

NutraHacker

Depression Report for Customer: 16b3a1d2-1cc8-4b35-972c-b83fceb0a109

Instructions:

This report analyzes polymorphisms that have been researched to vary based on differences in response to treatments for depression. It is designed to point out relevant research not guide treatment. We recommend starting with the BDNF rs6265 ref #2, which indicates whether SSRI, SNRI, or TCA is preferred. From there move to 5-HTTLPR to find other large correlations and narrow down a treatment modality, then use the remaining snps to eliminate other options and finalize choices.

NOTICE: NutraHacker reports are for scientific, educational and nutritional information only and are not intended to diagnose, cure, treat or prevent any disease, disorder or condition. Consult your doctor before beginning any treatment.

Definitions:

MDD - Major Depressive Disorder

HAM-D (or HDRS) - Hamilton Rating Score for Depression. The higher the score the more severe the depression.

MADRS - Montgomery-Asberg Depression Rating Scale. The higher the score the more severe the depression.

CDRS-R - Childrens Depression Rating Scale-Revised. Scale for depression in minors, the higher the score the more severe the depression.

Remission - resolution of the symptoms of depression

Response - a 50% reduction in the symptoms of depression

SSRI - Selective serotonin reuptake inhibitor

SNRI - Serotonin-norepinephrine reuptake inhibitor

NRI - Norepinephrine reuptake inhibitor

TCA - Tricyclic antidepressant

TeCA - Tetracyclic antidepressant

ECT - Electroconvulsive therapy

tDCS - Transcranial direct current stimulation

rTMS - Repetitive transcranial magnetic stimulation

PSD/TSD - Partial/Total sleep deprivation

Thank you for using NutraHacker. To your health!

Gender of customer: Male

rsID	Gene	Variant	Positive Allele	Your Genotype	Class	Treatment	Response	Publication Highlight	Citation
rs6265	BDNF	Val66Met	C	CT	ketamine	ketamine	Heterozygous	MDD patients with the Val/Val BDNF allele at rs6265 are more likely to exhibit increased antidepressant response to ketamine than Met carriers (C encodes val, T encodes met)	Ref #1
rs6265	BDNF	Val66Met	C	CT	SSRI	SSRI	Heterozygous	SSRI should be preferred for Val/Val patients and SNRI/TCA for Met patients	Ref #2
rs6265	BDNF	Val66Met	T	CT	SNRI	SNRI	Heterozygous	SSRI should be preferred for Val/Val patients and SNRI/TCA for Met patients	Ref #3
rs6265	BDNF	Val66Met	T	CT	TCA	TCA	Heterozygous	SSRI should be preferred for Val/Val patients and SNRI/TCA for Met patients	Ref #4
rs6265	BDNF	Val66Met	T	CT	SSRI	SSRI	Heterozygous	In Asians, the Met carrier was positively associated with response rate	Ref #5
rs6265	BDNF	Val66Met	C	CT	TMS	TMS	Heterozygous	rTMS treatment significantly symptomatology ($p < 0.0001$) and the response was significantly greater in 5-HTTLPR LL homozygotes compared to S allele carriers ($p = 0.007$) and in BDNF Val/Val homozygotes compared to Met allele carriers ($p = 0.024$).	Ref #6
rs6265	BDNF	Val66Met	T	CT	SSRI	escitalopram	Heterozygous	Relative to Val/Val homozygous (59.78%), a significantly greater proportion of subjects Met-carriers (77.94%) responded to escitalopram treatment (chi-square = 5.88, $p = 0.015$). After 6 weeks, we found the same pattern of results but this effect did not reach statistical significance (chi-square = 2.07, $p = 0.15$).	Ref #7
rs6265	BDNF	Val66Met	T	CT	SSRI	sertraline	Heterozygous	Carriers of the A allele of rs6265 exhibited improved responses to the sertraline treatment (chi-square=8.942, $P = 0.003$, $OR = 2.136$, 95% $CI = 1.3-5.28$).	Ref #8
rs6265	BDNF	Val66Met	T	CT	lithium	lithium	Heterozygous	A better response to lithium is connected with the Met allele of the BDNF Val/Met polymorphism	Ref #9
rs6265	BDNF	Val66Met	T	CT	SSRI	citalopram	Heterozygous	These results suggest that the Val66Met polymorphism of BDNF is associated with citalopram efficacy, with M-allele carriers responding better to citalopram treatment.	Ref #10
rs6265	BDNF	Val66Met	T	CT	TeCA	mirtazapine	Heterozygous	After 8 weeks of mirtazapine treatment, plasma BDNF levels were higher in Met allele homozygotes (1499.7 +/- 370.6 ng/mL) than in Val allele carriers (649.7 +/- 158.5 ng/mL, $P = 0.049$). Our results do not support the hypothesis that the Val66Met in the BDNF gene influences the therapeutic response to mirtazapine in Korean MDD patients. However, our data indicate that results in increased plasma BDNF after mirtazapine treatment.	Ref #12

