

Supplemental Figure 1. Distribution of ages of randomized subjects in the oral insulin and placebo groups.

Supplemental Figure 2. Kaplan-Meier curves showing the proportion of subjects during the trial, by treatment assignment, who remained

(A) without “suspected” (unconfirmed) diabetes.

(B) without any abnormal glucose tolerance test.

(C) without loss of first phase insulin response (FPIR).

The number of subjects at risk in each group at each year of follow-up is enumerated at the bottom of the figure. The log rank test was used for comparison between the groups, with the P-values as indicated.

Supplemental Figure 3. Mean area under the curve for C-peptide response during oral glucose tolerance tests during the trial, by treatment assignment.

Supplemental Figure 4. Kaplan-Meier curves showing the proportion of subjects without diabetes during the trial by treatment assignment for subjects with baseline IAA with at least one value 39-79 nU/ml.

The number of subjects at risk in each group at each year of follow-up is enumerated at the bottom of the figure. The log rank test was used for comparison between the groups, with the P-values as indicated.

Supplemental Table 1.

Baseline characteristics of randomized subjects with confirmed IAA \geq 80

	Oral insulin group	Placebo group	p-value
N	130	133	
Median age (interquartile range)	10.0 (6,13)	9.0 (6,12)	0.1258
Average FPIR (μ U/ml) (standard deviation)	155.4 (71.6)	155.1 (107.6)	0.9764
Race			0.3773
White	112 (86.1%)	119 (89.7%)	
African American	4 (3.0%)	1 (0.7%)	
Hispanic	7 (5.3%)	8 (6.0%)	
Other	7 (5.3%)	5 (3.7%)	
Gender			0.0304
Male	91 (70.0%)	76 (57.1%)	
Female	39 (30.0%)	57 (42.8%)	
Relationship to index patient with diabetes			0.7136
Sibling	81 (62.3%)	81 (60.9%)	
Offspring	33 (25.3%)	38 (28.5%)	
Parent	6 (4.6%)	3 (2.2%)	
2 nd Degree	10 (7.6%)	11 (8.2%)	
Antibody levels			
Median ICA (JDF units) (interquartile range)	80 (40,320)	80 (40,320)	0.8770
Mean IAA (nU/ml) (standard deviation)	518.4 (615.5)	452.7 (471.8)	0.3319
GAD Antibodies			0.7251
Positive	103 (79.2%)	103 (77.4%)	
Negative	27 (20.7%)	30 (22.5%)	
ICA-512 Antibodies			0.9713
Positive	74 (56.9%)	76 (57.1%)	
Negative	56 (43.0%)	57 (42.8%)	
MIAA Antibodies			0.0858
Positive	36 (37.8%)	27 (26.4%)	
Negative	59 (62.1%)	75 (73.5%)	
HbA1c (%) (standard deviation)	5.37 (0.38)	5.33 (0.34)	0.3402
C-Peptide Area Under Curve			
During Intravenous Glucose Tolerance Test	32.7 (14.2)	33.0 (16.6)	0.8747
During Oral Glucose Tolerance Test	470.1 (181.6)	483.0 (196.6)	0.5835
During Mixed Meal Tolerance Test	354.2 (152.4)	358.1 (185.3)	0.8543

Supplemental Table 2.

Baseline characteristics of randomized subjects not confirmed to have IAA ≥ 80

	Oral insulin group	Placebo group	p-value
N	56	53	
Median age (interquartile range)	13.0 (9,18)	14.0 (9,19)	0.5239
Average FPIR (μ U/ml) (standard deviation)	175.7 (72.9)	168..4 (73.8)	0.6008
Race			0.1452
White	52 (92.8%)	44 (83.0%)	
African American	1 (1.7%)	1 (1.8%)	
Hispanic	1 (1.7%)	6 (11.3%)	
Other	2 (3.4%)	2 (3.6%)	
Gender			0.6222
Male	28 (50.0%)	29 (54.7%)	
Female	28 (50.0%)	24 (45.2%)	
Relationship to index patient with diabetes			0.7759
Sibling	31 (55.3%)	27 (50.9%)	
Offspring	16 (28.5%)	15 (28.3%)	
Parent	5 (8.9%)	4 (7.5%)	
2 nd Degree	4 (7.1%)	7 (13.2%)	
Antibody levels			
Median ICA (JDF units) (interquartile range)	40 (20,160)	40 (20,160)	0.8442
Mean IAA (nU/ml) (standard deviation)	65.3 (30.0)	79.2 (99.0)	0.3179
GAD Antibodies			0.1695
Positive	41 (74.5%)	33 (62.2%)	
Negative	14 (25.4%)	20 (37.7%)	
ICA-512 Antibodies			0.8164
Positive	23 (41.8%)	21 (39.6%)	
Negative	32 (58.1%)	32 (60.3%)	
MIAA Antibodies			0.3415
Positive	3 (7.8%)	1 (2.3%)	
Negative	35 (92.1%)	41 (97.6%)	
HbA1c (%) (standard deviation)	5.31 (0.41)	5.35 (0.34)	0.6486
C-Peptide Area Under Curve			
During Intravenous Glucose Tolerance Test	39.8 (17.6)	40.5 (15.9)	0.8277
During Oral Glucose Tolerance Test	577.0 (224.7)	550.1 (226.7)	0.5352
During Mixed Meal Tolerance Test	448.8 (197.3)	437.3 (169.0)	0.7465

Supplemental Table 3.
Baseline characteristics of subjects randomized before October 31, 1997

	Oral insulin group	Placebo group	p-value
N	54	52	
Median age (interquartile range)	11.0 (7,14)	9.5 (6,13)	0.1258
Average FPIR (μ U/ml) (standard deviation)	151.7 (72.6)	136.8 (61.0)	0.2547
Race			0.0796
White	48 (88.8%)	46 (88.4%)	
African American	2 (3.7%)	0 (0.0%)	
Hispanic	0 (0.0%)	4 (7.6%)	
Other	4 (7.3%)	2 (3.8%)	
Gender			0.1781
Male	35 (64.8%)	27 (51.9%)	
Female	19 (35.1%)	25 (48.0%)	
Relationship to index patient with diabetes			0.6186
Sibling	34 (62.9%)	35 (67.3%)	
Offspring	15 (27.7%)	12 (23.0%)	
Parent	3 (5.5%)	1 (1.9%)	
2 nd Degree	2 (3.7%)	4 (7.6%)	
Antibody levels			
Median ICA (JDF units) (interquartile range)	120 (40,320)	160 (40,320)	0.5986
Mean IAA (nU/ml) (standard deviation)	408.3 (419.0)	476.3 (510.0)	0.4541
GAD Antibodies			0.5739
Positive	42 (77.7%)	48 (73.0%)	
Negative	12 (22.2%)	14 (26.9%)	
ICA-512 Antibodies			0.3331
Positive	24 (44.4%)	28 (53.8%)	
Negative	30 (55.5%)	24 (46.1%)	
MIAA Antibodies			0.4013
Positive	11 (37.9%)	8 (27.5%)	
Negative	18 (62.0%)	21 (72.4%)	
HbA1c (%) (standard deviation)	5.38 (0.40)	5.29 (0.37)	0.2586
C-Peptide Area Under Curve			
During Intravenous Glucose Tolerance Test	32.1 (13.4)	29.9 (12.9)	0.3989
During Oral Glucose Tolerance Test	473.1 (175.0)	470.5 (186.9)	0.9189
During Mixed Meal Tolerance Test	373.8 (171.0)	346.9 (188.7)	0.4480