

| SNP        | Gene Region | Chromosome | Gender | MAF  | N   | Marginal Effect       |                         |                         | Treatment Stratified Effects |                   |                   |                  | Test of Interaction |            |            |
|------------|-------------|------------|--------|------|-----|-----------------------|-------------------------|-------------------------|------------------------------|-------------------|-------------------|------------------|---------------------|------------|------------|
|            |             |            |        |      |     | Likelihood ratio test |                         | Placebo                 | Bupropion                    | Patch             | Spray             | Observed P       | Adjusted P          | Observed P | Adjusted P |
|            |             |            |        |      |     | SNP OR (95% CI)       | Observed P              |                         |                              |                   |                   |                  |                     |            |            |
| rs157198   | EPB41       | 1          | Male   | 0.09 | 385 | 0.91 (0.50-1.67)      | 0.77                    | 0.95                    | 0.75 (0.19-2.98)             | 2.06 (0.65-6.49)  | 0.40 (0.10-1.52)  | 0.97 (0.30-3.15) | 0.30                | 0.93       |            |
|            |             |            | Female | 0.08 | 401 | 0.53 (0.26-1.10)      | 0.08                    | 0.61                    | 0.69 (0.14-3.39)             | 0.23 (0.05-1.06)  | 0.81 (0.20-3.35)  | 0.77 (0.19-3.08) | 0.56                | 1.00       |            |
| rs157220   | EPB41       | 1          | Male   | 0.36 | 383 | 1.53 (1.11-2.11)      | 8.64 × 10 <sup>-3</sup> | 0.10                    | 1.88 (0.97-3.66)             | 1.82 (1.01-3.26)  | 1.46 (0.79-2.70)  | 0.97 (0.46-2.01) | 0.52                | 0.98       |            |
|            |             |            | Female | 0.38 | 401 | 1.02 (0.73-1.42)      | 0.90                    | 1.00                    | 0.90 (0.41-1.95)             | 1.22 (0.71-2.12)  | 0.72 (0.34-1.53)  | 1.14 (0.59-2.22) | 0.69                | 1.00       |            |
| rs126014   | EPB41       | 1          | Male   | 0.37 | 382 | 1.55 (1.12-2.14)      | 7.72 × 10 <sup>-3</sup> | 0.09                    | 1.85 (0.94-3.67)             | 1.85 (1.03-3.31)  | 1.52 (0.81-2.83)  | 0.96 (0.46-2.00) | 0.52                | 0.98       |            |
|            |             |            | Female | 0.38 | 392 | 0.97 (0.70-1.35)      | 0.86                    | 1.00                    | 0.88 (0.41-1.89)             | 1.08 (0.62-1.91)  | 0.69 (0.32-1.48)  | 1.16 (0.60-2.25) | 0.73                | 1.00       |            |
| rs150093   | EPB41       | 1          | Male   | 0.12 | 386 | 0.94 (0.58-1.53)      | 0.81                    | 0.81                    | 1.35 (0.54-3.37)             | 1.45 (0.62-3.38)  | 0.63 (0.20-2.03)  | 0.45 (0.15-1.36) | 0.27                | 0.93       |            |
|            |             |            | Female | 0.15 | 403 | 1.40 (0.89-2.18)      | 0.15                    | 0.81                    | 0.71 (0.22-2.27)             | 0.96 (0.42-2.17)  | 1.91 (0.73-4.99)  | 2.47 (1.06-5.75) | 0.22                | 0.86       |            |
| rs10915208 | EPB41       | 1          | Male   | 0.12 | 386 | 1.89 (1.15-3.10)      | 0.01                    | 0.11                    | 1.88 (0.63-5.64)             | 2.65 (1.00-7.05)  | 2.44 (1.02-5.85)  | 0.81 (0.26-2.57) | 0.39                | 0.96       |            |
|            |             |            | Female | 0.11 | 403 | 1.15 (0.66-1.98)      | 0.63                    | 1.00                    | 1.41 (0.40-4.98)             | 0.58 (0.21-1.58)  | 1.66 (0.57-4.83)  | 1.72 (0.55-5.36) | 0.40                | 0.98       |            |
| rs203298   | EPB41       | 1          | Male   | 0.09 | 386 | 1.46 (0.83-2.55)      | 0.19                    | 0.65                    | 1.75 (0.51-6.06)             | 0.32 (0.07-1.58)  | 1.92 (0.70-5.22)  | 2.32 (0.83-6.49) | 0.14                | 0.74       |            |
|            |             |            | Female | 0.08 | 402 | 0.80 (0.41-1.53)      | 0.49                    | 1.00                    | 0.67 (0.14-3.27)             | 1.07 (0.39-2.92)  | 0.36 (0.07-1.76)  | 1.17 (0.27-4.97) | 0.63                | 1.00       |            |
| rs203277   | EPB41       | 1          | Male   | 0.28 | 386 | 1.38 (0.98-1.94)      | 0.07                    | 0.41                    | 1.68 (0.83-3.40)             | 2.51 (1.29-4.90)  | 1.30 (0.63-2.70)  | 0.55 (0.26-1.19) | 0.02                | 0.24       |            |
|            |             |            | Female | 0.29 | 403 | 1.21 (0.86-1.70)      | 0.28                    | 0.95                    | 0.99 (0.46-2.15)             | 1.27 (0.70-2.29)  | 1.08 (0.53-2.22)  | 1.47 (0.74-2.92) | 0.88                | 1.00       |            |
| rs157194   | EPB41       | 1          | Male   | 0.11 | 386 | 1.35 (0.80-2.25)      | 0.26                    | 0.70                    | 1.08 (0.34-3.44)             | 1.19 (0.45-3.14)  | 1.31 (0.49-3.50)  | 1.97 (0.68-5.71) | 0.87                | 1.00       |            |
|            |             |            | Female | 0.11 | 403 | 0.95 (0.54-1.69)      | 0.87                    | 1.00                    | 0.58 (0.12-2.81)             | 1.05 (0.42-2.64)  | 1.83 (0.46-7.28)  | 0.76 (0.26-2.21) | 0.69                | 1.00       |            |
| rs203278   | EPB41       | 1          | Male   | 0.35 | 386 | 2.27 (1.44-3.60)      | 3.30 × 10 <sup>-4</sup> | 5.57 × 10 <sup>-3</sup> | 1.36 (0.52-3.56)             | 1.48 (0.63-3.51)  | 4.03 (1.61-10.77) | 3.15 (1.18-8.43) | 0.26                | 0.92       |            |
|            |             |            | Female | 0.34 | 403 | 0.79 (0.50-1.25)      | 0.32                    | 0.97                    | 0.99 (0.35-2.76)             | 0.65 (0.29-1.49)  | 0.72 (0.27-1.88)  | 0.92 (0.37-2.26) | 0.91                | 0.99       |            |
| rs157208   | EPB41       | 1          | Male   | 0.24 | 381 | 1.59 (1.11-2.27)      | 0.01                    | 0.11                    | 1.27 (0.59-2.73)             | 1.68 (0.85-3.31)  | 2.00 (1.03-3.89)  | 1.34 (0.61-2.94) | 0.80                | 1.00       |            |
|            |             |            | Female | 0.23 | 400 | 0.93 (0.63-1.37)      | 0.72                    | 1.00                    | 0.81 (0.31-2.12)             | 0.76 (0.39-1.47)  | 1.39 (0.60-3.20)  | 0.97 (0.46-2.05) | 0.72                | 1.00       |            |
| rs150085   | EPB41       | 1          | Male   | 0.28 | 386 | 1.39 (0.99-1.97)      | 0.06                    | 0.36                    | 1.68 (0.83-3.40)             | 2.51 (1.29-4.90)  | 1.38 (0.67-2.87)  | 0.55 (0.26-1.19) | 0.02                | 0.24       |            |
|            |             |            | Female | 0.29 | 403 | 1.21 (0.86-1.70)      | 0.28                    | 0.95                    | 0.99 (0.46-2.15)             | 1.27 (0.70-2.29)  | 1.08 (0.53-2.22)  | 1.47 (0.74-2.92) | 0.88                | 1.00       |            |
| rs157213   | EPB41       | 1          | Male   | 0.11 | 385 | 1.34 (0.80-2.25)      | 0.27                    | 0.71                    | 1.06 (0.33-3.38)             | 1.19 (0.45-3.14)  | 1.30 (0.49-3.50)  | 1.97 (0.68-5.71) | 0.87                | 1.00       |            |
|            |             |            | Female | 0.11 | 402 | 0.97 (0.55-1.71)      | 0.91                    | 1.00                    | 0.58 (0.12-2.80)             | 1.09 (0.43-2.75)  | 1.83 (0.46-7.27)  | 0.76 (0.26-2.21) | 0.68                | 1.00       |            |
| rs150089   | EPB41       | 1          | Male   | 0.32 | 386 | 1.71 (1.23-2.39)      | 1.48 × 10 <sup>-3</sup> | 0.02                    | 1.43 (0.71-2.87)             | 1.24 (0.64-2.38)  | 2.43 (1.29-4.58)  | 1.88 (0.92-3.86) | 0.48                | 0.97       |            |
|            |             |            | Female | 0.31 | 403 | 0.86 (0.61-1.23)      | 0.41                    | 0.99                    | 0.72 (0.31-1.67)             | 0.85 (0.47-1.54)  | 0.94 (0.44-2.03)  | 0.94 (0.47-1.88) | 0.96                | 0.96       |            |
| rs12038347 | EPB41       | 1          | Male   | 0.11 | 386 | 2.01 (1.20-3.37)      | 8.69 × 10 <sup>-3</sup> | 0.10                    | 1.51 (0.48-4.70)             | 3.45 (1.19-10.03) | 3.10 (1.19-8.04)  | 0.81 (0.26-2.56) | 0.20                | 0.85       |            |
|            |             |            | Female | 0.10 | 403 | 1.09 (0.61-1.95)      | 0.77                    | 1.00                    | 1.42 (0.40-4.98)             | 0.50 (0.16-1.61)  | 1.47 (0.49-4.45)  | 1.63 (0.49-5.48) | 0.43                | 0.99       |            |
| rs204057   | EPB41       | 1          | Male   | 0.23 | 386 | 1.77 (1.15-2.73)      | 9.45 × 10 <sup>-3</sup> | 0.10                    | 1.04 (0.40-2.69)             | 2.38 (1.02-5.57)  | 2.64 (1.19-5.88)  | 1.23 (0.50-3.04) | 0.35                | 0.95       |            |
|            |             |            | Female | 0.23 | 401 | 0.99 (0.62-1.58)      | 0.97                    | 1.00                    | 0.95 (0.32-2.80)             | 0.75 (0.33-1.69)  | 1.83 (0.69-4.84)  | 0.85 (0.33-2.15) | 0.55                | 1.00       |            |
| rs204060   | EPB41       | 1          | Male   | 0.27 | 386 | 1.35 (0.95-1.93)      | 0.09                    | 0.49                    | 1.79 (0.87-6.39)             | 2.56 (1.27-5.14)  | 1.35 (0.65-2.80)  | 0.49 (0.23-1.08) | 0.01                | 0.14       |            |
|            |             |            | Female | 0.28 | 403 | 1.18 (0.84-1.66)      | 0.34                    | 0.98                    | 0.90 (0.42-1.97)             | 1.26 (0.70-2.26)  | 1.13 (0.54-2.37)  | 1.39 (0.70-2.75) | 0.87                | 1.00       |            |
| rs2985319  | EPB41       | 1          | Male   | 0.02 | NA  | NA                    | NA                      | NA                      | NA                           | NA                | NA                | NA               | NA                  | NA         |            |
|            |             |            | Female | 0.01 | NA  | NA                    | NA                      | NA                      | NA                           | NA                | NA                | NA               | NA                  | NA         |            |