rsID	Gene	Variant	Positive Allele	Your Genotype	Class	Treatment	Response	Publication Highlight	Citation
rs4606	RGS2	N/A	C	CC	SSRI	sertraline	Increased	Variation in RGS2, a gene previously shown to be associated with social anxiety phenotypes and serotonergic neurotransmission, may be a biomarker of the likelihood of substantially benefiting from sertraline among patients with social anxiety disorder	Ref #13
rs2129785/ rs11867581	5-HTTLPR	L/S	L	SS	SSRI	citalopram	Decreased	Subjects with 5-HTTLPR ss genotype showed a less vigorous response with regard symptoms measured by the Children's Rating Scale-Revised (CDRS-R) scores over time compared to subjects with s/l/l genotypes (beta = 0.67, z = 2.02, p = 0.04).	Ref #14
rs2129785/ rs11867581	5-HTTLPR	L/S	L	SS	light therapy	light therapy	Decreased	Light therapy sustained the effect of TSD. The effect was more marked in homozygotes for the long variant of 5-HTTLPR than in heterozygotes and homozygotes for the short variant.	Ref #15
rs2129785/ rs11867581	5-HTTLPR	L/S	L	SS	sleep deprivation	sleep deprivation	Decreased	Light therapy sustained the effect of TSD. The effect was more marked in homozygotes for the long variant of 5-HTTLPR than in heterozygotes and homozygotes for the short variant.	Ref #16
rs2129785/ rs11867581	5-HTTLPR	L/S	L	SS	tDCS	tDCS	Decreased	5-HTTLPR predicted tDCS effects as long/long homozygotes displayed a larger improvement comparing active vs. sham tDCS, while short-allele carriers did not.	Ref #17
rs2129785/ rs11867581	5-HTTLPR	L/S	L	SS	SSRI	sertraline	Decreased	Relative to the SS and SL 5HTTLPR genotypes, the LL genotype is associated with greater responsiveness of PTSD to sertraline (100mg/day) and with lower drop out due to adverse events. The S allele is associated with a striking specificity for treatment nonresponse, as defined in this study.	Ref #18
rs2129785/ rs11867581	5-HTTLPR	L/S	S	SS	SSRI	sertraline	Increased	In contrast to studies in white patients, the favorable allele for SSRI response was S 5-HTTLPR. The S 5-HTTLPR was associated also with NRI response (OR = 3.73; 95% CI, 1.32-10.53; P = .01).	Ref #19
rs2129785/ rs11867581	5-HTTLPR	L/S	S	SS	SSRI	fluoxetine	Increased	In contrast to studies in white patients, the favorable allele for SSRI response was S 5-HTTLPR. The S 5-HTTLPR was associated also with NRI response (OR = 3.73; 95% CI, 1.32-10.53; P = .01).	Ref #20
rs2129785/ rs11867581	5-HTTLPR	L/S	S	SS	TCA	nortriptyline	Increased	In contrast to studies in white patients, the favorable allele for SSRI response was S 5-HTTLPR. The S 5-HTTLPR was associated also with NRI response (OR = 3.73; 95% CI, 1.32-10.53; P = .01).	Ref #21

rsID	Gene	Variant	Positive Allele	Your Genotype	Class	Treatment	Response	Publication Highlight	Citation
rs2129785/ rs11867581	5-HTTLPR	L/S	S	SS	N/A	paroxetine	Increased	Paroxetine was significantly more effective than fluvoxamine in the s/s carriers, as evaluated on the percentage reduction in total score (P=0.012) and core (P=0.049) HAM-D after 4 weeks of medication, but not in the l/s carriers.	Ref #22
rs2129785/ rs11867581	5-HTTLPR	L/S	L	SS	N/A	fluvoxamine	Decreased	Paroxetine was significantly more effective than fluvoxamine in the s/s carriers, as evaluated on the percentage reduction in total score (P=0.012) and core (P=0.049) HAM-D after 4 weeks of medication, but not in the l/s carriers.	Ref #23
rs2129785/ rs11867581	5-HTTLPR	L/S	L	SS	SSRI	fluoxetine	Decreased	Results reveal that patients with the l/l genotype of 5-HTTLPR had a significantly better response to fluoxetine when compared to s allele carriers, as evaluated on the basis of total (P<0.05) and Aggression subscale (P<0.01) Overt Aggression Scale Modified-score percentage change.	Ref #24
rs2129785/ rs11867581	5-HTTLPR	L/S	L	SS	TMS	TMS	Decreased	rTMS treatment significantly symptomatology (p<0.0001) and the response was significantly greater in 5-HTTLPR LL homozygotes compared to S allele carriers (p=0.007) and in BDNF Val/Val homozygotes compared to Met allele carriers (p=0.024).	Ref #25
rs2129785/ rs11867581	5-HTTLPR	L/S	L	SS	lithium	lithium	Decreased	S individuals (patients with s/s or s/l genotype) having Val/Val genotype were significantly more frequent in NR compared with ER or/and PR. Also, S individuals showed extreme differences in response to lithium prophylaxis depending on having either Val/Val or (Val/Met + Met/Met) genotypes of BDNF polymorphism: 9/48 (19%) of ER and 18/48 (37%) of NR in the first group, and 12/30 (40%) and 1/30 (3%) in the second group, respectively.	Ref #26
rs2129785/ rs11867581	5-HTTLPR	L/S	S	SS	TeCA	mirtazapine	Increased	Our results showed that responses at the 2nd and 4th weeks were significantly better for the s/s genotype of the 5-HTTLPR than for l-allele carriers.	Ref #27
rs2129785/ rs11867581	5-HTTLPR	L/S	L	SS	SSRI	escitalopram	Decreased	The 5-HTTLPR moderated the response to escitalopram, with long-allele carriers improving more than short-allele homozygotes. A significant three-way interaction between 5-HTTLPR, drug and gender indicated that the effect was concentrated in males treated with escitalopram. The single-rs2020933 also influenced outcome.	Ref #28

