Supplemental Material

Supplemental Methods

Probabilistic Reward Task (PRT): This task is rooted in signal detection theory and subjects were asked to determine, via button press, whether one of two stimuli was presented on the screen. The stimulus was either a short (11.5mm) or a long (13mm) mouth superimposed on a previously mouthless cartoon face. In this study, two blocks of 100 trials were presented. An equal number of short and long mouths were presented within each block. Each trial consisted of a fixation cross (jittered 750-900ms) followed by a mouthless face (500ms), after which either the short or a long mouth appeared on the face (100ms). Importantly, to induce a response bias, an asymmetric reinforcer ratio was employed. Thus, correct identification of either the long or short mouth was rewarded ("Correct!! You won 5 Cents") three times more frequently ("rich" stimulus) than the other mouth ("lean" stimulus). Participants were informed at the beginning of the task that the purpose of the game was to win as much money as possible, but that not every correct response would yield reward feedback. Keys and conditions (long or short mouth as "rich" stimulus) were counterbalanced across participants. Participants were excluded if any of the following quality control checks were not met: (1) less than 80 valid trials in each block (i.e., less than 20% outlier responses, as defined by RT <150ms or >2500ms and the log-transformed RT exceeding the participant's mean±3SD); (2) less than 20 rich rewards or less than 6 lean rewards in each block; (3) rich-to-lean reward ratio <2.0 in any block. Our main variable of interest, response bias, captured a participant's preference for the more frequently rewarded stimulus and was calculated as:

$$logb = \frac{1}{2} log \left[\frac{(\text{Rich}_{\text{correct}} + 0.5)(\text{Lean}_{\text{incorrect}} + 0.5)}{(\text{Rich}_{\text{incorrect}} + 0.5)(\text{Lean}_{\text{correct}} + 0.5)} \right]$$

Eriksen Flanker Task (EFT): Participants first completed a practice session consisting of 15 congruent and 15 incongruent trials. The flanking arrows were first presented alone (100ms) and were then joined by the central arrow (50ms), for a total stimulus duration of 150ms. Participants were asked to indicate, via button press, whether the center arrow pointed left or right, as quickly and accurately as possible. Both accuracy and reaction time (RT) were recorded. Following the practice session, participants completed five blocks consisting of 70 trials each (46 congruent, 24 congruent), for a total of 350 trials. To ensure adequate task difficulty, a response deadline was established for each block that corresponded to the 85th percentile of the RT distribution from incongruent trials in the preceding block (in the first block, the practice RT distribution was used). Stimulus presentation was followed by a fixation cross (1400ms). If the participant did not respond by the response deadline, a screen reading "TOO SLOW!" was presented (300ms). Participants were told that if they saw this screen, they should speed up. If a response was made before the deadline, the "TOO SLOW!" screen was omitted and the fixation cross remained onscreen for the 300ms interval. Finally, each trial ended with presentation of the fixation cross for an additional 200-400ms. Thus, total trial time varied between 2050-2250ms. The sequence of congruent and incongruent trials was established with optseq2 (http://surfer.nmr.mgh.harvard.edu/optseq/) and was identical across participants. While data collection was ongoing, block-by-block feedback was

added to maintain performance at desired levels. Specifically, if participants made fewer than three incongruent errors in a block, they were shown a screen reading, “Remember to respond as QUICKLY as possible while still being accurate”. If six or more incongruent errors were committed, the screen read, “Remember to respond as ACCURATELY as possible while still being fast”. Otherwise, the screen read, “Please respond as quickly and accurately as possible”. Pre-defined quality control checks were used to exclude datasets characterized by unusually poor performance. First, for each participant outlier trials were defined as those in which the raw RT was less than 150ms or the log-transformed RT exceeded the participant’s mean±3SD, computed separately for congruent and incongruent stimuli. Second, we excluded datasets with: 35 or more RT outliers (i.e., greater than 10% of trials), fewer than 200 outlier-free congruent trials, fewer than 90 outlier-free incongruent trials, or lower than 50% correct for congruent or incongruent trials. Trials characterized by RT outliers were excluded from all analyses.