| rs2985322  | EPB41       | 1          | Male   | 0.32 | 386 | 1.71 (1.23-2.39)      | 1.48 × 10 <sup>-3</sup> | 0.02                    | 1.43 (0.71-2.87)             | 1.24 (0.64-2.38)  | 2.43 (1.29-4.58)  | 1.88 (0.92-3.86) | 0.48                | 0.97       |            |
|            |             |            | Female | 0.31 | 403 | 0.87 (0.61-1.24)      | 0.44                    | 0.99                    | 0.75 (0.33-1.74)             | 0.85 (0.47-1.54)  | 0.94 (0.44-2.03)  | 0.94 (0.47-1.88) | 0.98                | 0.98       |            |
| rs2985344  | EPB41       | 1          | Male   | 0.28 | 385 | 1.38 (0.98-1.95)      | 0.07                    | 0.40                    | 1.68 (0.83-3.41)             | 2.51 (1.29-4.90)  | 1.32 (0.64-2.76)  | 0.55 (0.26-1.19) | 0.02                | 0.24       |            |
|            |             |            | Female | 0.29 | 403 | 1.21 (0.86-1.70)      | 0.28                    | 0.95                    | 0.99 (0.46-2.15)             | 1.27 (0.70-2.29)  | 1.08 (0.53-2.22)  | 1.47 (0.74-2.92) | 0.88                | 1.00       |            |
| rs2762682  | EPB41       | 1          | Male   | 0.28 | 386 | 1.39 (0.99-1.97)      | 0.06                    | 0.36                    | 1.68 (0.83-3.40)             | 2.51 (1.29-4.90)  | 1.38 (0.67-2.87)  | 0.55 (0.26-1.19) | 0.02                | 0.24       |            |
|            |             |            | Female | 0.29 | 403 | 1.21 (0.86-1.70)      | 0.28                    | 0.95                    | 0.99 (0.46-2.15)             | 1.27 (0.70-2.29)  | 1.08 (0.53-2.22)  | 1.47 (0.74-2.92) | 0.88                | 1.00       |            |
| rs12021667 | EPB41       | 1          | Male   | 0.40 | 386 | 0.45 (0.32-0.64)      | 2.01 × 10 <sup>-4</sup> | 3.65 × 10 <sup>-3</sup> | 0.40 (0.18-0.87)             | 0.37 (0.19-0.71)  | 0.32 (0.16-0.62)  | 0.93 (0.48-1.79) | 0.11                | 0.67       |            |
|            |             |            | Female | 0.39 | 403 | 0.96 (0.69-1.34)      | 0.82                    | 1.00                    | 1.35 (0.63-2.90)             | 0.93 (0.52-1.67)  | 1.00 (0.51-1.98)  | 0.73 (0.36-1.46) | 0.70                | 1.00       |            |
| rs2762686  | EPB41       | 1          | Male   | 0.11 | 386 | 1.32 (0.79-2.20)      | 0.30                    | 0.75                    | 1.08 (0.34-3.45)             | 1.19 (0.45-3.14)  | 1.30 (0.49-3.49)  | 1.77 (0.62-5.05) | 0.93                | 0.99       |            |
|            |             |            | Female | 0.11 | 402 | 0.95 (0.54-1.69)      | 0.87                    | 1.00                    | 0.58 (0.12-2.78)             | 1.05 (0.42-2.64)  | 1.83 (0.46-7.27)  | 0.76 (0.26-2.21) | 0.69                | 1.00       |            |
| rs2985329  | EPB41       | 1          | Male   | 0.12 | 386 | 1.21 (0.73-1.99)      | 0.47                    | 0.88                    | 1.04 (0.35-3.08)             | 1.10 (0.42-2.88)  | 1.08 (0.41-2.82)  | 1.77 (0.62-5.04) | 0.88                | 1.00       |            |
|            |             |            | Female | 0.12 | 402 | 1.05 (0.61-1.82)      | 0.85                    | 1.00                    | 0.49 (0.10-2.32)             | 0.98 (0.39-2.44)  | 1.83 (0.46-7.25)  | 1.28 (0.49-3.37) | 0.60                | 1.00       |            |
| rs16837840 | EPB41       | 1          | Male   | 0.11 | 386 | 2.09 (1.25-3.50)      | 5.23 × 10 <sup>-3</sup> | 0.06                    | 1.51 (0.48-4.70)             | 3.45 (1.19-10.02) | 3.10 (1.19-8.05)  | 1.02 (0.34-3.05) | 0.31                | 0.93       |            |
|            |             |            | Female | 0.10 | 403 | 1.06 (0.60-1.90)      | 0.84                    | 1.00                    | 1.42 (0.40-4.98)             | 0.50 (0.16-1.61)  | 1.47 (0.49-4.45)  | 1.44 (0.44-4.74) | 0.47                | 0.99       |            |
| rs2985331  | EPB41       | 1          | Male   | 0.16 | 386 | 1.84 (1.16-2.90)      | 9.48 × 10 <sup>-3</sup> | 0.10                    | 2.03 (0.77-5.33)             | 3.75 (1.47-9.56)  | 1.91 (0.82-4.45)  | 0.72 (0.26-1.97) | 0.12                | 0.70       |            |
|            |             |            | Female | 0.15 | 402 | 1.07 (0.65-1.78)      | 0.79                    | 1.00                    | 1.60 (0.55-4.64)             | 1.90 (0.77-4.69)  | 0.58 (0.20-1.71)  | 0.67 (0.23-1.91) | 0.25                | 0.88       |            |
| rs12072697 | EPB41       | 1          | Male   | 0.09 | 385 | 1.45 (0.83-2.54)      | 0.20                    | 0.66                    | 1.72 (0.50-5.95)             | 0.32 (0.07-1.58)  | 1.92 (0.70-5.23)  | 2.31 (0.83-6.48) | 0.14                | 0.74       |            |
|            |             |            | Female | 0.09 | 401 | 0.85 (0.45-1.61)      | 0.61                    | 1.00                    | 0.66 (0.13-3.19)             | 1.24 (0.47-3.26)  | 0.36 (0.07-1.75)  | 1.15 (0.27-4.87) | 0.54                | 1.00       |            |
| rs2985332  | EPB41       | 1          | Male   | 0.15 | 373 | 1.09 (0.67-1.77)      | 0.72                    | 0.98                    | 1.17 (0.41-3.34)             | 1.01 (0.40-2.54)  | 0.89 (0.37-2.18)  | 1.47 (0.52-4.14) | 0.91                | 1.00       |            |
|            |             |            | Female | 0.15 | 395 | 0.94 (0.55-1.58)      | 0.80                    | 1.00                    | 0.46 (0.10-2.17)             | 0.97 (0.41-2.30)  | 1.40 (0.41-4.81)  | 0.98 (0.37-2.58) | 0.72                | 1.00       |            |
| rs2985335  | EPB41       | 1          | Male   | 0.12 | 386 | 1.17 (0.71-1.94)      | 0.53                    | 0.92                    | 1.04 (0.35-3.07)             | 1.00 (0.39-2.60)  | 1.08 (0.41-2.82)  | 1.77 (0.62-5.04) | 0.86                | 1.00       |            |
|            |             |            | Female | 0.12 | 403 | 1.05 (0.61-1.83)      | 0.85                    | 1.00                    | 0.49 (0.10-2.35)             | 0.97 (0.39-2.44)  | 1.83 (0.46-7.27)  | 1.28 (0.49-3.37) | 0.61                | 1.00       |            |
| rs11807517 | EPB41       | 1          | Male   | 0.00 | NA  | NA                    | NA                      | NA                      | NA                           | NA                | NA                | NA               | NA                  | NA         |            |
|            |             |            | Female | 0.00 | NA  | NA                    | NA                      | NA                      | NA                           | NA                | NA                | NA               | NA                  | NA         |            |
| rs10915216 | EPB41       | 1          | Male   | 0.50 | 384 | 0.62 (0.45-0.85)      | 2.68 × 10 <sup>-3</sup> | 0.04                    | 0.46 (0.22-0.99)             | 0.57 (0.32-1.03)  | 0.60 (0.33-1.08)  | 0.89 (0.47-1.71) | 0.60                | 0.98       |            |
|            |             |            | Female | 0.49 | 402 | 0.97 (0.71-1.33)      | 0.87                    | 1.00                    | 1.41 (0.69-2.87)             | 0.82 (0.47-1.40)  | 1.08 (0.56-2.07)  | 0.83 (0.43-1.60) | 0.62                | 1.00       |            |
| rs2486200  | EPB41       | 1          | Male   | 0.23 | 386 | 1.55 (1.01-2.40)      | 0.05                    | 0.31                    | 1.79 (0.69-4.64)             | 0.79 (0.33-1.88)  | 1.53 (0.69-3.37)  | 2.97 (1.19-7.42) | 0.22                | 0.87       |            |
|            |             |            | Female | 0.22 | 402 | 0.82 (0.51-1.33)      | 0.43                    | 0.99                    | 0.37 (0.10-1.39)             | 0.90 (0.41-2.01)  | 0.71 (0.24-2.11)  | 1.28 (0.52-3.19) | 0.45                | 0.99       |            |
| rs12027267 | EPB41       | 1          | Male   | 0.40 | 385 | 0.46 (0.33-0.64)      | 2.3                     |                         |                              |                   |                   |                  |                     |            |            |

| SNP        | Gene Region | Chromosome | Gender | MAF  | N   | Marginal Effect       |            |         | Treatment Stratified Effects |                  |                   |                   | Test of Interaction     |            |            |
|------------|-------------|------------|--------|------|-----|-----------------------|------------|---------|------------------------------|------------------|-------------------|-------------------|-------------------------|------------|------------|
|            |             |            |        |      |     | Likelihood ratio test |            | Placebo | Bupropion                    | Patch            | Spray             | Observed P        | Adjusted P              | Observed P | Adjusted P |
|            |             |            |        |      |     | SNP OR (95% CI)       | Observed P |         |                              |                  |                   |                   |                         |            |            |
| rs10798880 | HCRTR1      | 1          | Female | 0.39 | 368 | 1.02 (0.71-1.45)      | 0.93       | 0.93    | 1.77 (0.85-3.66)             | 0.79 (0.42-1.48) | 0.73 (0.34-1.57)  | 1.11 (0.51-2.38)  | 0.30                    | 0.63       |            |
|            |             |            | Male   | 0.38 | 386 | 1.08 (0.79-1.49)      | 0.62       | 0.88    | 1.06 (0.52-2.17)             | 0.99 (0.54-1.81) | 1.29 (0.74-2.24)  | 0.95 (0.46-1.94)  | 0.90                    | 0.96       |            |
| rs7546297  | HCRTR1      | 1          | Female | 0.41 | 403 | 0.81 (0.58-1.13)      | 0.21       | 0.47    | 0.46 (0.20-1.06)             | 0.96 (0.55-1.69) | 0.84 (0.40-1.75)  | 0.90 (0.46-1.77)  | 0.50                    | 0.78       |            |
|            |             |            | Male   | 0.37 | 386 | 1.09 (0.79-1.50)      | 0.60       | 0.86    | 1.06 (0.52-2.17)             | 0.96 (0.52-1.76) | 1.21 (0.69-2.12)  | 1.12 (0.55-2.29)  | 0.96                    | 0.96       |            |
| rs7524405  | HCRTR1      | 1          | Female | 0.41 | 403 | 0.84 (0.60-1.17)      | 0.29       | 0.54    | 0.51 (0.22-1.15)             | 1.00 (0.57-1.76) | 0.87 (0.42-1.81)  | 0.90 (0.46-1.77)  | 0.58                    | 0.69       |            |