rsID	Gene	Variant	Positive Allele	Your Genotype	Class	Treatment	Response	Publication Highlight	Citation
rs4680	COMT	Val158Met	A	GG	SSRI	paroxetine	Decreased	rs4680 significantly interacted with time in affecting antidepressant response to paroxetine, with outcome being inversely proportional to the enzyme activity: better effects in Met/Met homozygotes, worse effects in Val/Val homozygotes and intermediate effects in heterozygotes. The effect became significant at the third week of treatment.	Ref #29
rs4680	COMT	Val158Met	G	GG	TeCA	mirtazapine	Increased	COMT(VAL/VAL) and COMT(VAL/MET) genotype carriers showed a better response than COMT(MET/MET)-bearing patients in the mirtazapine group.	Ref #30
rs4680	COMT	Val158Met	A	GG	SSRI	fluvoxamine	Decreased	rs4680 significantly interacted with time in affecting antidepressant response to fluvoxamine, with outcome being inversely proportional to the enzyme activity: better effects in Met-carriers, worse effects in Val/Val homozygotes.	Ref #31
rs4680	COMT	Val158Met	A	GG	SSRI	fluoxetine	Decreased	Patients with the COMT(Val/Val) genotype had poorer responses in the eighth week (CLUMP T1 P=0.020) and consistently showed significantly smaller reductions in HAM-D(21) scores in the eighth week (P=0.027).	Ref #32
rs4680	COMT	Val158Met	G	GG	SNRI	venlafaxine	Increased	Improvements in depression scores among subjects with Val/Val genotypes were larger than those in Met/Met genotypes, suggesting that venlafaxine may alter noradrenergic flux differentially according to COMT activity.	Ref #33
rs4680	COMT	Val158Met	A	GG	sleep deprivation	sleep deprivation	Decreased	Patients who were homozygotic for the Val/Val variant showed a significantly less efficient effect after the night awake than those who were heterozygotic and homozygotic for the Met variant.	Ref #34
rs4680	COMT	Val158Met	G	GG	ECT	ECT	Increased	The patients with TT genotype of D2 receptor gene combined with COMT Met/Met genotype did not achieve remission as often as those with CC genotype of DRD2 C957T combined with COMT Val/Val genotype.	Ref #35
rs4680	COMT	Val158Met	A	GG	SNRI	milnacipran	Decreased	The met/met genotype of the COMT val158met polymorphism was associated with a significantly faster therapeutic effect of milnacipran in the MADRS score during this study.	Ref #36
rs165599	COMT	N/A	G	AG	SNRI	duloxetine	Heterozygous	The least-squared mean change (SE) in HAMD17 score by rs165599 genotype was -10.8 (1.2), -8.7 (.6), and -6.5 (.7) for patients with GG, GA, and AA genotypes, respectively.	Ref #37

