Supplementary Figures

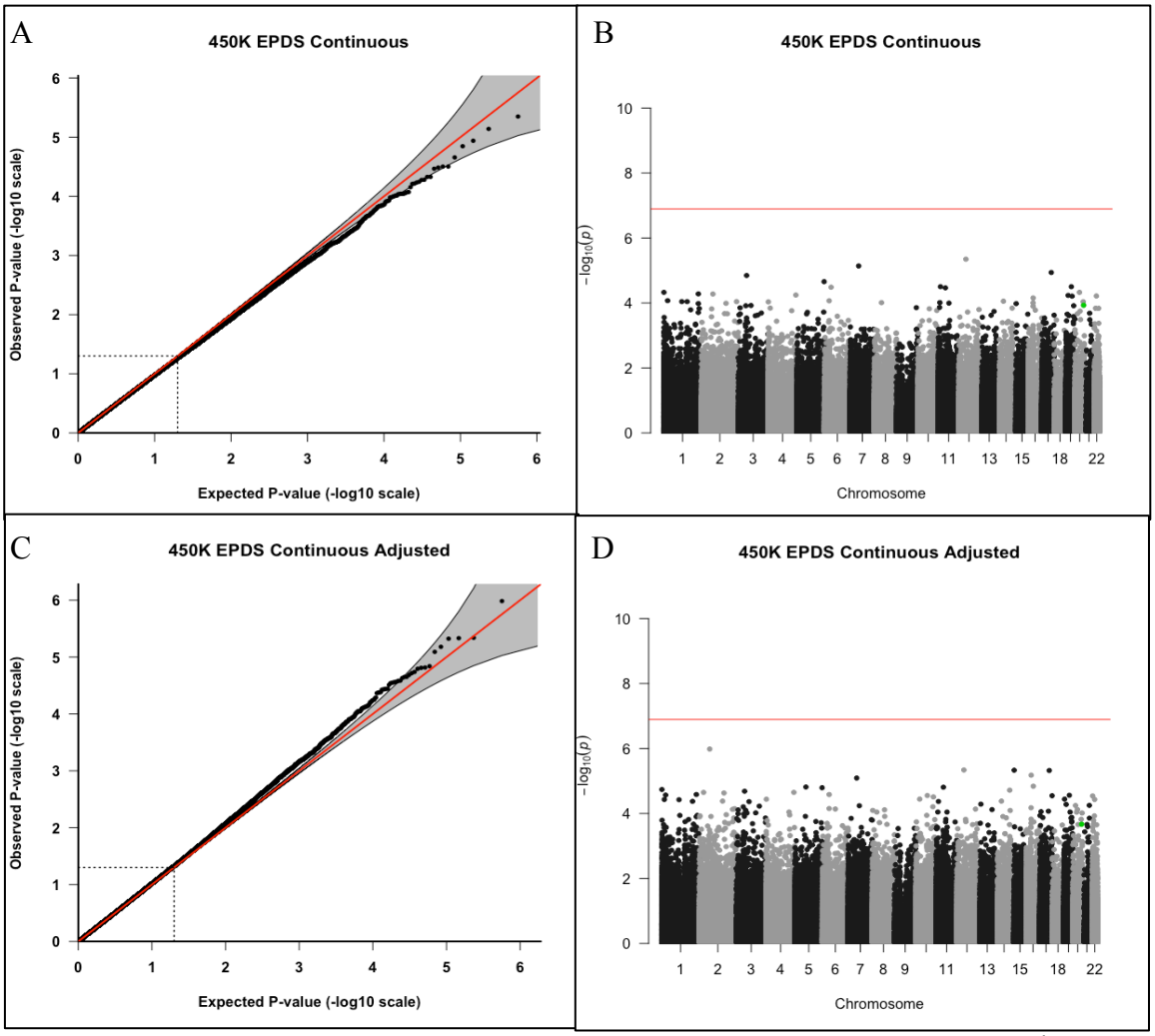


Figure S1: Results for the 450K EWAS for the EPDS continuous variable. The EPIC EWAS was adjusted for all covariates. A) Plot A is the QQ-plot for the unadjusted p-values. B) Plot B is the manhattan plot for the unadjusted p-values. The highlighted site is cg22798925. C) Plot C is the QQ-plot for the adjusted p-values using Bacon and Cate. D) Plot D is the manhattan plot for adjusted p-values using Bacon and Cate. The highlighted site is cg22798925.

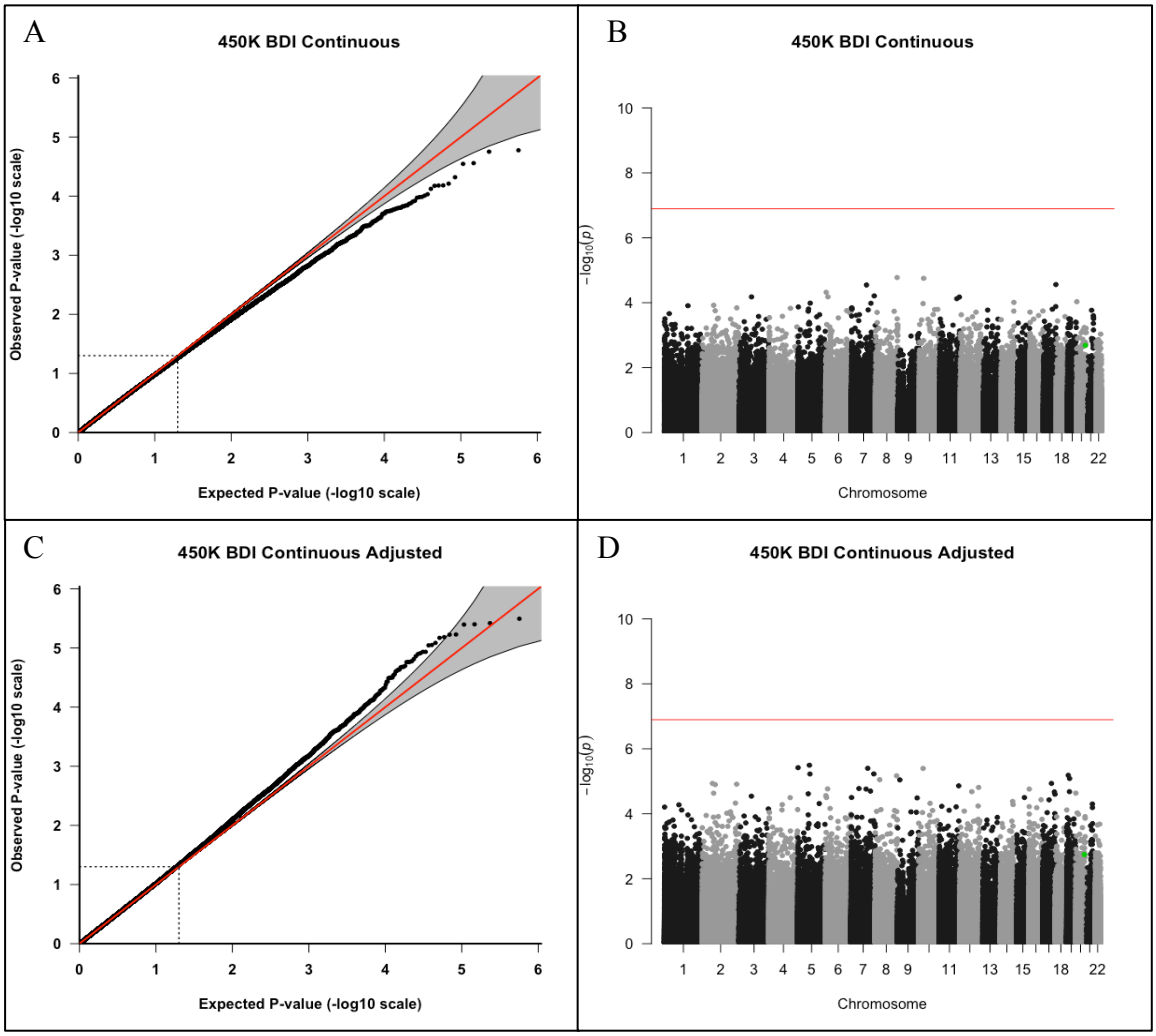


Figure S2: Results for the 450K EWAS for the BDI-II continuous variable. The EPIC EWAS was adjusted for all covariates. A) Plot A is the QQ-plot for the unadjusted p-values. B) Plot B is the manhattan plot for the unadjusted p-values. The highlighted site is cg22798925. C) Plot C is the QQ-plot for the adjusted p-values using Bacon and Cate. D) Plot D is the manhattan plot for adjusted p-values using Bacon and Cate. The highlighted site is cg22798925.

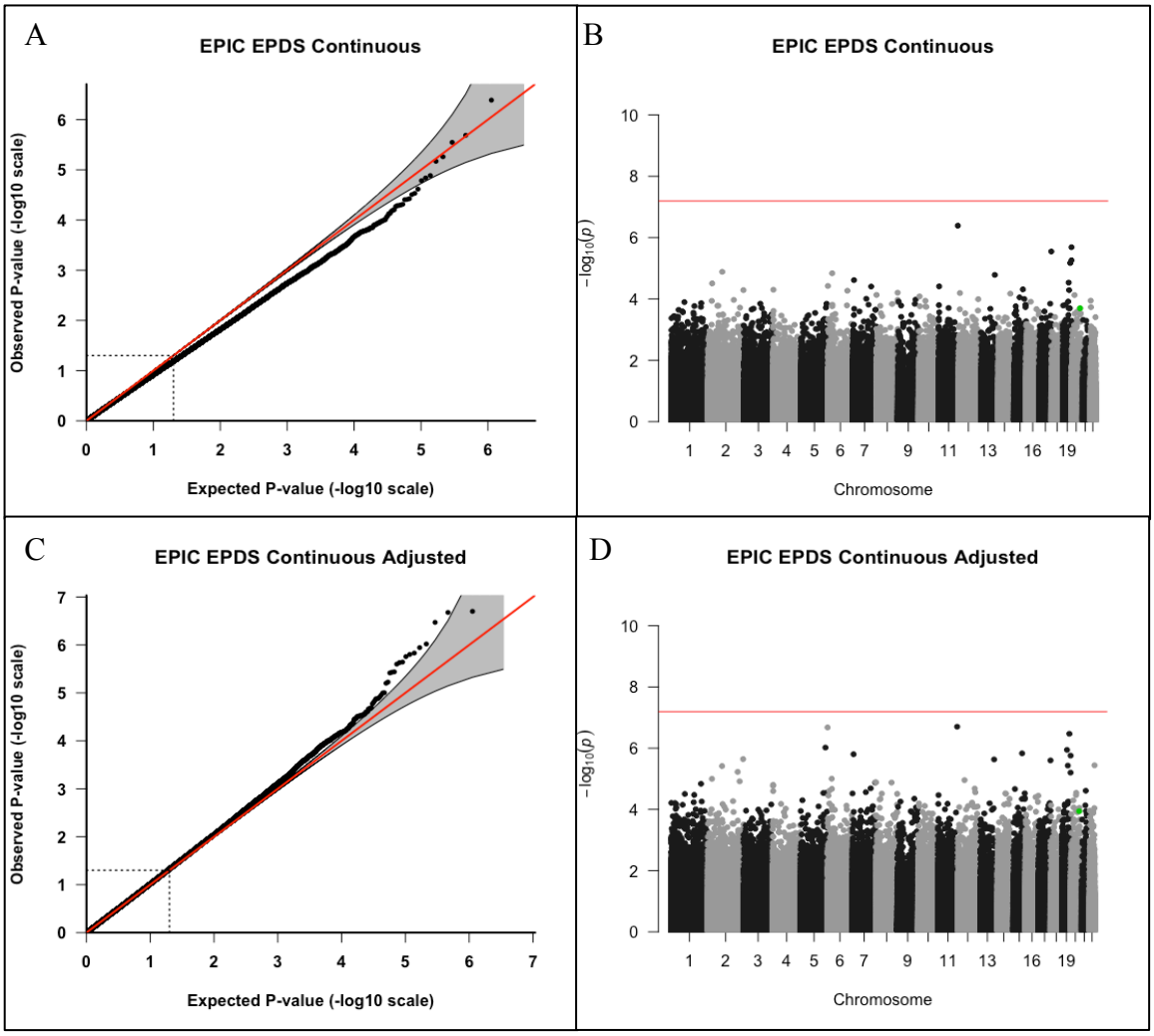


Figure S3: Results for the EPIC EWAS for the EDPS continuous variable. The EPIC EWAS was adjusted for all covariates. A) Plot A is the QQ-plot for the unadjusted p-values. B) Plot B is the manhattan plot for the unadjusted p-values. The highlighted site is cg22798925. C) Plot C is the QQ-plot for the adjusted p-values using Bacon and Cate. D) Plot D is the manhattan plot for adjusted p-values using Bacon and Cate. The highlighted site is cg22798925.

