

# Genetic and Environmental Interactions Modify the Risk of Type 1 Diabetes by 6 Years of Age: The TEDDY Study

Diabetes Care

40, 1194-1202

DOI: [10.2337/dc17-0238](https://doi.org/10.2337/dc17-0238)

Citation Report

#	ARTICLE	IF	CITATIONS
1	Antihyperglycaemic and organic protective effects on pancreas, liver and kidney by polysaccharides from <i>Hericium erinaceus</i> SG-02 in streptozotocin-induced diabetic mice. <i>Scientific Reports</i> , 2017, 7, 10847.	1.6	22
2	Type 1 Diabetes: Disease Stratification. <i>Biomedicine Hub</i> , 2017, 2, 1-16.	0.4	10
3	The Genetic Architecture of Type 1 Diabetes. <i>Genes</i> , 2017, 8, 209.	1.0	49
4	Conclusions and Future Trends. , 2017, , 199-212.		0
5	Identification of non-HLA genes associated with development of islet autoimmunity and type 1 diabetes in the prospective TEDDY cohort. <i>Journal of Autoimmunity</i> , 2018, 89, 90-100.	3.0	46
6	Accelerated Progression to Type 1 Diabetes in the Presence of <i>HLA-A*24</i> and <i>B*18</i> Is Restricted to Multiple Islet Autoantibody-Positive Individuals With Distinct <i>HLA-DQ</i> and Autoantibody Risk Profiles. <i>Diabetes Care</i> , 2018, 41, 1076-1083.	4.3	16
7	The rs2292239 polymorphism in <i>ERBB3</i> gene is associated with risk for type 1 diabetes mellitus in a Brazilian population. <i>Gene</i> , 2018, 644, 122-128.	1.0	10
8	Maternal dietary supplement use and development of islet autoimmunity in the offspring: TEDDY study. <i>Pediatric Diabetes</i> , 2019, 20, 86-92.	1.2	17
9	The Dynamic Origins of Type 1 Diabetes. <i>Diabetes Care</i> , 2018, 41, 2441-2443.	4.3	4
10	The Effect of Age on the Progression and Severity of Type 1 Diabetes: Potential Effects on Disease Mechanisms. <i>Current Diabetes Reports</i> , 2018, 18, 115.	1.7	32
11	The Environmental Determinants of Diabetes in the Young (TEDDY) Study: 2018 Update. <i>Current Diabetes Reports</i> , 2018, 18, 136.	1.7	77
12	Conclusions and Future Trends. , 2018, , 221-227.		0
13	Immune Mechanisms and Pathways Targeted in Type 1 Diabetes. <i>Current Diabetes Reports</i> , 2018, 18, 90.	1.7	29
14	Immune Recognition of Î²-Cells: Neoepitopes as Key Players in the Loss of Tolerance. <i>Diabetes</i> , 2018, 67, 1035-1042.	0.3	74
15	Understanding Pre-Type 1 Diabetes: The Key to Prevention. <i>Frontiers in Endocrinology</i> , 2018, 9, 70.	1.5	25
16	New Horizons in the Treatment of Type 1 Diabetes: More Intense Immunosuppression and Beta Cell Replacement. <i>Frontiers in Immunology</i> , 2018, 9, 1086.	2.2	14
17	Analysis of chosen polymorphisms rs2476601 a/G â€“ PTPN22, rs1990760 C/T â€“ IFIH1, rs179247 a/G â€“ TSHR in pathogenesis of autoimmune thyroid diseases in children. <i>Autoimmunity</i> , 2018, 51, 183-190.	1.2	14
18	Influence of early-life parental severe life events on the risk of type 1 diabetes in children: the DiPiS study. <i>Acta Diabetologica</i> , 2018, 55, 797-804.	1.2	9

