

SUPPLEMENTARY DATA

Supplementary Table 1. Sensitivity (Se), Specificity (Sp), and Youden's index (J) for each risk factor to predict any IA, IAA-IA or GADA-IA at age of 2 years or progression to T1D at 1 year from the appearance of multiple autoantibodies.

Risk Factor	At age of 2 years									At 1 year		
	Any IA			IAA-IA			GADA-IA			Progression to T1D		
	Se	Sp	J	Se	Sp	J	Se	Sp	J	Se	Sp	J
<b>Family History</b> (FDR vs. GP)	0.235	0.886	0.120	0.225	0.886	0.111	0.226	0.886	0.111			
<b>Sex</b> (Female vs. Male)	0.543	0.491	0.034	0.584	0.491	0.075	0.478	0.491	-0.031	0.499	0.571	0.071
<b>HLA Genotype</b> (DR3/4 vs. others)	0.520	0.612	0.132	0.530	0.612	0.142	0.461	0.612	0.073			
<b>Probiotics introduction age</b> (< 28 days vs. ≥ 28 days)	0.937	0.075	0.011	0.928	0.075	0.003	0.941	0.075	0.016			
<b>Weight z-score at 12 months</b> (≥ median vs. < median)	0.526	0.503	0.028	0.496	0.503	-0.001	0.570	0.503	0.072			
<b>First infant formula type during the first 7 days of life</b> (Extensively hydrolyzed vs. other)	0.060	0.973	0.033	0.066	0.973	0.039	0.061	0.973	0.034			
<b>First infant formula type during the first 3 months of life</b> (Extensively hydrolyzed vs. other)	0.068	0.967	0.034	0.072	0.967	0.039	0.075	0.967	0.041			
<b>Age at multiple persistent confirmed autoantibodies (months)</b> (≥ median vs. < median)										0.852	0.523	0.375
<b>Type of first autoantibody</b> (Two or more autoantibodies vs. one)										0.499	0.760	0.259
<b>rs1004446</b> ( <i>INS</i> )	0.437	0.602	0.039	0.465	0.602	0.067	0.460	0.602	0.062	0.618	0.534	0.153
<b>rs10517086</b>	0.528	0.507	0.035	0.541	0.507	0.049	0.552	0.493	0.045	0.651	0.469	0.119
<b>rs1534422</b>										0.765	0.283	0.048
<b>rs2327832</b> ( <i>TNFAIP3</i> )										0.516	0.671	0.187
<b>rs1143678</b> ( <i>ITGAM</i> )	0.737	0.267	0.004	0.722	0.267	-0.010	0.807	0.267	0.074			
<b>rs12708716</b> ( <i>CLECI6A</i> )	0.480	0.564	0.044	0.446	0.564	0.010	0.476	0.564	0.040			
<b>rs2292239</b> ( <i>ERBB3</i> )	0.649	0.462	0.111	0.664	0.462	0.127	0.654	0.462	0.116			
<b>rs2476601</b> ( <i>PTPN22</i> )	0.327	0.798	0.125	0.315	0.798	0.113	0.393	0.798	0.191			
<b>rs2816316</b> ( <i>RGS1</i> )	0.327	0.670	-0.003	0.302	0.670	-0.028	0.314	0.670	-0.016			

SUPPLEMENTARY DATA

<b>rs3184504 (SH2B3)</b>	0.746	0.308	0.054	0.722	0.308	0.030	0.789	0.308	0.097			
<b>rs4597342 (ITGAM)</b>	0.596	0.439	0.036	0.463	0.561	0.024	0.702	0.439	0.142			
<b>rs4948088 (COBL)</b>	0.947	0.088	0.035	0.960	0.088	0.048	0.928	0.088	0.016			

SUPPLEMENTARY DATA

Supplementary Table 2. Sensitivity (Se), Specificity (Sp), and Youden's index (J) for each risk factor to predict any IA, IAA-IA, or GADA-IA at age of 10 years or progression to T1D at 5 years from the appearance of multiple autoantibodies.

