Supplemental Table 1. FUSION 1 Chromosome 6 OSA Results.

Phenotype	Ranking	Position [cM]	LOD Score			Empirical p-value	Families		
			Maximum	Unconditional	Delta		Subset	Total	Proportion
Body Mass Index	Low	0.0	1.98	0.00	1.98	0.2900	27	494	0.05
	High	108.0	1.13	0.51	0.62	0.9000	335	494	0.68
Waist-Hip Ratio	Low	95.0	1.60	0.89	0.72	0.5700	39	494	0.08
	High	38.0	1.98	0.21	1.76	0.3400	102	494	0.21
Age-at-onset	Low	117.0	2.10	0.63	1.47	0.3000	159	494	0.32
	High	54.0	1.99	0.42	1.56	0.3000	42	494	0.09
Fasting Glucose	Low	123.0	2.91	0.20	2.71	0.0650	63	493	0.13
	High	40.0	1.22	0.25	0.97	0.9000	236	493	0.48
Fasting Insulin	Low	129.0	3.45	0.01	3.43	0.0171	33	493	0.07
	High	6.0	1.66	0.00	1.66	0.5100	24	493	0.05
Fasting C-peptide	Low	80.0	2.89	0.04	2.85	0.0437	28	488	0.06
	High	40.5	1.40	0.28	1.12	0.7200	66	488	0.14
Total Cholesterol	Low	97.5	3.95	0.88	3.07	0.0075	187	494	0.38
	High	40.5	1.23	0.22	1.01	0.8200	7	494	0.01
HDL Cholesterol	Low	79.5	2.18	0.01	2.16	0.2150	14	494	0.03
	High	77.5	3.29	0.00	3.29	0.0218	41	494	0.08
LDL Cholesterol	Low	96.0	4.18	0.81	3.37	0.0034	233	490	0.48
	High	10.5	0.90	0.00	0.89	0.9800	9	490	0.02
HDL Cholesterol Ratio	Low	0.5	1.48	0.00	1.48	0.6800	119	494	0.24
	High	80.5	4.68	0.01	4.67	0.0011	93	494	0.19
Triglyceride	Low	136.5	2.84	0.02	2.82	0.0780	57	494	0.12
	High	1.5	1.93	0.00	1.93	0.4000	41	494	0.08
Systolic Blood Pressure	Low	104.5	2.79	0.60	2.20	0.0740	26	494	0.05
	High	11.0	2.21	0.01	2.20	0.2000	41	494	0.08
Diastolic Blood Pressure	Low	97.0	3.09	0.89	2.20	0.0300	40	494	0.08
	High	8.5	2.81	0.00	2.81	0.0514	19	494	0.04