rsID	Gene	Variant	Positive Allele	Your Genotype	Class	Treatment	Response	Publication Highlight	Citation
rs10245483	ABCB1	N/A	G	N/A	PGP	escitalopram	N/A	Common homozygotes responded better and had fewer side effects with escitalopram and sertraline. Minor allele homozygotes responded better and had fewer side effects with venlafaxine, with the better response most apparent for patients with cognitive impairment.	Ref #40
rs10245483	ABCB1	N/A	G	N/A	PGP	sertraline	N/A	Common homozygotes responded better and had fewer side effects with escitalopram and sertraline. Minor allele homozygotes responded better and had fewer side effects with venlafaxine, with the better response most apparent for patients with cognitive impairment.	Ref #41
rs10245483	ABCB1	N/A	T	N/A	PGP	venlafaxine	N/A	Common homozygotes responded better and had fewer side effects with escitalopram and sertraline. Minor allele homozygotes responded better and had fewer side effects with venlafaxine, with the better response most apparent for patients with cognitive impairment.	Ref #42
rs2032582	ABCB1	G2677T	G	N/A	PGP	citalopram	N/A	The 2677 GG/GT genotype was associated with a better treatment response ($p=0.001$) compared with 2677TT genotype. Furthermore, higher R,S-CIT plasma and CSF concentrations were observed in treatment responders. This study is the first to demonstrate that a P-significantly influences plasma and CSF concentrations of R,S-CIT patients, therefore possibly influencing the activity of antidepressant.	Ref #43
rs2032582	ABCB1	G2677T	G	N/A	PGP	paroxetine	N/A	The 2677 GG/GT genotype was associated with a better treatment response ($p=0.001$) compared with 2677TT genotype. Furthermore, higher R,S-CIT plasma and CSF concentrations were observed in treatment responders. This study is the first to demonstrate that a P-significantly influences plasma and CSF concentrations of R,S-CIT patients, therefore possibly influencing the activity of antidepressant.	Ref #44
rs2032582	ABCB1	G2677T	G	N/A	PGP	amitriptyline	N/A	The 2677 GG/GT genotype was associated with a better treatment response ($p=0.001$) compared with 2677TT genotype. Furthermore, higher R,S-CIT plasma and CSF concentrations were observed in treatment responders. This study is the first to demonstrate that a P-significantly influences plasma and CSF concentrations of R,S-CIT patients, therefore possibly influencing the activity of antidepressant.	Ref #45

rsID	Gene	Variant	Positive Allele	Your Genotype	Class	Treatment	Response	Publication Highlight	Citation
rs2032582	ABCB1	G2677T	G	N/A	PGP	venlafaxine	N/A	The 2677 GG/GT genotype was associated with a better treatment response ($p=0.001$) compared with 2677TT genotype. Furthermore, higher R,S-CIT plasma and CSF concentrations were observed in treatment responders. This study is the first to demonstrate that a P-significantly influences plasma and CSF concentrations of R,S-CIT patients, therefore possibly influencing the activity of antidepressant.	Ref #46
rs2032583	ABCB1	N/A	G	AG	PGP	citalopram	Heterozygous	Among major allele homozygotes for ABCB1 single nucleotide polymorphisms (SNPs) rs2032583 and rs2235015 (TT/GG genotype), an increase in dose was associated with a shorter duration of hospital stay [$\rho(28) = -0.441$, $p = 0.009$, 1-sided], whereas other treatment strategies (eg, switching to a nonsubstrate) showed no significant associations with better treatment outcome.	Ref #47
rs2032583	ABCB1	N/A	G	AG	PGP	paroxetine	Heterozygous	Among major allele homozygotes for ABCB1 single nucleotide polymorphisms (SNPs) rs2032583 and rs2235015 (TT/GG genotype), an increase in dose was associated with a shorter duration of hospital stay [$\rho(28) = -0.441$, $p = 0.009$, 1-sided], whereas other treatment strategies (eg, switching to a nonsubstrate) showed no significant associations with better treatment outcome.	Ref #48
rs2032583	ABCB1	N/A	G	AG	PGP	amitriptyline	Heterozygous	Among major allele homozygotes for ABCB1 single nucleotide polymorphisms (SNPs) rs2032583 and rs2235015 (TT/GG genotype), an increase in dose was associated with a shorter duration of hospital stay [$\rho(28) = -0.441$, $p = 0.009$, 1-sided], whereas other treatment strategies (eg, switching to a nonsubstrate) showed no significant associations with better treatment outcome.	Ref #49
rs2032583	ABCB1	N/A	G	AG	PGP	venlafaxine	Heterozygous	Among major allele homozygotes for ABCB1 single nucleotide polymorphisms (SNPs) rs2032583 and rs2235015 (TT/GG genotype), an increase in dose was associated with a shorter duration of hospital stay [$\rho(28) = -0.441$, $p = 0.009$, 1-sided], whereas other treatment strategies (eg, switching to a nonsubstrate) showed no significant associations with better treatment outcome.	Ref #50