Risk Factor	At age of 10 years									At 5 years		
	Any IA			IAA-IA			GADA-IA			Progression to T1D		
	Se	Sp	J	Se	Sp	J	Se	Sp	J	Se	Sp	J
<b>Family History</b> (FDR vs. GP)	0.180	0.888	0.068	0.208	0.888	0.095	0.153	0.888	0.041			
<b>Sex</b> (Female vs. Male)	0.545	0.504	0.049	0.571	0.504	0.074	0.517	0.504	0.021	0.503	0.630	0.132
<b>HLA Genotype</b> (DR3/4 vs. others)	0.481	0.624	0.105	0.489	0.624	0.113	0.467	0.624	0.091			
<b>Probiotics introduction age</b> (< 28 days vs. ≥ 28 days)	0.938	0.051	-0.011	0.955	0.051	0.006	0.936	0.051	-0.013			
<b>Weight z-score at 12 months</b> (≥ median vs. < median)	0.542	0.490	0.032	0.523	0.490	0.013	0.571	0.490	0.060			
<b>First infant formula type during the first 7 days of life</b> (Extensively hydrolyzed vs. other)	0.044	0.955	-0.001	0.054	0.955	0.010	0.043	0.955	-0.002			
<b>First infant formula type during the first 3 months of life</b> (Extensively hydrolyzed vs. other)	0.050	0.944	-0.006	0.057	0.944	0.002	0.045	0.944	-0.010			
<b>Age at multiple persistent confirmed autoantibodies (months)</b> (≥ median vs. < median)										0.731	0.385	0.117
<b>Type of first autoantibody</b> (Two or more autoantibodies vs. one)										0.334	0.763	0.097
<b>rs1004446</b> ( <i>INS</i> )	0.446	0.600	0.046	0.479	0.600	0.078	0.402	0.600	0.001	0.478	0.519	-0.004
<b>rs10517086</b>	0.504	0.535	0.040	0.496	0.535	0.031	0.519	0.465	-0.016	0.585	0.533	0.118
<b>rs1534422</b>										0.772	0.304	0.076
<b>rs2327832</b> ( <i>TNFAIP3</i> )										0.375	0.689	0.064
<b>rs1143678</b> ( <i>ITGAM</i> )	0.734	0.277	0.011	0.735	0.277	0.011	0.730	0.277	0.007			
<b>rs12708716</b> ( <i>CLEC16A</i> )	0.468	0.567	0.035	0.450	0.567	0.017	0.477	0.567	0.044			
<b>rs2292239</b> ( <i>ERBB3</i> )	0.597	0.468	0.065	0.591	0.468	0.059	0.594	0.468	0.062			
<b>rs2476601</b> ( <i>PTPN22</i> )	0.288	0.789	0.077	0.295	0.789	0.085	0.283	0.789	0.072			
<b>rs2816316</b> ( <i>RGS1</i> )	0.352	0.674	0.025	0.343	0.674	0.017	0.347	0.674	0.021			

SUPPLEMENTARY DATA

<b>rs3184504 (SH2B3)</b>	0.764	0.327	0.091	0.755	0.327	0.082	0.771	0.327	0.098			
<b>rs4597342 (ITGAM)</b>	0.575	0.432	0.007	0.476	0.568	0.044	0.598	0.432	0.030			
<b>rs4948088 (COBL)</b>	0.935	0.080	0.015	0.941	0.080	0.021	0.929	0.080	0.009			

SUPPLEMENTARY DATA

Supplementary Table 3. Area under the curve of ROC curve (AUC) and Youden's index (J) of each prediction model, together with incremental AUC ( $\Delta$  AUC) and J ( $\Delta$  J) introduced by the newly added risk factor in each prediction model factor to predict any IA, IAA-IA, or GADA-IA at age of 2 years or progression to T1D at 1 year from the appearance of multiple autoantibodies.