Supplemental Table 2. FUSION 2 Chromosome 6 OSA Results

Phenotype	Ranking	Position [cM]	LOD Score			Empirical p-value	Families		
			Maximum	Unconditional	Delta		Subset	Total	Proportion
Body Mass Index	Low	105.0	3.58	2.76	0.82	0.2100	143	203	0.70
	High	4.0	3.11	0.65	2.46	0.5500	41	203	0.20
Waist-Hip Ratio	Low	102.5	3.44	2.98	0.46	0.3500	171	202	0.85
	High	103.0	3.09	2.98	0.11	0.8100	200	202	0.99
Age-at-onset	Low	104.5	2.76	2.11	0.65	0.4900	14	242	0.06
	High	94.5	3.39	2.26	1.14	0.1133	133	242	0.55
Fasting Glucose	Low	100.5	3.93	2.63	1.30	0.0950	126	197	0.64
	High	102.0	2.77	2.72	0.05	0.8100	195	197	0.99
Fasting Insulin	Low	101.5	3.87	2.64	1.23	0.0875	108	196	0.55
	High	103.5	2.96	2.63	0.33	0.4300	161	196	0.82
Fasting C-peptide	Low	76.5	3.24	0.99	2.25	0.5900	82	191	0.43
	High	102.5	3.01	3.01	0.00	0.9150	191	191	1.00
Total Cholesterol	Low	101.0	3.49	2.81	0.69	0.4000	183	202	0.91
	High	103.0	2.88	2.88	0.00	0.9400	202	202	1.00
HDL Cholesterol	Low	103.0	2.98	2.88	0.10	0.7800	187	202	0.93
	High	78.5	3.67	0.77	2.89	0.1950	50	202	0.25
LDL Cholesterol	Low	106.5	3.70	2.39	1.32	0.2100	62	200	0.31
	High	103.0	2.87	2.87	0.00	0.9600	200	200	1.00
HDL Cholesterol Ratio	Low	103.0	2.88	2.88	0.00	0.9500	202	202	1.00
	High	102.5	3.97	2.88	1.08	0.1200	141	202	0.70
Triglyceride	Low	96.5	3.62	2.32	1.31	0.2100	49	202	0.24
	High	103.0	2.88	2.88	0.00	0.9500	202	202	1.00
Systolic Blood Pressure	Low	103.0	2.81	2.41	0.40	0.4300	187	199	0.94
	High	102.5	3.11	2.41	0.69	0.3000	173	199	0.87
Diastolic Blood Pressure	Low	102.5	2.59	2.41	0.18	0.6500	197	199	0.99
	High	102.5	2.41	2.41	0.00	0.9550	199	199	1.00

Supplemental Table 3. Combined FUSION 1 and 2 Chromosome 6 OSA Results

Phenotype	Ranking	Position [cM]	LOD Score			Empirical p-value	Families		
			Maximum	Unconditional	Delta		Subset	Total	Proportion
Body Mass Index	Low	100.0	3.20	2.85	0.35	0.4700	511	697	0.73
	High	99.5	2.87	2.85	0.02	0.8800	696	697	1.00
Waist-Hip Ratio	Low	98.5	3.34	2.87	0.47	0.3800	477	696	0.69
	High	99.5	3.07	2.89	0.18	0.6900	689	696	0.99
Age-at-onset	Low	95.5	2.98	2.68	0.29	0.5400	693	736	0.94
	High	55.0	2.70	0.64	2.07	0.8500	85	736	0.12
Fasting Glucose	Low	98.5	3.91	2.69	1.22	0.1233	249	690	0.36
	High	99.0	2.82	2.70	0.11	0.7100	687	690	1.00
Fasting Insulin	Low	97.5	4.23	2.65	1.58	0.0617	535	689	0.78
	High	99.0	2.69	2.69	0.00	0.9600	689	689	1.00
Fasting C-peptide	Low	98.0	4.36	2.98	1.38	0.0650	235	679	0.35
	High	99.0	3.04	2.99	0.05	0.9200	677	679	1.00
Total Cholesterol	Low	101.5	5.71	2.78	2.93	0.0031	291	696	0.42
	High	99.5	2.85	2.85	0.00	0.9750	696	696	1.00
HDL Cholesterol	Low	99.5	2.85	2.85	0.00	0.8600	695	696	1.00
	High	78.0	4.32	0.24	4.09	0.0529	56	696	0.08
LDL Cholesterol	Low	95.5	5.09	2.40	2.69	0.0095	344	690	0.50
	High	99.5	2.67	2.67	0.00	0.9600	690	690	1.00
HDL Cholesterol Ratio	Low	99.5	2.85	2.85	0.00	0.9650	696	696	1.00
	High	78.0	7.91	0.24	7.67	0.00002	105	696	0.15
Triglyceride	Low	100.0	4.40	2.85	1.56	0.0462	194	696	0.28
	High	99.5	2.85	2.85	0.00	0.9800	696	696	1.00
Systolic Blood Pressure	Low	99.0	3.75	2.61	1.15	0.1100	628	693	0.91
	High	99.0	2.73	2.61	0.12	0.7500	689	693	0.99
Diastolic Blood Pressure	Low	102.0	3.09	2.47	0.61	0.3300	57	693	0.08
	High	8.5	3.02	0.09	2.93	0.4400	32	693	0.05