

# Supplemental Tables

Supplemental Table 1: Listing of samples used in each assay. TRN = Training Set, TST = Test Set, IOT = Indices of Tolerance, TOL = Tolerant, SI = Standard Immunotherapy, HC = Healthy Control.

## Samples Analyzed by Assay

Multi-assay biomarker identification						
Group	Flow cytometry* (Fresh)	Peripheral Blood Microarray	Urine RT-PCR	Mass ARRAY	Frozen Flow	
					ITN	IOT
TOL	25	19	15	25	23	6
SI	30	27+	20	30	31	14
HC	42	12	NA	20	13	18
Prediction of clinical state						
Group	Sequenom		Frozen Flow			
	ITN TRN	ITN TST	ITN	IOT		
TOL	19	6	23	6		
SI	24	6	31	12	(Samples with complete data)	
*Includes TOL-TRN, TOL-TST, SI-TRN, SI-TST						
+Three samples run on Affymetrix microarray only, not on MassARRAY QGE						

Supplemental Table 2: Listing of genes and Genbnk accessioning numbers for 228 genes tested in MassARRAY QGE

Ensembl Gene ID	HGNC gene symbol
ENSG00000197381	ADARB1
ENSG00000144218	AFF3
ENSG00000196139	AKR1C3
ENSG00000150347	ARID5B
ENSG00000085224	ATRX
ENSG00000112182	BACH2
ENSG00000112182	BACH2
ENSG00000114439	BBX
ENSG00000119866	BCL11A
ENSG00000119866	BCL11A
	BCL2L1
ENSG00000023445	BIRC3
ENSG00000197299	BLM
ENSG00000095585	BLNK
ENSG00000153162	BMP6
	BMP7_HUMAN
ENSG00000186265	BTLA
ENSG00000186265	BTLA
ENSG00000177364	C9orf45
ENSG00000129007	CALML4
ENSG00000115009	CCL20
ENSG00000117281	CD160
ENSG00000004468	CD38
	CD3E
	CD40
ENSG00000196352	CD55
ENSG00000137101	CD72
ENSG00000007312	CD79B
ENSG00000105810	CDK6
ENSG00000135837	CEP350
	CTGF
ENSG00000149187	CUGBP1
ENSG00000163739	CXCL1
ENSG00000081041	CXCL2
ENSG00000163734	CXCL3
ENSG00000163737	CXCL4
ENSG00000185753	CXorf38
ENSG00000171604	CXXC5
ENSG00000138061	CYP1B1
ENSG00000085788	DDHD2
ENSG00000164821	DEFA4

Ensembl Gene ID	HGNC gene symbol
ENSG00000135829	DHX9
ENSG00000197102	DYHC
ENSG00000169508	EBI2
	EDN1
ENSG00000134001	EIF2S1
ENSG00000132507	EIF5AP1
ENSG00000158417	EIF5B
ENSG00000187017	ESPN
ENSG00000117525	F3
ENSG00000167483	FAM129C
ENSG00000132185	FCRLA
ENSG00000149557	FEZ1
	FGF2
ENST00000295713	FNBP2
ENSG00000150907	FOXO1
ENSG00000174804	FZD4
ENSG00000007237	GAS7
ENSG00000141098	GFOD2
ENSG00000088256	GNA11
ENSG00000179921	GPBAR1
ENSG00000159618	GPR114
	HAVCR1
	HAVCR2
	HGF
ENSG00000204721	HLA-C
ENSG00000204776	HLA-C
ENSG00000204273	HLA-DOB
ENSG00000090339	ICAM1
	IFNG
ENSG00000073792	IGF2BP2
ENSG00000211895	IGHA1
ENSG00000211898	IGHD
ENSG00000211893	IGHG2
ENSG00000211899	IGHM
ENSG00000211956	IGHV4-34
ENSG00000132465	IGJ
ENSG00000211592	IGKC
ENSG00000211606	IGKV1-12
ENSG00000211613	IGKV1-27
ENSG00000211616	IGKV1-33
ENSG00000211630	IGKV1D-13

