below have the potential to be a Practical Cure.

The list is organized by the four pathways. Please note that it is not intended to rank the relative merit of each of these projects or to be read as an endorsement.

Since the last update in June 2015, one project has left the list and one has been added. The Tolerion project, a vaccine that attempts to block the T1D autoimmune attack, has been removed from the list due to inactivity for over 24 months. The dual-hormone artificial pancreas project at the Institut de Recherches Cliniques de Montreal, which was formerly designated as an emerging Practical Cure project, has registered 5-day outpatient tests and has been included.

## Pathway: Islet cell transplantation with sustainable cell supply

| PROJECT | ENTITY | DESCRIPTION | STATUS |
|---|---|---|---|
| VC-01<br>NCT02239354 | Viacyte<br>*San Diego, CA* | ➢ Precursor cells, derived from an embryonic stem cell line, mature into functional beta cells when implanted under the skin.<br>➢ Cells are protected by an encapsulation device called Encaptra. | ➢ Phase I/II.<br>➢ Recruiting participants.<br>➢ Estimated study completion August 2017. |
| BAir bio-artificial pancreas<br>NCT02064309 | Beta-O2 technologies<br>*Rosh-Haayin, Israel* | ➢ Islet cells are encapsulated in a device the size of a hockey puck, which is implanted in the abdomen.<br>➢ Requires daily injections of oxygen into the device. | ➢ Phase I/II.<br>➢ Recruiting.<br>➢ Estimated study completion March 2016. |
| Monolayer Cellular Device<br>NCT00790257 | Cliniques universitaires Saint-Luc<br>*Bruxelles, Belgium* | ➢ Islet cells are encapsulated in an alginate device (patch size of 1-3 cm) and transplanted subcutaneously.<br>➢ Phase 1a testing is accompanied by immunosuppressive drugs; Phase 1b is free of immunosuppression | ➢ Phase I.<br>➢ Recruiting.<br>➢ Start date November 2008.<br>➢ Estimated completion April 2019. |
| Diabecell | Diatranz-Otsuka Ltd.<br>*Auckland, New Zealand* | ➢ Porcine islets are encapsulated in alginate microcapsules, which are implanted in the abdomen. | ➢ Phase II.<br>➢ Concluded December 2014.<br>➢ Results TBD. |

## Pathway: Glucose-responsive insulin

| PROJECT | ENTITY | DESCRIPTION | STATUS |
|---|---|---|---|
| MK-2640<br>NCT02269735 | Merck<br>*Kenilworth, NJ* | ➢ Responsive and adaptive insulin.<br>➢ Injected under the skin, unique chemical properties activate the insulin when blood sugars rise and halt insulin action when blood sugar drops.<br>➢ Regular injections required. | ➢ Phase I.<br>➢ Estimated study completion December 2015. |

## Pathway: Immune system modification with sustainable cell supply

| PROJECT | ENTITY | DESCRIPTION | STATUS |
|---|---|---|---|
| ATG-GCSF<br>NCT02215200 | University of Florida<br>*Gainesville, FL* | ➢ Drug combination. ATG is aimed at stopping the autoimmune attack, and GCSF is intended to stimulate beta cell regrowth. | ➢ Phase II.<br>➢ Estimated study completion October 2016. |
| Stem Cell Educator<br>NCT01996228<br>NCT01350219 | Tianhe Stem Cell Biotech<br>*Hackensack, NJ* | ➢ A patient's blood is passed through a machine which, through exposure to cord blood stem cells, re-trains the immune system cells to cease the autoimmune attack. | ➢ Phase II.<br>➢ Test in adults concluded September 2014. Results TBD.<br>➢ Test in children have an estimated study completion of October 2015. |
| BCG<br>NCT02081326 | Massachusetts General Hospital<br>*Boston, MA* | ➢ Single drug.<br>➢ Tuberculosis vaccine repurposed to halt autoimmune attack and spur beta cell regeneration. | ➢ Phase II.<br>➢ Estimated study completion July 2021. |
| Cyclosporine + Lansoprazole / Omeprazole<br>NCT01762657 / NCT01762644 | Perle Bioscience<br>*Philadelphia, PA* | ➢ Drug combination.<br>➢ Cyclosporine is supposed to stop the autoimmune attack; Lansoprazole or Omeprazole is supposed to stimulate beta cell regrowth. | ➢ Inactive.*<br>➢ Phase III trials registered in January 2013 are still not yet open for recruitment. |

