SUPPLEMENTARY DATA

Supplementary Table 1. Demographic data of gender, age, season and calendar year at diagnosis as well as HLA-DQ genotype distribution in the newly diagnosed type 1 diabetes patients (n=654) and controls (n=605).

	Type 1 diabetes patients n (%)	Controls n (%)
Subjects, n	654 (100)	605 (100)
Males, n (%)	352 (54)	374 (62)
Age – median (range) (years)	10 (1-19)	44 (19-81)
Age at diagnosis –median (range) (years)	10 (1-19)	
Age groups at diagnosis, n (%)		
0-4 years	98 (15)	
5-9 years	221 (34)	
10-14 years	253 (39)	
15-19 years	82 (13)	
Season of diagnosis	349 (53) /305 (47)	
October-March (%) / April-September (%)		
Calendar year at diagnosis		
1996	23 (4)	
1997	51 (8)	
1998	62 (9)	
1999	84 (13)	
2000	50 (8)	
2001	81 (12)	
2002	77 (12)	
2003	95 (15)	
2004	96 (15)	
2005	35 (5)	
Total	654 (100)	
HLA genotypes*		
DQ2/8 heterozygous	215 (33)	
DQ8/X (X is not DQ2)	176 (27)	
DQ8/8 homozygous	74 (11)	
DQ2/X (X is not DQ8)	70 (11)	
DQ2/2 homozygous	39 (6)	
X/X (X is neither DQ2, nor DQ8)	80 (12)	
Total	654 (100)	

***** DQ2/8, DQ A1*05:01-B1*02:01/A1*03:01-B1*03:02; DQ8/X, DQ A1*03:01-B1*03:02/X (X is any haplotype except for DQ2 or DQ8); DQ8/8, DQ A1*03:01-B1*03:02/ A1*03:01-B1*03:02; DQ2/X, DQ A1*05:01-B1*02:01/X (X is any haplotype except for DQ2 or DQ8); DQ2/2, DQ A1*05:01-B1*02:01/A1*05:01-B1*02:01.

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SUPPLEMENTARY DATA

Supplementary Table 2. Type 1 diabetes patients (n=619) positive only for full-length GAD65 autoantibodies (fGADA-only), truncated GAD65 autoantibodies (tGADA-only) as well as patients positive only for ^{125}I-GAD65 autoantibodies (RSRGADA-only).

	fGADA-only	tGADA-only	RSRGADA-only
Subjects, n (%)	2 (100)	25 (100)	6 (100)
Males, n (%)	2 (100)	14 (56)	5 (83)
Age at diagnosis –median (range, years)	13 (12-13)	8 (1-17)	11 (5-15)
Age groups at diagnosis, n (%)			
0-9 years	0	15 (60)	3 (50)
10-17 years	2 (100)	10 (40)	3 (50)
Season of diagnosis, n (%)			
October-March	0	14 (56)	2 (33)
April-September	2 (100)	11 (44)	4 (67)
Calendar year at diagnosis, n (%)			
1996	0	1 (4)	0 (0)
1997	0	3 (12)	0 (0)
1998	0	2 (8)	0 (0)
1999	1 (50)	5 (20)	1 (17)
2000	0	4 (16)	1 (17)
2001	0	3 (12)	0
2002	0	2 (8)	1 (17)
2003	1 (50)	3 (12)	0
2004	0	1 (4)	2 (33)
2005	0	1 (4)	1 (17)
Total	2 (100)	25 (100)	6 (100)
HLA genotypes*, n (%)			
DQ2/8 heterozygous	0	5 (20)	1 (17)
DQ8/X (X is not DQ2)	0	6 (24)	2 (33)
DQ8/8 homozygous	0	6 (24)	0 (0)
DQ2/X (X is not DQ8)	1 (50)	3 (12)	1 (17)
DQ2/2 homozygous	0	3 (12)	0 (0)
X/X (X is neither DQ2, nor DQ8)	1 (50)	2 (8)	2 (33)
Total	2 (100)	25 (100)	6 (100)
Positivity for ≥ 2 autoantibodies†, n (%)	2 (100)	19 (76)	5 (83)
IAA, n (%)	0	12 (48)	2 (33)
IA-2A, n (%)	2 (100)	18 (72)	4 (67)
ZnT8RA, n (%)	1 (50)	11 (44)	1 (17)
ZnT8WA, n (%)	2 (100)	14 (56)	2 (33)
ZnT8QA, n (%)	1 (50)	9 (36)	2 (33)
NPYA n (%)	0	2 (8)	2 (33)
ICA n (%)	2 (100)	16 (64)	3 (50)

The following abbreviations are used for the HLA-DQ haplotypes:

*DQ2/8, DQ A1*05:01-B1*02:01/A1*03:01-B1*03:02; DQ8/X, DQ A1*03:01-B1*03:02/X (X is any

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haplotype except for DQ2 or DQ8); DQ8/8, DQ A1*03:01-B1*03:02/ A1*03:01-B1*03:02; DQ2/X, DQ A1*05:01-B1*02:01/X (X is any haplotype except for DQ2 or DQ8); DQ2/2, DQ A1*05:01-B1*02:01/A1*05:01-B1*02:01.