#	ARTICLE	IF	CITATIONS
19	Reduction in White Blood Cell, Neutrophil, and Red Blood Cell Counts Related to Sex, HLA, and Islet Autoantibodies in Swedish TEDDY Children at Increased Risk for Type 1 Diabetes. <i>Diabetes</i> , 2018, 67, 2329-2336.	0.3	15
20	Identical and Nonidentical Twins: Risk and Factors Involved in Development of Islet Autoimmunity and Type 1 Diabetes. <i>Diabetes Care</i> , 2019, 42, 192-199.	4.3	27
21	Genetic risk for autoimmunity is associated with distinct changes in the human gut microbiome. <i>Nature Communications</i> , 2019, 10, 3621.	5.8	132
22	Birth and coming of age of islet autoantibodies. <i>Clinical and Experimental Immunology</i> , 2019, 198, 294-305.	1.1	35
23	Islet Autoantibody Standardization Program 2018 Workshop: Interlaboratory Comparison of Glutamic Acid Decarboxylase Autoantibody Assay Performance. <i>Clinical Chemistry</i> , 2019, 65, 1141-1152.	1.5	62
24	Landmark models to define the age-adjusted risk of developing stage 1 type 1 diabetes across childhood and adolescence. <i>BMC Medicine</i> , 2019, 17, 125.	2.3	10
25	Proinsulin peptide promotes autoimmune diabetes in a novel HLA-DR3-DQ2-transgenic murine model of spontaneous disease. <i>Diabetologia</i> , 2019, 62, 2252-2261.	2.9	7
26	Age at Seroconversion, HLA Genotype, and Specificity of Autoantibodies in Progression of Islet Autoimmunity in Childhood. <i>Journal of Clinical Endocrinology and Metabolism</i> , 2019, 104, 4521-4530.	1.8	23
27	The Association between rs2292239 Polymorphism in ERBB3 Gene and Type 1 Diabetes: A Meta-Analysis. <i>BioMed Research International</i> , 2019, 2019, 1-7.	0.9	6
28	What Have Slow Progressors Taught Us About T1D? Mind the Gap!. <i>Current Diabetes Reports</i> , 2019, 19, 99.	1.7	3
29	The heterogeneous pathogenesis of type 1 diabetes mellitus. <i>Nature Reviews Endocrinology</i> , 2019, 15, 635-650.	4.3	249
30	Genetic Contribution to the Divergence in Type 1 Diabetes Risk Between Children From the General Population and Children From Affected Families. <i>Diabetes</i> , 2019, 68, 847-857.	0.3	22
31	Probiotics can really cure an autoimmune disease?. <i>Gene Reports</i> , 2019, 15, 100364.	0.4	26
32	Predicting Islet Cell Autoimmunity and Type 1 Diabetes: An 8-Year TEDDY Study Progress Report. <i>Diabetes Care</i> , 2019, 42, 1051-1060.	4.3	75
33	Prospective virome analyses in young children at increased genetic risk for type 1 diabetes. <i>Nature Medicine</i> , 2019, 25, 1865-1872.	15.2	161
34	Stem-cell based organ-on-a-chip models for diabetes research. <i>Advanced Drug Delivery Reviews</i> , 2019, 140, 101-128.	6.6	55
35	Time-Resolved Autoantibody Profiling Facilitates Stratification of Preclinical Type 1 Diabetes in Children. <i>Diabetes</i> , 2019, 68, 119-130.	0.3	28
36	A stochastic epigenetic Mendelian oligogenic disease model for type 1 diabetes. <i>Journal of Autoimmunity</i> , 2019, 96, 123-133.	3.0	4