# of risk factors in the model	At age of 2 years														At 1 year					
	Any IA					IAA-IA					GADA-IA				Progression to T1D					
	Newly added risk factor	AUC	$\Delta$ (AUC)	J	$\Delta$ (J)	Newly added risk factor	AUC	$\Delta$ (AUC)	J	$\Delta$ (J)	Newly added risk factor	AUC	$\Delta$ (AUC)	J	$\Delta$ (J)	Newly added risk factor	AUC	$\Delta$ (AUC)	J	$\Delta$ (J)
1	Family History	0.564	N/A	0.126	N/A	Family History	0.560	N/A	0.128	N/A	rs3184504 ( <i>SH2B3</i> )	0.578	N/A	0.114	N/A	Age at multiple IA	0.757	N/A	0.493	N/A
2	HLA Genotype	0.626	0.062	0.186	0.060	HLA Genotype	0.651	0.092	0.224	0.095	rs2476601 ( <i>PTPN22</i> )	0.633	0.055	0.226	0.112	Type of first autoantibody	0.757	0.001	0.435	-0.058
3	rs2476601 ( <i>PTPN22</i> )	0.650	0.024	0.217	0.032	rs2476601 ( <i>PTPN22</i> )	0.681	0.030	0.253	0.029	HLA Genotype	0.641	0.008	0.243	0.017	rs1534422	0.756	-0.002	0.405	-0.030
4	rs3184504 ( <i>SH2B3</i> )	0.662	0.012	0.228	0.011	rs1004446 ( <i>INS</i> )	0.686	0.005	0.284	0.031	Family History	0.655	0.013	0.250	0.007	Sex	0.755	-0.001	0.424	0.019
5	rs1004446 ( <i>INS</i> )	0.662	0	0.239	0.011	rs3184504 ( <i>SH2B3</i> )	0.697	0.011	0.303	0.019	Weight z-score at 12 months	0.669	0.014	0.283	0.033	rs2327832 ( <i>TNFAIP3</i> )	0.763	0.008	0.434	0.010
6	Weight z-score at 12 months	0.662	-0.001	0.250	0.011	Sex	0.704	0.007	0.316	0.013	rs12708716 ( <i>CLEC16A</i> )	0.671	0.002	0.288	0.005	rs1004446 ( <i>INS</i> )	0.773	0.010	0.440	0.006
7	rs2292239 ( <i>ERBB3</i> )	0.670	0.008	0.256	0.006	Weight z-score at 12 months	0.702	-0.002	0.321	0.005	rs2292239 ( <i>ERBB3</i> )	0.683	0.012	0.292	0.004	rs10517086	0.781	0.008	0.472	0.032
8	rs12708716 ( <i>CLEC16A</i> )	0.671	0.002	0.257	0.001	rs4948088 ( <i>COBL</i> )	0.708	0.006	0.321	-0.001										
9	Sex	0.675	0.004	0.267	0.010	Probiotics introduction age	0.704	-0.004	0.300	-0.021										
10	rs4948088 ( <i>COBL</i> )	0.679	0.004	0.271	0.004															
11	Probiotics introduction age	0.679	0	0.276	0.005															
12	First infant formula type during the first 3	0.682	0.003	0.285	0.009															

SUPPLEMENTARY DATA

months of life																				
-------------------	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

SUPPLEMENTARY DATA

Supplementary Table 4. Area under the curve of ROC curve (AUC) and Youden's index (J) of each prediction model, together with incremental AUC ( $\Delta$  AUC) and J ( $\Delta$  J) introduced by the newly added risk factor in each prediction model factor to predict any IA, IAA-IA or GADA-IA at age of 10 years or progression to T1D at 5 years from the appearance of multiple autoantibodies.

# of risk factors in the model	At age of 10 years														At year 5					
	Any IA					IAA-IA					GADA-IA				Progression to T1D					
	Newly added risk factor	AUC	$\Delta$ (AUC)	J	$\Delta$ (J)	Newly added risk factor	AUC	$\Delta$ (AUC)	J	$\Delta$ (J)	Newly added risk factor	AUC	$\Delta$ (AUC)	J	$\Delta$ (J)	Newly added risk factor	AUC	$\Delta$ (AUC)	J	$\Delta$ (J)
1	Family History	0.535	N/A	0.068	N/A	Family History	0.551	N/A	0.095	N/A	rs3184504 ( <i>SH2B3</i> )	0.574	NA	0.099	N/A	Age at multiple IA	0.614	N/A	0.246	N/A
2	HLA Genotype	0.586	0.051	0.127	0.059	HLA Genotype	0.625	0.074	0.182	0.086	rs2476601 ( <i>PTPN22</i> )	0.582	0.008	0.122	0.023	Type of first autoantibody	0.615	0.002	0.209	-0.037
3	rs2476601 ( <i>PTPN22</i> )	0.601	0.015	0.144	0.017	rs2476601 ( <i>PTPN22</i> )	0.643	0.018	0.190	0.008	HLA Genotype	0.605	0.023	0.147	0.025	rs1534422	0.642	0.026	0.261	0.052
4	rs3184504 ( <i>SH2B3</i> )	0.623	0.023	0.176	0.032	rs1004446 ( <i>INS</i> )	0.650	0.007	0.226	0.036	Family History	0.615	0.010	0.159	0.012	Sex	0.663	0.022	0.328	0.068
5	rs1004446 ( <i>INS</i> )	0.632	0.009	0.190	0.014	rs3184504 ( <i>SH2B3</i> )	0.672	0.022	0.276	0.050	Weight z-score at 12 months	0.626	0.011	0.185	0.027	rs2327832 ( <i>TNFAIP3</i> )	0.661	-0.002	0.289	-0.040
6	Weight z-score at 12 months	0.638	0.007	0.204	0.015	Sex	0.679	0.008	0.286	0.010	rs12708716 ( <i>CLEC16A</i> )	0.634	0.008	0.212	0.027	rs1004446 ( <i>INS</i> )	0.656	-0.005	0.287	-0.002
7	rs2292239 ( <i>ERBB3</i> )	0.642	0.003	0.202	-0.003	Weight z-score at 12 months	0.682	0.003	0.289	0.003	rs2292239 ( <i>ERBB3</i> )	0.639	0.005	0.199	-0.013	rs10517086	0.660	0.004	0.294	0.007
8	rs12708716 ( <i>CLEC16A</i> )	0.646	0.004	0.211	0.010	rs4948088 ( <i>COBL</i> )	0.684	0.002	0.297	0.008										
9	Sex	0.649	0.003	0.219	0.007	Probiotics introduction age	0.683	-0.001	0.284	-0.014										
10	rs4948088 ( <i>COBL</i> )	0.649	0	0.213	-0.006															
11	Probiotics introduction age	0.647	-0.002	0.212	-0.001															
12	First infant formula type during the first 3	0.644	-0.003	0.199	-0.013															

