	Type 1 diabetes (n=103 (84*****)**)**	**Controls (n=63**(60*****)**)**	**p-value**
D*emographics*			
Age. years	62.1±7.1	62.7±7.0	0.64
Sex, male	51 (51.5)	28 (44.4)	0.38
BMI, kg/m**²**	26.1 (3.9)	27.5 (1.3)	0.41
Daily smoker	4 (4)	6 (9.5)	0.16
Statins	55 (53.3)	10 (15.9)	<**0.001**
ACE-i/ARB	50.5	20.3	<**0.001**
LDL-c, mmol/L	2.7 (0.8)	3.8 (1.0)	<**0.001**
Systolic blood pressure (mmHg)	146 ±20	138 ±20	**0.012**
diastolic blood pressure(mmHg)	75 ±8	81 ±10	<**0.001**
eGFR (MDRD) ml/min/1.73 m^2	85±19	81±14	0.16
Diabetes related factors			
HbA1c, %	7.4 ± 0.8	5.4 ± 0.3	<**0.001**
mmol/mol	57 ± 9	36 ± 3.0	<**0.001**
Diabetes duration, years	49 (47-54)	n.a	
Persistent albuminuria	17 (17.2)	n.a	
Retinopathy: None	5 (5.1)	n.a	
Background	50 (50.5)	n.a	
Proliferative	44 (44.4)	n.a	
Neuropathy	63 (63.6)	11 (17.5)	<**0.001**
Coronary artery disease			
Normal coronary arteries on CTCA	14 (14.1)	30 (47.6)	<**0.001**
Non-obstructive CAD on CTCA	50 (50.5)	24 (38.1)	<**0.001**
Obstructive CAD on CTCA	20 (20.2)	6 (9.5)	<**0.001**
Previous coronary event	15 (15.2)	3 (4.8)	<**0.001**
Autoantibodies MGO-apoB100, p5 †			
MGO-apo B100 IgM †	61.5 (44-100)	73.1 (51.2-97.5)	0.28
MGO-apo B100 IgG †	55.5 (34.4-86)	76.3 (51.2-97.5)	**0.03**
MGO-p5 IgM †	45.6 (31-81,9)	61.5 (35.2-95.4)	0.61
MGO-p5 IgG †	67.3 (46.2-85.9)	63.9 (49.3-84.9)	0.98
CTCA findings			
Total plaque volume	29.5 (3.90-95.8)	0.40 (0.0-7.4)	<**0.001**
Coronary artery Calcium score	124 (98)	1 (38)	<**0.001**

Data are presented as mean ± SD, n (%), or median (IQR). *With complete data CTCA †Absorbance units of individuals samples as percentages to control plasma pool. N.a: Not applicable

Supplemental table S1**:** Clinical characteristics of the study population and autoantibodies MGO-apoB100, p5

		IgM anti-ApoB100		P	IgM anti- ApoB100-p5		P
CAD/No CAD	Unadj	OR (95% CI)	0.50 (0.30-0.90)	0.04	OR (95% CI)	0.60 (0.30-0.99)	0.04
	Model 1	OR (95% CI)	0.21 (0.06-0.60)	0.01	OR (95% CI)	0.22 (0.06-0.75]	0.02
PR/ BR	Unadj	OR (95% CI)	0.98 (0.97-0.99)	0.04	OR (95% CI)	0.16 (0.03-0.95)	0.04
	Model 2	OR (95% CI)	0.98 (0.97-0.99)	0.03	OR (95% CI)	0.11 (0.01-0.85)	0.03

CAD: Coronary artery disease, PR: Proliferative retinopathy, BR: Background retinopathy . Model 1: Adjusted for age, gender, HbA1c, LDL-cholesterol, systolic blood pressure, eGFR, and proliferative retinopathy. Model 2: Adjusted for age, gender, HbA1c, systolic blood pressure, LDL-c and eGFR

Supplemental table S2**:** Odds ratios (OR) and 95% confidence intervals (CI) of CAD or RD unadjusted and adjusted models