|            |             |            | Male   | 0.39 | 386 | 1.05 (0.77-1.44)      | 0.76       | 0.93    | 0.90 (0.45-1.79)             | 0.89 (0.48-1.66) | 1.30 (0.75-2.26)  | 1.07 (0.53-2.16)  | 0.78                    | 0.99       |            |
| rs7539745  | CHRN2       | 1          | Female | 0.41 | 402 | 0.80 (0.57-1.13)      | 0.21       | 0.47    | 0.47 (0.20-1.10)             | 0.91 (0.52-1.61) | 0.92 (0.44-1.93)  | 0.87 (0.44-1.72)  | 0.58                    | 0.74       |            |
|            |             |            | Male   | 0.13 | 386 | 1.16 (0.74-1.80)      | 0.52       | 0.97    | 1.19 (0.50-2.85)             | 1.99 (0.77-5.14) | 1.12 (0.49-2.55)  | 0.70 (0.26-1.84)  | 0.50                    | 0.83       |            |
| rs7543174  | CHRN2       | 1          | Female | 0.15 | 402 | 1.10 (0.72-1.68)      | 0.66       | 0.66    | 3.11 (1.27-7.59)             | 0.63 (0.29-1.37) | 0.97 (0.37-2.58)  | 1.03 (0.42-2.53)  | 0.06                    | 0.28       |            |
|            |             |            | Male   | 0.14 | 386 | 0.99 (0.64-1.52)      | 0.96       | 1.00    | 0.86 (0.35-2.14)             | 1.60 (0.68-3.74) | 0.98 (0.44-2.21)  | 0.65 (0.25-1.74)  | 0.57                    | 0.80       |            |
| rs4845652  | CHRN2       | 1          | Female | 0.18 | 403 | 0.88 (0.58-1.35)      | 0.56       | 0.67    | 2.55 (1.10-5.92)             | 0.58 (0.27-1.23) | 0.57 (0.21-1.56)  | 0.80 (0.33-1.93)  | 0.04                    | 0.24       |            |
|            |             |            | Male   | 0.09 | 386 | 1.09 (0.65-1.83)      | 0.75       | 1.00    | 0.67 (0.21-2.15)             | 1.90 (0.71-5.10) | 1.54 (0.58-4.06)  | 0.42 (0.09-1.93)  | 0.23                    | 0.53       |            |
| rs2072658  | CHRN2       | 1          | Female | 0.09 | 403 | 0.83 (0.46-1.49)      | 0.52       | 0.77    | 2.18 (0.66-7.22)             | 0.52 (0.18-1.53) | 0.77 (0.18-3.26)  | 0.73 (0.24-2.27)  | 0.37                    | 0.82       |            |
|            |             |            | Male   | 0.01 | NA  | NA                    | NA         | NA      | NA                           | NA               | NA                | NA                | NA                      | NA         |            |
| rs2072659  | CHRN2       | 1          | Female | 0.02 | NA  | NA                    | NA         | NA      | NA                           | NA               | NA                | NA                | NA                      | NA         |            |
|            |             |            | Male   | 0.11 | 349 | 0.73 (0.41-1.27)      | 0.25       | 0.85    | 0.22 (0.03-1.77)             | 0.43 (0.14-1.29) | 1.24 (0.42-3.62)  | 1.38 (0.47-4.07)  | 0.18                    | 0.51       |            |
| rs2072660  | CHRN2       | 1          | Female | 0.10 | 376 | 1.57 (0.91-2.70)      | 0.11       | 0.41    | 0.85 (0.17-4.24)             | 1.24 (0.48-3.19) | 4.03 (1.14-14.25) | 1.48 (0.56-3.88)  | 0.39                    | 0.76       |            |
|            |             |            | Male   | 0.25 | 382 | 0.79 (0.56-1.12)      | 0.18       | 0.76    | 0.25 (0.10-0.66)             | 0.59 (0.29-1.21) | 1.15 (0.61-2.17)  | 1.50 (0.75-2.97)  | 8.03 × 10 <sup>-3</sup> | 0.06       |            |
| rs2072661  | CHRN2       | 1          | Female | 0.22 | 402 | 0.76 (0.52-1.11)      | 0.15       | 0.45    | 0.73 (0.25-2.14)             | 0.63 (0.32-1.26) | 1.31 (0.63-2.75)  | 0.57 (0.27-1.21)  | 0.41                    | 0.64       |            |
|            |             |            | Male   | 0.26 | 386 | 0.75 (0.49-1.16)      | 0.19       | 0.77    | 0.26 (0.09-0.74)             | 0.33 (0.13-0.80) | 1.30 (0.59-2.85)  | 2.14 (0.87-5.24)  | 2.00 × 10 <sup>-3</sup> | 0.02       |            |
| rs3811450  | CHRN2       | 1          | Female | 0.22 | 403 | 0.64 (0.40-1.04)      | 0.07       | 0.40    | 0.71 (0.23-2.20)             | 0.54 (0.22-1.29) | 1.35 (0.51-3.57)  | 0.37 (0.14-1.00)  | 0.30                    | 0.76       |            |
|            |             |            | Male   | 0.08 | 385 | 0.72 (0.38-1.34)      | 0.29       | 0.86    | 0.32 (0.07-1.54)             | 0.89 (0.29-2.67) | 0.73 (0.21-2.55)  | 1.08 (0.29-3.98)  | 0.64                    | 0.64       |            |
| rs9616     | CHRN2       | 1          | Female | 0.07 | 402 | 0.61 (0.29-1.27)      | 0.17       | 0.42    | NA                           | 0.41 (0.11-1.51) | 0.68 (0.17-2.81)  | 1.42 (0.38-5.27)  | 0.27                    | 0.75       |            |
|            |             |            | Male   | 0.29 | 386 | 1.03 (0.74-1.43)      | 0.84       | 1.00    | 2.98 (1.25-7.08)             | 0.91 (0.48-1.72) | 0.91 (0.51-1.61)  | 0.71 (0.35-1.43)  | 0.06                    | 0.23       |            |
| rs1127314  | CHRN2       | 1          | Female | 0.27 | 403 | 1.36 (0.96-1.93)      | 0.08       | 0.44    | 0.98 (0.45-2.16)             | 1.54 (0.79-2.97) | 1.06 (0.52-2.15)  | 1.99 (0.99-4.01)  | 0.48                    | 0.48       |            |
|            |             |            | Male   | 0.31 | 386 | 1.02 (0.67-1.56)      | 0.92       | 1.00    | 0.48 (0.18-1.24)             | 0.87 (0.38-2.02) | 0.85 (0.39-1.86)  | 3.02 (1.21-7.56)  | 0.04                    | 0.18       |            |
| rs1127313  | CHRN2       | 1          | Female | 0.29 | 403 | 0.60 (0.38-0.95)      | 0.03       | 0.20    | 0.44 (0.15-1.30)             | 0.51 (0.22-1.17) | 1.80 (0.69-4.70)  | 0.34 (0.13-0.86)  | 0.07                    | 0.31       |            |
|            |             |            | Male   | 0.46 | 386 | 1.06 (0.65-1.72)      | 0.82       | 1.00    | 5.61 (1.20-26.10)            | 0.65 (0.25-1.72) | 1.10 (0.48-2.55)  | 0.54 (0.20-1.46)  | 0.03                    | 0.18       |            |
| rs2131902  | CHRN2       | 1          | Female | 0.47 | 403 | 1.57 (0.93-2.67)      | 0.09       | 0.42    | 2.10 (0.55-7.99)             | 1.72 (0.66-4.49) | 0.63 (0.22-1.80)  | 2.60 (0.91-7.40)  | 0.27                    | 0.75       |            |
|            |             |            | Male   | 0.32 | 386 | 0.95 (0.69-1.30)      | 0.75       | 1.00    | 0.49 (0.23-1.04)             | 0.89 (0.48-1.67) | 0.86 (0.49-1.54)  | 2.06 (1.05-4.02)  | 0.03                    | 0.19       |            |
| rs3766927  | CHRN2       | 1          | Female | 0.30 | 403 | 0.75 (0.53-1.07)      | 0.11       | 0.44    | 0.61 (0.25-1.49)             | 0.68 (0.36-1.28) | 1.50 (0.73-3.09)  | 0.52 (0.25-1.07)  | 0.18                    | 0.61       |            |
|            |             |            | Male   | 0.31 | 386 | 0.99 (0.65-1.52)      | 0.97       | 0.97    | 0.47 (0.18-1.23)             | 0.87 (0.38-2.02) | 0.78 (0.36-1.70)  | 3.02 (1.21-7.55)  | 0.03                    | 0.19       |            |
| rs6700238  | NTRK1       | 1          | Female | 0.29 | 403 | 0.59 (0.37-0.94)      | 0.02       | 0.18    | 0.44 (0.15-1.30)             | 0.51 (0.22-1.17) | 1.57 (0.60-4.11)  | 0.36 (0.14-0.91)  | 0.13                    | 0.50       |            |
|            |             |            | Male   | 0.00 | NA  | NA                    | NA         | NA      | NA                           | NA               | NA                | NA                | NA                      | NA         |            |
| rs1800878  | NTRK1       | 1          | Female | 0.00 | NA  | NA                    | NA         | NA      | NA                           | NA               | NA                | NA                | NA                      | NA         |            |
|            |             |            | Male   | 0.02 | NA  | NA                    | NA         | NA      | NA                           | NA               | NA                | NA                | NA                      | NA         |            |
| rs1800879  | NTRK1       | 1          | Female | 0.03 | NA  | NA                    | NA         | NA      | NA                           | NA               | NA                | NA                | NA                      | NA         |            |
|            |             |            | Male   | 0.38 | 386 | 0.75 (0.54-1.02)      | 0.07       | 0.33    | 1.31 (0.65-2.61)             | 0.59 (0.31-1.11) | 0.52 (0.29-0.94)  | 0.98 (0.50-1.92)  | 0.16                    | 0.55       |            |
| rs6334     | NTRK1       | 1          | Female | 0.36 | 403 | 0.77 (0.54-1.09)      | 0.13       | 0.54    | 1.41 (0.69-2.89)             | 0.70 (0.37-1.33) | 0.62 (0.30-1.27)  | 0.60 (0.29-1.23)  | 0.30                    | 0.71       |            |
|            |             |            | Male   | 0.21 | 386 | 1.16 (0.81-1.67)      | 0.43       | 0.82    | 1.15 (0.55-2.43)             | 1.23 (0.63-2.38) | 1.54 (0.78-3.06)  | 0.64 (0.25-1.63)  | 0.51                    | 0.87       |            |
| rs6336     | NTRK1       | 1          | Female | 0.23 | 403 | 1.15 (0.78-1.71)      | 0.48       | 0.90    | 1.46 (0.65-3.28)             | 0.77 (0.37-1.62) | 1.80 (0.81-4.00)  | 0.95 (0.41-2.21)  | 0.41                    | 0.78       |            |
|            |             |            | Male   | 0.06 | 386 | 1.36 (0.72-2.60)      | 0.35       | 0.87    | 1.19 (0.33-4.33)             | 2.74 (0.86-8.71) | 0.90 (0.25-3.30)  | 0.81 (0.15-4.50)  | 0.52                    | 0.76       |            |
| rs2644596  | NTRK1       | 1          | Female | 0.05 | 403 | 0.84 (0.36-1.93)      | 0.67       | 0.67    | 0.38 (0.05-3.10)             | 0.81 (0.20-3.23) | 1.11 (0.19-6.61)  | 1.57 (0.24-10.06) | 0.76                    | 0.76       |            |
|            |             |            | Male   | 0.21 | 386 | 1.00 (0.68-1.48)      | 0.98       | 0.98    | 0.78 (0.32-1.90)             | 0.89 (0.42-1.90) | 1.52 (0.75-3.07)  | 0.83 (0.37-1.88)  | 0.58                    | 0.58       |            |
| rs943551   | NTRK1       | 1          | Female | 0.21 | 403 | 1.28 (0.86-1.91)      | 0.23       | 0.68    | 1.81 (0.77-4.25)             | 0.83 (0.40-1.73) | 1.66 (0.69-3.96)  | 1.32 (0.60-2.94)  | 0.49                    | 0.81       |            |
|            |             |            | Male   | 0.06 | 386 | 0.75 (0.38-1.51)      | 0.42       | 0.88    | 1.73 (0.45-6.61)             | 1.08 (0.32-3.64) | 0.24 (0.05-1.16)  | 0.69 (0.13-3.69)  | 0.24                    | 0.66       |            |
| rs943552   | NTRK1       | 1          | Female | 0.06 | 403 | 1.23 (0.62-2.43)      | 0.56       | 0.80    | 0.30 (0.04-2.43)             | 1.96 (0.62-6.23) | NA                | 3.89 (1.16-13.11) | 5.75 × 10 <sup>-3</sup> | 0.03       |            |
