

SUPPLEMENTARY DATA

The TEDDY Study Group

Colorado Clinical Center: Marian Rewers, M.D., Ph.D., PI^{1,4,5,6,10,11}, Kimberly Bautista¹², Judith Baxter^{9,10,12,15}, Ruth Bedoy², Daniel Felipe-Morales, Kimberly Driscoll, Ph.D.⁹, Brigitte I. Frohnert, M.D.^{2,14}, Patricia Gesualdo^{2,6,12,14,15}, Michelle Hoffman^{12,13,14}, Rachel Karban¹², Edwin Liu, M.D.¹³, Jill Norris, Ph.D.^{2,3,12}, Adela Samper-Imaz, Andrea Steck, M.D.^{3,14}, Kathleen Waugh^{6,7,12,15}, Hali Wright¹². University of Colorado, Anschutz Medical Campus, Barbara Davis Center for Childhood Diabetes.

Finland Clinical Center: Jorma Toppari, M.D., Ph.D., PI^{1,4,11,14}, Olli G. Simell, M.D., Ph.D.^{1,4,11,13}, Annika Adamsson, Ph.D.¹², Suvi Ahonen^{*±§}, Heikki Hyöty, M.D., Ph.D.^{*±6}, Jorma Ilonen, M.D., Ph.D.[¥] ¶³, Sanna Jokipuu[^], Tiina Kallio[^], Leena Karlsson[^], Miia Kähönen^{µπ}, Mikael Knip, M.D., Ph.D.^{*±5}, Lea Kovanen^{*±§}, Mirva Koreasalo^{*±§2}, Kalle Kurppa, M.D., Ph.D.^{*±13}, Tiina Latva-aho^{µπ}, Maria Lönnrot, M.D., Ph.D.^{*±6}, Elina Mäntymäki[^], Katja Multasuo^{µπ}, Juha Mykkänen, Ph.D.[¥] ¶³, Tiina Niinen^{*±12}, Sari Niinistö^{±§}, Mia Nyblom^{*±}, Petra Rajala[^], Jenna Rautanen^{±§}, Anne Riikonen^{*±§}, Mika Riikonen[^], Jenni Rouhiainen[^], Minna Romo[^], Tuula Simell, Ph.D., Ville Simell^{¥13}, Maija Sjöberg^{¥12,14}, Aino Stenius^{µπ12}, Maria Leppänen[^], Sini Vainionpää[^], Eeva Varjonen^{¥12}, Riitta Veijola, M.D., Ph.D.^{µπ14}, Suvi M. Virtanen, M.D., Ph.D.^{*±§2}, Mari Vähä-Mäkilä[^], Mari Åkerlund^{*±§}, Katri Lindfors, Ph.D.^{*13} ¥^{University of Turku, *University of Tampere, µUniversity of Oulu, ^Turku University Hospital, Hospital District of Southwest Finland, ±Tampere University Hospital, πOulu University Hospital, §National Institute for Health and Welfare, Finland, ¶University of Kuopio.}

Georgia/Florida Clinical Center: Jin-Xiong She, Ph.D., PI^{1,3,4,11}, Desmond Schatz, M.D.^{*4,5,7,8}, Diane Hopkins¹², Leigh Steed^{12,13,14,15}, Jamie Thomas^{*6,12}, Janey Adams^{*12}, Katherine Silvis², Michael Haller, M.D.^{*14}, Melissa Gardiner, Richard McIndoe, Ph.D., Ashok Sharma, Joshua Williams, Gabriela Young, Stephen W. Anderson, M.D.[^], Laura Jacobsen, M.D.^{*14}. Center for Biotechnology and Genomic Medicine, Augusta University. *University of Florida, ^Pediatric Endocrine Associates, Atlanta.