PAV	B	Unadjusted (95% CI)	p-value	B	Adjusted (95%CI)	p-value
Anti-MGO-p5	0.17	(0.02-0.32)	0.028	0.19	(0.07-0.32)	0.006
HbA1c	2.9	(3.4-9.2)	0.35	7.0	(1.3-10.0)	0.026
Sex	-4.8	(-15.7-4.7)	0.36	-17.1	(-26.3,-7.9)	0.001
Age	0.37	(-0.5-1.2)	0.38	0.49	(-0.38-1.4)	0.38

N= 27, r^2= 0.58

Supplemental table S3: Simple and multiple linear regression models for the association between anti-MGO-p5 and PAV.

Risk factors	No/non-proliferative retinopathy (n=49)	Proliferative retinopathy (n=34)	p-value
Sex, M/F	27/22	17/17	0.66*
Age, y	60.9 (7.2)	62.3 (7.0)	0.39
Diabetes duration	48 (47-51)	51 (46-56)	0.15
BMI, kg/m2	25.7 (4.2)	25.9 (3.4)	0.44
Current smoking, %	2 (4.1)	2 (5.9)	0.61*
HbA1c, %/mmol/mol	7.4 (0.8)/57	7.4 (0.9)/57 (2.2)	0.76
Glucose, mmol/L	9 (3.7)	9.7 (3.4)	0.29
HDL-c, mmol/L	2.2 (0.58)	2.1 (0.51)	0.75
LDL-c, mmol/L	2.8 (0.8)	2.8 (0.9)	0.56
TG, mmol/L	0.76 (0.60-0.91)	0.85 (0.65-1.12)	0.09
Statin users, n (%)	22 (44.9)	17 (50)	0.51*
Systolic BP, mm Hg	147.7 (20.7)	143.6 (18.2)	0.16
Diastolic BP, mm Hg	76.2 (8.6)	75.5 (8.1)	0.46
eGFR, ml/min per 1.73 m^2	84 (78-99)	75.5 (62.5-105.8)	0.06

Values are mean (SD) or median (95% CI interval), *Fishers exact test

Supplemental table S4: Characteristics of non-cases and cases of proliferative retinopathy in the Dialong study.

	IgM MGO-apoB100 r_s-value		IgG MGO-apoB100 r_s-value	
	T1DM	Controls	T1DM	Controls
Age	0.16	0.25	0.06	0.38*
BMI	0.08	-0.21	0.08	-0.14
LDL-cholesterol	-0.17	-0.08	-0.11	-0.09
Systolic blood pressure	0.29*	0.26*	0.08	0.06
Diastolic blood pressure	0.07	-0.03	0.09	0.13
eGFR	0.08	-0.9	-0.33*	-0.27*
HbA1c	-0.24*	0.17	0.05	0.06