|            |             |            | Male   | 0.06 | 385 | 0.75 (0.38-1.50)      | 0.41       | 0.88    | 1.70 (0.45-6.50)             | 1.08 (0.32-3.64) | 0.24 (0.05-1.16)  | 0.69 (0.13-3.69)  | 0.25                    | 0.66       |            |
| rs2768762  | NTRK1       | 1          | Female | 0.06 | 403 | 1.23 (0.62-2.43)      | 0.56       | 0.80    | 0.30 (0.04-2.43)             | 1.96 (0.62-6.23) | NA                | 3.89 (1.16-13.11) | 5.75 × 10 <sup>-3</sup> | 0.03       |            |
|            |             |            | Male   | 0.21 | 386 | 0.86 (0.55-1.33)      | 0.49       | 0.82    | 1.58 (0.61-4.13)             | 0.92 (0.38-2.24) | 0.59 (0.26-1.34)  | 0.73 (0.29-1.83)  | 0.48                    | 0.89       |            |
| rs2644620  | NTRK1       | 1          | Female | 0.19 | 403 | 1.21 (0.75-1.94)      | 0.44       | 0.90    | 1.29 (0.46-3.63)             | 0.99 (0.42-3.32) | 0.63 (0.23-1.71)  | 2.71 (1.05-7.01)  | 0.20                    | 0.54       |            |
|            |             |            | Male   | 0.11 | 386 | 0.96 (0.59-1.55)      | 0.86       | 0.98    | 1.70 (0.61-4.74)             | 0.66 (0.24-1.83) | 1.52 (0.65-3.54)  | 0.39 (0.12-1.26)  | 0.15                    | 0.56       |            |
| rs1186675  | KCNJ9       | 1          | Female | 0.13 | 403 | 1.19 (0.72-1.97)      | 0.49       | 0.87    | 1.88 (0.65-5.50)             | 0.89 (0.34-2.30) | 0.84 (0.30-2.30)  | 1.69 (0.61-4.68)  | 0.57                    | 0.77       |            |
|            |             |            | Male   | 0.12 | 385 | 0.82 (0.50-1.33)      | 0.41       | 0.88    | 0.35 (0.07-1.67)             | 1.63 (0.68-3.88) | 0.63 (0.27-1.48)  | 0.75 (0.26-2.18)  | 0.25                    | 0.56       |            |
| rs4656874  | KCNJ9       | 1          | Female | 0.12 | 403 | 0.79 (0.46-1.36)      | 0.39       | 0.56    | 0.44 (0.12-1.66)             | 0.93 (0.40-2.21) | 1.08 (0.32-3.61)  | 0.74 (0.24-2.29)  | 0.75                    | 0.99       |            |
|            |             |            | Male   | 0.28 | 386 | 1.23 (0.88-1.73)      | 0.23       | 0.71    | 2.70 (1.31-5.55)             | 1.10 (0.57-2.13) | 1.10 (0.54-2.23)  | 0.70 (0.34-1.43)  | 0.06                    | 0.22       |            |
| rs4656876  | KCNJ9       | 1          | Female | 0.30 | 403 | 0.84 (0.59-1.19)      | 0.32       | 0.65    | 0.54 (0.21-1.36)             | 0.65 (0.36-1.20) | 1.51 (0.71-3.21)  | 0.92 (0.48-1.76)  | 0.26                    | 0.66       |            |
|            |             |            | Male   | 0.45 | 386 | 1.07 (0.71-1.61)      | 0.68       | 0.97    | 1.92 (0.97-3.79)             | 1.31 (0.73-2.33) | 0.95 (0.53-1.71)  | 0.53 (0.27-1.05)  | 0.05                    | 0.21       |            |
| rs2737703  | KCNJ9       | 1          | Female | 0.47 | 403 | 0.73 (0.53-1.00)      | 0.05       | 0.22    | 0.44 (0.20-0.99)             | 0.59 (0.33-1.03) | 1.30 (0.69-2.43)  | 0.74 (0.40-1.37)  | 0.14                    | 0.45       |            |
|            |             |            | Male   | 0.33 | 381 | 1.05 (0.68-1.61)      | 0.84       | 0.84    | 2.44 (0.85-6.99)             | 0.90 (0.39-2.10) | 1.29 (0.58-2.83)  | 0.48 (0.19-1.18)  | 0.11                    | 0.34       |            |
| rs2753268  | KCNJ9       | 1          | Female | 0.35 | 402 | 0.76 (0.48-1.20)      | 0.24       | 0.61    | 0.71 (0.25-2.01)             | 0.59 (0.27-1.32) | 1.16 (0.44-3.08)  | 0.76 (0.31-1.89)  | 0.78                    | 0.99       |            |
|            |             |            | Male   | 0.28 | 386 | 1.17 (0.76-1.80)      | 0.47       | 0.88    | 2.85 (1.04-7.84)             | 0.89 (0.39-2.05) | 1.33 (0.60-2.95)  | 0.65 (0.27-1.59)  | 0.15                    | 0.39       |            |
| rs2494211  | KCNJ9       | 1          | Female | 0.29 | 403 | 0.76 (0.48-1.20)      | 0.23       | 0.62    | 0.57 (0.20-1.59)             | 0.65 (0.29-1.44) | 1.04 (0.39-2.75)  | 0.89 (0.36-2.20)  | 0.81                    | 0.99       |            |
|            |             |            | Male   | 0.33 | 385 | 1.15 (0.74-1.76)      | 0.54       | 0.91    | 2.44 (0.85-6.98)             | 1.09 (0.47-2.56) | 1.36 (0.62-2.98)  | 0.52 (0.22-1.30)  | 0.16                    | 0.41       |            |
| rs3180694  | KCNJ9       | 1          | Female | 0.35 | 403 | 0.69 (0.44-1.08)      | 0.11       | 0.35    | 0.68 (0.24-1.92)             | 0.53 (0.24-1.19) | 0.93 (0.36-2.41)  | 0.73 (0.29-1.80)  |                         |            |            |

| SNP        | Gene Region | Chromosome | Gender | MAF  | N   | Marginal Effect       |            |         | Treatment Stratified Effects |                   |                  |                   | Test of Interaction |            |            |
|------------|-------------|------------|--------|------|-----|-----------------------|------------|---------|------------------------------|-------------------|------------------|-------------------|---------------------|------------|------------|
|            |             |            |        |      |     | Likelihood ratio test |            | Placebo | Bupropion                    | Patch             | Spray            | Observed P        | Adjusted P          | Observed P | Adjusted P |
|            |             |            |        |      |     | SNP OR (95% CI)       | Adjusted P |         |                              |                   |                  |                   |                     |            |            |
| rs1150144  | NR4A2       | 2          | Female | 0.33 | 403 | 0.70 (0.45-1.11)      | 0.13       | 0.41    | 0.72 (0.26-2.01)             | 0.94 (0.42-2.10)  | 0.73 (0.27-1.92) | 0.46 (0.18-1.15)  | 0.71                | 0.82       |            |
|            |             |            | Male   | 0.28 | 386 | 1.16 (0.82-1.64)      | 0.40       | 0.71    | 1.05 (0.51-2.17)             | 1.18 (0.64-2.17)  | 0.86 (0.44-1.69) | 2.11 (0.90-4.97)  | 0.43                | 0.83       |            |
|            |             |            | Female | 0.30 | 403 | 0.87 (0.61-1.24)      | 0.45       | 0.70    | 0.61 (0.24-1.53)             | 0.94 (0.51-1.73)  | 1.28 (0.60-2.76) | 0.75 (0.40-1.43)  | 0.61                | 0.94       |            |
| rs12803    | NR4A2       | 2          | Male   | 0.46 | 386 | 1.54 (0.95-2.50)      | 0.07       | 0.30    | 2.04 (0.67-6.25)             | 0.98 (0.39-2.47)  | 0.99 (0.43-2.32) | 4.17 (1.29-13.50) | 0.15                | 0.43       |            |
|            |             |            | Female | 0.49 | 403 | 0.74 (0.45-1.22)      | 0.24       | 0.62    | 0.78 (0.26-2.32)             | 0.99 (0.41-2.41)  | 0.95 (0.28-3.28) | 0.44 (0.17-1.13)  | 0.63                | 0.82       |            |
| rs13428968 | NR4A2       | 2          | Male   | 0.17 | 386 | 1.33 (0.89-1.99)      | 0.17       | 0.54    | 1.50 (0.61-3.67)             | 1.06 (0.47-2.37)  | 1.22 (0.59-2.51) | 1.71 (0.74-3.95)  | 0.85                | 0.97       |            |
|            |             |            | Female | 0.18 | 403 | 1.06 (0.70-1.59)      | 0.79       | 0.79    | 1.56 (0.66-3.71)             | 1.34 (0.66-2.71)  | 0.65 (0.28-1.47) | 0.90 (0.36-2.30)  | 0.43                | 0.89       |            |
| rs834829   | NR4A2       | 2          | Male   | 0.28 | 386 | 1.29 (0.84-1.98)      | 0.25       | 0.60    | 1.23 (0.48-3.16)             | 1.45 (0.63-3.36)  | 0.86 (0.39-1.91) | 1.96 (0.80-4.79)  | 0.58                | 0.88       |            |
|            |             |            | Female | 0.30 | 403 | 0.64 (0.40-1.01)      | 0.06       | 0.23    | 0.64 (0.23-1.79)             | 1.12 (0.50-2.50)  | 0.68 (0.25-1.86) | 0.29 (0.11-0.75)  | 0.20                | 0.56       |            |
| rs834830   | NR4A2       | 2          | Male   | 0.20 | 386 | 1.05 (0.71-1.56)      | 0.80       | 0.94    | 0.56 (0.23-1.36)             | 1.66 (0.81-3.40)  | 0.73 (0.34-1.58) | 1.85 (0.74-4.65)  | 0.11                | 0.40       |            |
|            |             |            | Female | 0.22 | 403 | 0.84 (0.57-1.25)      | 0.39       | 0.70    | 0.64 (0.23-1.75)             | 0.94 (0.47-1.86)  | 1.38 (0.53-3.58) | 0.68 (0.34-1.36)  | 0.61                | 0.91       |            |
| rs2709371  | CREB1       | 2          | Male   | 0.21 | 386 | 1.26 (0.87-1.83)      | 0.22       | 0.60    | 2.26 (0.91-5.66)             | 1.84 (0.89-3.80)  | 0.92 (0.48-1.77) | 0.82 (0.37-1.85)  | 0.20                | 0.55       |            |
|            |             |            | Female | 0.18 | 403 | 1.31 (0.88-1.95)      | 0.19       | 0.56    | 1.84 (0.84-4.04)             | 0.76 (0.35-1.64)  | 2.02 (0.87-4.68) | 1.17 (0.49-2.75)  | 0.27                | 0.60       |            |
| rs2253206  | CREB1       | 2          | Male   | 0.44 | 383 | 0.67 (0.43-1.04)      | 0.08       | 0.31    | 0.36 (0.13-0.98)             | 0.56 (0.23-1.36)  | 0.84 (0.38-1.85) | 0.98 (0.39-2.51)  | 0.46                | 0.46       |            |
|            |             |            | Female | 0.48 | 400 | 0.95 (0.57-1.57)      | 0.83       | 0.83    | 0.49 (0.17-1.43)             | 0.99 (0.41-2.40)  | 0.72 (0.26-1.99) | 2.32 (0.71-7.64)  | 0.25                | 0.61       |            |
| rs2551640  | CREB1       | 2          | Male   | 0.33 | 386 | 0.77 (0.56-1.06)      | 0.10       | 0.36    | 0.39 (0.17-0.88)             | 0.76 (0.43-1.36)  | 0.91 (0.52-1.60) | 1.08 (0.55-2.10)  | 0.23                | 0.53       |            |
|            |             |            | Female | 0.36 | 401 | 0.93 (0.66-1.31)      | 0.69       | 0.87    | 0.57 (0.24-1.32)             | 0.81 (0.45-1.48)  | 1.05 (0.50-2.22) | 1.35 (0.71-2.54)  | 0.40                | 0.65       |            |
| rs2551642  | CREB1       | 2          | Male   | 0.20 | 386 | 1.36 (0.88-2.12)      | 0.17       | 0.52    | 2.12 (0.81-5.55)             | 1.98 (0.84-4.66)  | 1.18 (0.53-2.60) | 0.67 (0.25-1.82)  | 0.29                | 0.57       |            |
|            |             |            | Female | 0.18 | 403 | 1.49 (0.93-2.39)      | 0.10       | 0.38    | 2.98 (1.04-8.51)             | 0.72 (0.29-1.75)  | 2.71 (1.02-7.20) | 1.16 (0.44-3.04)  | 0.11                | 0.36       |            |
