

## Supplementary Data

SUPPLEMENTARY TABLE S1. CONCORDANCE OF AUTOANTIBODY POSITIVITY IN DRIED BLOOD SPOT SAMPLES COMPARED WITH VENOUS SERUM SAMPLES

|       | <i>Sensitivity</i> | <i>Specificity</i> |
|-------|--------------------|--------------------|
| GADA  | 78%                | 99%                |
| IA-2A | 82%                | 100%               |
| ZnT8A | 81%                | —                  |

GADA, glutamic acid decarboxylase autoantibodies; IA-2A, islet antigen 2 autoantibodies; ZNT8A, zinc transporter 2 autoantibodies.

### Appendix 1: The TrialNet Consortium

*Executive Committee:* Jay S. Skyler, Katarzyna Bourcier, Carla J. Greenbaum, Richard Insel, Jeffrey P. Krischer, Ellen Leschek, Lisa Rafkin (University of Miami Diabetes Research Institute), Lisa Spain.

*Past Members:* Catherine Cowie, Mary Foulkes (George Washington University), Heidi Krause-Steinrauf (George Washington University), John M. Lachin, Saul Malozowski (National Institute of Diabetes and Digestive and Kidney Diseases), John Peyman, John Ridge, Peter Savage, Stephanie J. Zafonte (George Washington University).

*TrialNet Coordinating Center (University of South Florida):* Jeffrey P. Krischer, Brian Bundy, Michael Abbondandolo, Timothy Adams, Darlene Amado, Matthew Boonstra, David Boulware, Cristina Burroughs, David Cuthbertson, Mary Deemer, Christopher Eberhard, Steve Fiske, Julie Ford, Jennifer Garmeson, Heather Guillette, Brian Hays, Courtney Henderson, Martha Henry, Kathleen Heyman, Mary Holloway, Belinda Hsiao, Christina Karges, Pat Law, Ashley Leinbach, Cristin Linton, Shu Liu, Jennifer Lloyd, Jamie Malloy, Jessica Miller, Eric Milliot, Margaret Moore, Sarah Muller, Thuy Nguyen, Ryan O'Donnell, Vanessa Oduah, Jennifer Pilger, Joy Ramiro, Nichole Reed, Amy Roberts, Kelly Sadler, Archana Sharma, Roy Tamura, Amanda Terry, Keith Wood, Margaret Wooten, Ping Xu, Kenneth Young.

*Past Staff Members:* Persida Alies, Franz Badias, Aaron Baker, Monica Bassi, Craig Beam, London Bounmananh, Doug Freeman, Jinin Ginem, Jessica Gough, Moriah Granger, Mary Holloway, Michelle Kieffer, Page Lane, Lavanya Nallamshetty, Yazandra Parrimon, Kate Paulus, AQesha Luvon Ritzie, Archana Scharma, Audrey Shor, Xiaohong Song, Amanda Terry, Jeanne Weinberger.

*National Institute of Diabetes and Digestive and Kidney Diseases Staff:* Judith Fradkin, Ellen Leschek, Lisa Spain.

*Data Safety and Monitoring Board:* Emily Blumberg (University of Pennsylvania), Chair; Gerald Beck (Cleveland Clinic), David Brillon (Weill Cornell Medical College), Rose Gubitosi-Klug (Case Western Reserve University), Lori Laffel (Joslin Diabetes Center), Robert Veatch (Georgetown University), Dennis Wallace (Research Triangle Institute).

*Past Members:* Jonathan Braun (University of California Los Angeles), Ake Lernmark (Lund University), Bernard Lo (University of California San Francisco), Herman Mitchell (Rho Inc.), Ali Naji (University of Pennsylvania), Jorn Nerup

(University of Copenhagen), Trevor Orchard (University of Pittsburgh), Michael Steffes (University of Minnesota), Anastasios Tsiatis (North Carolina State University), Bernard Zinman (University of Toronto).

*Laboratory Directors:* George S. Eisenbarth (deceased) (University of Colorado Barbara Davis Center for Childhood Diabetes), Santica Marcovina (University of Washington), Jerry P. Palmer (University of Washington), Adriana Weinberg (University of Colorado Barbara Davis Center for Childhood Diabetes), William Winter (University of Florida), Liping Yu (University of Colorado Barbara Davis Center for Childhood Diabetes), Sunanda Babu (University of Colorado Barbara Davis Center for Childhood Diabetes).