Supplementary Results

Table S1. Logistic regression to predict treatment response in Stage 1 using baseline and early changes in choice reaction time (CRT)

Predictor	B [95% C.I.]	Odds Ratio [95% C.I.]	*Z*	*p*
Treatment	-1.453 [-2.316, -0.649]	0.234 [0.099, 0.523]	-3.430	<.001
Baseline_CRT	0.141 [-0.182, 0.471]	1.152 [0.834, 1.602]	0.856	0.392
Change_CRT	-0.667 [-1.323, -0.059]	0.513 [0.266, 0.942]	-2.090	0.037
Treatment*Baseline_CRT	-0.692 [-1.229, -0.175]	0.501 [0.293, 0.839]	-2.585	0.010
Treatment*Change_CRT	1.713 [0.711, 2.786]	5.546 [2.035, 16.22]	3.249	0.001
Site(CU)	1.157 [0.359, 1.988]	3.180 [1.432, 7.300]	2.794	0.005
Site(MG)	-0.291 [-1.297, 0.689]	0.747 [0.273, 1.993]	-0.579	0.563
Site(TX)	-0.211 [-0.998, 0.584]	0.810 [0.369, 1.793]	-0.525	0.600
Intercept	0.003 [-0.771, 0.769]	1.003 [0.463, 2.157]	0.007	0.995

Note: Treatment coded as 1 for placebo and 0 for sertraline; Change_CRT = Baseline_CRT – Week1_CRT, hence, larger values indicate greater improvement; CU=Columbia University, MG = Massachusetts General Hospital, TX = University of Texas, reference level for site is UM = University of Michigan. Significance results remain completely the same even after adding smoker status (yes vs. no).

Table S2. Logistic regression to predict treatment response in Stage 1 using early changes in choice reaction time (CRT)

Predictor	B [95% C.I.]	Odds Ratio [95% C.I.]	*Z*	*p*
Treatment	-1.087 [-1.855, -0.353]	0.337 [0.156, 0.702]	-2.848	0.004
Change_CRT	-0.530 [-1.096, -0.002]	0.589 [0.334, 0.998]	-1.918	0.055
Treatment*Change_CRT	1.032 [0.193, 1.911]	2.806 [1.213, 6.760]	2.367	0.018
Site(CU)	1.051 [0.286, 1.844]	2.861 [1.331, 6.324]	2.654	0.008
Site(MG)	-0.406 [-1.375, 0.535]	0.666 [0.253, 1.707]	-0.838	0.402
Site(TX)	-0.223 [-0.995, 0.558]	0.800 [0.370, 1.746]	-0.565	0.572
Intercept	0.005 [-0.728, 0.730]	1.005 [0.483, 2.075]	0.013	0.989

Note: Treatment coded as 1 for placebo and 0 for sertraline; Change_CRT = Baseline_CRT – Week1_CRT, hence, larger values indicate greater improvement; CU=Columbia University, MG = Massachusetts General Hospital, TX = University of Texas, reference level for site is UM = University of Michigan. Significance results remain completely the same even after adding smoker status (yes vs. no).

Table S3. Logistic regression to predict treatment response in Stage 1 using baseline choice reaction time (CRT)

Predictor	B [95% C.I.]	Odds Ratio [95% C.I.]	*Z*	*p*
Treatment	-0.481 [-1.028, 0.060]	0.618 [0.358, 1.061]	-1.736	0.083
Baseline_CRT	-0.023 [-0.306, 0.256]	0.977 [0.736, 1.292]	-0.163	0.870
Treatment*Baseline_CRT	-0.247 [-0.692, 0.191]	0.781 [0.501, 1.211]	-1.102	0.270
Site(CU)	1.128 [0.350, 1.937]	3.090 [1.419, 6.939]	2.796	0.005
Site(MG)	-0.144 [-1.114, 0.805]	0.866 [0.328, 2.237]	-0.296	0.767
Site(TX)	-0.068 [-0.831, 0.707]	0.934 [0.436, 2.028]	-0.175	0.861
Intercept	-0.384 [-1.067, 0.273]	0.681 [0.344, 1.314]	-1.131	0.258

