Table S2A. Sequencing results for 15 SNPs with samples having predicted OTVs.

									A						B						V						V1			V2			V3		
JAX SNP ID	Chr	Sequence (F/R)	Total Samples	Failed	Good	True-Positive	Unrecognized SNP	VINO Miscall	Predicted	Failed	Actual	True-Positive	Unrecognized SNP	Miscall	Predicted	Failed	Actual	True-Positive	Unrecognized SNP	Miscall	Predicted	Failed	Actual	True-Positive	Miscall	Unrecognized SNP	True-Positive	Unrecognized SNP	Genotype	True-Positive	Unrecognized SNP	Genotype	True-Positive	Unrecognized SNP	Genotype
		1 1 2 2 3 1 5 0 5 0 5 0																																	
JAX00241414	1	ACAAAGGTACCAAAGA**C**TAT**C**AGAT GTACCAAAGA**C**TAT**C**AGATAACCAT	23	0	23	23	0	0	4	0	4	4	0	0	8	0	8	8	0	0	11	0	11	11	0	0	11	0	17C>G, 21C>T						
JAX00258870	1	AGAGGTTGTTT**C**GAAC**A**AA**G**TCCAG GTTGTTT**C**GAAC**A**AA**G**TCCAGAGA**A**	24	1	23	20	3	0	12	0	12	12	0	0	7	1	3	3	3	0	5	0	8	5	0	3	3	3	17A>G, 28A>C	3	0	17A>G, 20G>	2	0	12C>T
JAX00518420	3	TTCAGGTCC**A**TT**T**CTAAGTCAAGAG GGTCC**A**TT**T**CTAAGTCAAGAGGCAT	20	0	20	20	0	0	8	0	8	8	0	0	8	0	8	8	0	0	4	0	4	4	0	0	4	0	10A>T, 13T>C						
JAX00567838	4	AGGTAC**G**TCGTCCT**G**ACCACAAAGC GTAC**G**TCGTCCT**G**ACCACAAAGCAT	21	0	21	21	0	0	12	0	12	12	0	0	4	0	4	4	0	0	5	0	5	5	0	0	5	0	7G>A, 15G>A						
JAX00149491	7	CCTCTTTT**TG**AGTTCATCTTCAACC CGAAC**C**CCCCTCTTTT**TG**AGTTCAT	17	3	14	10	0	4	5	1	4	4	0	0	5	1	8	4	0	4	7	1	2	2	4	0	2	0	6C>A, 18G>T						
JAX00156936	7	CTTCCAGTAAAATA**T**GC**G**GTGTACA TCCAGTAAAATA**T**GC**G**GTGTACACC	21	0	21	21	0	0	5	0	5	5	0	0	9	0	9	9	0	0	7	0	7	7	0	0	7	0	15T>C, 18G>A						
JAX00642397	7	CTGGTATC**G**TGATTAT**C**ATTTTTGG CTGGTATC**G**TGATTAT**C**ATTTTTGG	23	2	21	21	0	0	12	0	12	12	0	0	6	0	6	6	0	0	5	2	3	3	0	0	3	0	9G>A						
JAX00649359	7	TGGGTATGG**CA**CCTTTTAACTACAC GGTATGG**CA**CCTTTTAACTACACAG	21	2	19	19	0	0	10	0	10	10	0	0	7	1	6	6	0	0	4	1	3	3	0	0	3	0	10C>T, 11A>G						
JAX00300473	10	TTGTAAA**TA**CATAGTTGCAAATCCA CAGATTGTAAA**TA**CATAGTTGCAAA	20	1	19	19	0	0	7	0	7	7	0	0	9	0	9	9	0	0	4	1	3	3	0	0	3	0	12T>C, 13A>C						
JAX00031437	11	CAT**C**TC**G**AAGTC**A**TCCTCACAGAGG CAT**C**TC**G**AAGTC**A**TCCTCACAGAGG	21	1	20	20	0	0	5	0	5	5	0	0	6	1	5	5	0	0	10	0	10	10	0	0	7	0	7G>A	3	0	4C>T, 7G>A			
JAX00303026	11	CATGGCCTTCCGAACC**G**TCTCTTCG TCCGAACC**G**TCTCTTCGTCTCCCAG	22	0	22	30	0	0	10	0	10	10	0	0	4	0	4	4	0	0	8	0	8	8	0	0	8	0	RFLP						
JAX00376696	14	ACCAG**C**GA**G**CTCCT**G**TTTAAGGT**A**A ACCAG**C**GA**G**CTCCT**G**TTTAAGGT**A**A	19	0	19	14	5	0	11	0	6	6	5	0	4	0	3	3	0	0	5	0	10	5	0	5	5	5	24A>G	3	0	6C>T	2	0	6C>T, 15G>A
JAX00434064	17	CAACAACAGTCC**T**GATTCCA**A**AATC AACAGTCC**T**GATTCCA**A**AATCTACA	23	2	21	21	0	0	13	1	12	12	0	0	4	0	4	4	0	0	6	1	5	5	0	0	5	0	13T>C, 21A>G						
JAX00442587	17	TTATTGGCTTTCA**CA**AT**C**GGAGTTT ATTGGCTTTCA**CA**AT**C**GGAGTTTCA	21	2	19	19	0	0	12	0	12	12	0	0	4	0	4	4	0	0	6	3	3	3	0	0	2	0	14C>T, 15A>G	1	0	18C>T			
JAX00470882	19	TG**G**T**CAAA**C**A**TCTTTCGAGGGTCAG TG**G**T**CAAA**C**A**TCTTTCGAGGGTCAG	22	1	21	20	1	0	12	0	11	11	1	0	4	0	4	4	0	0	6	1	6	5	0	1	5	0	3G>C, 4T>A, 6A>G, 9C>A	1	1	3G>C, 4T>A			
Totals			318	15	303	298	9	4	138	2	130	130	6	0	89	4	85	81	3	4	93	10	88	79	4	9									