Supplemental Table 2, continued

Ensembl Gene ID	HGNC gene symbol
ENSG00000211612	IGKV2-24
ENSG00000211614	IGKV2-28
ENSG00000211607	IGKV3-15
ENSG00000211610	IGKV3-20
ENSG00000211598	IGKV4-1
ENSG00000211675	IGLC1
ENSG00000128322	IGLL1
ENSG00000206066	IGLL3
ENSG00000211648	IGLV1-47
ENSG00000211644	IGLV1-51
ENSG00000211666	IGLV2-14
ENSG00000161405	IKZF3
ENSG00000125538	IL-1
	IL10
ENSG00000110944	IL23A
	IL2RA
	IL6
ENSG00000169429	IL8
ENSG00000137265	IRF-4
ENSG00000162434	JAK1
ENSG00000123700	KCNJ2
ENSG00000091490	KIAA0746
ENSG00000111796	KLRB1
ENSG00000134545	KLRC1
ENSG00000205809	KLRC2
ENSG00000205810	KLRC3
ENSG00000134539	KLRD1
ENSG00000213809	Klrk1
ENSG00000136700	KV105_HUMAN
	LOX
	LOXL1
	LOXL2
ENSG00000124831	LRRFIP1
ENSG00000197063	MAFG
ENSG00000007264	MATK
ENSG00000081189	MEF2C
ENSG00000154035	MGC33894
ENSG00000101752	MIB1
ENSG00000091436	MLTK_HUMAN
ENSG00000102738	MRPS31
ENSG00000156738	MS4A1

Ensembl Gene ID	HGNC gene symbol
ENSG00000156738	MS4A1
ENSG00000188895	MSL-1
ENSG00000122497	NBPF16
ENSG00000102908	NFAT5
ENSG00000100968	NFATC4
ENSG00000077150	NFKB2
ENSG00000183542	NKG2F_HUMAN
ENSG00000119508	NR4A3
ENSG00000148136	OR13C4
ENSG00000083454	P2RX5
ENSG00000157654	PALM2
ENSG00000081853	PCDHGC5
ENSG00000184588	PDE4B
	PDGFA
	PECAM1
ENSG00000078124	PHCA
ENSG00000011422	PLAUR
ENSG00000104164	PLDN
	PLOD1
	PLOD2
	PLOD3
ENSG00000140464	PML
ENSG00000100413	POLR3H
ENSG00000147535	PPAPDC1B
ENSG00000147535	PPAPDC1B
ENSG00000058272	PPP1R12A
ENSG00000138814	PPP3CA
ENSG00000185920	PTCH1
ENSG00000168229	PTGDR
ENSG00000104388	RAB2A
ENSG00000123892	RAB38
ENSG00000108774	RAB5C
ENSG00000164754	RAD21
ENSG00000113522	RAD50
ENSG00000002016	RAD52
ENSG00000125249	RAP2A
ENSG00000172575	RASGRP1
ENSG00000157110	RBPM5
ENSG00000104856	RELB
ENSG00000168421	RHOH
ENSG00000067900	ROCK1

Supplemental Table 2, continued

Ensembl Gene ID	HGNC gene symbol
ENSG00000188846	RPL14
ENSG00000137154	RPS6
ENSG00000177409	SAMD9L
ENSG00000124145	SDC4
ENSG00000187231	SESTD
ENSG00000115524	SF3B1
ENSG00000145423	SFRP2
ENSG00000198574	SH2D1B
ENSG00000182199	SHMT2
ENSG00000026751	SLAMF7
ENSG00000163848	SLC12A8
ENSG00000059804	SLC2A3
	SMAD1
ENSG00000175387	SMAD2
	SMAD3
	SMAD5
	SMAD6
	SMAD7
ENSG00000198742	SMURF1
ENSG00000159140	SON
ENSG00000065526	SPEN
	SPG3A
ENSG00000142539	SPIB
ENSG00000070182	SPTB
ENSG00000035720	STAP1
ENSG00000165209	STRBP
ENSG00000133789	SWAP70
ENSG00000166317	SYNPO2L
ENSG00000149930	TAOK2
ENSG00000198211	TUBB3
ENSG00000131374	TBC1D5
	TBX21
ENSG00000100721	TCL1A
	TGFB1
	TGFB2
	TGFB3
	TGFBR1
	TGFBR2
ENSG00000069702	TGFBR3
	TGM2
ENSG00000204490	TNF

