

Online Appendix Table A1. Clinical characteristics of patients with type 2 diabetes (T2D), latent autoimmune diabetes in adults (LADA) and type 1 diabetes with onset after the age of 35 years (T1D<sub>>35y</sub>) or before 20 years (T1D<sub><20y</sub>)

Clinical characteristics	T2D	<i>p</i> value*	LADA	<i>p</i> value†	T1D <sub>&gt;35y</sub>	T1D <sub>&lt;20y</sub>
n	648		213		257	158
Number (%) of males	346 (53.4)		99 (46.5)		132 (51.4)	79 (50.0)
Age at diagnosis (years)	55.08 (54.37-55.80)		54.50 (52.93-56.07)	<0.00001	41.79 (40.98-42.60)	9.99 (9.21-10.77)
Age (years)	60.81 (60.06-61.56)		63.10 (61.47-64.72)	<0.00001	53.47 (52.40-54.54)	33.65 (31.49-35.80)
Duration (years)	5.80 (5.30-6.30)	<0.00001	8.80 (7.72-9.88)	0.0001	11.68 (10.71-12.65)	23.65 (21.61-25.70)
FPG (mmol/l)	9.0 (8.8-9.2)	<0.0001	10.2 (9.7-10.8)		NA	11.7 (10.9-12.6)
fS-C-peptide (nmol/l)	0.67 (0.64-0.71)	<0.00001	0.49 (0.43-0.55)	<0.00001	0.03 (0.02-0.04)	0.02 (0.02-0.03)
HOMA <sub>IR</sub>	4.77 (4.40-5.14)		7.93 (5.46-10.40)		NA	NA
Insulinogenic index	8.15 (7.13-9.17)		5.98 (4.22-7.73)		NA	NA
HbA <sub>1c</sub> (%)	7.4 (7.2-7.5)	0.010	7.9 (7.6-8.2)	<0.0001	8.5 (8.4-8.7)	8.6 (8.3-8.9)
BMI (kg/m <sup>2</sup> )	29.02 (28.64-29.40)	<0.0001	27.23 (26.54-27.88)	<0.001	25.29 (24.84-25.74)	24.06 (23.46-24.65)
Systolic BP (mmHg)	146 (145-148)		144 (141-146)		138 (136-140)	131 (127-134)
Diastolic BP (mmHg)	85 (84-86)	<0.00001	81 (79-82)		82 (81-83)	77 (75-78)
HDL cholesterol (mmol/l)	1.18 (1.16-1.21)	<0.00001	1.34 (1.29-1.39)		1.45 (1.40-1.51)	1.51 (1.44-1.57)
Triglycerides (mmol/l)	1.97 (1.86-2.08)	<0.00001	1.61 (1.46-1.76)	<0.00001	1.15 (1.06-1.24)	1.15 (1.05-1.26)
LDL cholesterol (mmol/l)	3.69 (3.61-3.77)		3.62 (3.50-3.74)	<0.00001	3.15 (3.03-3.26)	2.92 (2.79-3.05)

Data are presented as number (%) or mean (95% confidence interval). Insulinogenic index, n=380 for type 2 diabetes and n=88 for LADA patients; HbA<sub>1c</sub>: n=137 for LADA patients. \* *p* values comparing T2D and LADA patients. † *p* values comparing LADA and T1D<sub>>35y</sub> patients. All *p* values were obtained using a general linear model and adjusted for the effect of age where appropriate. Values for C-peptide, insulin, HDL cholesterol, triglycerides and variables derived from these were logarithmically transformed prior to analysing. FPG, fasting plasma glucose; fS, fasting serum; BP, blood pressure; NA, not applicable.

Online Appendix Table A2. Clinical characteristics of patients with type 2 diabetes (T2D) or latent autoimmune diabetes in adults (LADA) stratified according to GADA quartiles, and type 1 diabetes with onset after the age of 35 years (T1D<sub>>35y</sub>)