#	ARTICLE	IF	CITATIONS
37	Autoimmune (Type 1) Diabetes. , 2020, , 769-787.		4
38	Clinical and genetic correlates of islet-autoimmune signatures in juvenile-onset type 1 diabetes. Diabetologia, 2020, 63, 351-361.	2.9	22
39	Longitudinal Pattern of First-Phase Insulin Response Is Associated With Genetic Variants Outside the Class II HLA Region in Children With Multiple Autoantibodies. Diabetes, 2020, 69, 12-19.	0.3	18
40	Plasma ascorbic acid and the risk of islet autoimmunity and type 1 diabetes: the TEDDY study. Diabetologia, 2020, 63, 278-286.	2.9	18
41	The risk of progression to type 1 diabetes is highly variable in individuals with multiple autoantibodies following screening. Diabetologia, 2020, 63, 588-596.	2.9	58
42	Characterization of plasma lipidomics in adolescent subjects with increased risk for type 1 diabetes in the DiPiS cohort. Metabolomics, 2020, 16, 109.	1.4	1
43	Improved Semiparametric Analysis of Polygenic Gene-Environment Interactions in Case-Control Studies. Statistics in Biosciences, 2021, 13, 386-401.	0.6	0
44	A combined risk score enhances prediction of type 1 diabetes among susceptible children. Nature Medicine, 2020, 26, 1247-1255.	15.2	83
45	Genetic Susceptibility of the Host in Virus-Induced Diabetes. Microorganisms, 2020, 8, 1133.	1.6	14
46	Dynamics of Islet Autoantibodies During Prospective Follow-Up From Birth to Age 15 Years. Journal of Clinical Endocrinology and Metabolism, 2020, 105, e4638-e4651.	1.8	35
47	Efficacy of GAD-alum immunotherapy associated with HLA-DR3-DQ2 in recently diagnosed type 1 diabetes. Diabetologia, 2020, 63, 2177-2181.	2.9	38
48	Longitudinal Metabolome-Wide Signals Prior to the Appearance of a First Islet Autoantibody in Children Participating in the TEDDY Study. Diabetes, 2020, 69, 465-476.	0.3	30
49	Decreased HLA-DQ expression on peripheral blood cells in children with varying number of beta cell autoantibodies. Journal of Translational Autoimmunity, 2020, 3, 100052.	2.0	5
50	Association of diabetes-related autoantibodies with the incidence of asthma, eczema and allergic rhinitis in the TRIGR randomised clinical trial. Diabetologia, 2020, 63, 1796-1807.	2.9	8
51	Prediction and Prevention of Type 1 Diabetes. Frontiers in Endocrinology, 2020, 11, 248.	1.5	41
52	Studies of insulin and proinsulin in pancreas and serum support the existence of aetiopathological endotypes of type 1 diabetes associated with age at diagnosis. Diabetologia, 2020, 63, 1258-1267.	2.9	98
53	Hierarchical Order of Distinct Autoantibody Spreading and Progression to Type 1 Diabetes in the TEDDY Study. Diabetes Care, 2020, 43, 2066-2073.	4.3	41
54	Type 1 diabetes-early life origins and changing epidemiology. Lancet Diabetes and Endocrinology, the, 2020, 8, 226-238.	5.5	187