SUPPLEMENTARY DATA

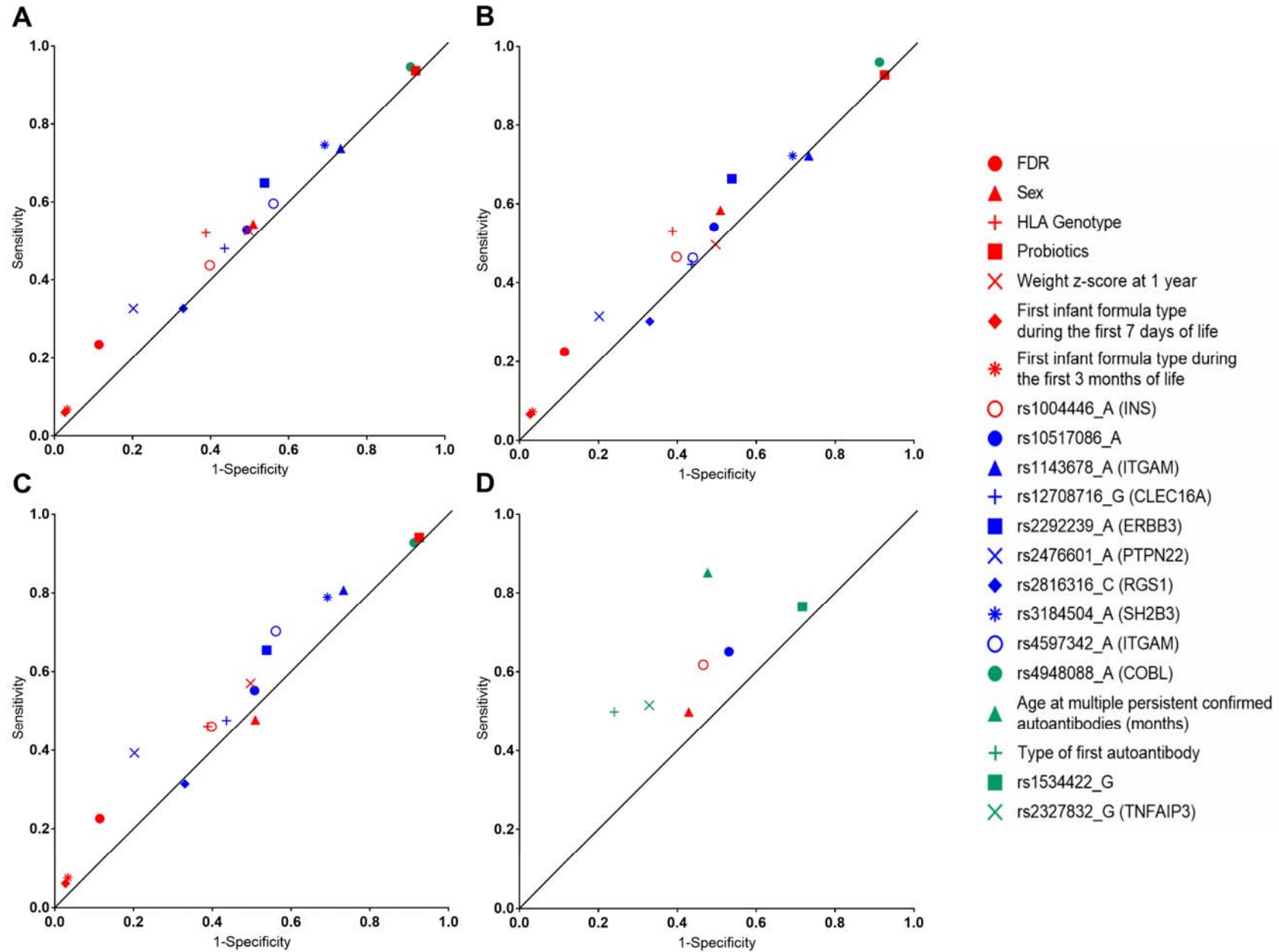
	months of life																			
--	-------------------	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--