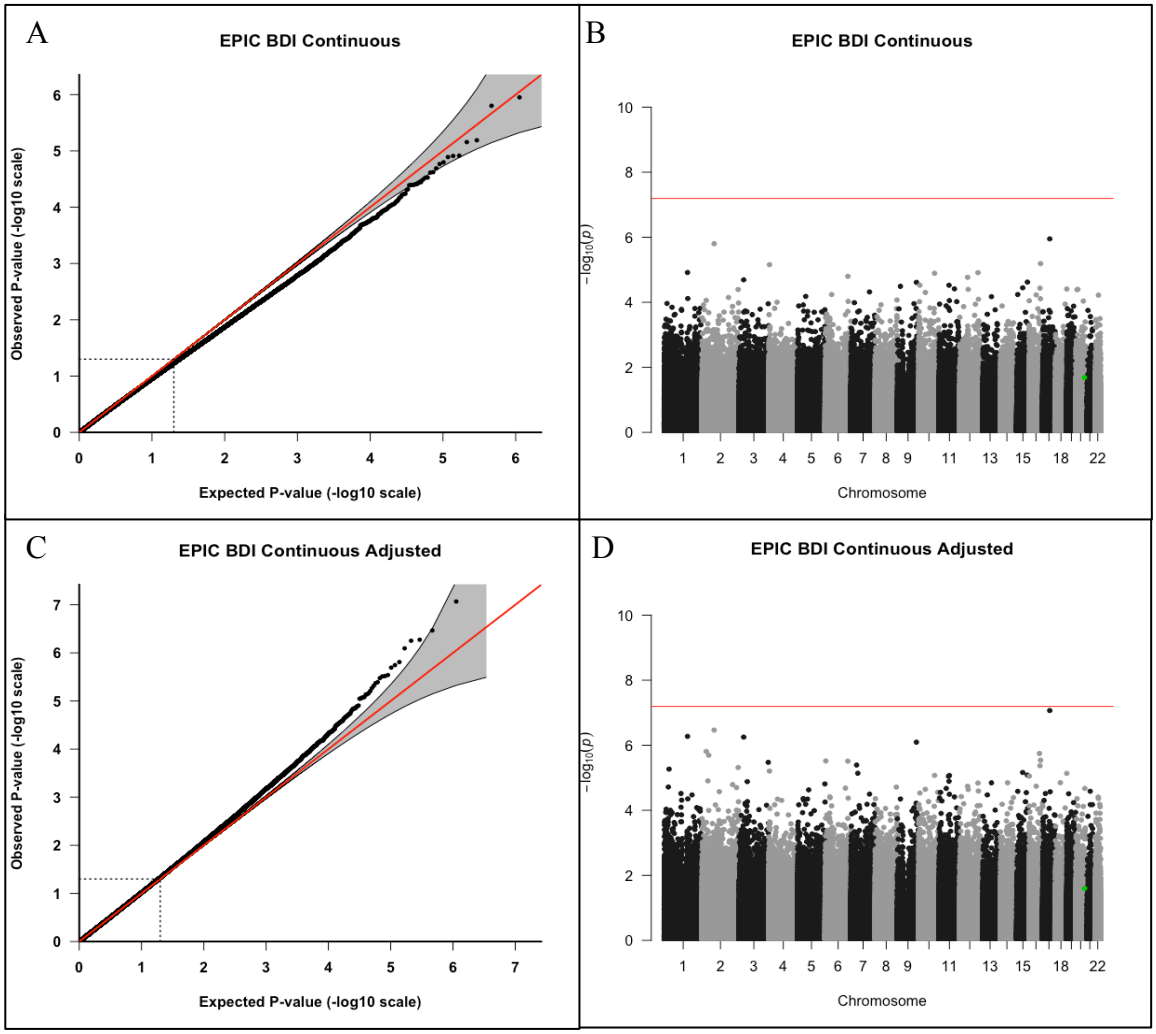
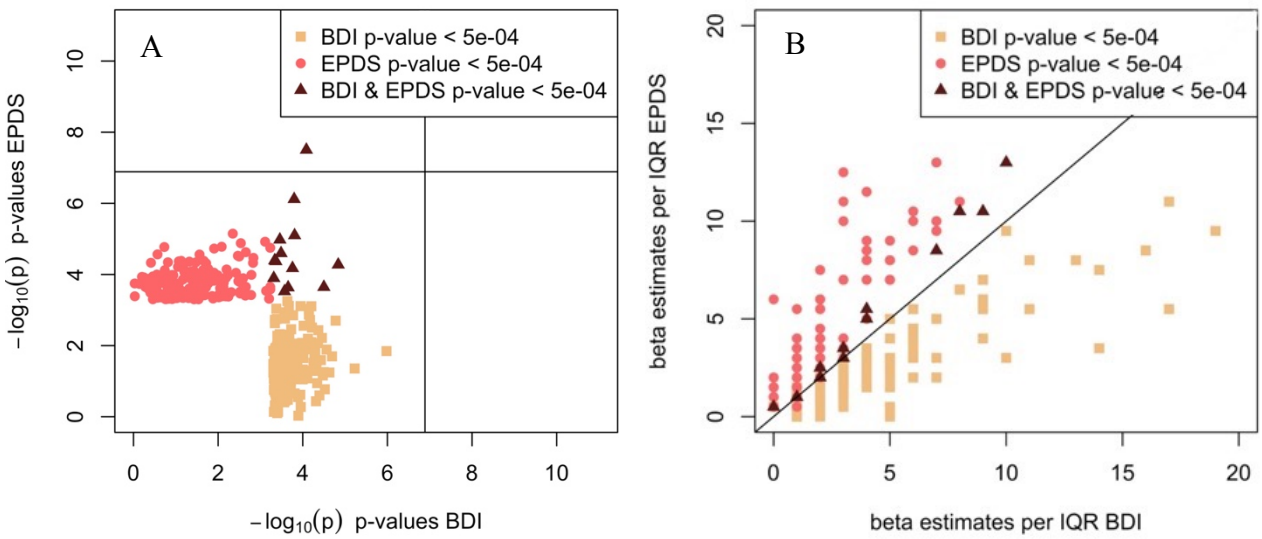


Figure S4: Results for the EPIC EWAS for the BDI-II continuous variable. The EPIC EWAS was adjusted for all covariates. A) Plot A is the QQ-plot for the unadjusted p-values. B) Plot B is the manhattan plot for the unadjusted p-values. The highlighted site is cg22798925. C) Plot C is the QQ-plot for the adjusted p-values using Bacon and Cate. D) Plot D is the manhattan plot for adjusted p-values using Bacon and Cate. The highlighted site is cg22798925.



S5: Comparison between the p-values and beta estimates for the EPDS and BDI-II continuous variables from the meta-analysis. The meta-analysis was adjusted for all covariates. A) Plot A is for the p-values between the EPDS and BDI-II continuous variables below a threshold of 5e-04. B) Plot B is for the beta estimates per IQR for the EPDS and BDI-II continuous variables. The plotted values are the beta estimates divided by the IQR to account for the different ranges between the EPDS and BDI-II scales.

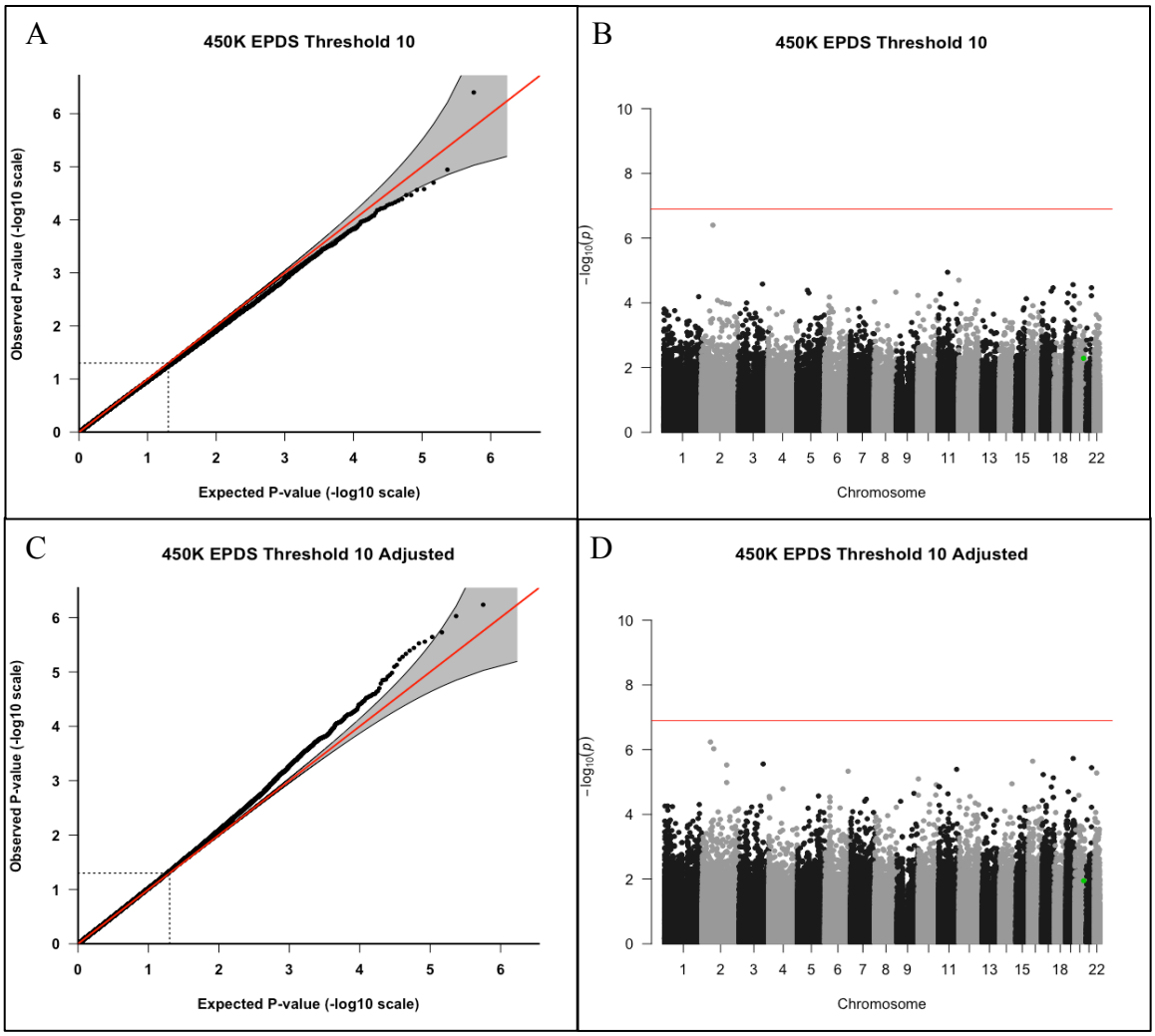


Figure S6: Results for the 450K EWAS for the EPDS 10 threshold variable. The EPIC EWAS was adjusted for all covariates. A) Plot A is the QQ-plot for the unadjusted p-values. B) Plot B is the manhattan plot for the unadjusted p-values. The highlighted site is cg22798925. C) Plot C is the QQ-plot for the adjusted p-values using Bacon and Cate. D) Plot D is the manhattan plot for adjusted p-values using Bacon and Cate. The highlighted site is cg22798925.

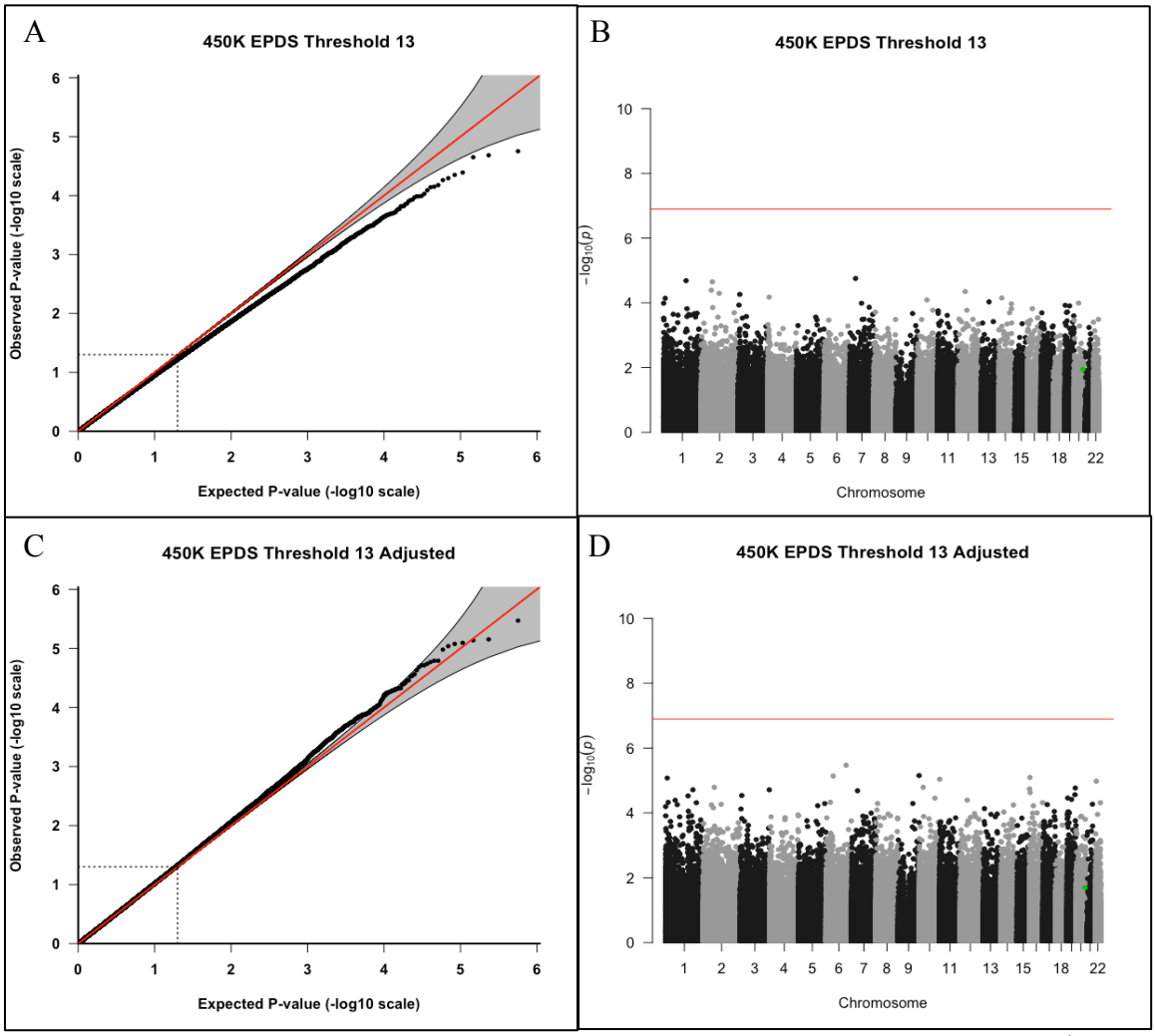


Figure S7: Results for the 450K EWAS for the BDI-II 20 threshold variable. The EPIC EWAS was adjusted for all covariates. A) Plot A is the QQ-plot for the unadjusted p-values. B) Plot B is the manhattan plot for the unadjusted p-values. The highlighted site is cg22798925. C) Plot C is the QQ-plot for the adjusted p-values using Bacon and Cate. D) Plot D is the manhattan plot for adjusted p-values using Bacon and Cate. The highlighted site is cg22798925.