#	ARTICLE	IF	CITATIONS
55	Genetics of Type 1 Diabetes Comes of Age. <i>Diabetes Care</i> , 2020, 43, 16-18.	4.3	11
56	Maternal Type 1 Diabetes Reduces Autoantigen-Responsive CD4+ T Cells in Offspring. <i>Diabetes</i> , 2020, 69, 661-669.	0.3	8
57	Motifs of Three HLA-DQ Amino Acid Residues ( $\hat{I}^{\pm 44}$ , $\hat{I}^{\pm 57}$ , $\hat{I}^{\pm 135}$ ) Capture Full Association With the Risk of Type 1 Diabetes in DQ2 and DQ8 Children. <i>Diabetes</i> , 2020, 69, 1573-1587.	0.3	17
58	Association between family history, early growth and the risk of beta cell autoimmunity in children at risk for type 1 diabetes. <i>Diabetologia</i> , 2021, 64, 119-128.	2.9	12
59	Prediction of the development of islet autoantibodies through integration of environmental, genetic, and metabolic markers. <i>Journal of Diabetes</i> , 2021, 13, 143-153.	0.8	25
60	Children's erythrocyte fatty acids are associated with the risk of islet autoimmunity. <i>Scientific Reports</i> , 2021, 11, 3627.	1.6	10
61	Association of PTPN22-C1858T Polymorphism With Susceptibility to <i>Mycobacterium tuberculosis</i> and <i>Mycobacterium leprae</i> Infection: A Meta-Analysis. <i>Frontiers in Immunology</i> , 2021, 12, 592841.	2.2	1
62	Teplizumab improves and stabilizes beta cell function in antibody-positive high-risk individuals. <i>Science Translational Medicine</i> , 2021, 13, .	5.8	142
63	Maternal food consumption during late pregnancy and offspring risk of islet autoimmunity and type 1 diabetes. <i>Diabetologia</i> , 2021, 64, 1604-1612.	2.9	5
64	Associations of breastfeeding with childhood autoimmunity, allergies, and overweight: The Environmental Determinants of Diabetes in the Young (TEDDY) study. <i>American Journal of Clinical Nutrition</i> , 2021, 114, 134-142.	2.2	14
65	Advances in Type 1 Diabetes Prediction Using Islet Autoantibodies: Beyond a Simple Count. <i>Endocrine Reviews</i> , 2021, 42, 584-604.	8.9	31
66	Preterm Birth and Birth Weight and the Risk of Type 1 Diabetes in Chinese Children. <i>Frontiers in Endocrinology</i> , 2021, 12, 603277.	1.5	7
67	Neutralizing Ljungan virus antibodies in children with newly diagnosed type 1 diabetes. <i>Journal of General Virology</i> , 2021, 102, .	1.3	3
68	Intralymphatic Glutamic Acid Decarboxylase With Vitamin D Supplementation in Recent-Onset Type 1 Diabetes: A Double-Blind, Randomized, Placebo-Controlled Phase IIb Trial. <i>Diabetes Care</i> , 2021, 44, 1604-1612.	4.3	27
69	Islet autoantibody <sc>types mark</sc> differential clinical characteristics at diagnosis of pediatric type 1 diabetes. <i>Pediatric Diabetes</i> , 2021, 22, 882-888.	1.2	3
70	The changing incidence of childhood-onset type 1 diabetes in Wales: Effect of gender and season at diagnosis and birth. <i>Diabetes Research and Clinical Practice</i> , 2021, 175, 108739.	1.1	9
71	Land Cover of Early-Life Environment Modulates the Risk of Type 1 Diabetes. <i>Diabetes Care</i> , 2021, 44, 1506-1514.	4.3	16
72	Complete blood counts with red blood cell determinants associate with reduced beta cell function in seroconverted Swedish TEDDY children. <i>Endocrinology, Diabetes and Metabolism</i> , 2021, 4, e00251.	1.0	3