## SUPPLEMENTARY DATA

Supplementary Figure 1. Sensitivity versus 1-Specificity of each TEDDY-identified risk factor to predict IA, IAA-IA, and GADA-IA (Panels A, B and C) at age of 2 years and to predict progression to T1D at 1 year from the appearance of multiple autoantibodies (Panel D).

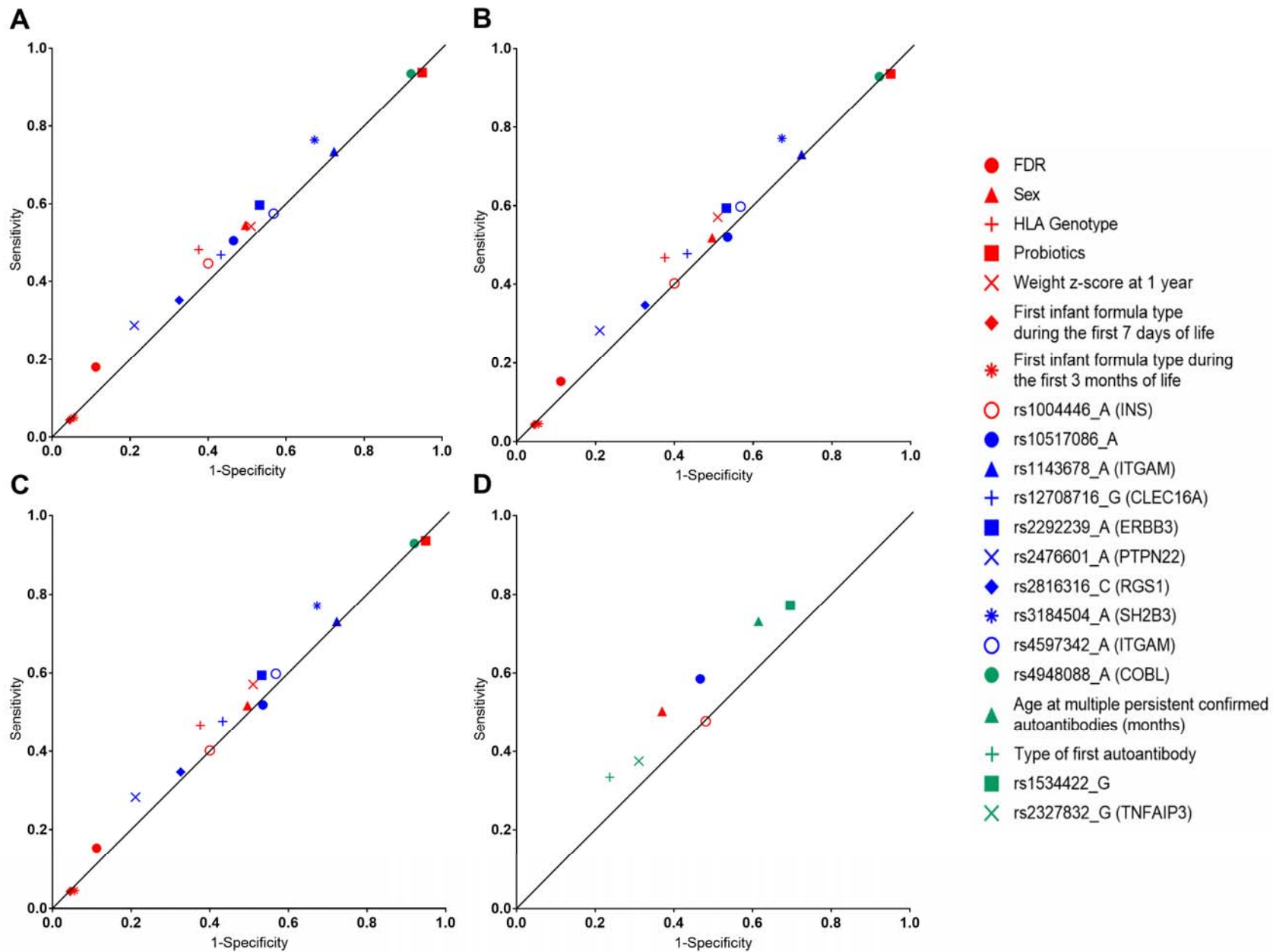
SUPPLEMENTARY DATA



## SUPPLEMENTARY DATA

Supplementary Figure 2. Sensitivity versus 1-Specificity of each TEDDY-identified risk factor to predict IA, IAA-IA, and GADA-IA (Panels A, B and C) at age of 10 years and to predict progression to T1D at 5 years from the appearance of multiple autoantibodies (Panel D).

SUPPLEMENTARY DATA



## SUPPLEMENTARY DATA

### **The TEDDY Study Group**

**Colorado Clinical Center:** Marian Rewers, M.D., Ph.D., PI<sup>1,4,5,6,10,11</sup>, Kimberly Bautista<sup>12</sup>, Judith Baxter<sup>9,12,15</sup>, Daniel Felipe-Morales, Kimberly Driscoll, Ph.D.<sup>9</sup>, Brigitte I. Frohnert, M.D.<sup>2,14</sup>, Marisa Gallant, M.D.<sup>13</sup>, Patricia Gesualdo<sup>2,6,12,14,15</sup>, Michelle Hoffman<sup>12,13,14</sup>, Rachel Karban<sup>12</sup>, Edwin Liu, M.D.<sup>13</sup>, Jill Norris, Ph.D.<sup>2,3,12</sup>, Andrea Steck, M.D.<sup>3,14</sup>, Kathleen Waugh<sup>6,7,12,15</sup>. University of Colorado, Anschutz Medical Campus, Barbara Davis Center for Childhood Diabetes.

**Finland Clinical Center:** Jorma Toppari, M.D., Ph.D., PI<sup>¥^1,4,11,14</sup>, Olli G. Simell, M.D., Ph.D., Annika Adamsson, Ph.D.<sup>^12</sup>, Suvi Ahonen<sup>\*±§</sup>, Mari Åkerlund<sup>\*±§</sup>, Anne Hekkala, M.D.