Clinical characteristics	T2D	<i>p</i> value*	LADA <sub>low</sub>	LADA <sub>mid</sub>	LADA <sub>high</sub>	<i>p</i> value <sup>†</sup>	T1D <sub>&gt;35y</sub>
n	648		52	109	52		257
Number (%) of males	346 (53.4)		28 (53.8)	50 (45.9)	21 (40.4)		132 (51.4)
Age at diagnosis (years)	55.08 (54.37-55.80)		57.56 (54.45-60.67)	53.81 (51.52-56.11)	52.87 (49.91-55.82)		41.79 (40.98-42.60) <sup>‡</sup>
Age (years)	60.81 (60.06-61.56)	<0.00001	67.22 (64.40-70.03)	61.52 (59.08-63.97)	62.29 (59.18-65.40)	0.02	53.47 (52.40-54.54) <sup>‡</sup>
Duration (years)	5.80 (5.30-6.30)	<0.0001	9.72 (7.05-12.39)	8.05 (6.79-9.30)	9.45 (7.0-11.91)		11.68 (10.71-12.65)
FPG (mmol/l)	9.0 (8.8-9.2)		9.7 (8.5-10.9)	10.1 (9.4-10.9)	10.9 (9.6-12.3)		NA
fS-C-peptide (nmol/l)	0.67 (0.64-0.71)		0.56 (0.46-0.66)	0.54 (0.45-0.63)	0.31 (0.22-0.41)	0.001	0.03 (0.02-0.04) <sup>‡</sup>
HOMA <sub>IR</sub>	4.77 (4.40-5.14)		9.31 (4.02-14.60)	7.30 (3.79-10.81)	7.86 (3.0-12.71)		NA
Insulinogenic index	8.15 (7.13-9.17)		8.84 (4.38-13.30)	4.62 (3.05-6.19)	4.25 (1.09-7.42)		NA
HbA <sub>1c</sub> (%)	7.4 (7.2-7.5)		7.7 (7.0-8.4)	7.9 (7.4-8.4)	8.1 (7.5-8.7)		8.5 (8.4-8.7)
BMI (kg/m <sup>2</sup> )	29.02 (28.64-29.40)		28.32 (27.08-29.55)	27.39 (26.42-28.36)	25.82 (24.68-26.95)		25.29 (24.84-25.74)
Systolic BP (mmHg)	146 (145-148)		149 (142-155)	142 (138-146)	142 (136-148)		138 (136-140)
Diastolic BP (mmHg)	85 (84-86)	0.02	81 (78-83)	81 (79-83)	81 (77-84)		82 (81-83)
HDL cholesterol (mmol/l)	1.18 (1.16-1.21)		1.26 (1.16-1.36)	1.32 (1.26-1.39)	1.45 (1.34-1.55)		1.45 (1.40-1.51)
Triglycerides (mmol/l)	1.97 (1.86-2.08)		1.74 (1.46-2.03)	1.60 (1.44-1.75)	1.51 (1.05-1.96)		1.15 (1.06-1.24)
LDL cholesterol (mmol/l)	3.69 (3.61-3.77)		3.78 (3.50-4.07)	3.69 (3.53-3.85)	3.29 (3.06-3.51)	0.005	3.15 (3.03-3.26)

Data are presented as number (%) or mean (95% confidence interval). Insulinogenic index: n=380 for type 2 diabetes and n=88 for LADA patients; HbA<sub>1c</sub>: n=137 for LADA patients. \* *p* values comparing T2D and LADA<sub>low</sub> patients, obtained using a general linear model after logarithmic transformation and adjusted for the effect of age where appropriate. † *p* values comparing LADA patients across the GADA quartiles, obtained with the non-parametric Kruskal-Wallis H test. ‡ *P*<0.00001 vs. LADA<sub>high</sub>, obtained using a general linear model. FPG, fasting plasma glucose; fS, fasting serum; LADA<sub>high</sub>, LADA patients within the highest GADA quartile; LADA<sub>low</sub>, LADA patients within the lowest GADA quartile; LADA<sub>mid</sub>, LADA patients within the two middle GADA quartiles. FPG, fasting plasma glucose; fS, fasting serum; BP, blood pressure; NA, not applicable

Online Appendix Table A3. Proportion of subjects with 0, 1 or  $\geq 2$  type 1 diabetes risk genotypes

	Number of risk genotypes		
	0	1	$\geq 2$
T2D	16,2% (104)	45,1% (290)	38,7% (249)
LADA All	14,6% (30)	31,2% (64)	54,1% (111)
GADA <sub>low</sub>	20,0% (10)	34,0% (17)	46,0% (23)
GADA <sub>mid</sub>	17,3% (18)	33,7% (35)	49,0% (51)
GADA <sub>high</sub>	3,9% (2)	23,5% (12)	72,5% (37)
T1D <sub>&gt;35y</sub>	2,4% (6)	23,2% (57)	74,4% (183)
T1D <sub>&lt;20y</sub>	2,6% (4)	15,4% (24)	82,1% (128)

*HLA-DQB1*\*0302/\*02 or \*0302/X, *PTPN22* TT/CT, *INS* I/I and *CTLA4* GG are counted as risk genotypes giving a combined score between 0 and 4. Subjects missing one or more genotypes have been excluded from the analyses. LADA<sub>high</sub>, LADA patients within the highest GADA quartile; LADA<sub>low</sub>, LADA patients within the lowest GADA quartile; LADA<sub>mid</sub>, LADA patients within the two middle GADA quartiles; T1D<sub>>35y</sub>, type 1 diabetes with onset after the age of 35 years; T1D<sub><20y</sub>, type 1 diabetes with onset before the age of 20 years; T2D, type 2 diabetes.