Table S2B. VINO prediction accuracy

Prediction	Correct Call	Incorrect Call	Unrecognized SNP	Error Rate
No OTV	211	0	9	4.1%
OTV	79	4	0	4.8%

Table S2C. Samples sequenced for each SNP.

JAX00241414	JAX00258870	JAX00518420	JAX00567838	JAX00149491	JAX00156936	JAX00642397	JAX00649359	JAX00300473	JAX00031437	JAX00303026	JAX00376696	JAX00434064	JAX00442587	JAX00470882
WSB/EiJ	129S1SvlmJ	129S1SvlmJ	129S1SvlmJ	129S1SvlmJ	A/J	129S1SvlmJ	129S1SvlmJ	129S1SvlmJ	129S1SvlmJ	129S1SvlmJ	129S1SvlmJ	A/J	129S1SvlmJ	129S1SvlmJ
PERA/EiJ	A/J	A/J	A/J	C57BL/6J	C57BL/6J	A/J	A/J	A/J	C57BL/6J	A/J	A/J	C57BL/6J	A/J	C57BL/6J
C57BL/6J	C57BL/6J	C57BL/6J	C57BL/6J	NZO/HILtJ	NZO/HILtJ	C57BL/6J	C57BL/6J	C57BL/6J	NOD/LtJ	C57BL/6J	C57BL/6J	NOD/LtJ	C57BL/6J	NZO/HILtJ
CALB/RkJ	NOD/LtJ	NOD/LtJ	NOD/LtJ	WSB/EiJ	SF/CAMEiJ	NOD/LtJ	NOD/LtJ	NOD/LtJ	LEWES/EiJ	NOD/LtJ	NOD/LtJ	NZO/HILtJ	NOD/LtJ	WSB/EiJ
CAST/EiJ	NZO/HILtJ	NZO/HILtJ	NZO/HILtJ	A/J	MOR/RkJ	NZO/HILtJ	NZO/HILtJ	NZO/HILtJ	MOLD/RkJ	NZO/HILtJ	NZO/HILtJ	WSB/EiJ	NZO/HILtJ	PWK/PhJ
TIRANO/EiJ	WSB/EiJ	WSB/EiJ	SF/CAMEiJ	NOD/LtJ	129S1SvlmJ	WSB/EiJ	WSB/EiJ	LEWES/EiJ	A/J	WSB/EiJ	WSB/EiJ	PWK/PhJ	WSB/EiJ	JF1/Ms
A/J	PWK/PhJ	CAST/EiJ	PWK/PhJ	LEWES/EiJ	NOD/LtJ	CAST/EiJ	MOLD/RkJ	MOLD/RkJ	NZO/HILtJ	PWK/PhJ	PWK/PhJ	JF1/Ms	CZECHI/EiJ	CAST/EiJ
AKR/J	JF1/Ms	POHN/Deh	JF1/Ms	PWK/PhJ	WSB/EiJ	STUP	CASA/RkJ	ALR/LtJ	WSB/EiJ	MOLF/EiJ	CAST/EiJ	BULS	CAST/EiJ	MSM/Ms
TIRANO/EiJ	CKN	AKR/J	CAST/EiJ	CIM	CZECHI/EiJ	POHN/Deh	BUSNA	RIIIS/J	CAST/EiJ	CAST/EiJ	P/J	MSM/Ms	BULS	BULS