<sup>μ□</sup>, Henna Holappa<sup>μ□</sup>, Heikki Hyöty, M.D., Ph.D.<sup>\*±6</sup>, Anni Ikonen<sup>μ□</sup>, Jorma Ilonen, M.D., Ph.D.<sup>¥13</sup>, Sinikka Jäminki<sup>\*±</sup>, Sanna Jokipuu<sup>^12</sup>, Leena Karlsson<sup>^</sup>, Miia Kähönen<sup>μ□12,14</sup>, Mikael Knip, M.D., Ph.D.<sup>\*±5</sup>, Minna-Liisa Koivikko<sup>μ□</sup>, Mirva Koreasalo<sup>\*±§2</sup>, Kalle Kurppa, M.D., Ph.D.<sup>\*±13</sup>, Jarita Kytölä<sup>\*±</sup>, Tiina Latva-aho<sup>μ□</sup>, Katri Lindfors, Ph.D.<sup>\*13</sup>, Maria Lönnrot, M.D., Ph.D.<sup>\*±6</sup>, Elina Mäntymäki<sup>^</sup>, Markus Mattila<sup>\*</sup>, Katja Multasuo<sup>μ□</sup>, Teija Mykkänen<sup>μ□</sup>, Tiina Niininen<sup>±\*12</sup>, Sari Niinistö<sup>±§2</sup>, Mia Nyblom<sup>\*±</sup>, Sami Oikarinen, Ph.D.<sup>\*±</sup>, Paula Ollikainen<sup>μ□</sup>, Sirpa Pohjola<sup>μ□</sup>, Petra Rajala<sup>^</sup>, Jenna Rautanen<sup>±§</sup>, Anne Riikonen<sup>\*±§</sup>, Minna Romo<sup>^</sup>, Suvi Ruohonen<sup>^</sup>, Satu Simell, M.D., Ph.D.<sup>¥13</sup>, Maija Sjöberg<sup>¥12</sup>, Aino Stenius<sup>μ□12</sup>, Päivi Tossavainen, M.D.<sup>μ□</sup>, Mari Vähä-Mäkilä<sup>^</sup>, Sini Vainionpää<sup>^12</sup>, Eeva Varjonen<sup>¥12</sup>, Riitta Veijola, M.D., Ph.D.<sup>μ□14</sup>, Irene Viinikangas<sup>μ□</sup>, Suvi M. Virtanen, M.D., Ph.D.<sup>\*±§2</sup>. ¥University of Turku, \*University of Tampere, μUniversity of Oulu, ^Turku University Hospital, Hospital District of Southwest Finland, ±Tampere University Hospital, □Oulu University Hospital, §National Institute for Health and Welfare, Finland, ¶University of Kuopio.