rsID	Gene	Variant	Positive Allele	Your Genotype	Class	Treatment	Response	Publication Highlight	Citation
rs2235015	ABCB1	N/A	A	AC	PGP	citalopram	Heterozygous	Among major allele homozygotes for ABCB1 single nucleotide polymorphisms (SNPs) rs2032583 and rs2235015 (TT/GG genotype), an increase in dose was associated with a shorter duration of hospital stay [rho(28) = -0.441, p = 0.009, 1-sided], whereas other treatment strategies (eg, switching to a nonsubstrate) showed no significant associations with better treatment outcome.	Ref #51
rs2235015	ABCB1	N/A	A	AC	PGP	paroxetine	Heterozygous	Among major allele homozygotes for ABCB1 single nucleotide polymorphisms (SNPs) rs2032583 and rs2235015 (TT/GG genotype), an increase in dose was associated with a shorter duration of hospital stay [rho(28) = -0.441, p = 0.009, 1-sided], whereas other treatment strategies (eg, switching to a nonsubstrate) showed no significant associations with better treatment outcome.	Ref #52
rs2235015	ABCB1	N/A	A	AC	PGP	amitriptyline	Heterozygous	Among major allele homozygotes for ABCB1 single nucleotide polymorphisms (SNPs) rs2032583 and rs2235015 (TT/GG genotype), an increase in dose was associated with a shorter duration of hospital stay [rho(28) = -0.441, p = 0.009, 1-sided], whereas other treatment strategies (eg, switching to a nonsubstrate) showed no significant associations with better treatment outcome.	Ref #53
rs2235015	ABCB1	N/A	A	AC	PGP	venlafaxine	Heterozygous	Among major allele homozygotes for ABCB1 single nucleotide polymorphisms (SNPs) rs2032583 and rs2235015 (TT/GG genotype), an increase in dose was associated with a shorter duration of hospital stay [rho(28) = -0.441, p = 0.009, 1-sided], whereas other treatment strategies (eg, switching to a nonsubstrate) showed no significant associations with better treatment outcome.	Ref #54
rs1800532	TPH1	A218C	G	GG	SSRI	citalopram	Increased	The remission rate to citalopram treatment was worse in MDD subjects with the TPH1 A/A and A/C genotypes than in those with the TPH1 C/C genotype.	Ref #55
rs1800532	TPH	A218C	G	GG	SSRI	paroxetine	Increased	TPH*A/A and TPH*A/C variants were associated with a poorer response to paroxetine treatment when compared to TPH*C/C (P=0.005)	Ref #56
rs2242446	NET	T-182C	T	TT	SNRI	milnacipran	Increased	The presence of the T allele of the NET T-182C polymorphism was associated with a superior antidepressant response.	Ref #57
rs5569	NET	N/A	G	AA	TCA	nortriptyline	Decreased	The NET G1287A GG genotype (56% of the population) was associated with better response to the NRI (83.3% [35/42]) than to SSRI (58.7% [44/75]) (OR = 3.52; 95% CI, 1.39-8.95; P = .006).	Ref #58

rsID	Gene	Variant	Positive Allele	Your Genotype	Class	Treatment	Response	Publication Highlight	Citation
rs2242446	NET	T-182C	T	TT	SNRI	milnacipran	Increased	The presence of the T allele of the NET T-was associated with a response, whereas the A/A genotype of the NET was associated with a slower onset of therapeutic response.	Ref #59
rs5569	NET	G1287A	G	AA	SNRI	milnacipran	Decreased	The presence of the T allele of the NET T-was associated with a response, whereas the A/A genotype of the NET was associated with a slower onset of therapeutic response.	Ref #60
rs6295	HTR1A	C-1019G	C	CG	SSRI	fluoxetine	Heterozygous	Our results demonstrated that the HTR1A -1019C/C carriers (P=0.009) and SERTPR I/I carriers (P<0.001) showed a better response to fluoxetine.	Ref #61
rs1800042	5HT1A	N/A	T	N/A	SSRI	fluvoxamine	N/A	The subjects with the Asp allele had a significantly higher % reduction in the HAM-D-17 score than those with the Gly/Gly genotype at week 2 (P=0.009), week 6 (P=0.036), and week 12 (P=0.031). There was a significant difference in the genotype distribution between the responders and nonresponders.	Ref #63
rs6295	5HT1A	-1019C/G	C	CG	TMS	TMS	Heterozygous	C/C patients showed a higher difference between active and sham stimulation, indicating that these patients benefited more by TMS than C/G and G/G subjects.	Ref #64
rs6313	5HT2A	N/A	A	AG	sleep deprivation	sleep deprivation	Heterozygous	5-HT2A receptor gene polymorphism rs6313 was associated with 5-HT2A receptor binding potential, with the ability of individuals to use environmental support in order to prevent depression, and with sleep improvement after antidepressant treatment with mirtazapine.	Ref #65
rs6311	5-HTR2A	-1438A/G	C	CT	SSRI	citalopram	Heterozygous	These results suggest that the G allele of the -1438A/in the 5-HTR2A gene is associated with MDD, and that patients with -1438G/-1438G have a better response to citalopram treatment than patients with -1438A/-1438A or -1438A/-1438G.	Ref #66
rs1360780	FKBP5	N/A	T	CC	SSRI	citalopram	Decreased	Individuals homozygous for the TT-genotype at one of the markers (rs1360780) reported episodes and responded better treatment.	Ref #67
rs242941	CRHR1	N/A	C	CC	SSRI	fluoxetine	Increased	The results show that the rs242941 G/G genotype and homozygous GAG haplotype of the three single-nucleotide polymorphisms (SNPs) are associated with fluoxetine therapeutic response in MDD patients of high-anxiety (HA).	Ref #68
rs1049353	CNR1	N/A	C	CC	SSRI	citalopram	Increased	The longitudinal study showed that (i) the CNR1 rs1049353-GG genotype conferred a better response to citalopram treatment in the subgroup of male patients	Ref #69