Note: Treatment coded as 1 for placebo and 0 for sertraline; Change_CRT = Baseline_CRT – Week1_CRT, hence, larger values indicate greater improvement; CU=Columbia University, MG = Massachusetts General Hospital, TX = University of Texas, reference level for site is UM = University of Michigan. Significance results remain completely the same even after adding smoker status (yes vs. no).

Table S4. Logistic regression to predict treatment response in Stage 1 using baseline and early changes in A-not-B reaction time (ABRT)

Predictor	B [95% C.I.]	Odds Ratio [95% C.I.]	*Z*	*p*
Treatment	-0.931 [-1.740, -0.159]	0.394 [0.176, 0.853]	-2.320	0.020
Baseline_ABRT	-0.002 [-0.414. 0.408]	0.998 [0.661, 1.504]	-0.008	0.994
Change_ABRT	-0.295 [-1.050, 0.428]	0.744 [0.350, 1.534]	-0.790	0.429
Treatment*Baseline_ABRT	-0.519 [-1.133, 0.065]	0.595 [0.322, 1.067]	-1.706	0.088
Treatment*Change_ABRT	1.107 [0.158, 2.124]	3.026 [1.171, 8.361]	2.219	0.027
Site(CU)	1.396 [0.532, 2.305]	4.041 [1.702, 10.02]	3.101	0.002
Site(MG)	-0.136 [-1.166, 0.874]	0.873 [0.312, 2.396]	-0.264	0.792
Site(TX)	0.081 [-0.761, 0.942]	1.084 [0.467, 2.565]	0.186	0.852
Intercept	-0.371 [-1.257, 0.489]	0.690 [0.285, 1.631]	-0.840	0.401

Note: Treatment coded as 1 for placebo and 0 for sertraline; Change_ABRT = Baseline_ABRT – Week1_ABRT, hence, larger values indicate greater improvement; CU=Columbia University, MG = Massachusetts General Hospital, TX = University of Texas, reference level for site is UM = University of Michigan. Significance results remain completely the same even after adding smoker status (yes vs. no).

Table S5. Logistic regression to predict treatment response in Stage 1 using early changes in A-not-B reaction time (ABRT)

Predictor	B [95% C.I.]	Odds Ratio [95% C.I.]	*Z*	*p*
Treatment	-0.777 [-1.494, -0.082]	0.460 [0.224, 0.921]	-2.163	0.031
Change_ABRT	-0.283 [-0.838, 0.221]	0.753 [0.432, 1.248]	-1.061	0.289
Treatment*Change_ABRT	0.741 [0.018, 1.520]	2.098 [1.018, 4.573]	1.944	0.052
Site(CU)	1.180 [0.361, 2.036]	3.255 [1.435, 7.658]	2.774	0.006
Site(MG)	-0.247 [-1.266, 0.749]	0.781 [0.282, 2.114]	-0.484	0.628
Site(TX)	-0.059 [-0.877, 0.778]	0.943 [0.416, 2.177]	-0.140	0.889
Intercept	-0.247 [-1.037, 0.520]	0.781 [0.355, 1.682]	-0.627	0.531

Note: Treatment coded as 1 for placebo and 0 for sertraline; Change_ABRT = Baseline_ABRT – Week1_ABRT, hence, larger values indicate greater improvement; CU=Columbia University, MG = Massachusetts General Hospital, TX = University of Texas, reference level for site is UM = University of Michigan. Significance results remain completely the same even after adding smoker status (yes vs. no).