**Georgia/Florida Clinical Center:** Jin-Xiong She, Ph.D., PI<sup>1,3,4,11</sup>, Desmond Schatz, M.D.<sup>\*4,5,7,8</sup>, Diane Hopkins<sup>12</sup>, Leigh Steed<sup>12,13,14,15</sup>, Jennifer Bryant<sup>12</sup>, Katherine Silvis<sup>2</sup>, Michael Haller, M.D.<sup>\*14</sup>, Melissa Gardiner<sup>12</sup>, Richard McIndoe, Ph.D., Ashok Sharma, Stephen W. Anderson, M.D.<sup>^</sup>, Laura Jacobsen, M.D.<sup>\*14</sup>, John Marks, DHSc.<sup>\*14</sup>, P.D. Towe\*. Center for Biotechnology and Genomic Medicine, Augusta University. \*University of Florida, ^Pediatric Endocrine Associates, Atlanta.

**Germany Clinical Center:** Anette G. Ziegler, M.D., PI<sup>1,3,4,11</sup>, Ezio Bonifacio Ph.D.<sup>\*5</sup>, Miryam D'Angelo, Anita Gavrigan, Cigdem Gezginci, Anja Heublein, Verena Hoffmann, Ph.D.<sup>2</sup>, Sandra Hummel, Ph.D.<sup>2</sup>, Andrea Keimer<sup>¥2</sup>, Annette Knopff<sup>7</sup>, Charlotte Koch, Sibylle Koletzko, M.D.<sup>¶13</sup>, Claudia Ramminger<sup>12</sup>, Roswith Roth, Ph.D.<sup>9</sup>, Marlon Scholz, Joanna Stock<sup>9,12,14</sup>, Katharina Warncke, M.D.<sup>14</sup>, Lorena Wendel, Christiane Winkler, Ph.D.<sup>2,12,15</sup>. Forschergruppe Diabetes e.V. and Institute of Diabetes Research, Helmholtz Zentrum München, Forschergruppe Diabetes, 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, ¥University of Bonn, Department of Nutritional Epidemiology.

**Sweden Clinical Center:** Åke Lernmark, Ph.D., PI<sup>1,3,4,5,6,8,10,11,15</sup>, Daniel Agardh, M.D., Ph.D.<sup>6,13</sup>, Carin Andrén Aronsson, Ph.D.<sup>2,12,13</sup>, Maria Ask, Jenny Bremer, Corrado Cilio, Ph.D., M.D.<sup>5,6</sup>, Emelie Ericson-Hallström, Annika Fors, Lina Fransson, Thomas Gard, Rasmus Bennet, Monika Hansen, Susanne Hyberg, Hanna Jisser, Fredrik Johansen, Berglind Jonsdottir, M.D., Ph.D.<sup>12</sup>, Silvija Jovic, Helena Elding Larsson, M.D., Ph.D.<sup>6,14</sup>, Marielle Lindström, Markus Lundgren, M.D., Ph.D.<sup>14</sup>, Maria Månsson-Martinez, Maria Markan, Jessica Melin<sup>12</sup>, Zeliha

## SUPPLEMENTARY DATA

Mestan, Caroline Nilsson, Karin Ottosson, Kobra Rahmati, Anita Ramelius, Falastin Salami, Anette Sjöberg, Birgitta Sjöberg, Carina Törn, Ph.D.<sup>3,15</sup>, Anne Wallin, Åsa Wimar<sup>14</sup>, Sofie Åberg. Lund University.

