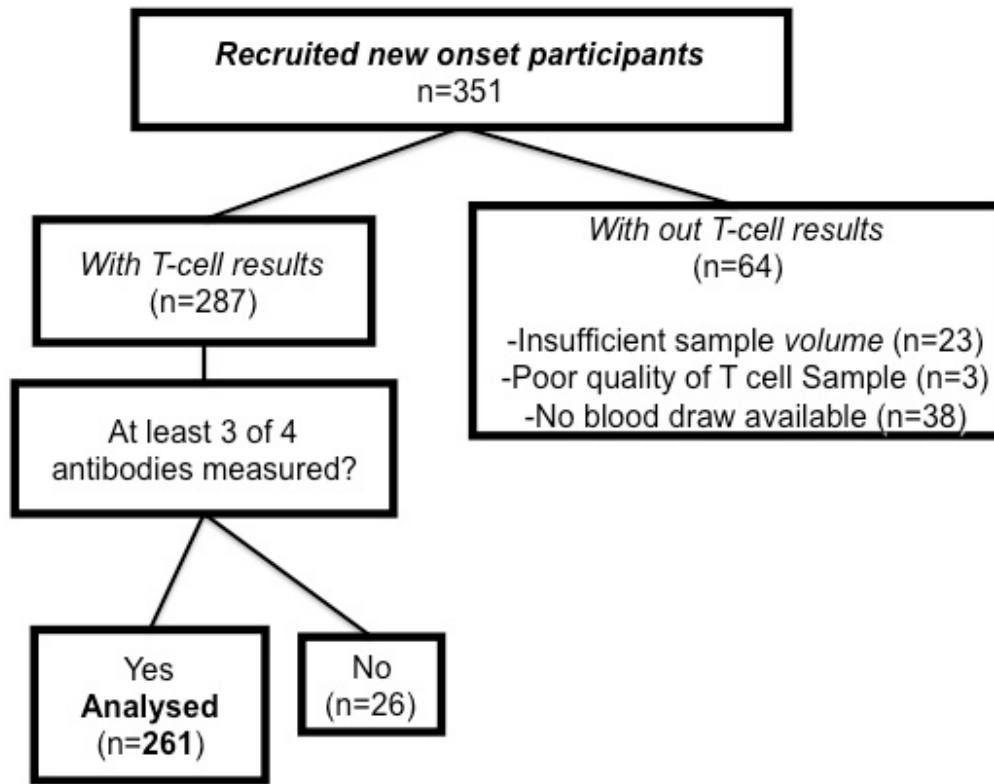


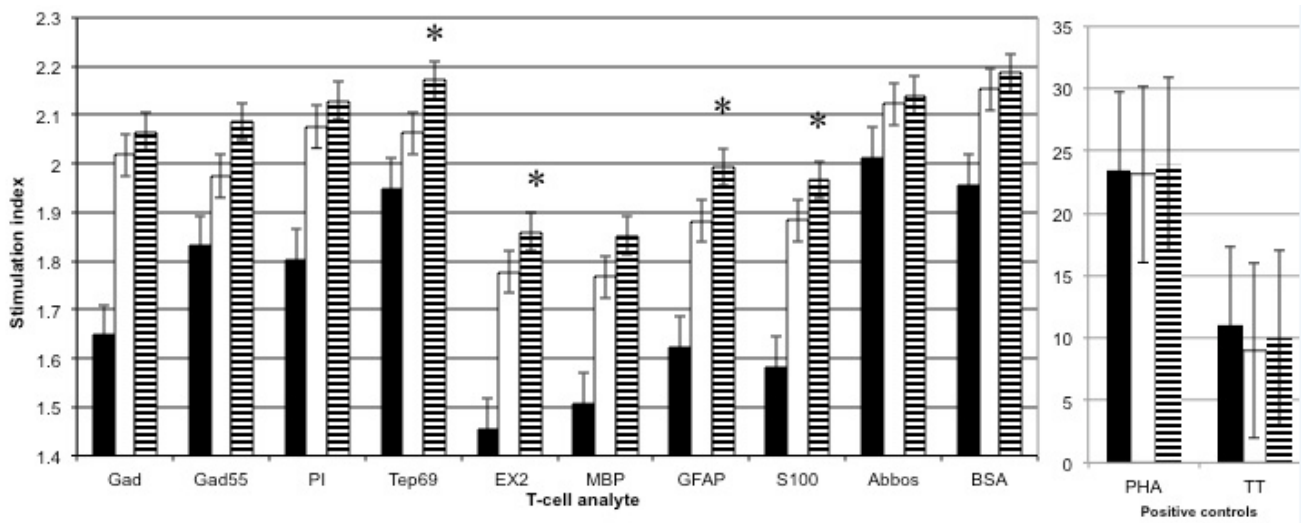
SUPPLEMENTARY DATA

Supplementary Figure 1. Patient selection flowsheet



Supplementary Figure 2. Black bar: <25th percentile; White bar: 25th-85th percentile; Hashed bar: >85th percentile. * p<0.05.

Left axis: diabetes related analytes. Right axis: positive control analytes (note different scales)



SUPPLEMENTARY DATA

Supplementary Table 1. Description of diabetes specific T cell test analytes and SI

Analyte	Description	Usage	New onset diabetes (n=261) Median SI [IQR]	FDR controls (n=45) Median SI [IQR]	P
Gad	Glutamic acid decarboxylase, an islet protein also present in neuronal sheath, (5 µg/ml)	Test analyte	2.0 [1.7-2.3]	1.1 [1-1.2]	<0.001
Gad55	A Gad epitope peptide (5 µg/ml)	Test analyte	2.0 [1.7-2.3]	1.1 [1-1.2]	<0.001
PI	Pro-insulin, an islet specific protein (1 µg/ml)		2.1 [1.8-2.4]	1.1 [1-1.3]	<0.001
Tep69	An epitope of ICA69 (islet cell antibody) often targeted in type 1 diabetes, 2 way mimicry antigen with ABBOS, has both neuronal and islet properties (5 µg/ml)	Test analyte	2.1 [1.8-2.4]	1.1 [1-1.2]	<0.001