Germany Clinical Center: Anette G. Ziegler, M.D., PI^{1,3,4,11}, Andreas Beyerlein, Ph.D.², Ezio Bonifacio Ph.D.^{*5}, Michael Hummel, M.D.¹³, Sandra Hummel, Ph.D.², Kristina Foterek^{¥2}, Nicole Janz, Mathilde Kersting, Ph.D.^{¥2}, Annette Knopff⁷, Sibylle Koletzko, M.D.^{¶13}, Claudia Peplow¹², Roswith Roth, Ph.D.⁹, Marlon Scholz, Joanna Stock^{9,12,14}, Katharina Warncke, M.D.¹⁴, Lorena Wendel, Christiane Winkler, Ph.D.^{2,12,15}. Forschergruppe Diabetes e.V. and Institute of Diabetes Research, Helmholtz Zentrum München, and Klinikum rechts der Isar, Technische Universität München. *Center for Regenerative Therapies, TU Dresden, ¶Dr. von Hauner Children's Hospital, Department of Gastroenterology, Ludwig Maximilians University Munich, ¥Research Institute for Child Nutrition, Dortmund.

Sweden Clinical Center: Åke Lernmark, Ph.D., PI^{1,3,4,5,6,8,10,11,15}, Daniel Agardh, M.D., Ph.D.¹³, Carin Andréon Aronsson^{2,12,13}, Maria Ask, Jenny Bremer, Ulla-Marie Carlsson, Corrado Cilio, Ph.D., M.D.⁵, Emelie Ericson-Hallström, Lina Fransson, Thomas Gard, Joanna Gerardsson, Rasmus Bennet, Monica Hansen, Gertie Hansson, Susanne Hyberg, Fredrik Johansen, Berglind Jonsdottir, M.D., Helena Elding Larsson, M.D., Ph.D.^{6,14}, Marielle Lindström, Markus Lundgren, M.D.¹⁴, Maria Månsson-Martinez, Maria Markan, Jessica Melin¹², Zeliha Mestan, Karin Ottosson, Kobra Rahmati, Anita Ramelius, Falastin Salami, Sara Sibthorpe, Birgitta Sjöberg, Ulrica Swartling, Ph.D.^{9,12}, Evelyn Tekum Amboh, Carina Törn, Ph.D.^{3,15}, Anne Wallin, Åsa Wimar^{12,14}, Sofie Åberg. Lund University.

Washington Clinical Center: William A. Hagopian, M.D., Ph.D., PI^{1,3,4, 5, 6,7,11,13, 14}, Michael Killian^{6,7,12,13}, Claire Cowen Crouch^{12,14,15}, Jennifer Skidmore², Josephine Carson, Maria Dalzell, Kayleen Dunson, Rachel Hervey, Corbin Johnson, Rachel Lyons, Arlene Meyer, Denise Mulenga, Alexander Tarr, Morgan Uland, John Willis. Pacific Northwest Diabetes Research Institute.

Pennsylvania Satellite Center: Dorothy Becker, M.D., Margaret Franciscus, MaryEllen Dalmagro-Elias Smith², Ashi Daftary, M.D., Mary Beth Klein, Chrystal Yates. Children's Hospital of Pittsburgh of UPMC.

Data Coordinating Center: Jeffrey P. Krischer, Ph.D., PI^{1,4,5,10,11}, Michael Abbondandolo, Sarah Austin-Gonzalez, Maryouri Avendano, Sandra Baethke, Rasheedah Brown^{12,15}, Brant Burkhardt, Ph.D.^{5,6}, Martha Butterworth², Joanna Clasen, David Cuthbertson, Christopher Eberhard, Steven Fiske⁹, Dena Garcia, Jennifer Garmeson, Veena Gowda, Kathleen Heyman, Francisco Perez Laras, Hye-Seung Lee, Ph.D.^{1,2,13,15}, Shu Liu, Xiang Liu, Ph.D.^{2,3,9,14}, Kristian Lynch, Ph.D.^{5,6,9,15}, Jamie Malloy, Cristina McCarthy^{12,15}, Steven Meulemans, Hemang Parikh, Ph.D.³, Chris Shaffer, Laura Smith, Ph.D.^{9,12}, Susan Smith^{12,15}, Noah Sulman, Ph.D., Roy Tamura, Ph.D.^{1,2,13}, Ulla Uusitalo, Ph.D.^{2,15}, Kendra Vehik, Ph.D.^{4,5,6,14,15}, Ponni Vijayakandipan, Keith Wood, Jimin Yang, Ph.D., R.D.^{2,15}. *Past staff: Lori Ballard, David Hadley, Ph.D., Wendy McLeod.* University of South Florida.