## Pathway: Device that mimics the pancreas

| PROJECT | ENTITY | DESCRIPTION | STATUS |
|---|---|---|---|
| Bionic Pancreas<br>NCT02509065<br>NCT02516150<br>NCT02536950<br>NCT02092220<br>NCT02105324<br>NCT02181127 | Boston University<br>*Boston, MA* | ➢ Bi-hormonal closed-loop pump + continuous glucose monitor.<br>➢ System delivers insulin and glucagon, and measures and adapts to each individual.<br>➢ Requires FDA approval of shelf-stable glucagon | ➢ Phase II.<br>➢ Completed numerous Phase II outpatient trials with strong results in adults and children.<br>➢ Additional Phase II trials underway.<br>➢ Pivotal FDA trial expected to start in January 2016 with results 2018. |
| Dual-Hormone Artificial Pancreas<br>NCT02282254<br>NCT02416765<br>NCT02488616 | Institut de Recherches Cliniques de Montreal<br>*Montreal, Canada* | ➢ Same as above. | ➢ Phase II<br>➢ Testing is occurring in 3 different trial settings: clinical 8 hours; outpatient 15 hours; in-home 5 days.<br>➢ Estimated study completion date September 2016. |
| Bio-Inspired Artificial Pancreas<br>NCT02397265 | Imperial College London<br>*London, U.K.* | ➢ Same as above. | ➢ Recruiting.<br>➢ Phase II study moving out of clinic into home studies this year.<br>➢ Estimated study completion Aug 2016. |

# VI. Emerging Practical Cure Projects

The JDCA follows projects with the potential to deliver a Practical Cure that have a decent chance at entering human trials within the next 24 months. We do not follow these projects as closely as those in human trials, so this list should be read as representative, not comprehensive. The considerable amount of time that these projects will require to enter and go through human trials puts them on the edge of the 15-year target.

The JDCA welcomes information on emerging Practical Cure projects that are not represented below.

## Emerging Practical Cure Projects

| Research Pathway | Emerging Projects |
|---|---|
| Device that mimics the pancreas | Bihormonal (insulin and glucagon) artificial pancreas projects:<br>✓ **DiaCon at Hvidovre University Hospital** in Denmark has registered a human trial that is not yet open for recruitment. The trial is designed to compare single- and dual-hormone closed-loop systems. |
| Islet cell transplantation with sustainable cell supply | Islet transplantation centered on a specific approach to cell supply:<br>✓ **PharmaCyte Biotech** has begun testing its Cell-in-a-Box microencapsulation technology in humans. Its insulin-producing Melligen cells, derived from liver cells, are being tested in mice.<br>✓ **Orgenesis** has developed a process to convert a patient's own liver cells into insulin-producing cells. Late stage animal testing indicates that autologous transplantation of these cells eliminates the need for immune suppression.<br>Multi-pathway research combining site selection, cell protection, and cell supply:<br>✓ **DRI** has begun a human trial to test the omentum as a site for islet transplantation. Late stage animal tests are underway on scaffolding to support transplanted cells.<br>✓ **City of Hope** is working on improving the immunosuppression regime in islet transplantations in humans, and conducting preclinical work on cell supply and immune tolerance. |
| Glucose-responsive Insulin | While Merck's smart insulin has entered clinical trials, other preclinical research in this pathway is more than two years away from human testing. |
| Immune system modification | Stopping the auto-immune attack:<br>✓ **DiaVacs** is a reverse vaccine to stop the autoimmune attack. A clinical trial registered in 2013 never opened. A second trial, scheduled to begin in October 2015, is not yet recruiting. |

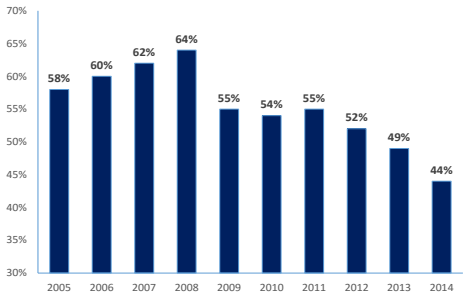
# VII. The ADA and JDRF: Cure Research Funding

The ADA and JDRF raise more money for type 1 diabetes than any other organizations in the world. In 2014 they posted a combined revenue of nearly $426 Million (JDRF was $225 Million and the ADA $201 Million). Of that:

- $128 Million went to any type of research.
- $31 Million went to cure research.
- $7 Million went to Practical Cure research (all from JDRF).