†Autoantibodies included GAD65 autoantibodies (GADA), Insulinoma-associated protein 2 autoantibodies (IA-2A), Insulin autoantibodies (IAA), Arginine 325 Zinc transporter 8 autoantibodies (ZnT8RA), Tryptophan 325 Zinc transporter 8 autoantibodies (ZnT8WA), Glutamine 325 Zinc transporter 8 autoantibodies (ZnT8QA), Neuropeptide Y autoantibodies NPYA and Islet cell cytoplasm autoantibodies (ICA).

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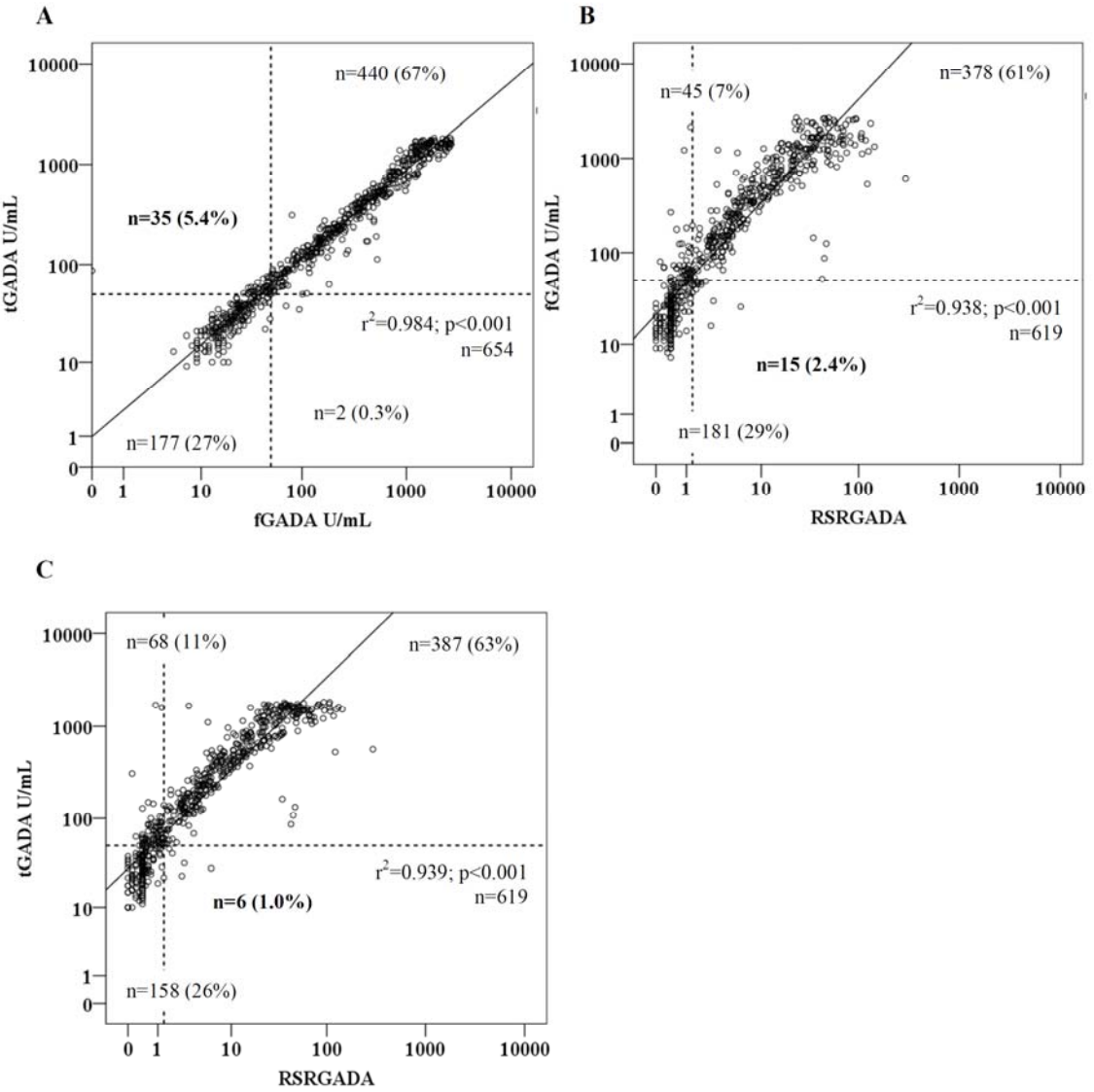
SUPPLEMENTARY DATA

Supplementary Figure 1. Correlation between levels (U/mL) of full-length GAD65 autoantibodies (fGADA) and truncated GAD65 autoantibodies (tGADA) (panel A) and of fGADA and ^{125}I-GAD65 autoantibodies (RSRGADA) (panel B) as well as of tGADA and RSRGADA (panel C) including the coefficient of determination (r^2). The dotted lines demonstrate the cut-offs for each of the GADA analyzed with full-length, truncated and RSRGADA kit



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