

Supplementary Table 1: Baseline Characteristics of the whole ORIGIN cohort N=12537 and the 8162 participants that had anti-GAD antibody measurements available and were included in the present study.

Variable	All	aGAD Level Assayed	aGAD Level Not Assayed	P
N	12537	8162	4375	
Mean Age	63.54(7.82)	63.72(7.95)	63.21(7.56)	<0.001
N(%) Females	4386(35.0)	2757(33.8)	1629(37.2)	<0.001
N(%) Prior Diabetes	10321(82.3)	6649(81.5)	3672(84.0)	<0.001
N Prior Diabetes & no diabetes drugs	2881(23.0)	1906(23.4)	975(22.3)	0.178
Mean Duration of diabetes	5.41(5.98)	5.24(5.78)	5.72(6.34)	<0.001
Mean age of diagnosis of diabetes	63.45(7.81)	63.59(7.95)	63.20(7.56)	0.013
N(%) New Diabetes	760(6.1)	533(6.5)	227(5.2)	0.003
Mean Age	64.44(7.64)	64.68(7.70)	63.85(7.48)	0.165
N(%) IGT/IFG	1452(11.6)	977(12.0)	475(10.9)	0.064
N(%) Prior CVD	7378(58.9)	4840(59.3)	2538(58.1)	0.173
N(%) Thyroid disease	1032(8.2)	612(7.5)	420(9.6)	<0.001
N(%) White	7394(59.0)	4940(60.5)	2454(56.1)	<0.001
N (%) Black	410(3.3)	353(4.3)	57(1.3)	<0.001
N (%) S. Asian	489(3.9)	439(5.4)	50(1.1)	<0.001
N (%) Other Asian	764(6.1)	38(0.5)	726(16.6)	<0.001
N (%) Latin	3165(25.3)	2191(26.9)	974(22.3)	<0.001
N (%) Other	309(2.5)	199(2.4)	110(2.5)	0.789
N (%) Prior Gestational Diabetes	146(3.3)	103(3.7)	43(2.6)	0.051
N (%) Hypertension	9963(79.5)	6456(79.1)	3507(80.2)	0.143
N (%) Smoker	1552(12.4)	1007(12.3)	545(12.5)	0.838
N (%) Alcohol > 2 /week	2848(22.7)	2014(24.7)	834(19.1)	<0.001
N (%) Education < 8 y	4456(35.6)	3132(38.4)	1324(30.3)	<0.001
N (%) Education 9-12 y	3335(26.6)	2150(26.3)	1185(27.1)	0.353
N (%) Education > 12 y	4739(37.8)	2878(35.3)	1861(42.6)	<0.001

Supplementary Table 2: Further baseline Characteristics of the whole ORIGIN cohort N=12537 and the 8162 participants that had anti-GAD antibody measurements available and were included in the present study.

Variable	All	aGAD Level Assayed	aGAD Level Not Assayed	P
Mean BMI	29.83(5.25)	30.07(5.30)	29.37(5.12)	<0.001
Mean Waist/Hip (Men)	0.98(0.09)	0.99(0.08)	0.98(0.10)	0.715
Mean Waist/Hip (Women)	0.90(0.09)	0.90(0.08)	0.91(0.11)	<0.001
Mean Systolic BP	145.8(21.77)	146.3(21.74)	144.9(21.80)	<0.001
Mean Diastolic BP	84.16(12.14)	84.44(12.15)	83.63(12.10)	<0.001
Mean Creatinine	89.01(22.03)	89.28(22.16)	88.50(21.78)	0.060
N(%) ACR > 30 mg/g	2403(19.7)	1550(19.2)	853(20.6)	0.060
N(%) with an ALT/AST>3*ULN	60(0.5)	42(0.5)	18(0.4)	0.415
Mean HDL	1.19(0.32)	1.18(0.32)	1.21(0.33)	<0.001
Median Triglyceride	1.58 (1.10-2.20)	1.60 (1.13-2.20)	1.57 (1.10-2.26)	0.508
Mean LDL	2.90(1.03)	2.89(1.02)	2.92(1.06)	0.244
Mean Cholesterol	4.90(1.20)	4.87(1.15)	4.96(1.28)	<0.001
Median HbA1c (%)	6.40 (5.81-7.18)	6.40 (5.80-7.12)	6.48 (5.90-7.20)	0.001
Median HbA1c (mmol/mol)	46 (40-55)	46 (40-54)	47 (41-55)	0.001
Mean HbA1c	6.52(0.95)	6.50(0.94)	6.56(0.96)	<0.001
Mean FPG	7.33(2.00)	7.29(1.98)	7.40(2.02)	0.006
N(%) Statin	6740(53.8)	4488(55.0)	2252(51.5)	<0.001
N (%) ACE/ARB	8681(69.3)	5635(69.0)	3046(69.7)	0.471
N (%) Beta Blocker	6598(52.6)	4398(53.9)	2200(50.3)	<0.001
N (%) Thiazide	2371(18.9)	1502(18.4)	869(19.9)	0.045