Ensembl Gene ID	HGNC gene symbol
ENSG00000123610	TNFAIP6
ENSG00000076554	TPD52
ENSG00000164548	TRA2A_HUMAN
ENSG00000211829	TRDC
ENSG00000106537	TSPAN13
ENSG00000140391	TSPAN3
ENSG00000168785	TSPAN5
ENSG00000137267	TUBB2A
ENSG00000198211	TUBB3
ENSG00000104833	TUBB4
ENSG00000150991	UBC
ENSG00000183696	UPP1
ENSG00000103194	USP10
ENSG00000115464	USP34
ENSG00000128218	VPREB3
ENSG00000156787	WDR67
ENSG00000108953	YWHAE
ENSG00000205189	ZBTB10
ENSG00000185947	ZNF267
ENSG00000173276	ZNF295
ENSG00000130844	ZNF331

Supplemental Table 3: MassARRAY QGE reveals genes expressed differentially between TOL and SI. P value adjustments were made using a false discovery rate (FDR) correction to account for the multiple comparisons. The TOL vs. HC comparison showed no genes as statistically significant using a FDR correction. We provide a ranked listing of genes between TOL vs. HC ( $p < 0.05$ ) without FDR.

TOL vs. SI	TOL vs. HC
Gene	Gene
IGKVID-13	IGKVID-13
FCRLA	IGKV1-33
IGHM	IGF2BP2
IGHV4-34	VPREB3
IGKC	BCL2L1
IGKV3-20	TUBB2A
IGKV4-1	RAB2A
FAM129C	Kirk1
MS4A1	IL-1
MS4A1_2	SF3B1
KV105_HUMAN	PTCH1
IGKV1-12	PPP1R12A
IGJ	CXCL4
IKZF3	NBPF16
IGLL1	IGHG2
IGLC1	TSPAN5
BIRC3	TSPAN13
IGHA1	GFOD2
IGHD	MLTK_HUMAN
PPAPDC1B	TGFBR2
IRF-4	CD40
STAP1	
EBI2	
IGKV2-28	
BTLA_2	
HLA-C	
IGKV3-15	
TUBB2A	
ARID5B	
IGKV1-27	
PLOD3	

Supplemental Table 4: Listing of panels used in flow cytometry measures of whole blood and of frozen PBMCs.

Flow Cytometry Panels
Antibody panels for whole blood staining:
1.FITC-CD11c, PE-CD80, PerCP(CD3, 56, 19, 14), PeCy7 HLA-DR, APC-CD123;
2.FITC-CD11c, PE-CD86, PerCP(CD3, 56, 19, 14), PeCy7 HLA-DR, APC-CD123;
3.FITC-CD45RA, PE-CD45RO, PerCP-CD8, PeCy7-CD4, APC-CD62L;
4.FITC-CD8, PE-CD25, PerCP-CD4, PeCy7-CD3, APC-CD62L;
5.FITC-CD11c, PE-IgD, PerCP-C27, PeCy7-CD19, APC-IgM;
6.FITC-HLA-DR, PE-CD80, PerCP-C27, PeCy7-CD19, APC-CD86;
7.FITC-57, PE-57, PerCP-CD8 PeCy7-CD3, APC-CD14;
8.FITC-CD8, PE-CD69, PerCP-CD4 PeCy7-CD3, APC-HLA-DR;
Antibody panels for frozen cell staining:
1.FITC-IgD, PE-CD11c, PE-Alexa610-CD24, PE-Cy5-CD21, PerCP-Cy5.5-CD3, PE-Cy7-B220 PacificBlue-CD38, PacificOrange-Aqua live/dead, APC-CD27, APC-Cy7-CD19
2.FITC-V delta 1, PE-V delta 2, PerCP gamma/delta, APC-CD3