| rs2709402  | CREB1       | 2          | Male   | 0.20 | 386 | 1.36 (0.88-2.12)      | 0.17       | 0.52    | 2.12 (0.81-5.55)             | 1.98 (0.84-4.66)  | 1.18 (0.53-2.60) | 0.67 (0.25-1.82)  | 0.29                | 0.57       |            |
|            |             |            | Female | 0.18 | 402 | 1.49 (0.93-2.40)      | 0.10       | 0.38    | 2.98 (1.05-8.52)             | 0.75 (0.30-1.83)  | 2.52 (0.95-6.67) | 1.16 (0.44-3.04)  | 0.14                | 0.43       |            |
| rs10932201 | CREB1       | 2          | Male   | 0.46 | 386 | 1.10 (0.69-1.77)      | 0.69       | 0.90    | 2.91 (0.77-10.94)            | 0.91 (0.38-2.20)  | 1.49 (0.64-3.47) | 0.46 (0.17-1.22)  | 0.11                | 0.37       |            |
|            |             |            | Female | 0.46 | 402 | 0.90 (0.57-1.49)      | 0.68       | 0.95    | 1.54 (0.46-5.18)             | 1.08 (0.44-2.68)  | 0.71 (0.24-2.09) | 0.60 (0.24-1.56)  | 0.61                | 0.91       |            |
| rs11904814 | CREB1       | 2          | Male   | 0.29 | 386 | 0.89 (0.64-1.24)      | 0.48       | 0.77    | 0.40 (0.17-0.97)             | 0.92 (0.48-1.77)  | 0.92 (0.52-1.64) | 1.47 (0.73-2.97)  | 0.14                | 0.43       |            |
|            |             |            | Female | 0.32 | 402 | 0.93 (0.66-1.31)      | 0.68       | 0.97    | 0.44 (0.18-1.10)             | 0.74 (0.40-1.39)  | 1.34 (0.62-2.90) | 1.37 (0.74-2.55)  | 0.14                | 0.43       |            |
| rs16839883 | CREB1       | 2          | Male   | 0.02 | NA  | NA                    | NA         | NA      | NA                           | NA                | NA               | NA                | NA                  | NA         |            |
|            |             |            | Female | 0.01 | NA  | NA                    | NA         | NA      | NA                           | NA                | NA               | NA                | NA                  | NA         |            |
| rs2551921  | CREB1       | 2          | Male   | 0.20 | 386 | 1.36 (0.88-2.12)      | 0.17       | 0.52    | 2.12 (0.81-5.55)             | 1.98 (0.84-4.66)  | 1.18 (0.53-2.60) | 0.67 (0.25-1.82)  | 0.29                | 0.57       |            |
|            |             |            | Female | 0.18 | 403 | 1.47 (0.91-2.35)      | 0.12       | 0.41    | 2.98 (1.04-8.50)             | 0.71 (0.29-1.75)  | 2.52 (0.95-6.67) | 1.16 (0.44-3.05)  | 0.12                | 0.40       |            |
| rs2551923  | CREB1       | 2          | Male   | 0.20 | 384 | 1.35 (0.87-2.10)      | 0.18       | 0.55    | 1.92 (0.72-5.11)             | 1.98 (0.84-4.67)  | 1.18 (0.54-2.62) | 0.70 (0.26-1.91)  | 0.38                | 0.51       |            |
|            |             |            | Female | 0.18 | 402 | 1.49 (0.93-2.40)      | 0.10       | 0.38    | 2.98 (1.05-8.52)             | 0.75 (0.30-1.83)  | 2.52 (0.95-6.67) | 1.16 (0.44-3.04)  | 0.14                | 0.43       |            |
| rs7369949  | CREB1       | 2          | Male   | 0.34 | 386 | 0.82 (0.60-1.12)      | 0.21       | 0.60    | 0.39 (0.17-0.88)             | 0.87 (0.49-1.57)  | 0.91 (0.52-1.60) | 1.17 (0.60-2.28)  | 0.18                | 0.53       |            |
|            |             |            | Female | 0.36 | 403 | 0.95 (0.67-1.33)      | 0.75       | 0.91    | 0.56 (0.24-1.30)             | 0.81 (0.45-1.48)  | 1.16 (0.54-2.49) | 1.34 (0.71-2.54)  | 0.36                | 0.60       |            |
| rs13397461 | CREB1       | 2          | Male   | 0.00 | NA  | NA                    | NA         | NA      | NA                           | NA                | NA               | NA                | NA                  | NA         |            |
|            |             |            | Female | 0.00 | NA  | NA                    | NA         | NA      | NA                           | NA                | NA               | NA                | NA                  | NA         |            |
| rs2551928  | CREB1       | 2          | Male   | 0.21 | 386 | 1.29 (0.83-1.99)      | 0.26       | 0.62    | 1.95 (0.75-5.10)             | 1.70 (0.73-3.96)  | 1.17 (0.53-2.59) | 0.67 (0.25-1.82)  | 0.41                | 0.52       |            |
|            |             |            | Female | 0.18 | 403 | 1.50 (0.93-2.40)      | 0.10       | 0.37    | 2.98 (1.04-8.50)             | 0.78 (0.33-1.87)  | 2.52 (0.95-6.67) | 1.16 (0.44-3.05)  | 0.16                | 0.46       |            |
| rs1806584  | CREB1       | 2          | Male   | 0.20 | 384 | 1.31 (0.84-2.04)      | 0.24       | 0.60    | 2.13 (0.81-5.57)             | 1.96 (0.83-4.62)  | 1.11 (0.50-2.47) | 0.57 (0.20-1.62)  | 0.20                | 0.47       |            |
|            |             |            | Female | 0.18 | 403 | 1.50 (0.93-2.40)      | 0.10       | 0.37    | 2.98 (1.04-8.51)             | 0.71 (0.29-1.75)  | 2.75 (1.03-7.31) | 1.16 (0.44-3.05)  | 0.10                | 0.35       |            |
| rs1045780  | CREB1       | 2          | Male   | 0.20 | 386 | 1.36 (0.88-2.12)      | 0.17       | 0.52    | 2.12 (0.81-5.55)             | 1.98 (0.84-4.66)  | 1.18 (0.53-2.60) | 0.67 (0.25-1.82)  | 0.29                | 0.57       |            |
|            |             |            | Female | 0.18 | 403 | 1.47 (0.91-2.35)      | 0.12       | 0.41    | 2.98 (1.04-8.50)             | 0.71 (0.29-1.75)  | 2.52 (0.95-6.67) | 1.16 (0.44-3.05)  | 0.12                | 0.40       |            |
| rs2551931  | CREB1       | 2          | Male   | 0.20 | 383 | 1.36 (0.88-2.12)      | 0.17       | 0.52    | 2.12 (0.81-5.55)             | 1.89 (0.80-4.46)  | 1.23 (0.55-2.72) | 0.67 (0.25-1.82)  | 0.32                | 0.61       |            |
|            |             |            | Female | 0.18 | 400 | 1.45 (0.90-2.33)      | 0.13       | 0.44    | 2.88 (1.01-8.23)             | 0.70 (0.29-1.72)  | 2.52 (0.95-6.66) | 1.16 (0.44-3.05)  | 0.13                | 0.40       |            |
| rs7569963  | CREB1       | 2          | Male   | 0.26 | 385 | 0.96 (0.68-1.35)      | 0.80       | 0.80    | 0.51 (0.22-1.18)             | 1.13 (0.59-2.19)  | 1.01 (0.56-1.82) | 1.25 (0.61-2.60)  | 0.36                | 0.66       |            |
|            |             |            | Female | 0.30 | 402 | 0.81 (0.57-1.17)      | 0.26       | 0.58    | 0.49 (0.20-1.23)             | 0.72 (0.37-1.38)  | 1.00 (0.45-2.22) | 1.05 (0.56-1.94)  | 0.53                | 0.72       |            |
| rs10934253 | DRD3        | 3          | Male   | 0.02 | NA  | NA                    | NA         | NA      | NA                           | NA                | NA               | NA                | NA                  | NA         |            |
|            |             |            | Female | 0.02 | NA  | NA                    | NA         | NA      | NA                           | NA                | NA               | NA                | NA                  | NA         |            |
| rs1385884  | DRD3        | 3          | Male   | 0.42 | 385 | 0.89 (0.65-1.21)      | 0.45       | 0.97    | 0.71 (0.35-1.43)             | 1.00 (0.54-1.86)  | 0.83 (0.46-1.49) | 1.00 (0.54-1.84)  | 0.86                | 0.96       |            |
|            |             |            | Female | 0.43 | 403 | 1.04 (0.75-1.45)      | 0.81       | 1.00    | 1.14 (0.55-2.37)             | 0.86 (0.47-1.56)  | 1.20 (0.62-2.34) | 1.08 (0.55-2.09)  | 0.88                | 1.00       |            |
| rs2087017  | DRD3        | 3          | Male   | 0.43 | 386 | 0.94 (0.60-1.48)      | 0.79       | 1.00    | 0.52 (0.19-1.38)             | 1.33 (0.52-3.38)  | 0.86 (0.38-1.96) | 1.26 (0.49-3.25)  | 0.50                | 0.94       |            |
|            |             |            | Female | 0.43 | 403 | 1.05 (0.64-1.72)      | 0.84       | 0.98    | 1.64 (0.49-5.51)             | 0.81 (0.35-1.89)  | 1.10 (0.40-3.02) | 1.03 (0.39-2.75)  | 0.82                | 1.00       |            |
| rs2399496  | DRD3        | 3          | Male   | 0.48 | 385 | 0.85 (0.63-1.14)      | 0.28       | 0.89    | 0.61 (0.30-1.23)             | 0.83 (0.47-1.49)  | 0.88 (0.50-1.57) | 1.04 (0.58-1.84)  | 0.72                | 0.99       |            |
|            |             |            | Female | 0.47 | 403 | 1.13 (0.82-1.56)      | 0.45       | 0.97    | 1.76 (0.82-3.74)             | 0.88 (0.50-1.55)  | 1.36 (0.67-2.76) | 0.97 (0.52-1.83)  | 0.46                | 0.97       |            |
| rs2134655  | DRD3        | 3          | Male   | 0.27 | 386 | 1.35 (0.88-2.07)      | 0.17       | 0.78    | 1.00 (0.38-2.60)             | 2.00 (0.86-4.68)  | 2.32 (1.04-5.19) | 0.53 (0.20-1.38)  | 0.07                | 0.32       |            |
|            |             |            | Female | 0.28 | 403 | 1.30 (0.83-2.05)      | 0.25       | 0.85    | 0.99 (0.35-2.77)             | 1.17 (0.53-2.60)  | 1.07 (0.41-2.80) | 2.23 (0.88-5.63)  | 0.61                | 0.99       |            |
| rs963468   | DRD3        | 3          | Male   | 0.39 | 386 | 0.79 (0.57-1.08)      | 0.14       | 0.70    | 0.67 (0.33-1.35)             | 0.99 (0.52-1.89)  | 0.73 (0.41-1.32) | 0.79 (0.43-1.48)  | 0.86                | 0.86       |            |
|            |             |            | Female | 0.38 | 403 | 0.95 (0.68-1.33)      | 0.75       | 1.00    | 1.15 (0.55-2.38)             | 0.81 (0.43-1.51)  | 1.08 (0.54-2.17) | 0.86 (0.44-1.67)  | 0.86                | 1.00       |            |
| rs324035   | DRD3        | 3          | Male   | 0.19 | 386 | 0.91 (0.62-1.32)      | 0.61       | 1.00    | 0.98 (0.46-2.08)             | 0.64 (0.28-1.49)  | 0.86 (0.39-1.87) | 1.13 (0.57-2.23)  | 0.77                | 0.99       |            |
|            |             |            | Female | 0.20 | 403 | 1.16 (0.78-1.71)      | 0.47       | 0.97    | 1.98 (0.81-4.82)             | 1.11 (0.59-2.11)  | 0.69 (0.28-1.70) | 1.30 (0.56-3.02)  | 0.42                | 0.96       |            |
| rs3773679  | DRD3        | 3          | Male   | 0.39 | 385 | 0.79 (0.57-1.08)      | 0.13       | 0.69    | 0.67 (0.33-1.34)             | 1.10 (0.58-2.08)  | 0.74 (0.41-1.33) | 0.70 (0.37-1.30)  | 0.69                | 0.98       |            |
|            |             |            | Female | 0.38 | 403 | 0.93 (0.66-1.30)      | 0.68       | 1.00    | 1.15 (0.55-2.38)             | 0.81 (0.43-1.51)  | 1.08 (0.54-2.17) | 0.81 (0.42-1.57)  | 0.83                | 1.00       |            |