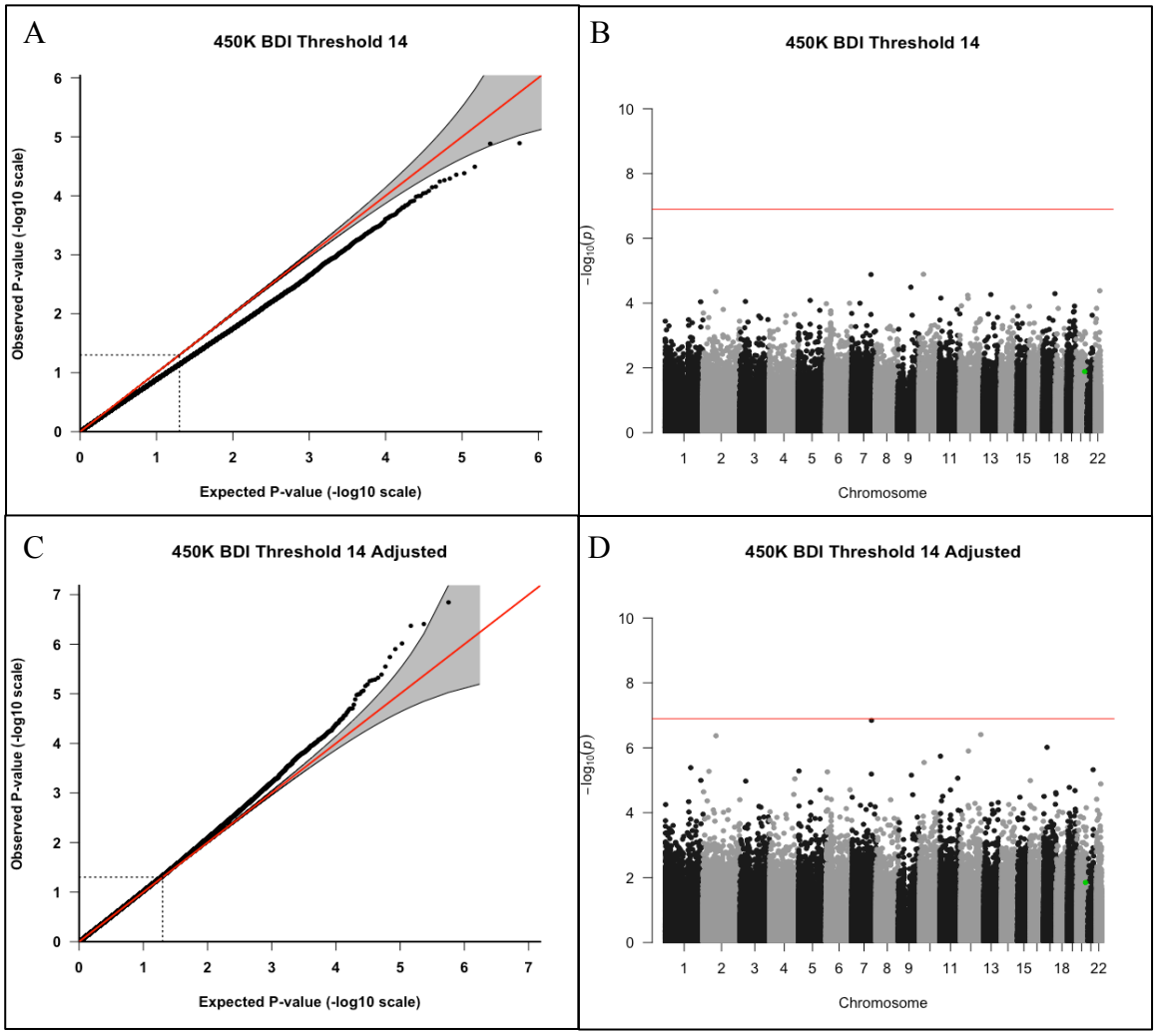


Figure S8: Results for the 450K EWAS for the BDI-II 14 threshold variable. The EPIC EWAS was adjusted for all covariates. A) Plot A is the QQ-plot for the unadjusted p-values. B) Plot B is the manhattan plot for the unadjusted p-values. The highlighted site is cg22798925. C) Plot C is the QQ-plot for the adjusted p-values using Bacon and Cate. D) Plot D is the manhattan plot for adjusted p-values using Bacon and Cate. The highlighted site is cg22798925.

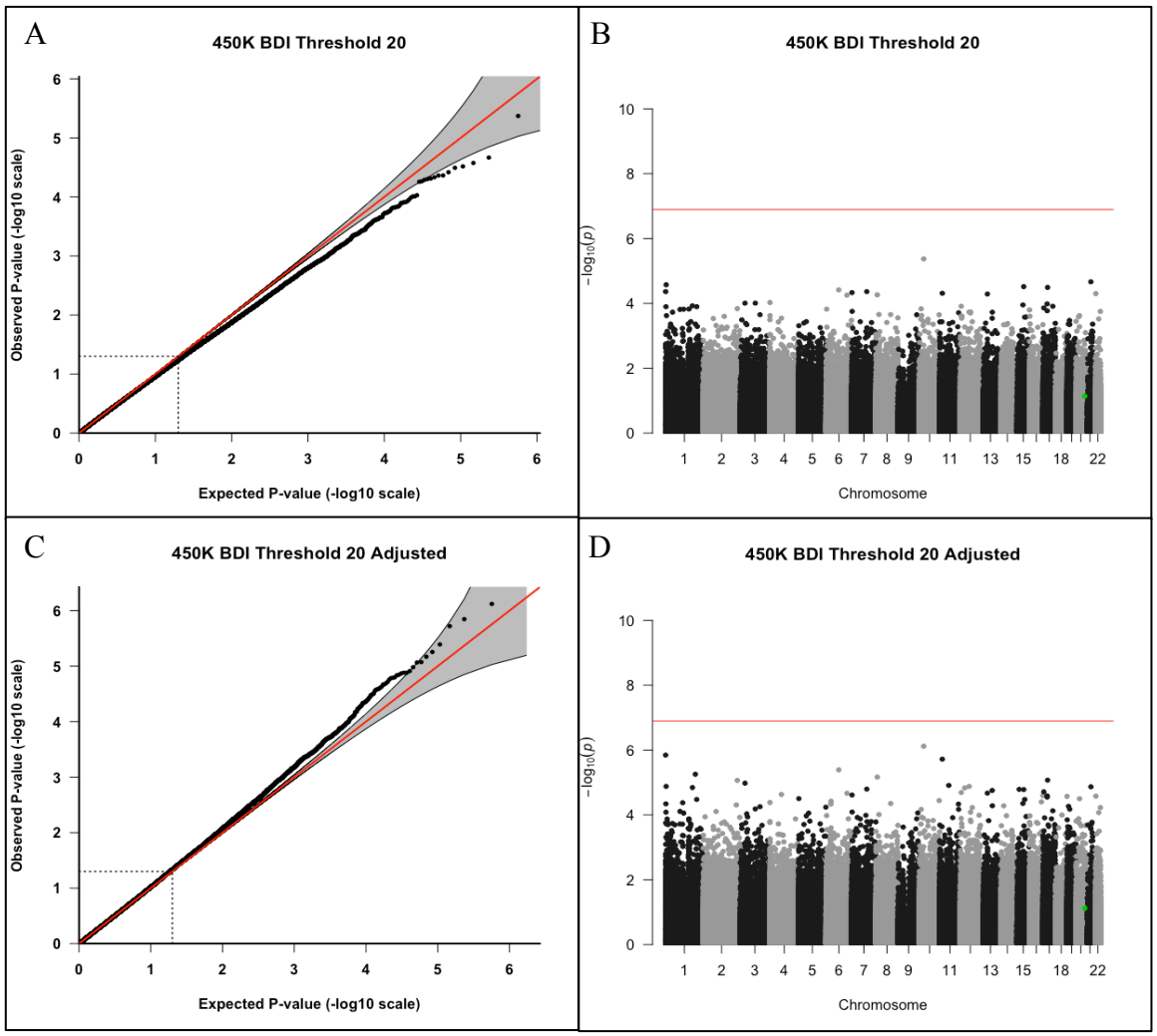


Figure S9: Results for the 450K EWAS for the BDI-II 20 threshold variable. The EPIC EWAS was adjusted for all covariates. A) Plot A is the QQ-plot for the unadjusted p-values. B) Plot B is the manhattan plot for the unadjusted p-values. The highlighted site is cg22798925. C) Plot C is the QQ-plot for the adjusted p-values using Bacon and Cate. D) Plot D is the manhattan plot for adjusted p-values using Bacon and Cate. The highlighted site is cg22798925.

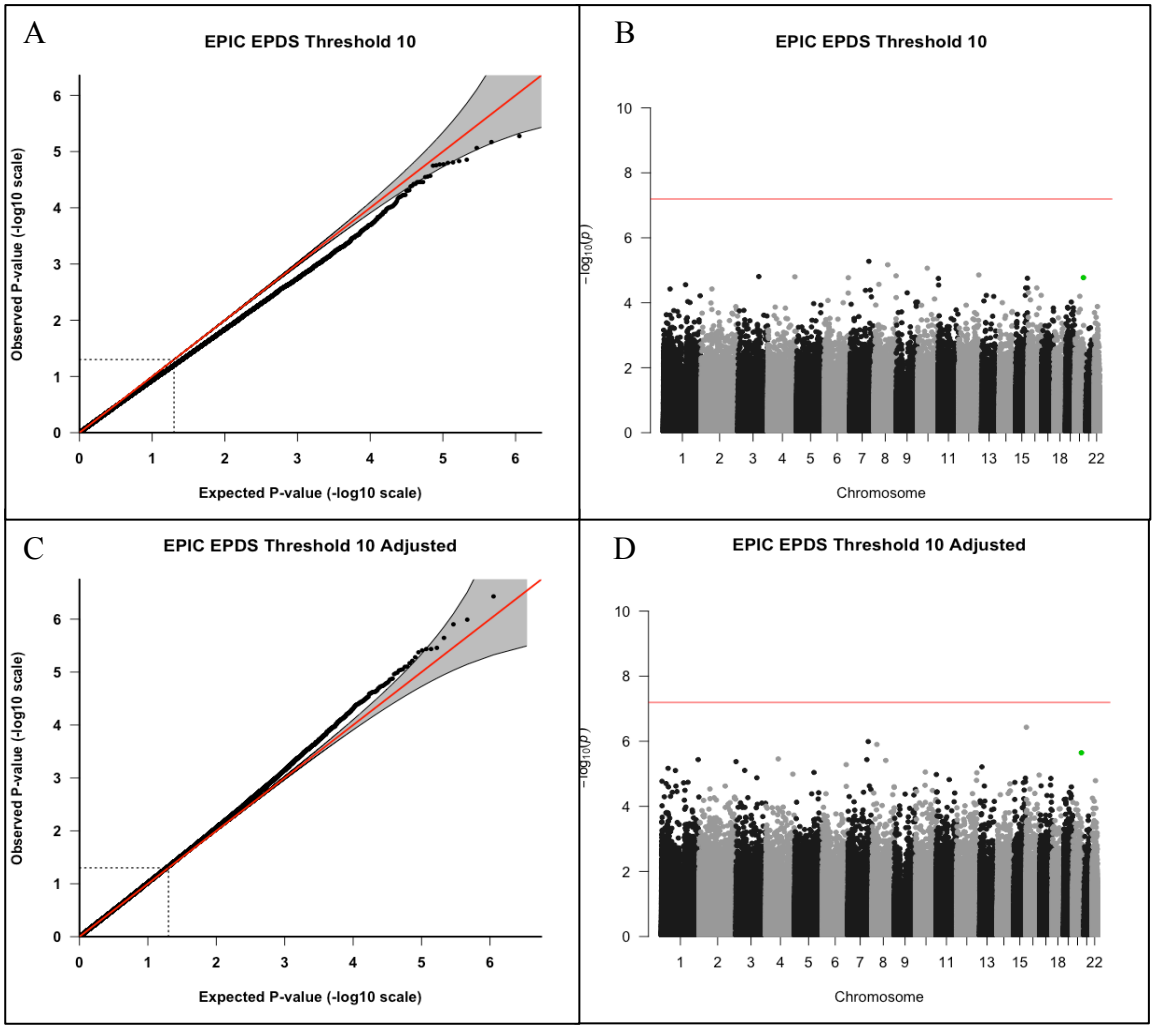


Figure S10: Results for the EPIC EWAS for the EPDS 10 threshold variable. The EPIC EWAS was adjusted for all covariates. A) Plot A is the QQ-plot for the unadjusted p-values. B) Plot B is the manhattan plot for the unadjusted p-values. The highlighted site is cg22798925. C) Plot C is the QQ-plot for the adjusted p-values using Bacon and Cate. D) Plot D is the manhattan plot for adjusted p-values using Bacon and Cate. The highlighted site is cg22798925.