BIK	BULS	PERC/EiJ	SKIVE/EiJ	CKS	JF1/Ms	SKIVE/EiJ	TIRANO/EiJ	WSB/EiJ	TIRANO/EiJ	TIRANO/EiJ	SOD1/EiJ	SKIVE/EiJ	POHN/Deh	SKIVE/EiJ
DIK	SKIVE/EiJ	PWK/PhJ	MSM/Ms	JF1/Ms	CAST/EiJ	STUF	NH/KiPtJ	PWK/PhJ	PWK/PhJ	129X1/SvJ	PERC/EiJ	STUF	STUF	STUF
POHN/Deh	POHN/Deh	JF1/Ms	POHN/Deh	BUSNA	SKIVE/EiJ	TIRANO/EiJ	PWK/PhJ	JF1/Ms	JF1/Ms	BALB/cByJ	MGA	TIRANO/EiJ	TIRANO/EiJ	ALR/LtJ
MOLD/RkJ	BUB/BnJ	SKIVE/EiJ	I/LnJ	BULS	STUF	PWK/PhJ	JF1/Ms	BULS	MDG	BALB/cJ	RBA/DnJ	129S1SvlmJ	PWK/PhJ	ALS/LtJ
CZECHI/EiJ	C3H/HeJ	MSM/Ms	ISS	MOLD/RkJ	TIRANO/EiJ	JF1/Ms	SKIVE/EiJ	MSM/Ms	CZECHI/EiJ	I/LnJ	BULS	129P1/ReJ	MOLD/RkJ	BUB/BnJ
JF1/Ms	SF/CAMEiJ	STUF	WSB/EiJ	MGA	PWK/PhJ	PWD/PhJ	MSM/Ms	SKIVE/EiJ	CZECHII/EiJ	YBR/EiJ	CZECHII/EiJ	LEWES/EiJ	STUP	C3H/HeJ
PWK/PhJ	BXSB/MpJ	TIRANO/EiJ	PERA/EiJ	CAST/EiJ	MOLD/RkJ	MOLD/RkJ	BULS	STUF	PWD/PhJ	DDK	JF1/Ms	PERA/EiJ	SKIVE/EiJ	A/J
STUP	RBF/DnJ	CZECHII/EiJ	RBF/DnJ	SKIVE/EiJ	PWD/PhJ	BULS	CAST/EiJ	CAST/EiJ	BULS	CZECHI/EiJ	MSM/Ms	BPN/3J	JF1/Ms	NOD/LtJ
SKIVE/EiJ	SB/LeJ	BUSNA	LEWES/EiJ		MGA	MSM/Ms	STUP	CASA/RkJ	MSM/Ms	JF1/Ms	SKIVE/EiJ	P/J	MSM/Ms	A/HeJ
MGA	TIRANO/EiJ	BULS	RBA/DnJ		BUSNA	PL/J	STUS	CALB/RkJ	SKIVE/EiJ	CZECHII/EiJ	STUF	CAST/EiJ	DIK	RBB/DnJ
MSM/Ms	ZALENDE/EiJ	STUS	TIRANO/EiJ		BULS	PERC/EiJ	CKS	CKS	STUF	BULS		CASA/RkJ	BIK/g	DCP
SKIVE/EiJ	MOLD/RkJ		ZALENDE/EiJ		MSM/Ms	RBB/DnJ	(PWKxCAST)F1 m005		MBS	MSM/Ms		CALB/RkJ	MGA	TIRANO/EiJ
STUF	STUS					CTP				SKIVE/EiJ		CKS		DGA
BULS	MSM/Ms					SM/J						BDP/J		
	CAST/EiJ													

Reference Allele
Variant Allele
True Positive VINO
False Positive VINO
Unrecognized SNP
Failed