| rs3773678  | DRD3        | 3          | Male   | 0.14 | 386 | 1.02 (0.67-1.55)      | 0.94       | 0.94    | 1.16 (0.51-2.62)             | 1.02 (0.38-2.75)  | 0.71 (0.29-1.71) | 1.20 (0.58-2.51)  | 0.81                | 0.99       |            |
|            |             |            | Female | 0.15 | 403 | 0.94 (0.61-1.46)      | 0.79       | 1.00    | 1.16 (0.39-3.46)             | 1.16 (0.61-2.21)  | 0.40 (0.12-1.37) | 1.05 (0.40-2.78)  | 0.41                | 0.96       |            |
| rs2630349  | DRD3        | 3          | Male   | 0.06 | 386 | 0.91 (0.49-1.70)      | 0.78       | 1.00    | 0.51 (0.11-2.32)             | 2.61 (0.64-10.59) | 0.20 (0.03-1.52) | 1.78 (0.60-5.29)  | 0.05                | 0.26       |            |
|            |             |            |        |      |     |                       |            |         |                              |                   |                  |                   |                     |            |            |

| SNP        | Gene Region | Chromosome | Gender | MAF    | N   | Marginal Effect       |            |         | Treatment Stratified Effects |                  |                  |                  | Test of Interaction |            |            |
|------------|-------------|------------|--------|--------|-----|-----------------------|------------|---------|------------------------------|------------------|------------------|------------------|---------------------|------------|------------|
|            |             |            |        |        |     | Likelihood ratio test |            | Placebo | Bupropion                    | Patch            | Spray            | Observed P       | Adjusted P          | Observed P | Adjusted P |
|            |             |            |        |        |     | SNP OR (95% CI)       | Observed P |         |                              |                  |                  |                  |                     |            |            |
| rs1865149  | NCK1        | 3          | Female | 0.28   | 403 | 1.20 (0.76-1.89)      | 0.43       | 0.93    | 1.13 (0.40-3.14)             | 1.49 (0.67-3.33) | 1.07 (0.41-2.78) | 1.05 (0.43-2.59) | 0.93                | 1.00       |            |
|            |             |            | Male   | 0.32   | 386 | 0.87 (0.57-1.34)      | 0.53       | 0.98    | 0.54 (0.21-1.40)             | 0.77 (0.33-1.80) | 1.36 (0.63-2.98) | 0.84 (0.35-2.03) | 0.51                | 0.87       |            |
|            |             |            | Female | 0.28   | 403 | 1.20 (0.76-1.89)      | 0.43       | 0.93    | 1.13 (0.40-3.14)             | 1.49 (0.67-3.33) | 1.07 (0.41-2.78) | 1.05 (0.43-2.59) | 0.93                | 1.00       |            |
| rs2343662  | NCK1        | 3          | Male   | 0.32   | 386 | 0.87 (0.57-1.34)      | 0.53       | 0.98    | 0.54 (0.21-1.40)             | 0.77 (0.33-1.80) | 1.36 (0.63-2.98) | 0.84 (0.35-2.03) | 0.51                | 0.87       |            |
|            |             |            | Female | 0.28   | 403 | 1.19 (0.75-1.87)      | 0.46       | 0.94    | 1.13 (0.40-3.14)             | 1.45 (0.65-3.22) | 1.07 (0.41-2.78) | 1.05 (0.43-2.59) | 0.95                | 1.00       |            |
| rs9846691  | NCK1        | 3          | Male   | 0.32   | 386 | 0.87 (0.57-1.34)      | 0.53       | 0.98    | 0.54 (0.21-1.40)             | 0.77 (0.33-1.80) | 1.36 (0.63-2.98) | 0.84 (0.35-2.03) | 0.51                | 0.87       |            |
|            |             |            | Female | 0.28   | 403 | 1.20 (0.76-1.89)      | 0.43       | 0.93    | 1.13 (0.40-3.14)             | 1.49 (0.67-3.33) | 1.07 (0.41-2.78) | 1.05 (0.43-2.59) | 0.93                | 1.00       |            |
| rs6784005  | NCK1        | 3          | Male   | 0.32   | 349 | 1.00 (0.70-1.43)      | 0.99       | 0.99    | 0.69 (0.32-1.49)             | 1.01 (0.49-2.07) | 1.42 (0.72-2.79) | 0.95 (0.47-1.90) | 0.58                | 0.91       |            |
|            |             |            | Female | 0.29   | 363 | 1.24 (0.85-1.82)      | 0.27       | 0.80    | 1.01 (0.43-2.37)             | 1.53 (0.75-3.11) | 1.35 (0.58-3.17) | 1.10 (0.55-2.20) | 0.87                | 1.00       |            |
| rs9824147  | NCK1        | 3          | Male   | 0.04   | NA  | NA                    | NA         | NA      | NA                           | NA               | NA               | NA               | NA                  | NA         |            |
|            |             |            | Female | 0.02   | NA  | NA                    | NA         | NA      | NA                           | NA               | NA               | NA               | NA                  | NA         |            |
| rs9867325  | NCK1        | 3          | Male   | 0.20   | 385 | 1.01 (0.65-1.57)      | 0.96       | 1.00    | 0.48 (0.16-1.38)             | 0.83 (0.35-1.98) | 1.23 (0.55-2.74) | 1.79 (0.72-4.44) | 0.27                | 0.66       |            |
|            |             |            | Female | 0.27   | 402 | 1.13 (0.71-1.77)      | 0.61       | 0.95    | 1.65 (0.59-4.61)             | 1.03 (0.47-2.29) | 0.47 (0.18-1.26) | 2.02 (0.81-5.09) | 0.15                | 0.53       |            |
| rs6761993  | NCK1        | 3          | Male   | 0.39   | 384 | 0.81 (0.52-1.25)      | 0.34       | 0.90    | 0.47 (0.18-1.22)             | 0.69 (0.29-1.64) | 1.08 (0.49-2.40) | 1.07 (0.43-2.64) | 0.52                | 0.88       |            |
|            |             |            | Female | 0.38   | 401 | 1.18 (0.73-1.91)      | 0.50       | 0.95    | 1.20 (0.42-3.42)             | 1.61 (0.66-3.90) | 0.51 (0.19-1.36) | 1.76 (0.65-4.76) | 0.27                | 0.77       |            |
| rs9837990  | NCK1        | 3          | Male   | 0.39   | 386 | 0.96 (0.70-1.32)      | 0.82       | 1.00    | 0.62 (0.32-1.21)             | 0.86 (0.47-1.59) | 1.36 (0.70-2.64) | 1.19 (0.64-2.23) | 0.34                | 0.72       |            |
|            |             |            | Female | 0.38   | 403 | 1.20 (0.85-1.68)      | 0.31       | 0.84    | 1.20 (0.57-2.53)             | 1.33 (0.72-2.47) | 0.78 (0.34-1.80) | 1.36 (0.73-2.55) | 0.73                | 1.00       |            |
| rs9881139  | NCK1        | 3          | Male   | 0.39   | 386 | 0.95 (0.69-1.30)      | 0.73       | 1.00    | 0.56 (0.29-1.12)             | 0.86 (0.47-1.59) | 1.36 (0.70-2.64) | 1.19 (0.64-2.23) | 0.25                | 0.62       |            |
|            |             |            | Female | 0.38   | 403 | 1.20 (0.85-1.68)      | 0.31       | 0.84    | 1.20 (0.57-2.53)             | 1.33 (0.72-2.47) | 0.78 (0.34-1.80) | 1.36 (0.73-2.55) | 0.73                | 1.00       |            |
| rs4678274  | NCK1        | 3          | Male   | 0.32   | 386 | 0.87 (0.57-1.34)      | 0.53       | 0.98    | 0.54 (0.21-1.40)             | 0.77 (0.33-1.80) | 1.36 (0.63-2.98) | 0.84 (0.35-2.03) | 0.51                | 0.87       |            |
|            |             |            | Female | 0.28   | 403 | 1.20 (0.76-1.89)      | 0.43       | 0.93    | 1.13 (0.40-3.14)             | 1.49 (0.67-3.33) | 1.07 (0.41-2.78) | 1.05 (0.43-2.59) | 0.93                | 1.00       |            |
| rs10935210 | NCK1        | 3          | Male   | 0.32   | 386 | 1.02 (0.74-1.42)      | 0.90       | 1.00    | 0.69 (0.34-1.38)             | 0.94 (0.49-1.81) | 1.66 (0.86-3.18) | 0.98 (0.51-1.88) | 0.32                | 0.70       |            |
|            |             |            | Female | 0.28   | 402 | 1.19 (0.82-1.71)      | 0.36       | 0.88    | 1.04 (0.45-2.38)             | 1.35 (0.70-2.63) | 1.28 (0.56-2.95) | 1.08 (0.55-2.12) | 0.95                | 1.00       |            |
| rs6775389  | NCK1        | 3          | Male   | 0.32   | 386 | 0.87 (0.57-1.34)      | 0.53       | 0.98    | 0.54 (0.21-1.40)             | 0.77 (0.33-1.80) | 1.36 (0.63-2.98) | 0.84 (0.35-2.03) | 0.51                | 0.87       |            |
|            |             |            | Female | 0.28   | 403 | 1.18 (0.75-1.85)      | 0.48       | 0.95    | 1.13 (0.40-3.14)             | 1.49 (0.67-3.33) | 0.98 (0.38-2.54) | 1.05 (0.43-2.59) | 0.91                | 1.00       |            |
| rs1433318  | NCK1        | 3          | Male   | 0.32   | 385 | 1.02 (0.73-1.41)      | 0.92       | 1.00    | 0.69 (0.34-1.38)             | 0.94 (0.49-1.81) | 1.66 (0.86-3.18) | 0.95 (0.49-1.85) | 0.32                | 0.70       |            |
|            |             |            | Female | 0.28   | 402 | 1.19 (0.82-1.71)      | 0.36       | 0.88    | 1.04 (0.45-2.38)             | 1.35 (0.70-2.63) | 1.28 (0.56-2.95) | 1.08 (0.55-2.12) | 0.95                | 1.00       |            |
| rs835648   | NCK1        | 3          | Male   | 0.32   | 386 | 0.85 (0.55-1.30)      | 0.45       | 0.96    | 0.62 (0.24-1.59)             | 0.77 (0.33-1.79) | 1.28 (0.59-2.80) | 0.73 (0.30-1.76) | 0.64                | 0.91       |            |
|            |             |            | Female | 0.27   | 403 | 1.34 (0.85-2.11)      | 0.21       | 0.70    | 1.21 (0.44-3.39)             | 1.64 (0.74-3.65) | 1.23 (0.47-3.19) | 1.20 (0.48-2.95) | 0.95                | 1.00       |            |
| rs7648198  | NCK1        | 3          | Male   | 0.45   | 386 | 1.09 (0.80-1.49)      | 0.60       | 0.99    | 0.63 (0.34-1.20)             | 1.28 (0.71-2.32) | 1.00 (0.54-1.86) | 1.19 (0.92-3.77) | 0.14                | 0.45       |            |
|            |             |            | Female | 0.45   | 402 | 1.05 (0.75-1.47)      | 0.78       | 0.94    | 1.08 (0.51-2.29)             | 1.13 (0.62-2.04) | 0.75 (0.34-1.62) | 1.89 (0.63-2.24) | 0.81                | 1.00       |            |
| rs835637   | NCK1        | 3          | Male   | 0.47   | 386 | 0.87 (0.54-1.40)      | 0.57       | 0.99    | 2.23 (0.73-6.79)             | 0.99 (0.40-2.42) | 0.66 (0.26-1.66) | 0.44 (0.17-1.14) | 0.15                | 0.44       |            |
|            |             |            | Female | 0.45   | 402 | 0.91 (0.56-1.50)      | 0.71       | 0.97    | 0.98 (0.31-3.06)             | 0.89 (0.37-2.15) | 1.72 (0.55-5.39) | 0.57 (0.23-1.44) | 0.52                | 0.97       |            |
| rs835636   | NCK1        | 3          | Male   | 0.48   | 386 | 0.83 (0.51-1.34)      | 0.45       | 0.96    | 0.59 (0.22-1.60)             | 0.84 (0.32-2.22) | 0.94 (0.40-2.19) | 0.99 (0.33-2.94) | 0.89                | 0.89       |            |