#	ARTICLE	IF	CITATIONS
73	Insulin immunotherapy for pretype 1 diabetes. <i>Current Opinion in Endocrinology, Diabetes and Obesity</i> , 2021, 28, 390-396.	1.2	5
74	Immunological predictors of type 1 diabetes mellitus (literature review). <i>Diabetes Mellitus</i> , 2021, 24, 167-174.	0.5	0
75	The Multifactorial Progression from the Islet Autoimmunity to Type 1 Diabetes in Children. <i>International Journal of Molecular Sciences</i> , 2021, 22, 7493.	1.8	11
76	The dark side of insulin: A primary autoantigen and instrument of self-destruction in type 1 diabetes. <i>Molecular Metabolism</i> , 2021, 52, 101288.	3.0	9
77	Characteristics of children diagnosed with type 1 diabetes before vs after 6 years of age in the TEDDY cohort study. <i>Diabetologia</i> , 2021, 64, 2247-2257.	2.9	14
78	Simplifying prediction of disease progression in pre-symptomatic type 1 diabetes using a single blood sample. <i>Diabetologia</i> , 2021, 64, 2432-2444.	2.9	8
79	Genetic variation at ERBB3/IKZF4 and sexual dimorphism in epitope spreading in single autoantibody-positive relatives. <i>Diabetologia</i> , 2021, 64, 2511-2516.	2.9	6
80	Identifying the lungs as a susceptible site for allele-specific regulatory changes associated with type 1 diabetes risk. <i>Communications Biology</i> , 2021, 4, 1072.	2.0	2
81	100 Years of insulin: Lifesaver, immune target, and potential remedy for prevention. <i>Med</i> , 2021, 2, 1120-1137.	2.2	4
82	Exploring biological efficacy of novel benzothiazole linked 2,5-disubstituted-1,3,4-oxadiazole hybrids as efficient $\alpha$ -amylase inhibitors: Synthesis, characterization, inhibition, molecular docking, molecular dynamics and Monte Carlo based QSAR studies. <i>Computers in Biology and Medicine</i> , 2021, 138, 104876.	3.9	31
83	First-appearing islet autoantibodies for type 1 diabetes in young children: maternal life events during pregnancy and the child's genetic risk. <i>Diabetologia</i> , 2021, 64, 591-602.	2.9	7
84	The virome in early life and childhood and development of islet autoimmunity and type 1 diabetes: A systematic review and meta-analysis of observational studies. <i>Reviews in Medical Virology</i> , 2021, 31, 1-14.	3.9	21
85	Exploring the Triple Interaction between the Host Genome, the Epigenome, and the Gut Microbiome in Type 1 Diabetes. <i>International Journal of Molecular Sciences</i> , 2021, 22, 125.	1.8	11
86	Virus Infection Is an Instigator of Intestinal Dysbiosis Leading to Type 1 Diabetes. <i>Frontiers in Immunology</i> , 2021, 12, 751337.	2.2	9
87	Human islet T cells are highly reactive to preproinsulin in type 1 diabetes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	3.3	42
90	Characterising the age-dependent effects of risk factors on type 1 diabetes progression. <i>Diabetologia</i> , 2022, 65, 684.	2.9	11
91	Heterogeneity of DKA Incidence and Age-Specific Clinical Characteristics in Children Diagnosed With Type 1 Diabetes in the TEDDY Study. <i>Diabetes Care</i> , 2022, 45, 624-633.	4.3	7
92	Evidence and possible mechanisms of probiotics in the management of type 1 diabetes mellitus. <i>Journal of Diabetes and Metabolic Disorders</i> , 2022, 21, 1081-1094.	0.8	9