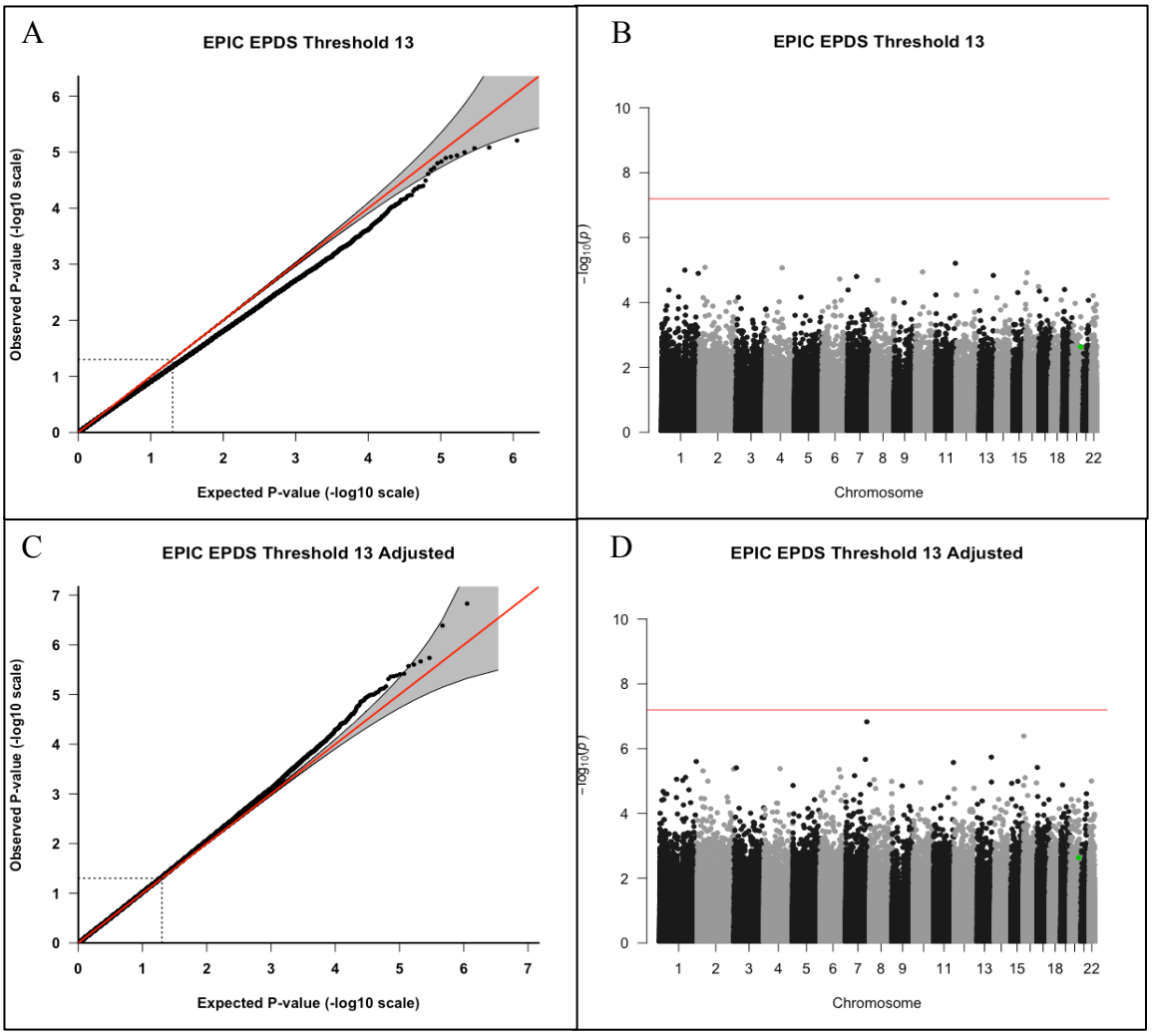


Figure S11: Results for the EPIC EWAS for the EPDS 13 threshold variable. The EPIC EWAS was adjusted for all covariates. A) Plot A is the QQ-plot for the unadjusted p-values. B) Plot B is the manhattan plot for the unadjusted p-values. The highlighted site is cg22798925. C) Plot C is the QQ-plot for the adjusted p-values using Bacon and Cate. D) Plot D is the manhattan plot for adjusted p-values using Bacon and Cate. The highlighted site is cg22798925.

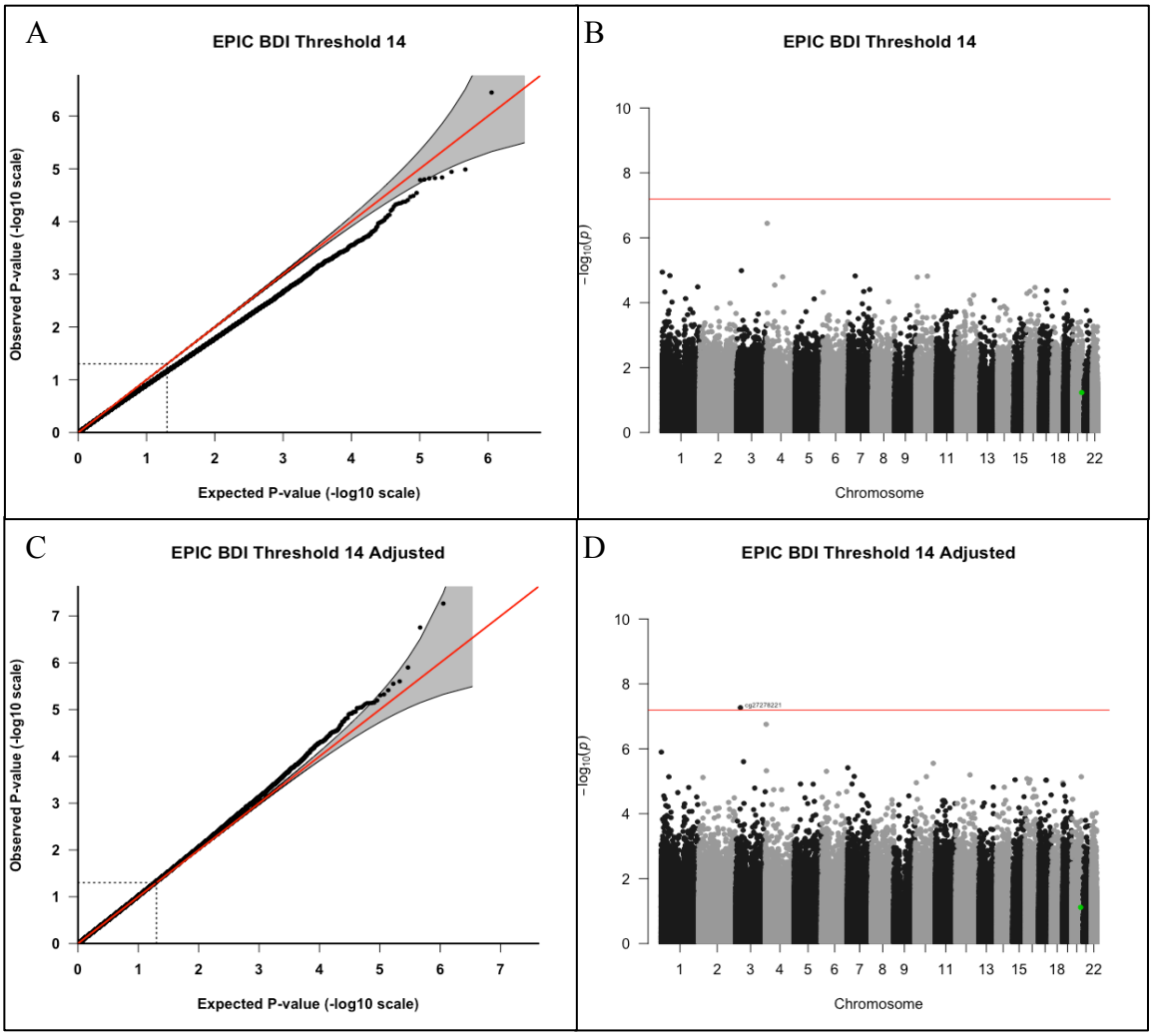


Figure S12: Results for the EPIC EWAS for the BDI-II 14 threshold variable. The EPIC EWAS was adjusted for all covariates. A) Plot A is the QQ-plot for the unadjusted p-values. B) Plot B is the manhattan plot for the unadjusted p-values. The highlighted site is cg22798925. C) Plot C is the QQ-plot for the adjusted p-values using Bacon and Cate. D) Plot D is the manhattan plot for adjusted p-values using Bacon and Cate. The highlighted site is cg22798925.

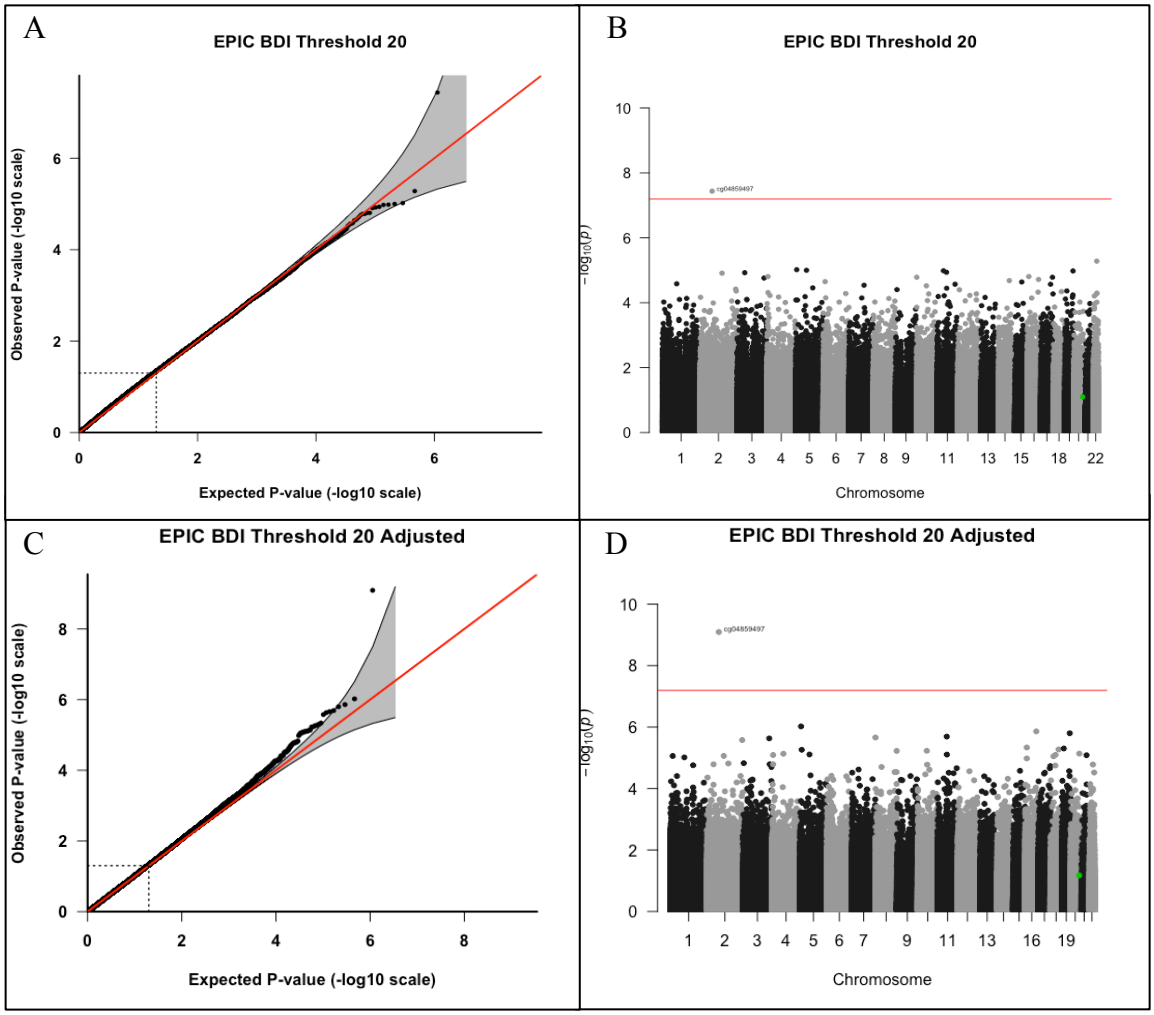


Figure S13: Results for the EPIC EWAS for the BDI-II 20 threshold variable. The EPIC EWAS was adjusted for all covariates. A) Plot A is the QQ-plot for the unadjusted p-values. B) Plot B is the manhattan plot for the unadjusted p-values. The highlighted site is cg22798925. C) Plot C is the QQ-plot for the adjusted p-values using Bacon and Cate. D) Plot D is the manhattan plot for adjusted p-values using Bacon and Cate. The highlighted site is cg22798925.

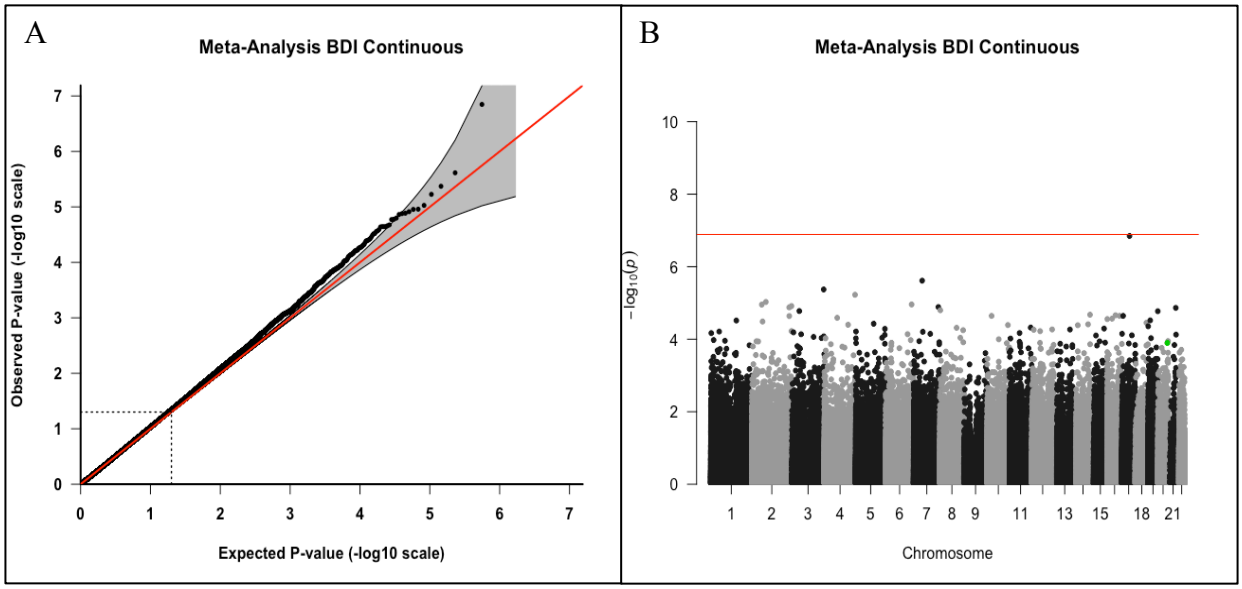


Figure S14: Results for the meta-analysis for the BDI-II continuous variable. The meta-analysis was adjusted for all covariates and the p-values were adjusted using Bacon and Cate prior to the meta-analysis. A) Plot A is the QQ-plot for the p-values. B) Plot B is the manhattan plot for the p-values. The highlighted site is cg22798925.