Supplementary Table 3: Effect of n-3 Fatty Acids versus Placebo in anti-GAD Positive and anti-GAD Negative Participants Based on Survival Models

	Overall	Omega 3FA	Placebo	HR(95%CI)	P	P*
	N(N/100py)	N(N/100py)	N(N/100py)			
N	8162	4085	4077			.
Person Years	48394	24171	24223			.
First Co-primary	1358 (2.94)	679 (2.94)	679 (2.93)	1.00 (0.90-1.11)	0.966	0.819
anti-GAD positive	46 (3.07)	22 (2.93)	24 (3.21)	0.98 (0.54-1.78)	0.960	.
anti-GAD negative	1312 (2.93)	657 (2.94)	655 (2.92)	1.00(0.90-1.12)	0.932	.
Second Co-primary	2361 (5.56)	1171 (5.52)	1186 (5.59)	0.99 (0.91-1.07)	0.799	0.938
anti-GAD positive	75 (5.41)	37 (5.32)	38 (5.52)	0.93 (0.58-1.48)	0.746	.
anti-GAD negative	2286 (5.56)	1134 (5.53)	1148 (5.59)	0.99 (0.91-1.07)	0.812	.
Total Mortality	1295 (2.68)	643 (2.67)	652 (2.70)	0.99 (0.89-1.10)	0.848	0.176
anti-GAD positive	40 (2.52)	16 (1.98)	24 (3.10)	0.70 (0.36-1.34)	0.280	.
anti-GAD negative	1255 (2.68)	627 (2.69)	628 (2.68)	1.00 (0.90-1.12)	0.957	.

P* is the p-value for the interaction of n-3 fatty acid allocation and anti-GAD-status, py=patient-years. The first co-primary was a composite of cardiovascular death, nonfatal myocardial infarction, or nonfatal stroke and the second co-primary was a composite of any of these events, a revascularization procedure, or hospitalization for heart failure.

Supplementary Table 4: Effect of Glargine versus Standard Care on New Diabetes in Participants Without Diabetes at Baseline

	Overall	Glargine	STD	OR(95%CI)	P	P*
	N (%)	N (%)	N (%)			
N	980	493	487			
New diabetes (after 1st OGTT)	275 (28.1)	121 (24.5)	154 (31.6)	0.70 (0.53- 0.93)	0.014	0.158
anti-GAD positive	6 (23.1)	1 (7.1)	5 (41.7)	0.05 (0.00- 1.32)	0.047	
anti-GAD negative	269 (28.2)	120 (25.1)	149 (31.4)	0.73(0.55- 0.97)	0.031	
New diabetes (after 2 nd OGTT)	316 (32.2)	147 (29.8)	169 (34.7)	0.80 (0.61- 1.04)	0.099	0.215
anti-GAD positive	7 (26.9)	2 (4.3)	5 (41.7)	0.10 (0.01- 1.74)	0.105	
anti-GAD negative	309 (32.4)	145 (30.3)	164 (34.5)	0.82 (0.63- 1.08)	0.154	
Confirmed + uncertain diabetes	388 (39.6)	174 (35.3)	214 (43.9)	0.69 (0.54- 0.90)	0.005	0.281
anti-GAD positive	9 (34.6)	3 (21.4)	6 (50.0)	0.15 (0.01- 1.90)	0.132	
anti-GAD negative	379 (39.7)	171 (35.7)	208 (43.8)	0.71(0.55- 0.92)	0.010	

OR were calculated using a Cochran-Mantel-Haensel test stratified by omega 3 or placebo and previous CV. * P for the interaction of the glargine allocation and the anti-GAD status.