rsID	Gene	Variant	Positive Allele	Your Genotype	Class	Treatment	Response	Publication Highlight	Citation
rs2501431	CNR2	N/A	A	AG	SSRI	citalopram	Heterozygous	G allele carriers (CNR2 rs2501431) presented higher HDRS scores in the follow-up than AA homozygous allele carriers.	Ref #70
rs10473984	CRHBP	N/A	G	GT	SSRI	citalopram	Heterozygous	The T allele of this SNP was associated with poorer treatment outcome in 2 of the 3 ethnic subsamples (African American and Hispanic), despite large differences in minor allele frequency.	Ref #71
rs242941	CRHR1	N/A	C	CC	SSRI	fluoxetine	Increased	The results show that the rs242941 G/G genotype and homozygous GAG haplotype of the three single-nucleotide polymorphisms (SNPs) are associated with fluoxetine therapeutic response in MDD patients of high-anxiety (HA).	Ref #72
rs2270007	CRHR2	N/A	C	N/A	SSRI	citalopram	N/A	Allele G carriers of rs2270007 of CRHR2 gene, showed a worse overall response to citalopram along time of follow-up (Genotype effect $F=7.45$, $P=0.007$). G allele carriers showed 2.93 increased risk (95% CI [1.24-6.90]) for non-responding at 4th week to citalopram treatment (chi-square=7.59, df=1, $P=0.006$).	Ref #73
rs1800497	DRD2	Taq1A	G	GG	NDRI	bupropion	Increased	These data suggest that bupropion may be effective for smoking cessation only in a subgroup of smokers with the DRD2 Taq1 A2/A2 genotype.	Ref #74
rs1800497	DRD2	Taq1A	A	GG	SSRI	paroxetine	Decreased	Furthermore, there was a significant allele by time interaction on the social dysfunction scale, with A1+ allelic patients showing significant improvement in social functioning compared to A1- allelic patients ($P=0.031$), an effect independent of changes or anxiety. This suggests changes in social functioning induced by paroxetine may be, in part, mediated via D2 dopamine receptors.	Ref #75
rs6277	DRD2	C957T	G	AG	ECT	ECT	Heterozygous	The patients with TT genotype of D2 receptor gene combined with COMT Met/Met genotype did not achieve remission as often as those with CC genotype of DRD2 C957T combined with COMT Val/Val genotype.	Ref #76
rs3732790	DRD3	N/A	T	N/A	ECT	ECT	N/A	The rs3732790T allele conferred a more favourable treatment response	Ref #77
rs1800544	DRD4	N/A	G	N/A	SSRI	SSRI	N/A	The frequency of the DRD4 rs1800544 CG genotype was significantly higher ($P = 0.003$) in responders (51.4%) than in nonresponders (35.8%), and patients with the CG genotype showed an 81.7% response rate. In comparison, the response rates were 73.9% and 52.2% in patients with the GG genotype and the CC genotype, respectively.	Ref #78