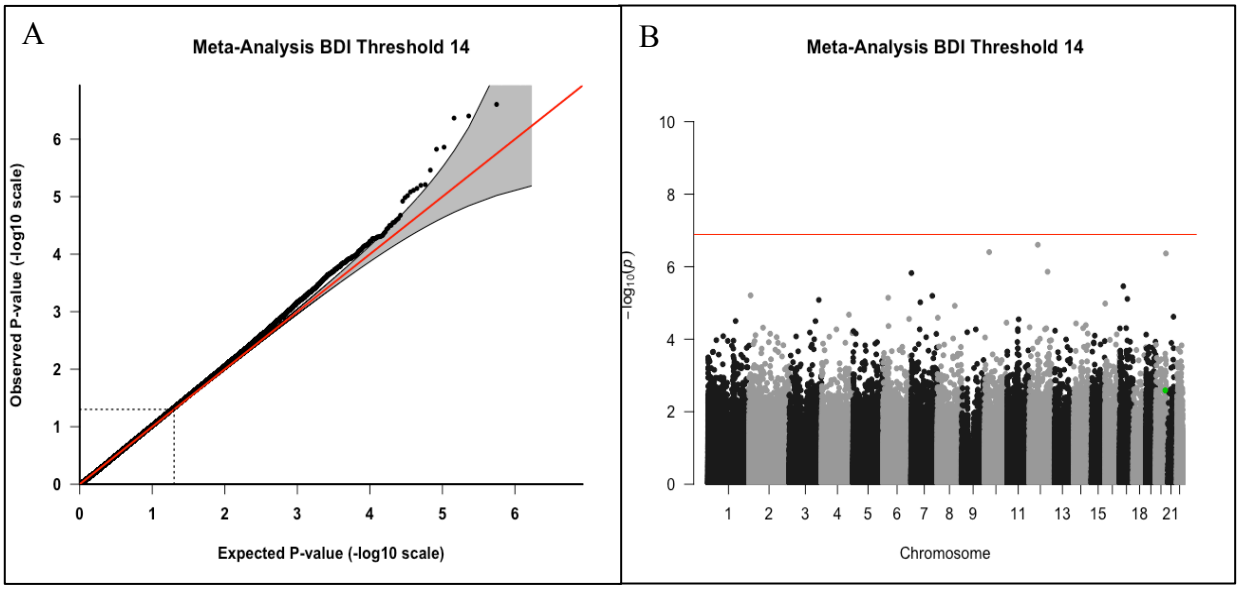


Figure S15: Results for the meta-analysis for the BDI-II 14 threshold variable. The meta-analysis was adjusted for all covariates and the p-values were adjusted using Bacon and Cate prior to the meta-analysis. A) Plot A is the QQ-plot for the p-values. B) Plot B is the manhattan plot for the p-values. The highlighted site is cg22798925.

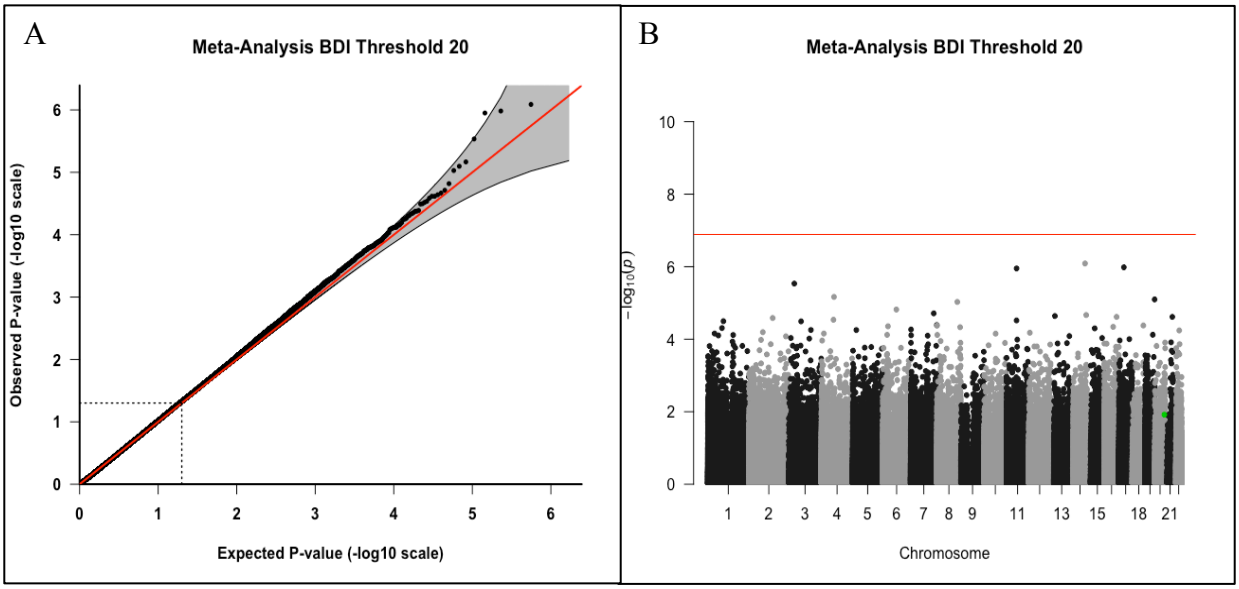


Figure S16: Results for the meta-analysis for the BDI-II 20 threshold variable. The meta-analysis was adjusted for all covariates and the p-values were adjusted using Bacon and Cate prior to the meta-analysis. A) Plot A is the QQ-plot for the p-values. B) Plot B is the manhattan plot for the p-values. The highlighted site is cg22798925.

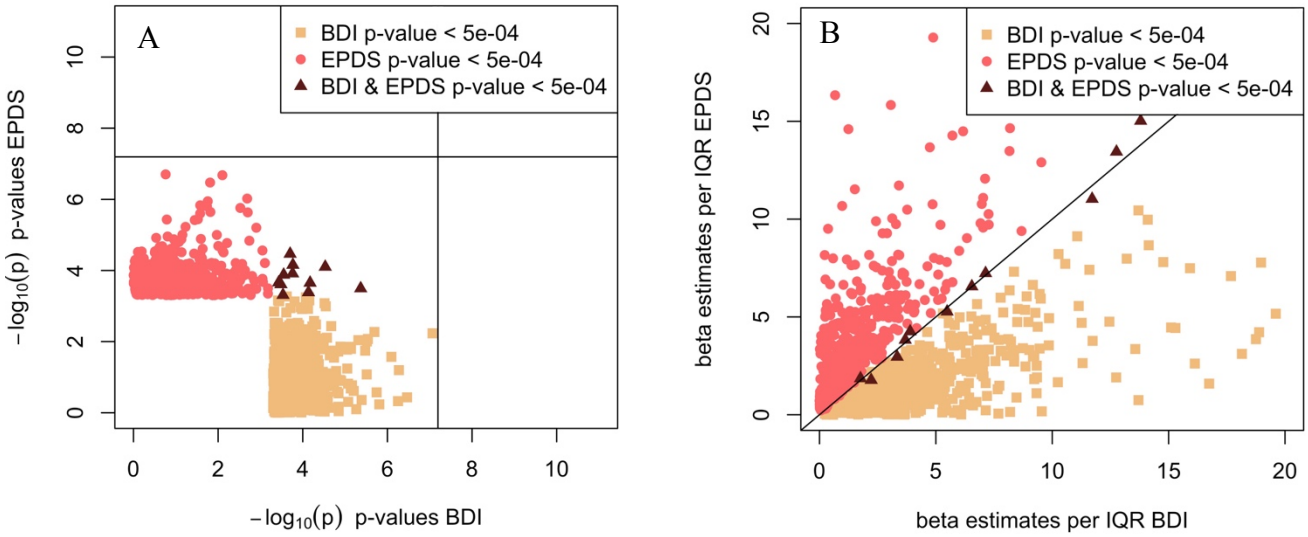


Figure S17: Comparison between the p-values and beta estimates for the EPDS and BDI-II continuous variables from the EPIC EWAS. The EPIC EWAS was adjusted for all covariates. A) Plot A is for the p-values between the EPDS and BDI-II continuous variables below a threshold of 5e-04. B) Plot B is for the beta estimates per IQR for the EPDS and BDI-II continuous variables. The plotted values are the beta estimates divided by the IQR to account for the different ranges between the EPDS and BDI-II scales.

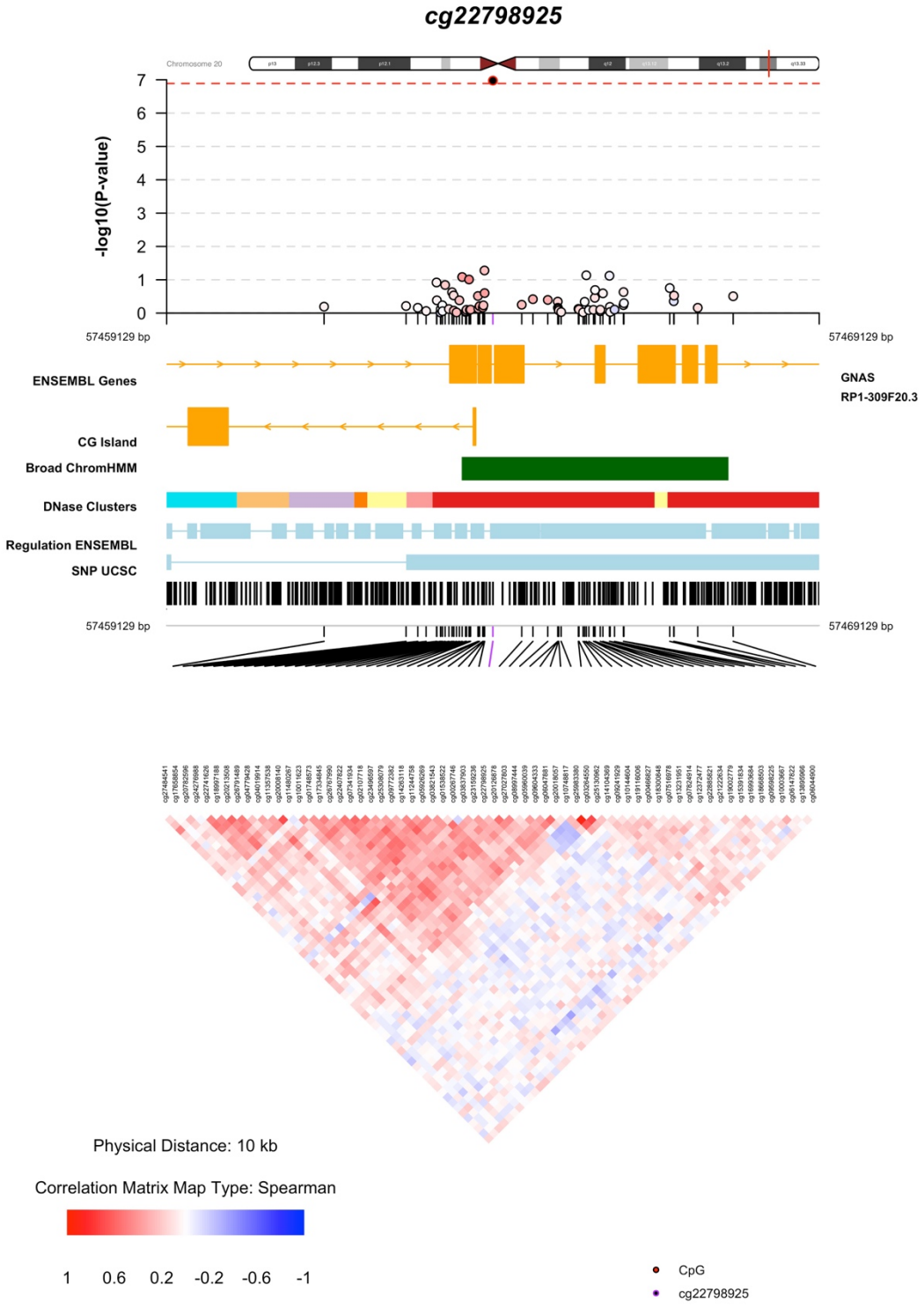


Figure S18: CoMET results for cg22798925. The CoMET results were obtained using p-values from the meta-analysis for the EPIC continuous variable while adjusting for all covariates. The CpG sites include sites 5000 bp upstream and downstream cg22798925.