**Washington Clinical Center:** William A. Hagopian, M.D., Ph.D., PI<sup>1,3,4,5,6,7,11,13,14</sup>, Michael Killian<sup>6,7,12,13</sup>, Claire Cowen Crouch<sup>12,14,15</sup>, Jennifer Skidmore<sup>2</sup>, Ashley Akramoff, Masumeh Chavoshi, Kayleen Dunson, Rachel Hervey, Rachel Lyons, Arlene Meyer, Denise Mulenga<sup>12</sup>, Jared Radtke, Matei Romancik, Davey Schmitt, Julie Schwabe, Sarah Zink. Pacific Northwest Research Institute.

**Pennsylvania Satellite Center:** Dorothy Becker, M.D., Margaret Franciscus, MaryEllen Dalmagro-Elias Smith<sup>2</sup>, 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<sup>1,4,5,10,11</sup>, Sarah Austin-Gonzalez, Maryouri Avendano, Sandra Baethke, Rasheedah Brown<sup>12,15</sup>, Brant Burkhardt, Ph.D.<sup>5,6</sup>, Martha Butterworth<sup>2</sup>, Joanna Clasen, David Cuthbertson, Christopher Eberhard, Steven Fiske<sup>9</sup>, Jennifer Garmeson, Veena Gowda, Kathleen Heyman, Belinda Hsiao, Christina Karges, Francisco Perez Laras, Hye-Seung Lee, Ph.D.<sup>1,2,3,13,15</sup>, Qian Li<sup>2,3</sup>, Shu Liu, Xiang Liu, Ph.D.<sup>2,3</sup>, Kristian Lynch, Ph.D.<sup>5,6,9,15</sup>, Colleen Maguire, Jamie Malloy, Cristina McCarthy<sup>12,15</sup>, Aubrie Merrell, Steven Meulemans, Hemang Parikh, Ph.D.<sup>3</sup>, Ryan Quigley, Cassandra Remedios, Chris Shaffer, Laura Smith, Ph.D.<sup>9,12</sup>, Susan Smith<sup>12,15</sup>, Noah Sulman, Ph.D., Roy Tamura, Ph.D.<sup>1,2,12,13,14</sup>, Dena Tewey, Michael Toth, Ulla Uusitalo, Ph.D.<sup>2,15</sup>, Kendra Vehik, Ph.D.<sup>4,5,6,9,14,15</sup>, Ponni Vijayakandipan, Keith Wood, Jimin Yang, Ph.D., R.D.<sup>2,15</sup>. *Past staff: Michael Abbondandolo, Lori Ballard, David Hadley, Ph.D., Wendy McLeod.* University of South Florida.

**Autoantibody Reference Laboratories:** Liping Yu, M.D.<sup>^5</sup>, Dongmei Miao, M.D.<sup>^</sup>, Polly Bingley, M.D., FRCP\*<sup>5</sup>, Alistair Williams\*, Kyla Chandler\*, Olivia Ball\*, Ilana Kelland\*, Sian Grace\*, Ben Gillard\*. <sup>^</sup>Barbara Davis Center for Childhood Diabetes, University of Colorado Denver, \*Bristol Medical School, University of Bristol UK.

**HLA Reference Laboratory:** William Hagopian<sup>3</sup>, MD, PhD, Masumeh Chavoshi, Jared Radtke, Julie Schwabe. Pacific Northwest Research Institute, Seattle WA. (Previously Henry Erlich, Ph.D.<sup>3</sup>, 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.

**SNP Laboratory:** Stephen S. Rich, Ph.D.<sup>3</sup>, Wei-Min Chen, Ph.D.<sup>3</sup>, Suna Onengut-Gumuscu, Ph.D.<sup>3</sup>, Emily Farber, Rebecca Roche Pickin, Ph.D., Jonathan Davis, Jordan Davis, Dan Gallo, Jessica Bonnie, Paul Campolieto. Center for Public Health Genomics, University of Virginia.

**Project scientist:** Beena Akolkar, Ph.D.<sup>1,3,4,5,6,7,10,11</sup>. National Institutes of Diabetes and Digestive and Kidney Diseases.

**Other contributors:** Kasia Bourcier, Ph.D.<sup>5</sup>, National Institutes of Allergy and Infectious Diseases. Thomas Briese, Ph.D.<sup>6,15</sup>, Columbia

## SUPPLEMENTARY DATA

University. Suzanne Bennett Johnson, Ph.D.<sup>9,12</sup>, Florida State University. Eric Triplett, Ph.D.<sup>6</sup>, University of Florida.

### ***Committees:***

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