Table S6. Logistic regression to predict treatment response in Stage 1 using baseline A-not-B reaction time (ABRT)

Predictor	B [95% C.I.]	Odds Ratio [95% C.I.]	*Z*	*p*
Treatment	-0.398 [-0.972, 0.169]	0.671 [0.378, 1.184]	-1.371	0.170
Baseline_ABRT	-0.105 [-0.403, 0.179]	0.900 [0.669, 1.196]	-0.716	0.474
Treatment*Baseline_ABRT	-0.138 [-0.600, 0.317]	0.871 [0.549, 1.372]	-0.593	0.553
Site(CU)	1.228 [0.394, 2.101]	3.414 [1.482, 8.171]	2.832	0.005
Site(MG)	-0.260 [-1.277, 0.733]	0.771 [0.279, 2.081]	-0.511	0.609
Site(TX)	-0.012 [-0.836, 0.831]	0.988 [0.434, 2.295]	-0.028	0.977
Intercept	-0.440 [-1.188, 0.276]	0.644 [0.305, 1.318]	-1.186	0.235

Note: Treatment coded as 1 for placebo and 0 for sertraline; Change_ABRT = Baseline_ABRT – Week1_ABRT, hence, larger values indicate greater improvement; CU=Columbia University, MG = Massachusetts General Hospital, TX = University of Texas, reference level for site is UM = University of Michigan. Significance results remain completely the same even after adding smoker status (yes vs. no).

Table S7. Logistic regression to predict treatment response in Stage 1 using baseline and early changes in verbal fluency (VF)

Predictor	B [95% C.I.]	Odds Ratio [95% C.I.]	*Z*	*p*
Treatment	-0.496 [-1.112, 0.113]	0.609 [0.329, 1.120]	-1.591	0.112
Baseline_VF	0.145 [-0.243, 0.537]	1.156 [0.784, 1.710]	0.733	0.464
Change_VF	-0.233 [-0.882, 0.404]	0.792 [0.414, 1.498]	-0.715	0.474
Treatment*Baseline_VF	0.152 [-0.409, 0.716]	1.164 [0.664, 2.048]	0.530	0.596
Treatment*Change_VF	-0.126 [-1.024, 0.766]	0.882 [0.359, 2.151]	-0.277	0.782
Site(CU)	0.967 [0.200, 1.760]	2.630 [1.222, 5.814]	2.439	0.015
Site(MG)	-0.445 [-1.417, 0.498]	0.641 [0.242, 1.645]	-0.916	0.360
Site(TX)	-0.045 [-0.809, 0.733]	0.956 [0.445, 2.082]	-0.114	0.909
Intercept	-0.250 [-0.968, 0.447]	0.779 [0.380, 1.564]	-0.698	0.485

Note: Treatment coded as 1 for placebo and 0 for sertraline; Change_VF = Baseline_VF – Week1_VF, hence, larger values indicate greater decrease; CU=Columbia University, MG = Massachusetts General Hospital, TX = University of Texas, reference level for site is UM = University of Michigan. Significance results remain completely the same even after adding smoker status (yes vs. no).

Table S8. Logistic regression to predict treatment response in Stage 1 using baseline and early changes in response bias (RB) from the probabilistic reward task