SUPPLEMENTARY DATA

Project scientist: Beena Akolkar, Ph.D.^{1,3,4,5,6,7,10,11}. National Institutes of Diabetes and Digestive and Kidney Diseases.

Autoantibody Reference Laboratories: Liping Yu, M.D.^{^5}, Dongmei Miao, M.D.[^], Polly Bingley, M.D., FRCP^{*5}, Alistair Williams^{*}, Kyla Chandler^{*}, Saba Rokni^{*}, Claire Williams^{*}, Rebecca Wyatt^{*}, Gifty George^{*}, Sian Grace^{*}. [^]Barbara Davis Center for Childhood Diabetes, University of Colorado Denver, ^{*}School of Clinical Sciences, University of Bristol UK.

HLA Reference Laboratory: Henry Erlich, Ph.D.³, Steven J. Mack, Ph.D., Anna Lisa Fear. Center for Genetics, Children's Hospital Oakland Research Institute.

Repository: Sandra Ke, Niveen Mulholland, Ph.D. NIDDK Biosample Repository at Fisher BioServices.

Other contributors: Kasia Bourcier, Ph.D.⁵, National Institutes of Allergy and Infectious Diseases. Thomas Briese, Ph.D.^{6,15}, Columbia University. Suzanne Bennett Johnson, Ph.D.^{9,12}, Florida State University. Eric Triplett, Ph.D.⁶, University of Florida.

Committees:

¹Ancillary Studies, ²Diet, ³Genetics, ⁴Human Subjects/Publicity/Publications, ⁵Immune Markers, ⁶Infectious Agents, ⁷Laboratory Implementation, ⁸Maternal Studies, ⁹Psychosocial, ¹⁰Quality Assurance, ¹¹Steering, ¹²Study Coordinators, ¹³Celiac Disease, ¹⁴Clinical Implementation, ¹⁵Quality Assurance Subcommittee on Data Quality.

SUPPLEMENTARY DATA

Supplementary Table 1. Factors Associated with Parents' SAI Scores One to Four Years after Initial IA+ Test Result

Factors	Mothers			Fathers		
	B	95%CI	p-value	B	95%CI	p-value
Country						
US	0.00	ref		0.00	ref	
Finland	-0.82	-2.05 – +0.46	0.19	-1.29	-2.59 – -0.01	0.04
Germany	-2.75	-4.89 – -0.61	0.01	-2.27	-4.64 – +0.11	0.06
Sweden	-0.30	-0.70 – -1.30	0.56	-0.39	-1.45 – +0.67	0.47
FDR						
no	0.00	ref		0.00	ref	
yes	0.97	-0.29 – +2.24	0.13	1.32	+0.20 – +2.85	0.09
Ethnic minority						
no	0.00	ref		0.00	ref	
yes	1.98	+0.63 – +3.33	0.004	0.68	-0.81 – +2.17	0.37
Risk perception						
underestimate	0.00	ref		0.00	ref	
accurate	1.59	+0.78 – +2.40	<0.0001	1.72	+0.91 – +2.53	<0.0001
SAI after the first IA+ test	0.65	+0.60 – +0.70	<0.0001	0.66	+0.60 – +0.71	<0.0001
Time since first IA+ test result	-0.33	-0.53 – -0.13	0.001	-0.27 0	-0.53 – -0.03	0.03
Child's IA Status						
nonpersistent IA+	0.00	ref		0.00	ref	
single persistent IA+	1.04	+0.06 – +2.01	0.008	0.63	+0.32 – +1.58	0.20
multiple persistent IA+	3.91	+2.88 – +4.93	<0.0001	2.97	+1.86 – +4.08	<0.0001