#	ARTICLE	IF	CITATIONS
93	Progression of type 1 diabetes from latency to symptomatic disease is predicted by distinct autoimmune trajectories. <i>Nature Communications</i> , 2022, 13, 1514.	5.8	16
94	Cepharanthine Blocks Presentation of Thyroid and Islet Peptides in a Novel Humanized Autoimmune Diabetes and Thyroiditis Mouse Model. <i>Frontiers in Immunology</i> , 2021, 12, 796552.	2.2	5
95	Associations between deduced first islet specific autoantibody with sex, age at diagnosis and genetic risk factors in young children with type 1 diabetes. <i>Pediatric Diabetes</i> , 2022, 23, 693-702.	1.2	8
96	The First Case of Familiar Anti-leucine-rich Glioma-Inactivated1 Autoimmune Encephalitis: A Case Report and Literature Review. <i>Frontiers in Neurology</i> , 2022, 13, 855383.	1.1	1
97	Integration of Infant Metabolite, Genetic, and Islet Autoimmunity Signatures to Predict Type 1 Diabetes by Age 6 Years. <i>Journal of Clinical Endocrinology and Metabolism</i> , 2022, 107, 2329-2338.	1.8	10
98	Autoantibodies against <i>ATP4A</i> are a feature of the abundant autoimmunity that develops in first-degree relatives of patients with type 1 diabetes. <i>Pediatric Diabetes</i> , 2022, 23, 714-720.	1.2	2
99	Association of HLA-DQ Heterodimer Residues $\hat{\sim}181^2$ and $\hat{I}257$ With Progression From Islet Autoimmunity to Diabetes in the Diabetes Prevention Trialâ€“Type 1. <i>Diabetes Care</i> , 2022, 45, 1610-1620.	4.3	1
100	Influence of Insulin Receptor Single Nucleotide Polymorphisms on Glycaemic Control and Formation of Anti-Insulin Antibodies in Diabetes Mellitus. <i>International Journal of Molecular Sciences</i> , 2022, 23, 6481.	1.8	4
101	The association of physical activity to oral glucose tolerance test outcomes in multiple autoantibody positive children: The <i>TEDDY</i> Study. <i>Pediatric Diabetes</i> , 2022, 23, 1017-1026.	1.2	1
102	Non-HLA Gene Polymorphisms in the Pathogenesis of Type 1 Diabetes: Phase and Endotype Specific Effects. <i>Frontiers in Immunology</i> , 0, 13, .	2.2	5
103	Two-age islet-autoantibody screening for childhood type 1 diabetes: a prospective cohort study. <i>Lancet Diabetes and Endocrinology</i> , the, 2022, 10, 589-596.	5.5	16
104	Environmental Triggering of Type 1 Diabetes Autoimmunity. <i>Frontiers in Endocrinology</i> , 0, 13, .	1.5	10
105	Possible Relationship between the HLA-DRA1 Intron Haplotype of Three Single-Nucleotide Polymorphisms in Intron 1 of the HLA-DRA1 Gene and Autoantibodies in Children at Increased Genetic Risk for Autoimmune Type 1 Diabetes. <i>ImmunoHorizons</i> , 2022, 6, 614-629.	0.8	0
106	Predictors of the Initiation of Islet Autoimmunity and Progression to Multiple Autoantibodies and Clinical Diabetes: The <i>TEDDY</i> Study. <i>Diabetes Care</i> , 2022, 45, 2271-2281.	4.3	21
107	Gut microbiome and metabolic activity in type 1 diabetes: An analysis based on the presence of GADA. <i>Frontiers in Endocrinology</i> , 0, 13, .	1.5	3
108	Islet Autoantibody Levels Differentiate Progression Trajectories in Individuals With Presymptomatic Type 1 Diabetes. <i>Diabetes</i> , 2022, 71, 2632-2641.	0.3	3
109	Preventing type 1 diabetes in late-stage pre-diabetic NOD mice with insulin: A central role for alum as adjuvant. <i>Frontiers in Endocrinology</i> , 0, 13, .	1.5	1
110	Phase III, randomised, double-blind, placebo-controlled, multicentre trial to evaluate the efficacy and safety of rhGAD65 to preserve endogenous beta cell function in adolescents and adults with recently diagnosed type 1 diabetes, carrying the genetic HLA DR3-DQ2 haplotype: the <i>DIAGNODE-3</i> study protocol. <i>BMI Open</i> , 2022, 12, e061776.	0.8	2

#	ARTICLE	IF	CITATIONS
111	<i>CTLA4</i>, <i>SH2B3</i> and <i>CLEC16A</i> diversely affect the progression of early islet autoimmunity in relatives of type 1 diabetes patients. <i>Clinical and Experimental Immunology</i> , 0, , .	1.1	0
112	Epitope-based precision immunotherapy of Type 1 diabetes. <i>Human Vaccines and Immunotherapeutics</i> , 2023, 19, .	1.4	2
113	Autoimmune diseases. , 2023, , 123-244.		2
114	Type 1 diabetes. <i>Lancet, The</i> , 2023, 401, 2149-2162.	6.3	29
115	Intralymphatic glutamic acid decarboxylase administration in type 1 diabetes patients induced a distinctive early immune response in patients with DR3DQ2 haplotype. <i>Frontiers in Immunology</i> , 0, 14, .	2.2	1
116	DAMPs in Organ-Specific Autoimmune Diseases. , 2023, , 569-656.		0
126	The countdown to type 1 diabetes: when, how and why does the clock start?. <i>Diabetologia</i> , 2023, 66, 1169-1178.	2.9	4
138	The immunology of type 1 diabetes. <i>Nature Reviews Immunology</i> , 0, , .	10.6	0