Predictor	**B [95% C.I.]**	**Odds Ratio [95% C.I.]**	***Z***	***p***
Treatment	-0.649 [-1.486, 0.161]	0.523 [0.226, 1.174]	-1.553	0.121
Baseline_RB	-0.403 [-3.728, 2.851]	0.668 [0.024, 17.31]	-0.243	0.808
Change_RB	0.184 [-3.423, 3.790]	1.202 [0.033, 44.24]	0.101	0.920
Treatment*Baseline_RB	3.876 [-0.741, 8.697]	48.23 [0.477, 5987]	1.618	0.106
Treatment*Change_RB	-1.493 [-6.422, 3.361]	0.225 [0.002, 28.82]	-0.601	0.548
Site(CU)	1.091 [0.259, 1.953]	2.977 [1.295, 7.048]	2.534	0.011
Site(MG)	-0.195 [-1.224, 0.813]	0.823 [0.294, 2.255]	-0.378	0.705
Site(TX)	-0.236 [-1.078, 0.611]	0.790 [0.340, 1.842]	-0.550	0.583
Age	-0.006 [-0.030, 0.018]	0.994 [0.970, 1.019]	-0.469	0.639
Gender	-0.068 [-0.690, 0.556]	0.934 [0.501, 1.744]	-0.214	0.831
Education	0.006 [-0.119, 0.131]	1.006 [0.888, 1.140]	0.098	0.922
Intercept	-0.117 [-2.238, 1.999]	0.889 [0.107, 7.382]	-0.109	0.913

Note: Treatment coded as 1 for placebo and 0 for sertraline; Change_RB = Baseline_RB – Week1_RB, hence, larger values indicate greater decrease; CU=Columbia University, MG = Massachusetts General Hospital, TX = University of Texas, reference level for site is UM = University of Michigan; Gender is coded as 1 for female and 0 for male. Significance results remain completely the same even after adding smoker status (yes vs. no).

Table S9. Logistic regression to predict treatment response in Stage 1 using baseline and early changes in Flanker reaction time interference (FRTI).

Predictor	B [95% C.I.]	Odds Ratio [95% C.I.]	*Z*	*p*
Treatment	0.932 [-2.128, 4.024]	2.539 [0.119, 55.93]	0.597	0.551
Baseline_FRTI	0.022 [-0.004, 0.050]	1.022 [0.996, 1.051]	1.617	0.106
Change_FRTI	-0.043 [-0.080, -0.008]	0.958 [0.923, 0.992]	-2.354	0.019
Treatment*Baseline_FRTI	-0.018 [-0.053, 0.017]	0.983 [0.948, 1.017]	-0.983	0.326
Treatment*Change_FRTI	0.025 [-0.022, 0.073]	1.025 [0.978, 1.076]	1.030	0.303
Site(CU)	1.084 [0.226, 1.977]	2.958 [1.253, 7.222]	2.439	0.015
Site(MG)	-0.671 [-1.858, 0.456]	0.511 [0.156, 1.577]	-1.147	0.252
Site(TX)	-0.022 [-0.915, 0.889]	0.979 [0.401, 2.432]	-0.047	0.962
Age	-0.018 [-0.044, 0.008]	0.982 [0.957, 1.008]	-1.351	0.177
Gender	-0.067 [-0.729, 0.598]	0.936 [0.483, 1.818]	-0.198	0.843
Education	0.006 [-0.125, 0.138]	1.006 [0.882, 1.148]	0.093	0.926
Intercept	-1.319 [-4.368, 1.684]	0.267 [0.013, 5.388]	-0.860	0.390

Note: Treatment coded as 1 for placebo and 0 for sertraline; Change_CRT = Baseline_FRTI – Week1_FRTI, hence, larger values indicate improved inhibitory control; CU=Columbia University, MG = Massachusetts General Hospital, TX = University of Texas, reference level for site is UM = University of Michigan; Gender is coded as 1 for female and 0 for male. Significance results remain completely the same even after adding smoker status (yes vs. no).

Table S10. Logistic regression to predict treatment response in Stage 2 using baseline response bias (RB) from the probabilistic reward task