**Said differently, only 3 Cents of every dollar donated to JDRF made its way to Practical Cure research, while the ADA funded zero Practical Cure research.** Low funding is a critical barrier to increasing the number of high quality Practical Cure projects in human trials. Without sufficient funding, potential projects stall on the way to human trials. Priority funding would allow current projects to move forward more quickly, and attract new cure research to the arena.

**Chart VIIA:**
Percentage of JDRF annual income spent on research of any type by year




Source: JDRF Audited Financial Statements

## JDRF Highlights: Strategy Shift or Strategy Drift?

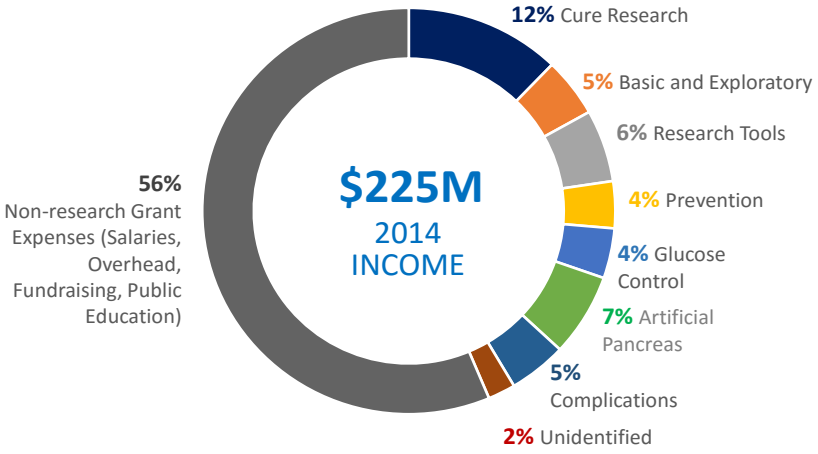
JDRF was founded in 1970 with the purpose of supporting research to cure type 1 diabetes. Historically, JDRF has spent the majority of its money on T1D research. Until 2008, roughly 60% of annual income was used for research grants. That number has since decreased. In 2014, research funding reached an all-time low of 44% (Chart VIIA and Chart VIIB).

As research spending has declined, spending in all other categories has gone up. Over the past several years, significant increases were posted in spending on public education and the cost of research support, with more moderate increases in management, overhead, and fundraising costs. Taken together, these increases stand in stark contrast to the nearly $58 Million decline in annual research spending since 2008 (Chart VIIC).

**Chart VIIB:**
JDRF total annual spending on research of any type ($ Millions)

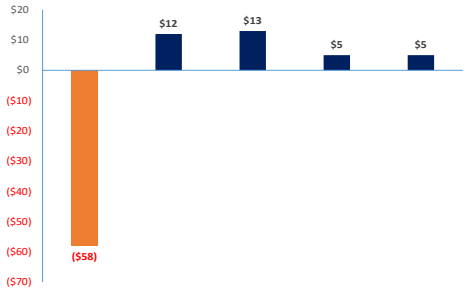

Source: JDRF Audited Financial Statements

**Chart VIID:**
JDRF Utilization of 2014 Income Highlighting Research Grant Categories




Sources: JDRF 2014 Audited Financial Statements; *Research Funding Facts,* JDRF Official Website

**Chart VIIC:**
JDRF spending changes by category since 2008 ($ Millions)




Source: JDRF Audited Financial Statements

# VII. The ADA and JDRF: Cure Research Funding (continued)

During 2014, JDRF spent $98 Million to fund 387 research projects. These projects covered a broad range of research areas (Chart VIID), but only a small portion of research grants went to cure research and even less supported Practical Cure research:

- 44% of income was spent on any type of research.
- 12% was spent on cure research.
- 3% was spent specifically on Practical Cure research.

The continued decrease in research spending overall, and cure research in particular, raises the concern that JDRF is either shifting or drifting away from its core mission of finding a cure. Recent discussion with JDRF leaders revealed that changes are underway which should result in increased funding for research, including cure research. This would be a meaningful improvement, which we look forward to seeing in the numbers in the years ahead.