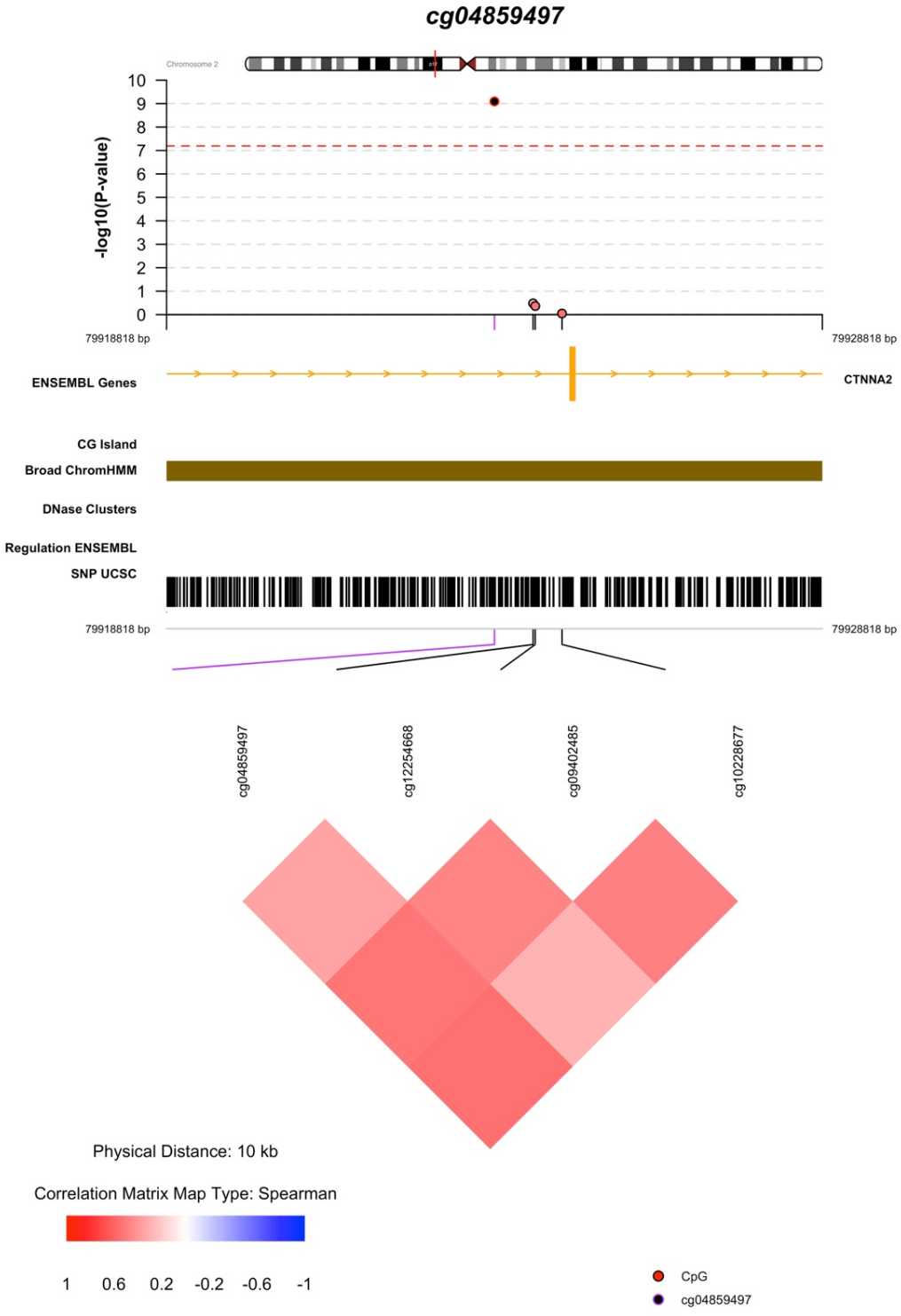


Figure S19: CoMET results for cg04859497. The CoMET results were obtained using p-values from the EPIC EWAS for the BDI-II 20 threshold variable while adjusting for all covariates. The CpG sites include sites 5000 bp upstream and downstream cg04859497.

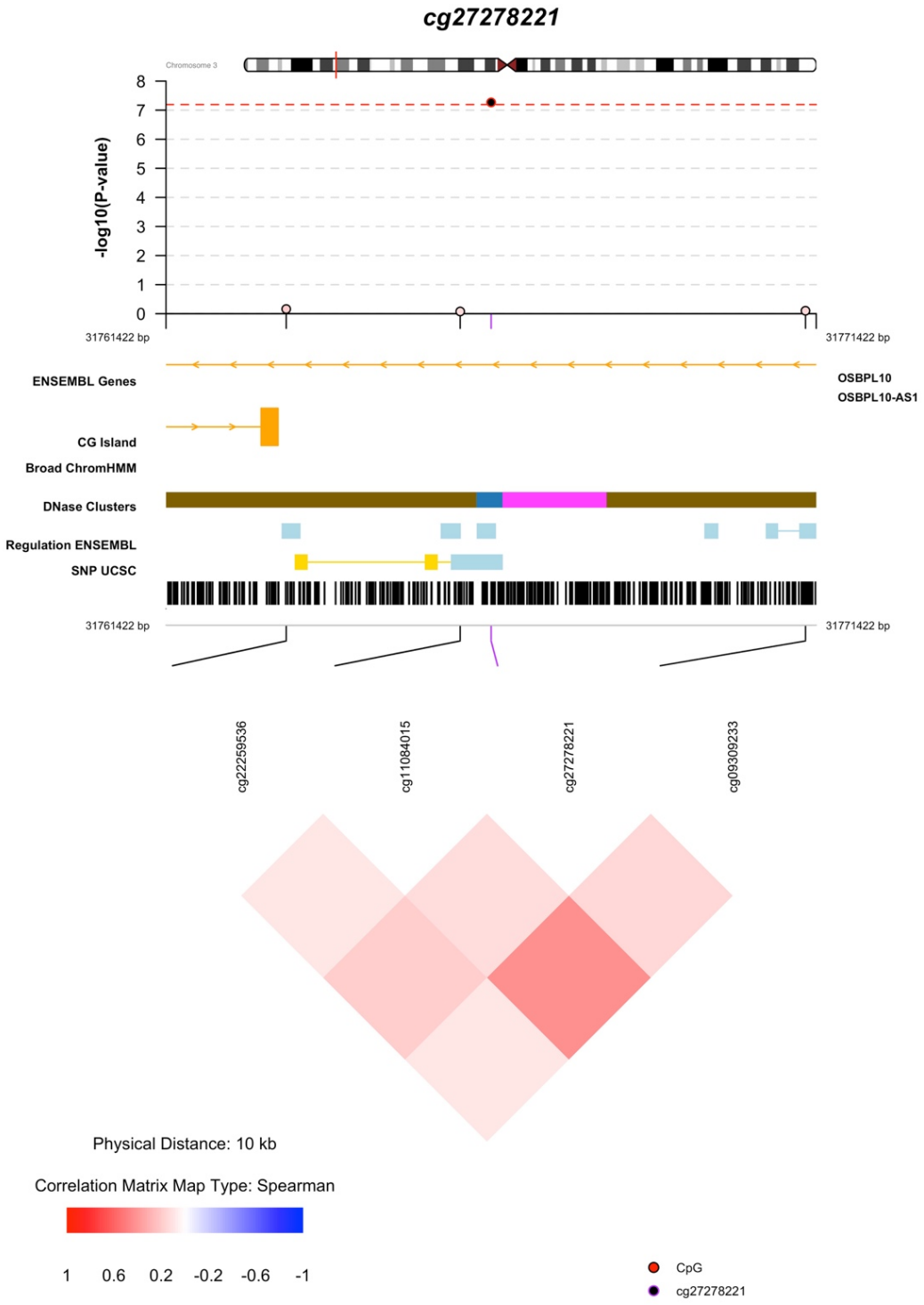


Figure S20: CoMET results for cg27278221. The CoMET results were obtained using p-values from the EPIC EWAS for the BDI-II 14 threshold variable while adjusting for all covariates. The CpG sites include sites 5000 bp upstream and downstream cg27278221.

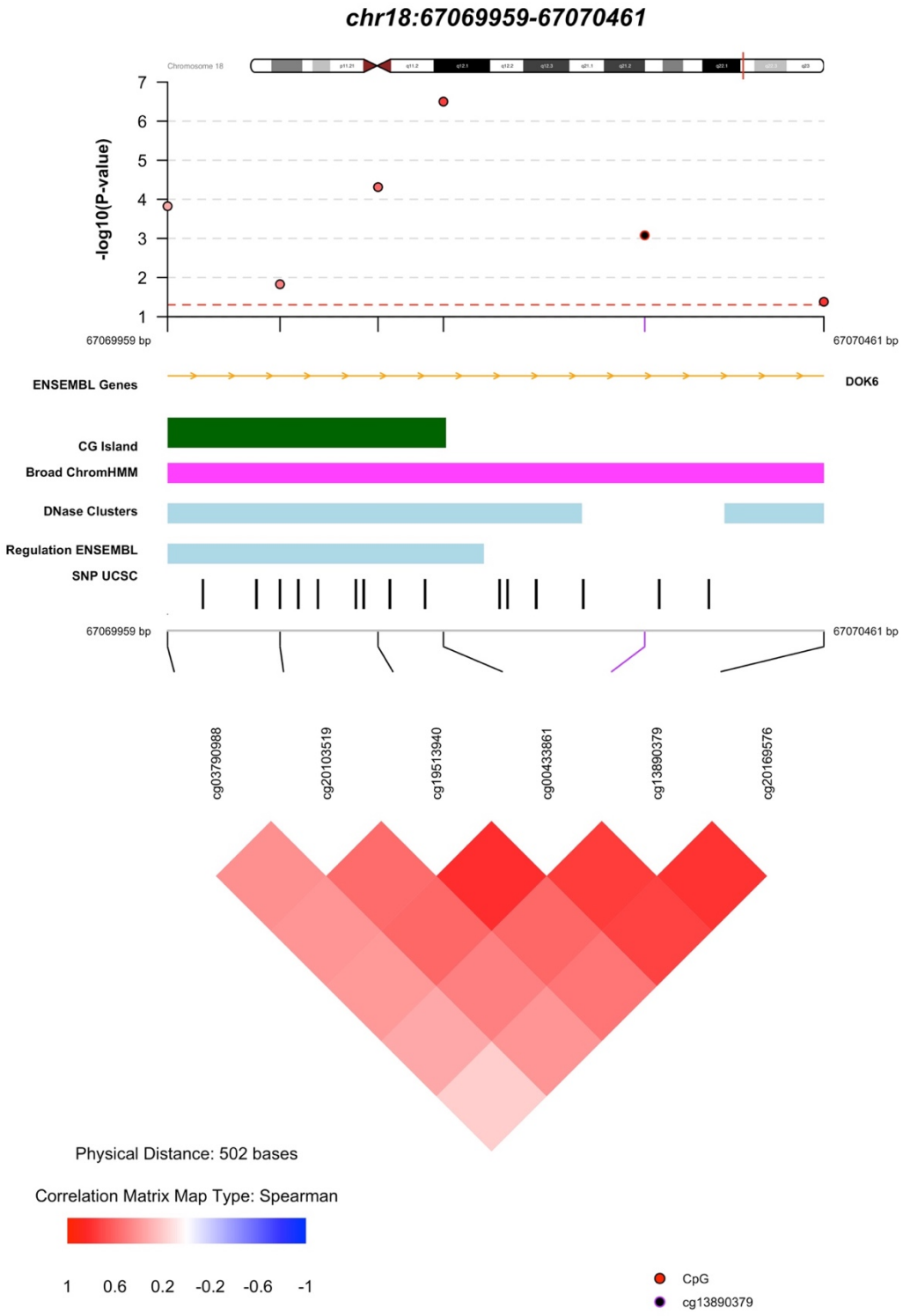


Figure S21: CoMET results for DMR chr18:67069959-67070461. The CoMET results were obtained using p-values from the meta-analysis for the EPDS threshold-13 variable while adjusting for all covariates.

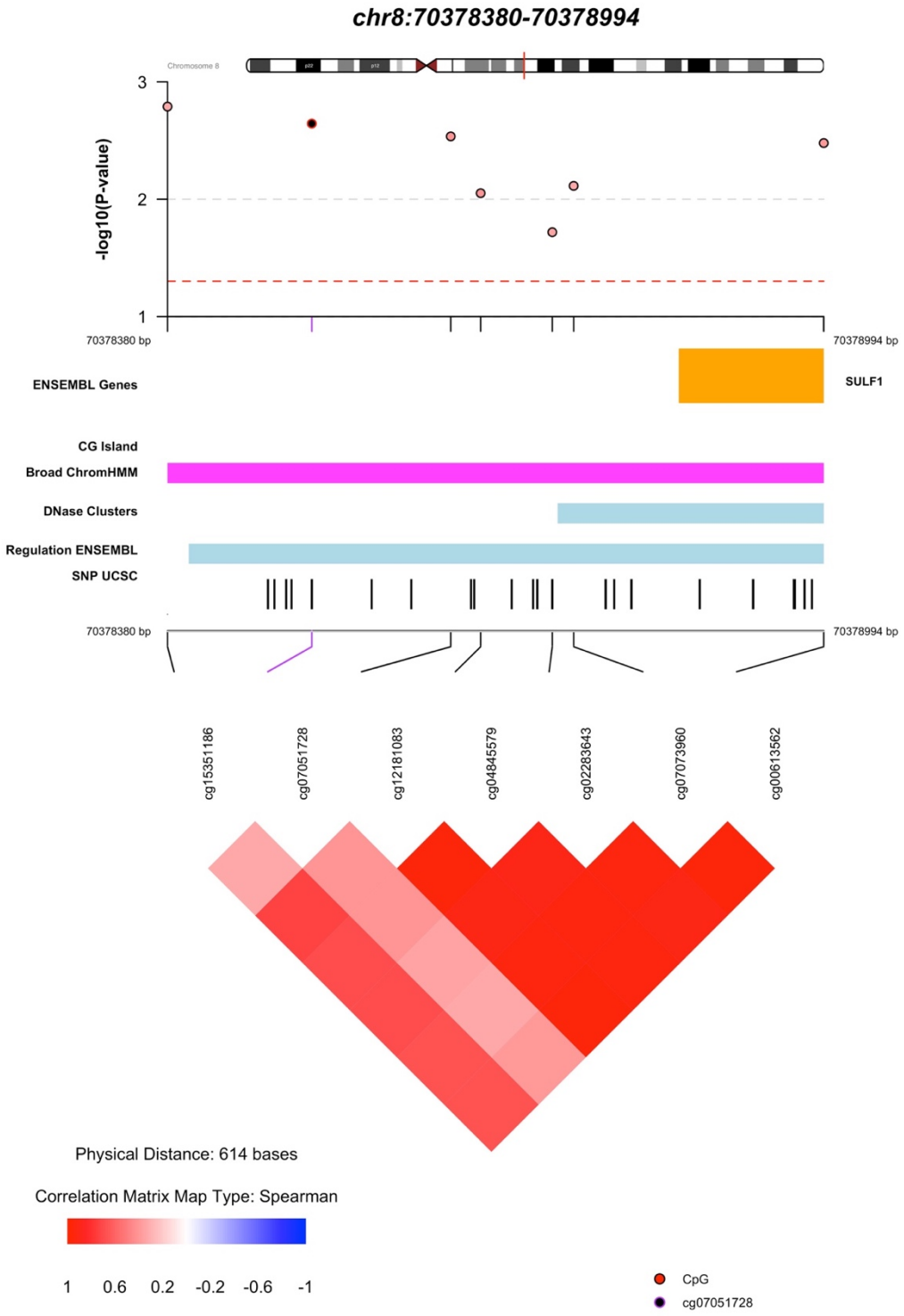


Figure S22: CoMET results for DMR chr8:70378380-70378994. The CoMET results were obtained using p-values from the meta-analysis for the BDI-II threshold-20 variable while adjusting for all covariates.