rsID	Gene	Variant	Positive Allele	Your Genotype	Class	Treatment	Response	Publication Highlight	Citation
rs16944	IL-1beta	C-511T	A	AG	SSRI	paroxetine	Heterozygous	Patients homozygous for the IL-1beta-511T allele had a significantly faster and more pronounced response to paroxetine treatment than IL-1beta-511C allele carriers.	Ref #79
rs16944	IL-1beta	C-511T	A	AG	SSRI	fluoxetine	Heterozygous	However, MDD patients who were homozygous for the -511T allele of the IL-1beta gene had a trend of less severity symptoms and more favorable fluoxetine therapeutic response than -511C carriers.	Ref #80
rs1126757	IL11	N/A	T	CC	SSRI	escitalopram	Decreased	A synonymous SNP in the coding region of the interleukin-11 gene, IL11, was associated with outcome at a suggestive level of significance (Table 2, Figure 2).	Ref #81
rs2500535	UST	N/A	G	AG	TCA	nortriptyline	Heterozygous	Carriers of the minor A allele at rs2500535 experienced less improvement than carriers of the GG homozygote from week 4 onward.	Ref #82
rs3736544	CLOCK	N/A	A	AG	SSRI	fluvoxamine	Heterozygous	We detected a significant association between rs3736544, a synonymous polymorphism in exon 20, and the fluvoxamine therapeutic response in MDD in the allele/genotype-wise analyses. In addition, remission with fluvoxamine was also significantly associated with rs3736544.	Ref #83
rs3749474	CLOCK	N/A	C	CT	SSRI	fluvoxamine	Heterozygous	In healthy participants, the C allele was associated with a significantly greater delay in preferred timing for activity or sleep. In mood disorders, the same C variant was coupled with higher recurrence rates in patients with bipolar disorders, increased lifetime sleep disturbances and persistence of insomnia during anti depressant therapy. Recently, a significant association between rs3736544 (T allele) and response and between rs3749474 (C allele) and remission has been found.	Ref #84
rs1800544	ADRA2A	C-1297G	C	N/A	SNRI	milnacipran	N/A	The C allele carriers of the ADRA2A C-1297G polymorphism showed a significantly better improvement than G/G subjects at weeks 2, 4, and over time (P = 0.037) in the milnacipran group.	Ref #85
rs334558	GSK3B	-50T/C	G	AA	lithium	lithium	Decreased	The allele frequencies in our sample were CC 14.8%, CT 48.2% and TT 37% (no deviation from the Hardy-Weinberg equilibrium). Carriers of the C-allele of the -50T/C SNP showed a significantly better response to lithium augmentation (hazard ratio: 2.70, p = .007), with a mean remission rate of 56.25% after 4 weeks compared to 31% in patients with the TT-genotype (chi-square = 4.1; p = .04).	Ref #86
rs5443	GNB3	C825T	C	CC	TCA	nortriptyline	Increased	The GNB3 polymorphism, which results in a 41 amino acid deletion, was significantly associated with lack of remission (OR=0.18, P=0.02) and lack of response (OR=0.26, P=0.03) following 2nd switch treatment.	Ref #87

rsID	Gene	Variant	Positive Allele	Your Genotype	Class	Treatment	Response	Publication Highlight	Citation
rs11042725	ADM	N/A	A	AC	N/A	paroxetine	Heterozygous	Association analysis demonstrated rs11042725 to be significantly associated with response to paroxetine (odds ratio=0.075, P<0.001) but not with response to either fluoxetine or citalopram. Our results suggest that ADM is involved with the therapeutic efficacy of paroxetine, which may have pharmacogenetic utility.	Ref #88
rs2235544	DIO1	-C785T	A	CC	triiodothyronine	triiodothyronine	Decreased	HRSD-21 scores of DIO1-758T allele carriers declined by 68.7+26.6% (mean+SD) over 8 weeks compared to 42.9+37.8% among non-carriers (p=0.02).	Ref #90

References:

- #1: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3786174/>
- #2: <http://www.ncbi.nlm.nih.gov/pubmed/25658497>
- #3: <http://www.ncbi.nlm.nih.gov/pubmed/25658497>
- #4: <http://www.ncbi.nlm.nih.gov/pubmed/25658497>
- #5: <http://www.ncbi.nlm.nih.gov/pubmed/25231750>
- #6: <http://www.ncbi.nlm.nih.gov/pubmed/18450378>
- #7: <http://www.ncbi.nlm.nih.gov/pubmed/25074447>
- #8: <http://www.ncbi.nlm.nih.gov/pubmed/25324022>
- #9: <http://www.ncbi.nlm.nih.gov/pubmed/25377609>
- #10: <http://www.ncbi.nlm.nih.gov/pubmed/16979146>
- #12: <http://www.ncbi.nlm.nih.gov/pubmed/19493959>
- #13: <http://www.ncbi.nlm.nih.gov/pubmed/24154666>
- #14: <http://www.ncbi.nlm.nih.gov/pubmed/18315446>
- #15: <http://www.ncbi.nlm.nih.gov/pubmed/14512208>
- #16: <http://www.ncbi.nlm.nih.gov/pubmed/14512208>
- #17: <http://www.ncbi.nlm.nih.gov/pubmed/23615118>
- #18: <http://www.ncbi.nlm.nih.gov/pubmed/21962566>
- #19: <http://www.ncbi.nlm.nih.gov/pubmed/17018806>
- #20: <http://www.ncbi.nlm.nih.gov/pubmed/17018806>
- #21: <http://www.ncbi.nlm.nih.gov/pubmed/17018806>
- #22: <http://www.ncbi.nlm.nih.gov/pubmed/15812265>
- #23: <http://www.ncbi.nlm.nih.gov/pubmed/15812265>
- #24: <http://www.ncbi.nlm.nih.gov/pubmed/20010449>
- #25: <http://www.ncbi.nlm.nih.gov/pubmed/18450378>
- #26: <http://www.ncbi.nlm.nih.gov/pubmed/17373693>
- #27: <http://www.ncbi.nlm.nih.gov/pubmed/17618721>
- #28: <http://www.ncbi.nlm.nih.gov/pubmed/19567893>
- #29: <http://www.ncbi.nlm.nih.gov/pubmed/18989660>
- #30: <http://www.ncbi.nlm.nih.gov/pubmed/15520843>
- #31: <http://www.ncbi.nlm.nih.gov/pubmed/20619611>