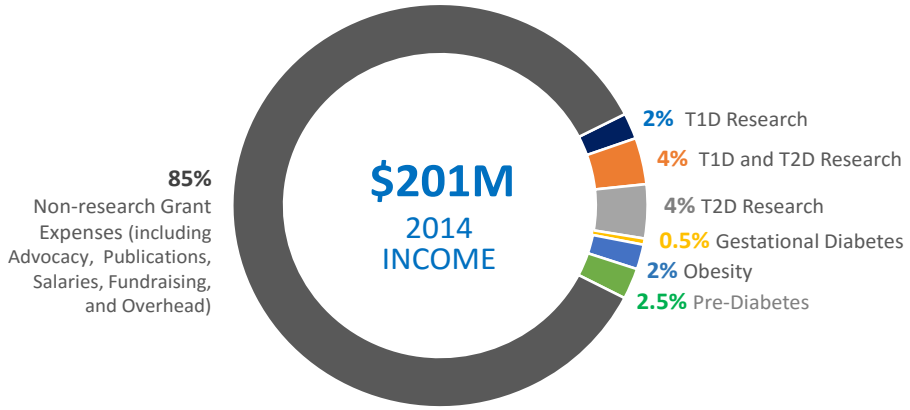
## ADA Highlights

The American Diabetes Association (ADA) was founded in 1940 with the dual mission of finding a cure for diabetes and improving the lives of people with diabetes, both type 1 and type 2. Initially, membership was confined to health professionals and corporations, whose legacy is still apparent today in the relatively large number of corporate donors. In 1970, membership opened to the public, launching the modern ADA.

In 2014, the ADA posted revenue of $201 Million, raised mainly from donors and publication sales. Only 15% of that $201 Million funded research of any type. Only 2% was spent on research specific to type 1 diabetes. The ADA did not fund any Practical Cure research (Chart VIIG).

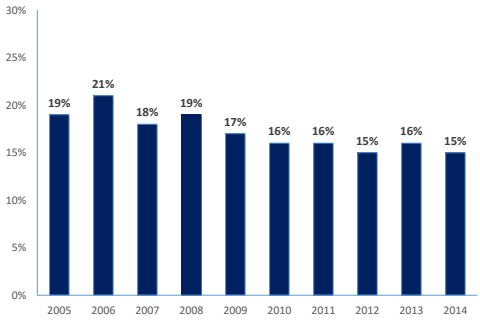
The majority of ADA resources are focused on type 2 diabetes. The ADA has outstanding fundraising capacity, a deep Washington network, and access to researchers throughout the world. If it were to increase focus on T1D research, it could make a meaningful difference in the amount of money available for research and ultimately help speed up a cure. In the meantime, those interested in supporting type 1 diabetes must understand that only a small portion of donations to the ADA will actually go to T1D, and donors may find better alternatives elsewhere.

**Chart VIIG:**
ADA Utililization of 2014 Annual Income Highlighting Research Grant Categories



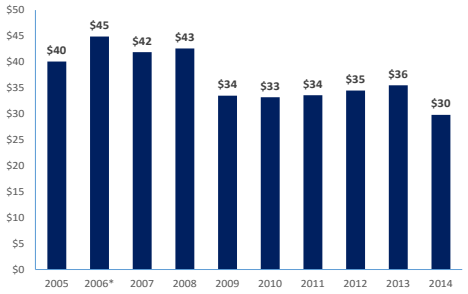

Source: ADA Historical Consolidated Financial Statements and official website

**Chart VIIE:**
Percentage of ADA annual income spent on research of any type by year




Source: ADA Historical Consolidated Financial Statements
*2006 was an 18 month fiscal year due to shift of fiscal year timing. The numbers for 2006 and 2007 have been adjusted for two twelve month periods and are, therefore, informed estimates.