*Steering Committee:* Jay S. Skyler (University of Miami Diabetes Research Institute), Chair; Mark Anderson (University of California San Francisco), Katarzyna Bourcier (National Institute of Allergy and Infectious Diseases), Dorothy Becker (University of Pittsburgh), Polly Bingley (University of Bristol), Janice Blum (Indiana University), Emanuele Bosi (San Raffaele Hospital), Jane Buckner (Benaroya Research Institute), Michael Clare-Salzler (University of Florida), Peter Colman (Walter and Eliza Hall Institute of Medical Research), Linda DiMeglio (Indiana University), C. Garrison Fathman (Stanford University), Stephen Gitelman (University of California San Francisco), Robin Goland (Columbia University), Peter Gottlieb (University of Colorado Barbara Davis Center for Childhood Diabetes), Gilman Grave (The Eunice Kennedy Shriver National Institute of Child Health and Human Development), Carla Greenbaum (Benaroya Research Institute), Bernard Hering (University of Minnesota), Kevan Herold (Yale University), Richard Insel (JDRF), Jeffrey P. Krischer (University of South Florida), Jennifer Marks (University of Miami Diabetes Research Institute), Antoinette Moran (University of Minnesota), Jerry P. Palmer (University of Washington), Mark Peakman (Guy's, King's, and St. Thomas' School of Medicine), Alberto Pugliese (University of Miami Diabetes Research Institute), Philip Raskin (University of Texas Southwestern Medical School), Maria Grazia Roncarolo (San Raffaele Scientific Institute), William Russell (Vanderbilt University), Desmond Schatz (University of Florida), Robert Sherwin (Yale University), Mark Siegelman (University of Texas Southwestern Medical School), Lisa Spain (National Institute of Diabetes and Digestive and Kidney Diseases), Andrea Steck (University of Colorado Barbara Davis Center for Childhood Diabetes), James Thomas (Vanderbilt University), Jorma Toppari (Hospital District of Southwest Finland), Massimo Trucco (University of Pittsburgh), Diane Wherrett (University of Toronto), Darrell M. Wilson (Stanford University), John Wentworth (Walter and Eliza Hall Institute of Medical Research), William Winter (University of Florida); Judith Fradkin (National Institute of Diabetes and Digestive and Kidney Diseases, ex-officio), Ellen Leschek (National Institute of Diabetes and Digestive and Kidney Diseases, ex-officio).

*Past Members:* Christophe Benoist (Joslin Diabetes Center), Jeffrey Bluestone (University of California San

Francisco), David Brown (University of Minnesota), H. Peter Chase (University of Colorado Barbara Davis Center for Childhood Diabetes), Catherine Cowie (National Institute of Diabetes and Digestive and Kidney Diseases), George S. Eisenbarth (deceased) (University of Colorado Barbara Davis Center for Childhood Diabetes), Leonard Harrison (Walter and Eliza Hall Institute of Medical Research), Stanley Jordan (Cedars-Sinai Medical Center), Francine R. Kaufman (Childrens Hospital Los Angeles), Jeffrey Mahon (University of Western Ontario), John M. Lachin (George Washington University), Kirsti Nanto-Salonen (Hospital District of Southwest Finland), Gerald Nepom (Benaroya Research Institute), Tihamer Orban (Joslin Diabetes Center), Robertson Parkman (Childrens Hospital Los Angeles), Mark Pescovitz (deceased) (Indiana University), John Peyman (National Institute of Allergy and Infectious Diseases), John Ridge (National Institute of Allergy and Infectious Diseases), Henry Rodriguez (Indiana University), Peter Savage (National Institute of Diabetes and Digestive and Kidney Diseases), Olli Simell (Hospital District of Southwest Finland), John Wagner (University of Minnesota), Anette Ziegler (Institut für Diabetesforschung).

*Appendix 2: Participant questionnaire for adults (adapted versions were available for use by child participants and parents)*

Your blood can tell us if you have antibodies for type 1 diabetes. We get blood by sticking a needle in a vein. This is called a blood draw. There is a new test we can use that uses blood from your finger. We put the blood on a piece of paper. It is called the Dried Blood Spot test.

Today you had a blood draw with a needle. You also had the Dried Blood Spot test.

1. Did the blood draw hurt
  - A lot
  - A little
  - Did not hurt at all
2. Did the finger stick for the Dried Blood Spot test hurt
  - A lot
  - A little
  - Did not hurt at all
3. Which hurt more?
  - Blood draw
  - Finger stick for the Dried Blood Spot test
  - They both hurt the same.
4. Which did you like better?
  - Blood draw

- Finger stick for the Dried Blood Spot test
- I liked both tests the same.

5. Think about having a blood test again. Which test would make you more worried or scared:
  - Blood draw
  - Finger stick for the Dried Blood Spot test
  - One test does not make me more worried or scared than the other.
6. Think about having a blood test again. Which test would you choose:
  - Blood draw
  - Finger stick for the Dried Blood Spot test
  - I liked both tests the same.

You can do the Dried Blood Spot test at home.

1. Would you like to do the Dried Blood Spot test at home instead of coming to the clinic for a blood draw?
  - Yes
  - No
2. Today someone in the clinic did the Dried Blood Spot test for you. How easy or hard would it be for YOU to do the Dried Blood Spot test at home?
  - Very easy
  - Easy
  - Not easy or hard
  - Hard
  - Very hard

Most people have no antibodies for diabetes. The Dried Spot Test can find the few people who have antibodies. But if the Dried Blood Spot Test says you have antibodies, you have to get a blood draw to be sure.

Which would you like to do: (choose one answer)

- I want to do the Dried Blood Spot Test at home. I will only need a blood draw if the Dried Blood Spot Test says I have antibodies.
- I do not want to do the Dried Blood Spot test at home. I want to get a blood draw each time my blood is tested for antibodies.

Please share any additional thoughts about the use of the Dried Blood Spot (for your child) compared to a regular blood draw:

---



---



---



---



---