Predictor	B [95% C.I.]	Odds Ratio [95% C.I.]	*Z*	*p*
Treatment	-1.430 [-2.825, -0.241]	0.239 [0.059, 0.786]	-2.203	0.028
Baseline_RB	-2.195 [-6.269, 1.348]	0.111 [0.002, 3.851]	-1.154	0.249
Treatment*Baseline_RB	11.78 [4.603, 20.55]	1.30×10^{5} [99.81, 8.44×10^{8}]	2.934	0.003
Site(CU)	-2.037 [-3.883, -0.409]	0.130 [0.021, 0.665]	-2.336	0.019
Site(MG)	-1.209 [-3.321, 0.763]	0.299 [0.036, 2.145]	-1.179	0.239
Site(TX)	-0.565 [-2.176, 0.882]	0.568 [0.114, 2.415]	-0.742	0.458
Age	-0.013 [-0.050, 0.023]	0.987 [0.951, 1.024]	-0.695	0.487
Gender	-0.137 [-1.173, 0.889]	0.872 [0.309, 2.433]	-0.263	0.793
Education	0.067 [-0.123, 0.267]	1.069 [0.884, 1.306]	0.681	0.496
Intercept	0.699 [-3.011, 4.610]	2.012 [0.049, 100.44]	0.366	0.715

Note: Treatment coded as 1 for bupropion and 0 for sertraline; CU=Columbia University, MG = Massachusetts General Hospital, TX = University of Texas, reference level for site is UM = University of Michigan. Significance results remain completely the same even after adding smoker status (yes vs. no).

Table S11. Logistic regression to predict treatment response in Stage 2 using baseline verbal fluency (VF)

Predictor	B [95% C.I.]	Odds Ratio [95% C.I.]	*Z*	*p*
Treatment	-0.006 [-0.997, 1.011]	0.994 [0.369, 2.749]	-0.013	0.990
Baseline_VF	-0.343 [-0.965, 0.243]	0.709 [0.381, 1.276]	-1.130	0.259
Treatment*Baseline_VF	1.007 [0.097, 1.995]	2.738 [1.102, 7.351]	2.106	0.035
Site(CU)	-1.011 [-2.509, 0.404]	0.364 [0.081, 1.498]	-1.377	0.168
Site(MG)	-1.498 [-3.300, 0.139]	0.224 [0.037, 1.149]	-1.733	0.083
Site(TX)	-0.543 [-1.916, 0.735]	0.581 [0.147, 2.085]	-0.816	0.415
Intercept	0.656 [-0.605, 2.014]	1.927 [0.546, 7.493]	1.002	0.317

Note: Treatment coded as 1 for bupropion and 0 for sertraline; CU=Columbia University, MG = Massachusetts General Hospital, TX = University of Texas, reference level for site is UM = University of Michigan. Significance results remain completely the same even after adding smoker status (yes vs. no).

Table S12. Logistic regression to predict treatment response in Stage 2 using baseline Flanker reaction time interference (FRTI)

Predictor	**B [95% C.I.]**	**Odds Ratio [95% C.I.]**	***Z***	***P***
Treatment	-8.066 [-14.17, -2.916]	0.0003 [6.99×10^{-7}, 0.054]	-2.850	0.004
Baseline_FRTI	-0.016 [-0.049, 0.015]	0.985 [0.953, 1.015]	-0.992	0.321
Treatment*Baseline_FRTI	0.081 [0.027, 0.146]	1.084 [1.027, 1.157]	2.711	0.007
Site(CU)	-1.490 [-3.263, 0.131]	0.225 [0.038, 1.140]	-1.747	0.081
Site(MG)	-1.298 [-3.363, 0.596]	0.273 [0.035, 1.816]	-1.305	0.192
Site(TX)	-0.375 [-1.937, 1.102]	0.687 [0.144, 3.009]	-0.493	0.622
Age	-0.003 [-0.044. 0.037]	0.997 [0.957, 1.038]	-0.163	0.870
Gender	0.288 [-0.760, 1.360]	1.334 [0.468, 3.898]	0.538	0.591
Education	0.157 [-0.042, 0.374]	1.170 [0.959, 1.454]	1.491	0.136
Intercept	-0.180 [-4.958, 4.728]	0.835 [0.007, 113.02]	-0.074	0.941

Note: Treatment coded as 1 for bupropion and 0 for sertraline; CU=Columbia University, MG = Massachusetts General Hospital, TX = University of Texas, reference level for site is UM = University of Michigan. Significance results remain completely the same even after adding smoker status (yes vs. no).