|            |             |            | Female | 0.49   | 402 | 1.49 (0.86-2.60)      | 0.15       | 0.58    | 3.08 (0.65-14.47)            | 1.60 (0.61-4.23) | 0.67 (0.23-1.91) | 2.05 (0.62-6.77) | 0.33                | 0.84       |            |
| rs835634   | NCK1        | 3          | Male   | 0.44   | 385 | 0.98 (0.72-1.33)      | 0.90       | 1.00    | 2.06 (1.06-4.02)             | 0.93 (0.52-1.66) | 0.72 (0.41-1.24) | 0.73 (0.37-1.42) | 0.07                | 0.29       |            |
|            |             |            | Female | 0.42   | 402 | 0.77 (0.56-1.07)      | 0.11       | 0.52    | 0.85 (0.40-1.80)             | 0.64 (0.35-1.18) | 0.92 (0.47-1.82) | 0.76 (0.41-1.38) | 0.88                | 1.00       |            |
| rs12054220 | NCK1        | 3          | Male   | 0.46   | 386 | 1.04 (0.77-1.41)      | 0.80       | 1.00    | 0.55 (0.29-1.05)             | 1.45 (0.81-2.60) | 0.87 (0.48-1.58) | 1.80 (0.90-3.58) | 0.05                | 0.23       |            |
|            |             |            | Female | 0.47   | 403 | 1.13 (0.82-1.56)      | 0.46       | 0.95    | 1.05 (0.52-2.11)             | 1.27 (0.72-2.24) | 1.11 (0.53-2.33) | 1.04 (0.55-1.97) | 0.96                | 0.96       |            |
| rs7655090  | DRD5        | 4          | Male   | 0.31   | 386 | 1.41 (0.91-2.18)      | 0.12       | 0.22    | 1.25 (0.49-3.23)             | 1.94 (0.83-4.51) | 0.71 (0.32-1.55) | 2.80 (1.09-7.19) | 0.13                | 0.24       |            |
|            |             |            | Female | 0.33   | 403 | 0.84 (0.53-1.32)      | 0.44       | 0.44    | 1.16 (0.42-3.25)             | 1.41 (0.62-3.23) | 0.82 (0.32-2.14) | 0.35 (0.13-0.87) | 0.12                | 0.14       |            |
| rs10939514 | DRD5        | 4          | Male   | 0.05   | NA  | NA                    | NA         | NA      | NA                           | NA               | NA               | NA               | NA                  | NA         |            |
|            |             |            | Female | 0.04   | NA  | NA                    | NA         | NA      | NA                           | NA               | NA               | NA               | NA                  | NA         |            |
| rs10939515 | DRD5        | 4          | Male   | 0.16   | 385 | 1.24 (0.78-1.96)      | 0.37       | 0.37    | 1.32 (0.49-3.54)             | 1.30 (0.53-3.16) | 0.73 (0.30-1.72) | 2.25 (0.84-6.03) | 0.40                | 0.40       |            |
|            |             |            | Female | 0.18   | 403 | 0.79 (0.47-1.30)      | 0.35       | 0.54    | 2.03 (0.70-5.94)             | 0.92 (0.40-2.13) | 0.72 (0.25-2.05) | 0.24 (0.07-0.89) | 0.08                | 0.13       |            |
| rs10033951 | DRD5        | 4          | Male   | 0.30   | 381 | 1.39 (0.90-2.15)      | 0.14       | 0.22    | 1.29 (0.50-3.33)             | 2.02 (0.86-4.71) | 0.68 (0.31-1.50) | 2.56 (1.01-6.48) | 0.13                | 0.24       |            |
|            |             |            | Female | 0.32   | 395 | 0.84 (0.53-1.32)      | 0.44       | 0.49    | 0.99 (0.35-2.74)             | 1.51 (0.66-3.47) | 0.82 (0.32-2.14) | 0.34 (0.13-0.90) | 0.13                | 0.13       |            |
| rs2867383  | DRD5        | 4          | Male   | 0.31   | 385 | 1.41 (0.91-2.18)      | 0.12       | 0.23    | 1.12 (0.44-2.90)             | 2.01 (0.86-4.70) | 0.87 (0.40-1.92) | 2.17 (0.86-5.47) | 0.37                | 0.49       |            |
|            |             |            | Female | 0.33   | 403 | 0.76 (0.48-1.20)      | 0.23       | 0.41    | 0.92 (0.33-2.55)             | 1.51 (0.66-3.46) | 0.61 (0.23-1.59) | 0.32 (0.12-0.85) | 0.10                | 0.14       |            |
| rs1850744  | DRD5        | 4          | Male   | 0.05   | NA  | NA                    | NA         | NA      | NA                           | NA               | NA               | NA               | NA                  | NA         |            |
|            |             |            | Female | 0.04   | NA  | NA                    | NA         | NA      | NA                           | NA               | NA               | NA               | NA                  | NA         |            |
| rs13106539 | DRD5        | 4          | Male   | 0.38   | 386 | 1.48 (0.94-2.35)      | 0.09       | 0.20    | 0.90 (0.34-2.36)             | 2.71 (1.11-6.60) | 0.86 (0.37-1.99) | 2.34 (0.86-6.36) | 0.15                | 0.26       |            |
|            |             |            | Female | 0.38   | 403 | 0.66 (0.41-1.04)      | 0.08       | 0.18    | 0.70 (0.25-1.95)             | 1.23 (0.52-2.88) | 0.75 (0.28-2.01) | 0.26 (0.10-0.67) | 0.11                | 0.15       |            |
| rs1519097  | DRD5        | 4          | Male   | 0.32   | 382 | 1.55 (1.00-2.42)      | 0.05       | 0.13    | 0.82 (0.31-2.14)             | 2.80 (1.16-6.76) | 1.25 (0.55-2.80) | 1.88 (0.75-4.74) | 0.27                | 0.40       |            |
|            |             |            | Female | 0.34   | 402 | 0.75 (0.47-1.18)      | 0.21       | 0.39    | 0.94 (0.34-2.60)             | 1.45 (0.63-3.33) | 0.60 (0.23-1.57) | 0.33 (0.13-0.84) | 0.12                | 0.14       |            |
| rs356219   | SNCA        | 4          | Male   | 0.36   | 386 | 1.04 (0.67-1.61)      | 0.86       | 1.00    | 0.79 (0.30-2.06)             | 0.90 (0.39-2.08) | 2.37 (1.02-5.52) | 0.58 (0.24-1.42) | 0.12                | 0.48       |            |
|            |             |            | Female | 0.39   | 403 | 1.20 (0.74-1.94)      | 0.46       | 0.98    | 0.66 (0.23-1.90)             | 2.39 (0.97-5.91) | 1.08 (0.40-2.91) | 0.91 (0.36-2.31) | 0.27                | 0.82       |            |
| rs11931074 | SNCA        | 4          | Male   | 0.08   | 386 | 1.04 (0.57-1.88)      | 0.90       | 1.00    | 1.12 (0.31-3.98)             | 1.71 (0.52-5.61) | 0.83 (0.28-2.44) | 0.77 (0.22-2.70) | 0.78                | 0.99       |            |
|            |             |            | Female | 0.08   | 403 | 0.65 (0.32-1.33)      | 0.22       | 0.88    | 0.38 (0.08-1.78)             | 1.79 (0.52-6.16) | 0.18 (0.02-1.49) | 0.82 (0.20-3.45) | 0.17                | 0.68       |            |
| rs356220   | SNCA        | 4          | Male   | 0.35   | 343 | 0.91 (0.58-1.44)      | 0.69       | 1.00    | 0.79 (0.29-2.18)             | 0.84 (0.34-2.06) | 2.13 (0.90-5.06) | 0.38 (0.15-1.00) | 0.07                | 0.36       |            |
|            |             |            | Female | 0.37   | 348 | 1.32 (0.79-2.20)      | 0.29       | 0.92    | 0.77 (0.25-2.41)             | 2.88 (1.08-7.70) | 1.05 (0.37-3.01) | 1.00 (0.39-2.59) | 0.27                | 0.83       |            |
| rs10003708 | SNCA        | 4          | Male   | 0.08   | 386 | 1.04 (0.57-1.88)      | 0.90       | 1.00    | 1.12 (0.31-3.98)             | 1.71 (0.52-5.61) | 0.83 (0.28-2.44) | 0.77 (0.22-2.70) | 0.78                | 0.99       |            |
|            |             |            | Female | 0.08   | 403 | 0.65 (0.32-1.33)      | 0.22       | 0.88    | 0.38 (0.08-1.78)             | 1.79 (0.52-6.16) | 0.18 (0.02-1.49) | 0.82 (0.20-3.45) | 0.17                | 0.68       |            |
| rs168552   | SNCA        | 4          | Male   | 0.29   | 386 | 1.00 (0.71-1.40)      | 0.99       | 0.99    | 0.87 (0.40-1.93)             | 0.63 (0.30-1.33) | 2.27 (1.20-4.30) | 0.59 (0.29-1.20) | 0.01                | 0.11       |            |
|            |             |            | Female | 0.31</ |     |                       |            |         |                              |                  |                  |                  |                     |            |            |

| SNP        | Gene Region | Chromosome | Gender | MAF  | N   | Marginal Effect  |            |                       | Treatment Stratified Effects |                              |                          |                          | Test of Interaction |            |
|------------|-------------|------------|--------|------|-----|------------------|------------|-----------------------|------------------------------|------------------------------|--------------------------|--------------------------|---------------------|------------|
|            |             |            |        |      |     | SNP OR (95% CI)  |            | Likelihood ratio test | Placebo<br>SNP OR (95% CI)   | Bupropion<br>SNP OR (95% CI) | Patch<br>SNP OR (95% CI) | Spray<br>SNP OR (95% CI) | Observed P          | Adjusted P |
|            |             |            |        |      |     | Observed P       | Adjusted P |                       |                              |                              |                          |                          |                     |            |
| rs961386   | SNCA        | 4          | Female | 0.05 | 403 | 0.52 (0.21-1.26) | 0.12       | 0.72                  | 0.31 (0.04-2.58)             | 0.68 (0.13-3.42)             | 1.07 (0.29-3.98)         | NA                       | 0.25                | 0.81       |
|            |             |            | Male   | 0.01 | NA  | NA               | NA         | NA                    | NA                           | NA                           | NA                       | NA                       | NA                  | NA         |
|            |             |            | Female | 0.01 | NA  | NA               | NA         | NA                    | NA                           | NA                           | NA                       | NA                       | NA                  | NA         |
| rs3822095  | SNCA        | 4          | Male   | 0.37 | 386 | 0.78 (0.50-1.21) | 0.27       | 0.94                  | 0.83 (0.32-2.16)             | 1.28 (0.52-3.16)             | 0.51 (0.23-1.14)         | 0.77 (0.32-1.88)         | 0.52                | 0.90       |
|            |             |            | Female | 0.38 | 403 | 1.24 (0.77-2.00) | 0.37       | 0.96                  | 0.90 (0.32-2.58)             | 1.44 (0.63-3.30)             | 0.79 (0.29-2.19)         | 1.98 (0.73-5.35)         | 0.55                | 0.98       |
| rs2619372  | SNCA        | 4          | Male   | 0.30 | 386 | 1.12 (0.73-1.73) | 0.60       | 1.00                  | 0.92 (0.35-2.45)             | 1.55 (0.67-3.59)             | 0.93 (0.43-2.02)         | 1.17 (0.48-2.81)         | 0.81                | 0.98       |