#32: <http://www.ncbi.nlm.nih.gov/pubmed/18533273>
#33: <http://www.ncbi.nlm.nih.gov/pubmed/23706899>
#34: <http://www.ncbi.nlm.nih.gov/pubmed/19520435>
#35: <http://www.ncbi.nlm.nih.gov/pubmed/18929622>
#36: <http://www.ncbi.nlm.nih.gov/pubmed/18023073>
#37: <http://www.ncbi.nlm.nih.gov/pubmed/19095219>
#40: <http://www.ncbi.nlm.nih.gov/pubmed/25815420>
#41: <http://www.ncbi.nlm.nih.gov/pubmed/25815420>
#42: <http://www.ncbi.nlm.nih.gov/pubmed/25815420>
#43: <http://www.ncbi.nlm.nih.gov/pubmed/18940259>
#44: <http://www.ncbi.nlm.nih.gov/pubmed/18940259>
#45: <http://www.ncbi.nlm.nih.gov/pubmed/18940259>
#46: <http://www.ncbi.nlm.nih.gov/pubmed/18940259>
#47: <http://www.ncbi.nlm.nih.gov/pubmed/23880209>
#48: <http://www.ncbi.nlm.nih.gov/pubmed/23880209>
#49: <http://www.ncbi.nlm.nih.gov/pubmed/23880209>
#50: <http://www.ncbi.nlm.nih.gov/pubmed/23880209>
#51: <http://www.ncbi.nlm.nih.gov/pubmed/23880209>
#52: <http://www.ncbi.nlm.nih.gov/pubmed/23880209>
#53: <http://www.ncbi.nlm.nih.gov/pubmed/23880209>
#54: <http://www.ncbi.nlm.nih.gov/pubmed/23880209>
#55: <http://www.ncbi.nlm.nih.gov/pubmed/16979275>
#56: <http://www.ncbi.nlm.nih.gov/pubmed/11597824>
#57: <http://www.ncbi.nlm.nih.gov/pubmed/20491280>
#58: <http://www.ncbi.nlm.nih.gov/pubmed/17018806>
#59: <http://www.ncbi.nlm.nih.gov/pubmed/15337646>
#60: <http://www.ncbi.nlm.nih.gov/pubmed/15337646>
#61: <http://www.ncbi.nlm.nih.gov/pubmed/16302021>
#63: <http://www.ncbi.nlm.nih.gov/pubmed/15148501>
#64: <http://www.ncbi.nlm.nih.gov/pubmed/17466494>
#65: <http://www.ncbi.nlm.nih.gov/pubmed/18801406>
#66: <http://www.ncbi.nlm.nih.gov/pubmed/16127283>
#67: <http://www.ncbi.nlm.nih.gov/pubmed/18191112>
#68: <http://www.ncbi.nlm.nih.gov/pubmed/17258395>
#69: <http://www.ncbi.nlm.nih.gov/pubmed/22826533>
#70: <http://www.ncbi.nlm.nih.gov/pubmed/22826533>
#71: <http://www.ncbi.nlm.nih.gov/pubmed/20368512>
#72: <http://www.ncbi.nlm.nih.gov/pubmed/17258395>
#73: <http://www.ncbi.nlm.nih.gov/pubmed/17467808>
#74: <http://www.ncbi.nlm.nih.gov/pubmed/18058343?dopt=Abstract>
#75: <http://www.ncbi.nlm.nih.gov/pubmed/12957328>
#76: <http://www.ncbi.nlm.nih.gov/pubmed/18929622>
#77: <http://www.ncbi.nlm.nih.gov/pubmed/22093107>
#78: <http://www.ncbi.nlm.nih.gov/pubmed/25854875>

#79: <http://www.ncbi.nlm.nih.gov/pubmed/18728809>

#80: <http://www.ncbi.nlm.nih.gov/pubmed/12700687>

#81: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3698532/>

#82: <http://www.ncbi.nlm.nih.gov/pubmed/20360315>

#83: <http://www.ncbi.nlm.nih.gov/pubmed/19347611>

#84: <http://jpn.ca/wp-content/uploads/2014/04/36-2-87.pdf>

#85: <http://www.ncbi.nlm.nih.gov/pubmed/18794646>

#86: <http://www.ncbi.nlm.nih.gov/pubmed/17628506>

#87: <http://www.ncbi.nlm.nih.gov/pubmed/17460549>

#88: <http://www.ncbi.nlm.nih.gov/pubmed/19636336>

#90: <http://www.ncbi.nlm.nih.gov/pubmed/19064291>

SAMPLE