Table S13. Logistic regression to predict treatment response in Stage 2 using baseline choice reaction time (CRT)

Predictor	B [95% C.I.]	Odds Ratio [95% C.I.]	*Z*	*p*
Treatment	-0.479 [-1.350, 0.377]	0.620 [0.259, 1.457]	-1.092	0.275
Baseline_CRT	0.145 [-0.418, 0.718]	1.156 [0.658, 2.051]	0.509	0.611
Treatment*Baseline_CRT	-0.384 [-1.155, 0.352]	0.681 [0.315, 1.422]	-1.012	0.312
Site(CU)	-1.337 [-2.789, 0.004]	0.263 [0.061, 1.004]	-1.899	0.058
Site(MG)	-1.384 [-3.123, 0.209]	0.251 [0.044, 1.232]	-1.652	0.099
Site(TX)	-0.511 [-1.842, 0.717]	0.600 [0.159, 2.048]	-0.796	0.426
Intercept	0.957 [-0.168, 2.223]	2.603 [0.845, 9.231]	1.600	0.110

Note: Treatment coded as 1 for bupropion and 0 for sertraline; CU=Columbia University, MG = Massachusetts General Hospital, TX = University of Texas, reference level for site is UM = University of Michigan. Significance results remain completely the same even after adding smoker status (yes vs. no).

Table S14. Logistic regression to predict treatment response in Stage 2 using baseline A-not-B reaction time (ABRT)

Predictor	B [95% C.I.]	Odds Ratio [95% C.I.]	*Z*	*p*
Treatment	-0.245 [-1.141, 0.647]	0.783 [0.319, 1.909]	-0.539	0.590
Baseline_ABRT	-0.223 [-0.810, 0.296]	0.800 [0.445, 1.345]	-0.810	0.418
Treatment*Baseline_ABRT	-0.125 [-0.870, 0.613]	0.882 [0.419, 1.845]	-0.338	0.736
Site(CU)	-0.879 [-2.357, 0.516]	0.415 [0.095, 1.676]	-1.214	0.225
Site(MG)	-1.565 [-3.449, 0.112]	0.209 [0.032, 1.119]	-1.756	0.079
Site(TX)	-0.310 [-1.656, 0.955]	0.733 [0.191, 2.600]	-0.473	0.636
Intercept	0.670 [-0.496, 1.949]	1.955 [0.609, 7.021]	1.097	0.273

Note: Treatment coded as 1 for bupropion and 0 for sertraline; CU=Columbia University, MG = Massachusetts General Hospital, TX = University of Texas, reference level for site is UM = University of Michigan. Significance results remain completely the same even after adding smoker status (yes vs. no).

Table S15. Comparison of $HAMD_{17}$ between Stage 2 bupropion responders and non-responders at different timepoints

	Baseline		Week 8		$\Delta_{\text{baseline-to-week 8}}$	
	t_{df}	*P*	t_{df}	*p*	t_{df}	*p*
PRT	0.508_{36}	.615	-0.266_{36}	.792	0.800_{36}	.429
VFT	0.669_{40}	.508	-0.257_{40}	.799	0.958_{40}	.344
EFT	0.925_{34}	.362	0.138_{34}	.891	0.742_{34}	.463

Table S16. Comparison of $HAMD_{17}$ between Stage 2 sertraline responders and non-responders at different timepoints

	Baseline		Week 8		$\Delta_{\text{baseline-to-week 8}}$	
	t_{df}	*p*	t_{df}	*p*	t_{df}	*p*
PRT	0.340_{47}	.736	-0.519_{47}	.606	0.757_{47}	.453
VFT	0.285_{50}	.777	-0.541_{50}	.591	0.729_{50}	.469
EFT	0.496_{48}	.622	-0.166_{48}	.869	0.537_{48}	.593