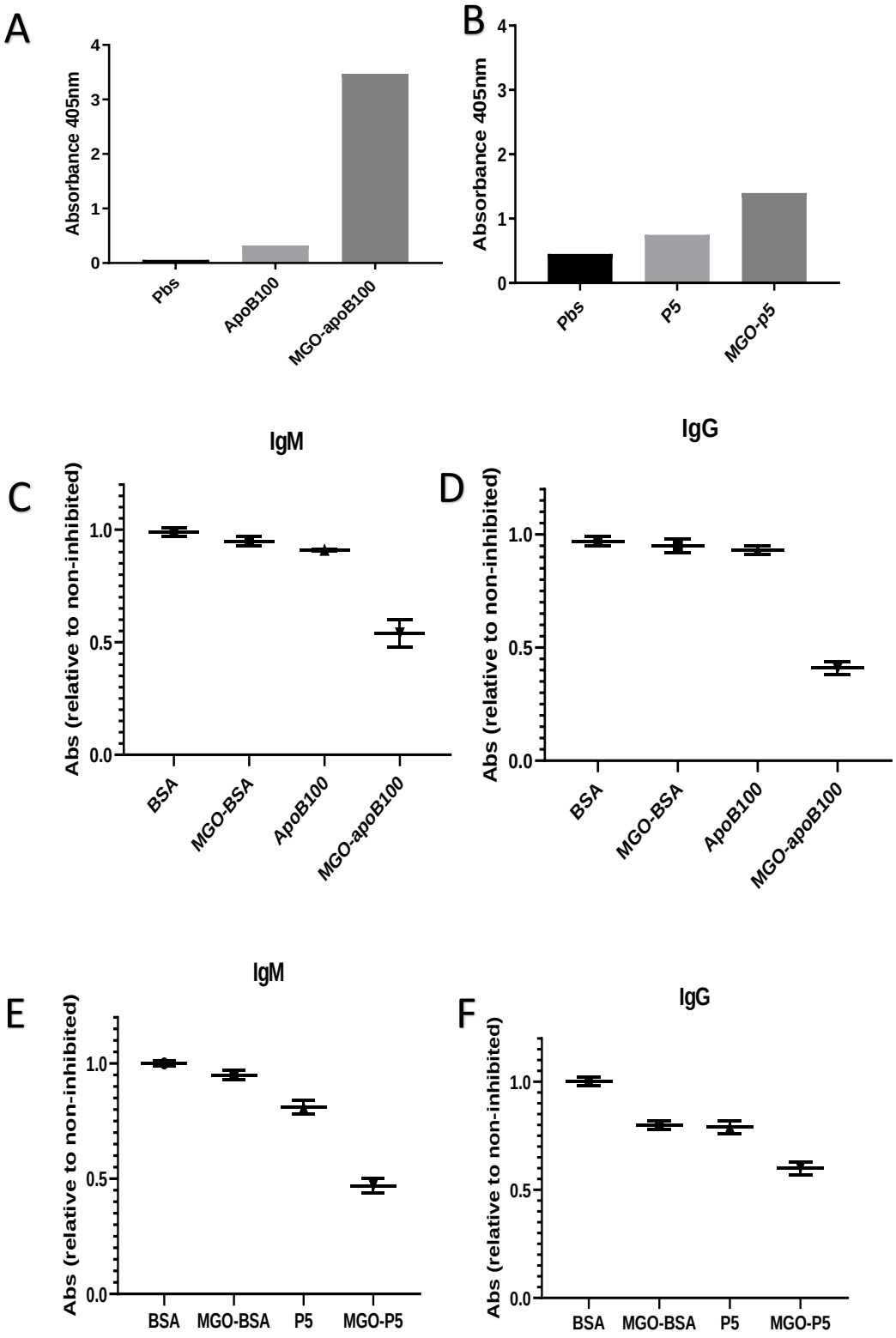
*$p<0.05$

Supplemental table S5**:** Correlations of IgM and IgG against MGO-apoB100 with cardiovascular risk factors

	IgM MGO-p5 r_s -value		IgG MGO-p5 r_s -value	
	T1DM	Controls	T1DM	Controls
Age	0.18	0.28*	0.14	0.21
BMI	-0.11	-0.15	0.15	0.11
LDL-cholesterol	0.39*	0.02	0.11	0.06
Systolic blood pressure	0.06	0.06	0.05	0.19
Diastolic blood pressure	0.08	0.07	0.05	0.15
eGFR	-0.22*	0.02	-0.33*	-0.06
HbA1c	0.14	0.13	0.04	-0.09

*p<0.05

Supplemental table S6**:** Correlations of IgM and IgG against MGO-ApoB-p5 with cardiovascular risk factors



Supplemental figure 1**:** MGO-modification of MGO-apoB100 (a) and MGO-p5 (b) was confirmed by ELISA using anti-CEL antibody andverified by demonstrating relative increases in AGE-dependent (370⁄440 nm) fluorescence and presence of CEL epitopes. The specificities of the IgM and IgG against MGO-apoB100 and MGO-p5 were verified by competition with native or MGO-modified apoB100, p5, or BSA (100 µg/ml). Pooled plasma from controls were pre-incubated with the competitors and analyzed for binding to MGO-apoB00 (c,d) or MGO-p5 (e,f).