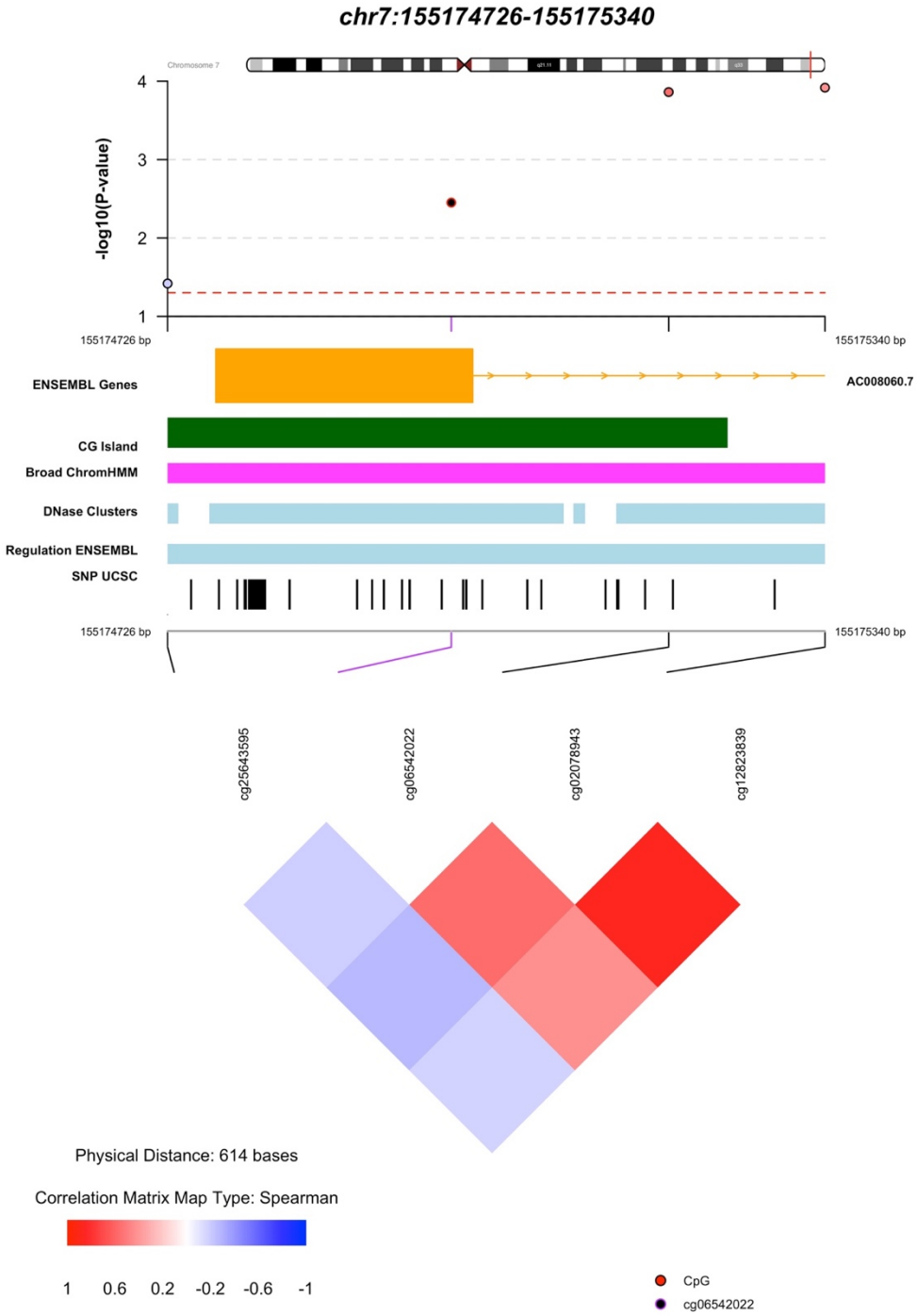


Figure S23: CoMET results for DMR chr7:155174726-155175340. The CoMET results were obtained using p-values from the meta-analysis for the BDI-II continuous variable while adjusting for all covariates.

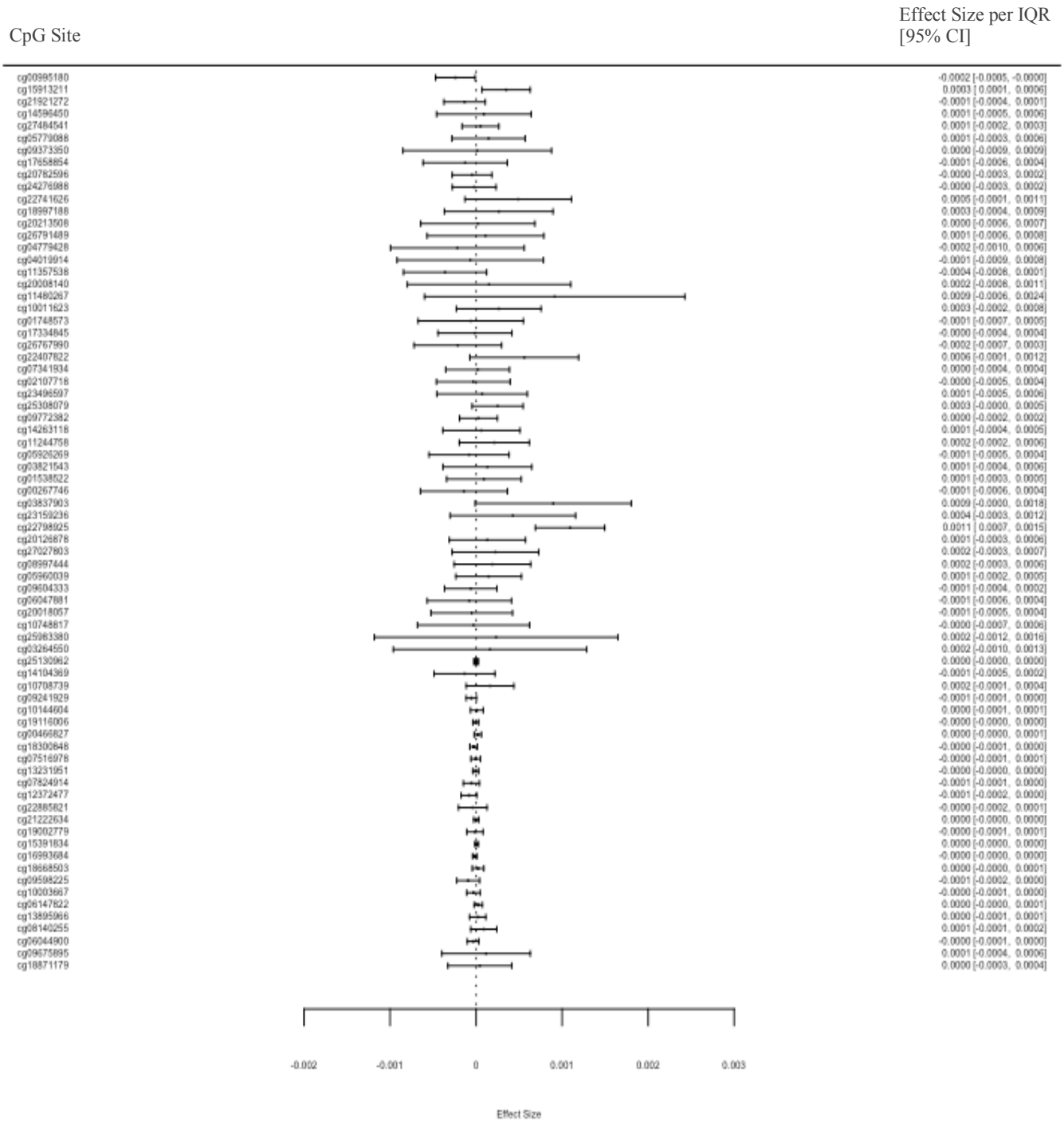


Figure S24: Effect size per IQR for CpG sites surrounding cg22798925. CpG sites include sites 5000 bps upstream and downstream cg22798925. Effect sizes were obtained through the meta-analysis for the EPDS continuous depression variable.

Supplementary Tables

Table S1: DMR results for meta-analysis EPDS continuous variable

DMR	# CpGs	P-value	Max Effect	Overlapping Promoters
chr1: 201951162-201951234	2	4.30E-03	0.0013	RNPEP-001, RNPEP-003, RNPEP-008, RNPEP-002, RNPEP-007, RNPEP-010, RNPEP-004, RNPEP-005, RNPEP-006, RNPEP-009
chr1: 55035183-155035748	5	1.37E-03	-0.0012	EFNA4-002, EFNA4-001, EFNA4-003, ADAM15-035, EFNA3-001, EFNA3-202
chr10: 45406187-45406847	5	2.08E-04	0.0062	TMEM72-001, TMEM72-201
chr10: 91296252-91296457	3	4.86E-03	-0.0021	SLC16A12-201, SLC16A12-001
chr10: 94180383-94180753	4	4.58E-03	-0.0013	MARK2P9-001
chr10: 94820376-94821085	5	5.96E-03	-0.0022	CYP26C1-001, RP11-348J12.2-001
chr11: 111249659-111250201	5	7.95E-03	-0.0022	POU2AF1-001, POU2AF1-002, POU2AF1-003
chr13: 47472050-47472429	11	5.96E-03	-0.0018	HTR2A-001, HTR2A-201, HTR2A-202
chr14: 24422368-24423864	12	4.43E-08	-0.0019	DHRS4-201, DHRS4-002, DHRS4-202, DHRS4-203, DHRS4-001, DHRS4-003, DHRS4-AS1-004, DHRS4-204, DHRS4-004, DHRS4-AS1-003, DHRS4-AS1-005, DHRS4-AS1-002, DHRS4-AS1-007, DHRS4-005, DHRS4-007, DHRS4-006
chr15: 98195808-98196247	4	1.11E-05	-0.0032	NA
chr17: 46019006-46019184	5	7.14E-03	0.0005	PNPO-001, AC003665.1-003, AC003665.1-002, PNPO-002, AC003665.1-001, PNPO-201, PNPO-202, PNPO-003, PNPO-004, PNPO-008, PNPO-005, AC003665.1-004, PNPO-007
chr17: 6899085-6899888	12	1.36E-04	-0.0033	ALOX12-001, ALOX12-003, RP11-589P10.5-001
chr18: 67069959-67070461	6	4.41E-10	-0.0026	DOK6-001
chr19: 18698825-18699631	9	1.46E-05	-0.0034	C19orf60-001, C19orf60-002, C19orf60-007, C19orf60-005, C19orf60-008, C19orf60-004, C19orf60-003, C19orf60-006
chr2:1 08994116-108994528	5	2.46E-03	0.0019	SULT1C4-001, SULT1C4-004, SULT1C4-003
chr4: 74847710-74848016	7	7.14E-03	0.0028	PF4-001

chr6: 33282313-33283317	27	1.80E-08	-0.0016	TAPBP-008, TAPBP-001, TAPBP-003, TAPBP-209, TAPBP-010, TAPBP-007, TAPBP-004, TAPBP-002, TAPBP-006
chr7: 116139180-116139705	9	2.73E-04	0.0018	CAV2-001, CAV2-019, CAV2-023, AC002066.1-003, CAV2-002
chr8: 142183179-142183860	5	7.25E-04	0.0021	DENND3-019
chr8: 143085750-143085905	2	6.29E-03	0.0014	NA
chr8: 22132874-22133356	7	5.96E-03	0.0021	PIWIL2-001, PIWIL2-003, PIWIL2-002, CTD-2530N21.4-001

Table S2: DMR results for meta-analysis BDI-II continuous variable

DMRs	# CpGs	P-value	Max Effect	Overlapping Promoters
chr10: 70321574-70322442	7	7.86E-05	1.58E-03	TET1-001
chr10: 94820376-94820923	3	4.03E-03	-9.66E-04	CYP26C1-001, RP11-348J12.2-001
chr11: 65190825-65191707	4	2.74E-04	2.50E-03	NEAT1-002, NEAT1-001, NEAT1-202
chr12: 7781004-7781431	5	2.16E-03	-3.85E-03	NA
chr12: 8380050-8380472	5	4.71E-03	1.40E-03	FAM90A1-001, ALG1L10P-001, FAM90A1-003, FAM90A1-002, AC092111.1-201
chr12:104697193-104697983	12	2.70E-04	1.05E-03	EID3-001
chr13: 113540189-113540557	5	5.36E-03	1.77E-03	AL356740.1-201
chr18: 67069959-67070461	6	3.87E-06	-1.09E-03	DOK6-001
chr2: 208631259-208631916	3	1.01E-03	9.52E-04	NA
chr2: 240884831-240884925	2	2.62E-04	2.03E-03	NA
chr2: 27530884-27531535	8	1.43E-03	-8.26E-04	UCN-001
chr3: 194119861-194120150	4	8.60E-03	8.51E-04	GP5-201, GP5-001
chr5: 176046902-176047485	3	8.09E-04	9.21E-04	NA
chr6: 33047944-33049360	16	1.79E-11	2.06E-03	HLA-DPB1-002, HLA-DPA1-004, HLA-DPA1-001, HLA-DPB1-008, RPL32P1-001, HLA-DPA1-002, HLA-DPB1-006, HLA-DPA1-005, HLA-DPB1-009, HLA-DPB1-005, HLA-DPB1-007
chr7: 155174726-155175340	4	3.47E-05	1.62E-03	AC008060.7-001
chr8: 70378380-70378994	7	2.36E-04	1.25E-03	SULF1-201, SULF1-001, SULF1-008, SULF1-009, SULF1-010