**Chart VIIF:**
ADA total annual spending on research of any type ($ Millions)



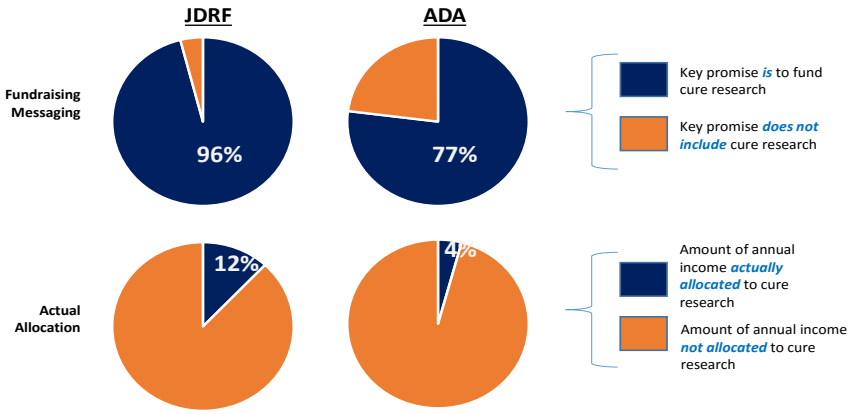

Source: ADA Historical Consolidated Financial Statements
*2006 was an 18 month fiscal year due to shift of fiscal year timing. The numbers for 2006 and 2007 have been adjusted for two twelve month periods and are, therefore, informed estimates.

# VIII. Fundraising

The ADA and JDRF are extremely effective at raising money. Both utilize highly successful fundraising events that are directed nationally but executed by local chapters throughout the United States. Combined, these events generate nearly $300 Million per year and account for a significant portion of JDRF and the ADA's annual revenue.

The majority of these nationally-directed events either explicitly or implicitly communicate that proceeds will be used for cure research. Many familiar event names feature a 'cure' message, including JDRF One Walk for a World Without Type 1 Diabetes, Walk to Cure Diabetes, Crossroads to a Cure, Ride to Cure Diabetes, and Stop Diabetes.

**Chart VIIIA:**
2015 National Fundraising Messaging Compared to Actual Allocation

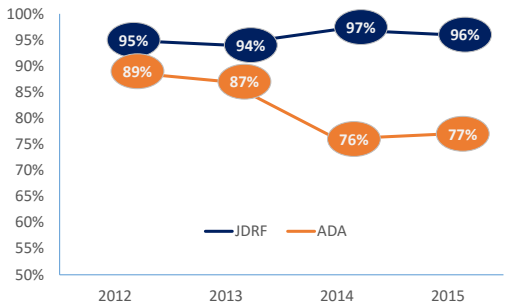



Source: JDRF and ADA websites and promotional materials. 398 national events reviewed individually.

In 2015, 96% of all JDRF national fundraising events featured a cure message. This number is consistent with prior years and yet only 12% of JDR's annual income was actually utilized for cure research. The ADA featured a cure message in 77% of its 2015 events, but only an estimated 2% of annual income was used for T1D cure research (Charts VIIIA and VIIIB). Moreover, many of the ADA marketing materials feature children, which implies a greater commitment to T1D than is actually the case.

In summary, the fundraising promise is not aligned with the way proceeds are actually used. As illustrated in Section III of this report, T1D donors clearly prioritize cure research, yet only a small proportion of donations are actually used to fund cure research.

**Chart VIIIB:**
Percentage of franchise events that promise proceeds to be used for cure research




Source: JDRF and ADA websites and promotional materials.

"The fundraising promise is not aligned with the way proceeds are actually used."

# IX. More for a Cure

If you come away with just one thing from this report, it should be that now is the time to refocus on cure research. During the past five years the JDRF has slowly decreased its allocations to research overall and to cure research in particular. The ADA continues to spend relatively little on research overall, and directs an almost insignificant amount to T1D cure research.

The ADA and JDRF are extraordinary organizations that continue to be highly effective at raising money for type 1 diabetes. No other organizations in the world, short of a government entity, are as well positioned to deliver a cure. But their ability to deliver this outcome is limited by how they are currently utilizing their resources. A renewed commitment to fund quality research could greatly increase the chances for a cure breakthrough in the near future.

"Now is the time to re-focus on cure research."

We ask both organizations to increase spending on T1D cure research to 30% of their annual income. And we ask each of you to let them know that cure research is job number one.

Such an increase will attract researchers to pursue Practical Cure research and will ensure that all current projects in human trials are fully funded so that results can be determined and reported as soon as possible.

As of this publication, the JDCA is actively petitioning the ADA and JDRF to increase cure research funding. We invite you to support and sign the petition at http://petitionforacure.thejdca.org/

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Juvenile Diabetes
Cure Alliance
*The Voice of the Donor For a Cure*