MBP	Myelin basic protein, a myelin autoantigen commonly targeted in type 1 diabetes and MS, (5 ug/mL)	Test analyte	1.8 [1.6-2.0]	1.1 [1-1.2]	<0.001
EX2	A major myelin basic protein autoimmune target epitope (splice variant) expressed in developing myelin and remyelination (5ug/mL)	Test analyte	1.8 [1.6-2.0]	1.1 [1-1.2]	<0.001
GFAP	Glial Fibrillary Acid Protein, A glial autoantigen often targeted in type 1 diabetes and MS (0.5 ug/mL)	Test analyte	2.0 [1.7-2.2]	1.1 [1-1.2]	<0.001
S100	An epitope of GFAP often targeted in type 1 diabetes and MS (0.5 ug/mL)	Test analyte	1.9 [1.6-2.2]	1.1 [1-1.2]	<0.001
ABBOS	A milk epitope peptide commonly targeted in type 1 diabetes, 2-way mimicry with ICA-69 (5 µg/ml)	Test analyte	2.1 [1.9-2.4]	1.1 [1-1.3]	<0.001
BSA	Bovine Serum Albumin containing the ABBOS epitope (5 µg/ml)	Test analyte	2.2 [1.9-2.5]	1.1 [1-1.1]	<0.001
PHA	Phytohemagglutinin, T-cell mitogen (1 µg/ml)	Positive control, proliferation competence	23 [19-26]	21 [17-26]	0.1
TT	Tetanus toxoid (0.1 µg/ml)	Positive control, post-vaccination response competence	10 [8-11]	9 [7-10.5]	0.07
OVA	Ovalbumin- dietary protein (5 µg/ml)	Negative control	1.0 [1-1.1]	1.0 [1-1.1]	0.25
Actin	Human actin (5 µg/ml)	Negative control	1.1 [1-1.1]	1.0 [1-1.1]	0.1