Table S3: DMR results for meta-analysis EPDS threshold-10 variable

DMR	# CpGs	P-value	Max Effect	Overlapping Promoters
chr12: 122019006-122019080	4	9.76E-03	-1.78E-02	KDM2B-005, KDM2B-001, KDM2B-006, KDM2B-201, KDM2B-004, KDM2B-007, KDM2B-008, RP13-941N14.1-001, KDM2B-002
chr14: 55907122-55907501	8	5.62E-03	2.14E-02	TBPL2-001
chr15: 28147928-28148431	4	2.57E-03	2.12E-02	NA
chr15: 98195808-98196247	4	1.37E-04	-3.35E-02	NA
chr16: 89686618-89687052	5	5.62E-03	1.97E-02	DPEP1-002
chr18: 67069959-67070461	6	6.10E-04	-2.53E-02	DOK6-001
chr19: 18698825-18699631	9	1.37E-04	-4.15E-02	C19orf60-001, C19orf60-002, C19orf60-007, C19orf60-005, C19orf60-008, C19orf60-004, C19orf60-003, C19orf60-006
chr2: 20211771-20211868	2	5.62E-03	-1.32E-02	MATN3-001, MATN3-201
chr4: 298926-299370	7	5.62E-03	-1.46E-02	ZNF732-001
chr4: 74734714-74735092	8	5.62E-03	-4.18E-03	CXCL1-001, CXCL1-002
chr6: 33282736-33283293	21	5.62E-03	-1.60E-02	TAPBP-008, TAPBP-001, TAPBP-003, TAPBP-209, TAPBP-010, TAPBP-007, TAPBP-004, TAPBP-002, TAPBP-006
chr6: 90121670-90121836	2	5.62E-03	-2.38E-03	RRAGD-002, RRAGD-001, RRAGD-003
chr6: 99395968-99396345	6	5.62E-03	-7.98E-03	FBXL4-201, FBXL4-001
chr8: 142183507-142183677	3	6.29E-03	2.16E-02	DENND3-019

Table S4: DMR results for meta-analysis EPDS threshold-13 variable

DMRs	# CpGs	P-value	Max Effect	Overlapping Promoters
chr1: 159046391-159047163	7	3.54E-03	-3.46E-02	AIM2-001
chr1: 228646841-228647248	5	4.39E-03	-4.81E-03	HIST3H2A-001, HIST3H2BB-001
chr1: 62660188-62660861	7	1.25E-06	-2.93E-02	L1TD1-001
chr1: 99469323-99469698	4	3.54E-03	2.05E-02	LPPR5-002, LPPR5-001, RP5-896L10.1-001, LPPR5-003
chr10: 94820892-94821085	4	3.54E-03	-1.38E-02	CYP26C1-001, RP11-348J12.2-001
chr11: 14993378-14994230	16	3.54E-03	-1.22E-02	CALCA-001, CALCA-201, CALCA-202, CALCA-003, CALCA-002, CALCA-004, CALCA-005
chr12: 133022423-133022853	4	7.83E-03	4.77E-02	NA
chr14: 24422956-24423618	5	3.54E-03	-7.51E-03	DHRS4-201, DHRS4-002, DHRS4-202, DHRS4-203, DHRS4-001, DHRS4-003, DHRS4-AS1-004, DHRS4-204, DHRS4-004, DHRS4-AS1-003, DHRS4-AS1-005, DHRS4-AS1-002, DHRS4-AS1-007, DHRS4-005, DHRS4-007, DHRS4-006
chr16: 838502-838515	2	8.65E-03	1.53E-03	RPUSD1-001, CHTF18-001, CHTF18-201, CHTF18-008, CHTF18-002, CHTF18-006, CHTF18-003, CHTF18-005, CHTF18-004, CHTF18-007, CHTF18-012, RPUSD1-004, RPUSD1-010, CHTF18-014, RPUSD1-009, RPUSD1-005, RPUSD1-006, RPUSD1-002, RPUSD1-003, RPUSD1-008, CHTF18-015, RPUSD1-007, CHTF18-013
chr17: 46018875-46019184	6	4.28E-03	4.56E-03	PNPO-001, AC003665.1-003, AC003665.1-002, PNPO-002, AC003665.1-001, PNPO-201, PNPO-202, PNPO-003, PNPO-004, PNPO-008, PNPO-005, AC003665.1-004, PNPO-007
chr18: 67069959-67070461	6	3.62E-10	-2.32E-02	DOK6-001
chr19: 51774377-51774666	5	4.05E-03	2.72E-02	CTD-3187F8.11-003, CTD-3187F8.11-001, CTD-3187F8.2-001, CTD-3187F8.11-002
chr19: 55598782-55599320	4	3.98E-03	3.93E-02	EPS8L1-014, EPS8L1-019, EPS8L1-018
chr19: 57306631-57307081	6	2.66E-03	1.86E-02	NA
chr5: 1726145-1726243	3	4.05E-03	2.44E-02	CTD-2587M23.1-001

chr6: 151646312-151647133	10	7.79E-04	4.58E-02	AKAP12-002
chr6: 33282624-33283189	20	3.54E-03	-1.46E-02	TAPBP-008, TAPBP-001, TAPBP-003, TAPBP-209, TAPBP-010, TAPBP-007, TAPBP-004, TAPBP-002, TAPBP-006
chr8: 22132563-22133356	11	3.54E-03	2.27E-02	PIWIL2-001, PIWIL2-003, PIWIL2-002, CTD-2530N21.4-001
chr8: 52321814-52322341	6	5.27E-03	3.13E-02	PXDNL-004, PXDNL-003

Table S5: DMR results for meta-analysis BDI-II threshold-14 variable

DMRs	# CpGs	P-value	Max Effect	Overlapping Promoters
chr10: 2543763-2544120	2	2.63E-03	5.37E-02	RP11-526P5.1-001, RP11-526P5.2-001, RP11-526P5.2-002
chr10: 26942165-26942225	2	5.87E-03	-7.70E-03	NA
chr10: 70321874-70321889	2	7.42E-03	2.77E-02	TET1-001
chr11: 65190825-65191707	4	2.93E-06	6.40E-02	NEAT1-002, NEAT1-001, NEAT1-202
chr12: 104697193-104697983	12	1.00E-08	2.74E-02	EID3-001
chr13: 51417686-51418020	5	6.89E-03	1.93E-02	DLEU7-002, DLEU7-001
chr14: 105167300-105167457	2	6.22E-03	1.53E-02	NA
chr17: 41738893-41739926	6	1.18E-04	7.00E-02	MEOX1-001, MEOX1-201, MEOX1-003, MEOX1-002
chr19: 49540073-49540241	3	9.74E-04	2.12E-02	CGB1-001, CTB-60B18.6-001, CGB1-002, CTB-60B18.6-002
chr20: 32856747-32857227	6	1.32E-06	2.74E-02	NA
chr22: 24104820-24105692	6	1.50E-05	-5.60E-02	C22orf15-003, C22orf15-001, C22orf15-004, C22orf15-002, C22orf15-005
chr3: 65342216-65342971	6	1.27E-04	2.65E-02	NA
chr5: 145215546-145215784	3	9.74E-04	5.38E-02	PRELID2-004, PRELID2-201, PRELID2-002, PRELID2-009, PRELID2-001, PRELID2-003, PRELID2-007
chr5: 16508920-16509123	4	5.08E-03	-2.11E-02	FAM134B-003, FAM134B-006, FAM134B-004
chr5: 191793-191806	2	7.64E-03	1.87E-02	LRRC14B-001
chr6: 32847530-32847845	13	4.05E-03	2.41E-02	PPP1R2P1-002, PPP1R2P1-001
chr6: 33047944-33048879	15	2.87E-07	4.45E-02	HLA-DPB1-002, HLA-DPA1-004, HLA-DPA1-001, HLA-DPB1-008, RPL32P1-001, HLA-DPA1-002, HLA-DPB1-006, HLA-DPA1-005, HLA-DPB1-009, HLA-DPB1-005, HLA-DPB1-007
chr7: 155174726-155175340	4	1.11E-04	3.26E-02	AC008060.7-001
chr7: 27183591-27185282	32	2.27E-04	2.51E-02	HOXA5-001, HOXA-AS3-001, HOXA5-002, HOXA-AS3-005

Table S6: DMR results for meta-analysis BDI-II threshold-20 variable

DMRs	# CpGs	P-value	Max Effect	Overlapping Promoters
chr10: 70321668-70322442	5	4.18E-04	3.68E-02	TET1-001
chr11: 2020101-2020560	12	9.71E-04	1.43E-02	H19-008, H19-004, H19-002, H19-001, H19-005, H19-009, H19-007, H19-003, H19-006
chr13: 113622539-113622750	7	1.04E-03	-1.69E-02	MCF2L-202, MCF2L-002, MCF2L-AS1-001, MCF2L-005
chr15: 70387217-70387268	2	4.25E-03	1.37E-02	TLE3-010, TLE3-030, TLE3-022, TLE3-015, TLE3-026, TLE3-011, TLE3-008, TLE3-007, TLE3-013, TLE3-012, TLE3-020, TLE3-014
chr17: 19290353-19290762	7	1.72E-03	6.60E-03	MFAP4-001, MFAP4-002, MFAP4-003, MFAP4-004
chr17: 37893764-37894636	10	2.76E-04	1.69E-02	GRB7-001, GRB7-201, GRB7-009, GRB7-002, GRB7-006, GRB7-005, GRB7-011, GRB7-014, GRB7-012, GRB7-013, GRB7-008, GRB7-010
chr18: 67069959-67070461	6	1.86E-07	-2.41E-02	DOK6-001
chr2: 27530670-27531535	10	9.03E-07	-2.31E-02	UCN-001
chr5: 1393934-1394633	7	4.05E-08	4.17E-02	NA
chr6: 30458519-30458998	5	7.46E-04	-1.44E-02	HLA-E-001, HLA-E-002, HLA-E-003
chr6: 33040535-33040610	2	6.84E-03	2.28E-02	HLA-DPA1-205, HLA-DPA1-007, HLA-DPA1-003
chr6: 33047944-33049360	16	4.05E-08	4.71E-02	HLA-DPB1-002, HLA-DPA1-004, HLA-DPA1-001, HLA-DPB1-008, RPL32P1-001, HLA-DPA1-002, HLA-DPB1-006, HLA-DPA1-005, HLA-DPB1-009, HLA-DPB1-005, HLA-DPB1-007
chr7: 155174726-155175340	4	1.98E-04	3.78E-02	AC008060.7-001
chr8: 1764878-1765820	12	1.29E-04	-1.16E-02	MIR596-201
chr8: 70378380-70378994	7	1.19E-05	3.36E-02	SULF1-201, SULF1-001, SULF1-008, SULF1-009, SULF1-010

Table S7: Results for cg08667740 and cg22868225 for this study and the Viuff, A et al. study

	Drakenstein Child Health Study[a]		Viuff, A. et al. ALSPAC mid-pregnancy depression[b]		Viuff, A. et al. Generation R Study[c]	
CpG sites	Effect	P-value[d]	Effect	P-value	Effect	P-value
cg08667740	-2.94E-04	0.755	-0.025	3.90E-08	0.003	0.186
cg22868225	-3.28E-04	0.402	-0.005	5.98E-08	-0.001	0.672

a - in association with the EPDS 13 threshold depression variable
b - in association with the EPDS 12 threshold depression variable
c - in association with the Brief Symptom Inventory (BSI) 0.80 threshold variable
d - adjusted with Bacon and Cate

Table S8: Results for cg06808585, cg05245515, and cg15264806 for this study and the Cardenas, A et al. study

	Drakenstein Child Health Study[a]		Cardenas, A. et al. Discover cohort Project[a]		Cardenas, A. et al. Generation R Study[b]	
CpG sites	Effect	P-value[c]	Effect	P-value[d]	Effect	P-value
cg06808585	-4.10E-03	0.359	3.10	<0.05	0.04	0.96
cg05245515	5.68E-03	0.177	-1.59	<0.05	0.28	0.29
cg15264806	-1.11E-04	0.609	0.14	<0.05	0.05	0.63

a - in association with the EPDS 13 threshold depression variable
b - in association with the Brief Symptom Inventory (BSI) 0.80 threshold variable
c - adjusted with Bacon and Cate
d - FDR

Table S9: Correlation between brain and blood DNAm for CpG sites and DMRs

DMR	CpG sites	DNAm Correlation Across Brain and Blood[a]	P-value[a]
N/A	cg04859497	-0.184	0.422
chr8:70378380-70378994	cg15351186	0.194	0.399
	cg07051728	**0.499**	**0.023**
	cg12181083	0.166	0.470
	cg04845579	0.216	0.346
	cg02283643	0.182	0.428
	cg07073960	0.201	0.380
	cg00613562	-0.022	0.926
chr11:65190825-65191707	cg04145264	0.143	0.535
	cg09411730	-0.418	0.060
	cg07985890	-0.381	0.090
	cg18019132	-0.168	0.466
chr12:104697193-104697983	cg01857475	-0.131	0.570
	cg09884423	**0.543**	**0.012**
	cg10572274	-0.135	0.558
	cg18633684	0.226	0.323
	cg03817911	0.247	0.280
	cg20923245	0.243	0.287
	cg27205904	**0.677**	**0.001**
	cg21234561	0.177	0.442
	cg26614816	0.370	0.099
	cg09477407	**0.552**	**0.011**
	cg05057777	-0.005	0.984
	cg01848457	0.345	0.125
chr18:67069959-67070461	**cg03790988**	**0.439**	**0.048**
	cg20103519	0.160	0.487
	cg19513940	0.079	0.733
	cg00433861	-0.177	0.442
	cg13890379	-0.236	0.301
	cg20169576	0.079	0.733

[a] - These values came from IMAGE-CpG

Table S10: Sensitivity analysis results for the significant single CpG sites with and without HIV exposure as a covariate

	Without HIV exposed		With HIV exposed	
CpG sites	Effect	p-value	Effect	p-value
cg22798925	0.0011	1.06E-07	0.0011	7.27Ee-08
cg04859497	-0.0642	8.09E-10	-0.0645	6.89E-10
cg27278221	-0.0195	5.40E-08	-0.0194	6.16E-08