|            |             |            | Female | 0.26 | 403 | 0.98 (0.62-1.55) | 0.94       | 0.94                  | 0.90 (0.32-2.52)             | 0.75 (0.33-1.67)             | 1.94 (0.73-5.14)         | 0.81 (0.31-2.08)         | 0.47                | 0.97       |
| rs1812923  | SNCA        | 4          | Male   | 0.43 | 386 | 0.69 (0.44-1.10) | 0.12       | 0.71                  | 0.78 (0.29-2.15)             | 1.19 (0.45-3.15)             | 0.46 (0.20-1.06)         | 0.63 (0.25-1.57)         | 0.52                | 0.90       |
|            |             |            | Female | 0.45 | 403 | 1.19 (0.72-1.98) | 0.48       | 0.98                  | 0.53 (0.18-1.53)             | 1.52 (0.64-3.61)             | 0.70 (0.24-2.02)         | 3.03 (0.93-9.84)         | 0.10                | 0.49       |
| rs2737020  | SNCA        | 4          | Male   | 0.30 | 385 | 1.11 (0.72-1.71) | 0.64       | 1.00                  | 0.93 (0.35-2.47)             | 1.55 (0.67-3.58)             | 0.89 (0.41-1.95)         | 1.17 (0.48-2.82)         | 0.79                | 0.98       |
|            |             |            | Female | 0.26 | 403 | 0.98 (0.62-1.55) | 0.94       | 0.94                  | 0.90 (0.32-2.52)             | 0.75 (0.33-1.67)             | 1.94 (0.73-5.14)         | 0.81 (0.31-2.08)         | 0.47                | 0.97       |
| rs7356228  | SNCA        | 4          | Male   | 0.37 | 386 | 0.78 (0.50-1.21) | 0.27       | 0.94                  | 0.83 (0.32-2.16)             | 1.28 (0.52-3.16)             | 0.51 (0.23-1.14)         | 0.77 (0.32-1.88)         | 0.52                | 0.90       |
|            |             |            | Female | 0.39 | 402 | 1.24 (0.77-2.00) | 0.38       | 0.96                  | 0.88 (0.31-2.53)             | 1.45 (0.63-3.31)             | 0.79 (0.29-2.19)         | 1.98 (0.73-5.34)         | 0.54                | 0.98       |
| rs2737015  | SNCA        | 4          | Male   | 0.26 | 385 | 1.02 (0.71-1.46) | 0.92       | 1.00                  | 1.09 (0.47-2.50)             | 0.62 (0.29-1.36)             | 2.09 (1.06-4.12)         | 0.67 (0.33-1.37)         | 0.06                | 0.34       |
|            |             |            | Female | 0.30 | 403 | 1.09 (0.76-1.57) | 0.64       | 0.99                  | 1.21 (0.51-2.83)             | 1.29 (0.71-2.34)             | 1.14 (0.51-2.52)         | 0.74 (0.34-1.61)         | 0.72                | 1.00       |
| rs3113355  | SNCA        | 4          | Male   | 0.23 | 385 | 0.99 (0.69-1.42) | 0.94       | 1.00                  | 0.69 (0.29-1.64)             | 0.97 (0.50-1.85)             | 0.72 (0.35-1.49)         | 1.79 (0.88-3.62)         | 0.25                | 0.77       |
|            |             |            | Female | 0.21 | 403 | 1.11 (0.76-1.61) | 0.59       | 0.98                  | 1.56 (0.66-3.65)             | 0.80 (0.44-1.49)             | 1.57 (0.70-3.50)         | 1.04 (0.46-2.39)         | 0.49                | 0.98       |
| rs6532191  | SNCA        | 4          | Male   | 0.49 | 386 | 0.76 (0.47-1.23) | 0.27       | 0.94                  | 0.54 (0.18-1.59)             | 0.56 (0.22-1.40)             | 1.34 (0.55-3.28)         | 0.71 (0.27-1.84)         | 0.49                | 0.91       |
|            |             |            | Female | 0.50 | 403 | 1.45 (0.83-2.54) | 0.18       | 0.84                  | 1.05 (0.34-3.28)             | 1.66 (0.56-4.90)             | 2.25 (0.67-7.58)         | 1.15 (0.39-3.34)         | 0.79                | 1.00       |
| rs2583975  | SNCA        | 4          | Male   | 0.22 | 385 | 1.02 (0.71-1.46) | 0.92       | 1.00                  | 0.72 (0.31-1.70)             | 0.91 (0.47-1.76)             | 0.85 (0.42-1.75)         | 1.79 (0.88-3.62)         | 0.33                | 0.85       |
|            |             |            | Female | 0.20 | 403 | 1.14 (0.78-1.66) | 0.51       | 0.98                  | 1.71 (0.71-4.13)             | 0.83 (0.45-1.55)             | 1.46 (0.65-3.25)         | 1.09 (0.48-2.50)         | 0.54                | 0.98       |
| rs13148411 | SNCA        | 4          | Male   | 0.26 | 385 | 1.02 (0.71-1.46) | 0.92       | 1.00                  | 1.09 (0.47-2.50)             | 0.62 (0.29-1.36)             | 2.09 (1.06-4.12)         | 0.67 (0.33-1.37)         | 0.06                | 0.34       |
|            |             |            | Female | 0.30 | 403 | 1.08 (0.75-1.56) | 0.68       | 0.99                  | 1.21 (0.51-2.83)             | 1.25 (0.69-2.25)             | 1.14 (0.51-2.52)         | 0.74 (0.34-1.61)         | 0.74                | 1.00       |
| rs10011157 | SNCA        | 4          | Male   | 0.23 | 385 | 0.97 (0.67-1.39) | 0.86       | 1.00                  | 0.64 (0.26-1.54)             | 0.97 (0.51-1.86)             | 0.70 (0.34-1.45)         | 1.78 (0.88-3.61)         | 0.21                | 0.69       |
|            |             |            | Female | 0.21 | 402 | 1.09 (0.75-1.59) | 0.65       | 0.99                  | 1.44 (0.60-3.46)             | 0.80 (0.44-1.49)             | 1.58 (0.71-3.52)         | 1.04 (0.46-2.39)         | 0.53                | 0.99       |
| rs2583981  | SNCA        | 4          | Male   | 0.27 | 386 | 1.01 (0.71-1.45) | 0.94       | 1.00                  | 1.09 (0.48-2.50)             | 0.62 (0.29-1.35)             | 2.05 (1.04-4.04)         | 0.67 (0.33-1.37)         | 0.07                | 0.36       |
|            |             |            | Female | 0.30 | 403 | 1.08 (0.75-1.56) | 0.68       | 0.99                  | 1.21 (0.51-2.83)             | 1.25 (0.69-2.25)             | 1.14 (0.51-2.52)         | 0.74 (0.34-1.61)         | 0.74                | 1.00       |
| rs2301134  | SNCA        | 4          | Male   | 0.50 | 386 | 0.88 (0.54-1.45) | 0.62       | 1.00                  | 0.96 (0.30-3.05)             | 1.27 (0.44-3.72)             | 0.86 (0.36-2.09)         | 0.64 (0.25-1.62)         | 0.81                | 0.96       |
|            |             |            | Female | 0.49 | 403 | 0.92 (0.55-1.54) | 0.76       | 0.94                  | 0.40 (0.14-1.18)             | 1.39 (0.57-3.39)             | 0.57 (0.19-1.70)         | 1.67 (0.55-5.09)         | 0.18                | 0.69       |
| rs3775085  | TDO2        | 4          | Male   | 0.08 | 386 | 0.68 (0.36-1.26) | 0.21       | 0.76                  | 0.28 (0.06-1.33)             | 1.08 (0.32-3.62)             | 0.92 (0.33-2.57)         | 0.51 (0.10-2.57)         | 0.48                | 0.97       |
|            |             |            | Female | 0.10 | 403 | 1.53 (0.88-2.66) | 0.14       | 0.56                  | 1.11 (0.28-4.38)             | 2.91 (1.16-7.29)             | 0.61 (0.15-2.46)         | 1.49 (0.52-4.28)         | 0.27                | 0.77       |
| rs3755910  | TDO2        | 4          | Male   | 0.02 | NA  | NA               | NA         | NA                    | NA                           | NA                           | NA                       | NA                       | NA                  | NA         |
|            |             |            | Female | 0.03 | NA  | NA               | NA         | NA                    | NA                           | NA                           | NA                       | NA                       | NA                  | NA         |
| rs2271537  | TDO2        | 4          | Male   | 0.48 | 360 | 1.27 (0.90-1.78) | 0.17       | 0.71                  | 1.41 (0.65-3.04)             | 1.58 (0.74-3.34)             | 1.30 (0.71-2.39)         | 0.96 (0.50-1.85)         | 0.78                | 0.98       |
|            |             |            | Female | 0.50 | 372 | 1.23 (0.88-1.73) | 0.22       | 0.65                  | 0.73 (0.33-1.61)             | 1.41 (0.76-2.64)             | 1.43 (0.69-2.96)         | 1.36 (0.71-2.61)         | 0.54                | 0.90       |
| rs10517626 | TDO2        | 4          | Male   | 0.11 | 386 | 1.21 (0.75-1.94) | 0.44       | 0.91                  | 0.99 (0.38-2.65)             | 1.91 (0.72-5.08)             | 0.86 (0.34-2.18)         | 1.37 (0.53-3.55)         | 0.66                | 0.97       |
|            |             |            | Female | 0.10 | 403 | 1.70 (1.06-2.74) | 0.03       | 0.20                  | 1.02 (0.28-3.74)             | 4.03 (1.65-9.87)             | 0.85 (0.30-2.43)         | 1.52 (0.59-3.91)         | 0.10                | 0.44       |
| rs2878125  | TDO2        | 4          | Male   | 0.12 | 385 | 1.13 (0.71-1.79) | 0.60       | 0.89                  | 1.37 (0.55-3.41)             | 1.52 (0.59-3.91)             | 0.74 (0.30-1.78)         | 1.15 (0.45-2.95)         | 0.69                | 0.96       |
|            |             |            | Female | 0.12 | 403 | 1.42 (0.91-2.21) | 0.12       | 0.56                  | 0.76 (0.21-2.82)             | 2.42 (1.15-5.11)             | 0.87 (0.32-2.36)         | 1.39 (0.59-3.32)         | 0.27                | 0.75       |
| rs13152449 | TDO2        | 4          | Male   | 0.10 | 386 | 1.10 (0.67-1.78) | 0.71       | 0.92                  | 0.99 (0.37-2.62)             | 1.43 (0.52-3.97)             | 0.86 (0.34-2.18)         | 1.26 (0.47-3.37)         | 0.89                | 0.89       |
|            |             |            | Female | 0.10 | 403 | 1.77 (1.08-2.90) | 0.03       | 0.18                  | 1.02 (0.28-3.74)             | 4.03 (1.65-9.87)             | 0.75 (0.21-2.66)         | 1.52 (0.59-3.91)         | 0.10                | 0.44       |
| rs11723579 | TDO2        | 4          | Male   | 0.50 | 386 | 0.86 (0.51-1.43) | 0.56       | 0.97                  | 1.10 (0.37-3.23)             | 0.89 (0.32-2.42)             | 0.50 (0.19-1.32)         | 1.29 (0.41-4.00)         | 0.59                | 0.97       |
|            |             |            | Female | 0.47 | 403 | 0.71 (0.44-1.16) | 0.17       | 0.59                  | 1.33 (0.40-4.47)             | 0.49 (0.21-1.13)             | 0.80 (0.27-2.36)         | 0.68 (0.27-1.73)         | 0.59                | 0.83       |
| rs2292537  | TDO2        | 4          | Male   | 0.09 | 386 | 0.85 (0.48-1.51) | 0.58       | 0.94                  | 3.51 (0.99-12.38)            | 1.04 (0.36-2.94)             | 0.28 (0.09-0.89)         | 0.86 (0.24-3.01)         | 0.03                | 0.17       |
|            |             |            | Female | 0.09 | 403 | 0.93 (0.51-1.70) | 0.81       | 0.81                  | 0.99 (0.25-3.97)             | 1.34 (0.53-3.39)             | 0.25 (0.03-1.52)         | 0.88 (0.27-2.82)         | 0.48                | 0.93       |
| rs2292536  | TDO2        | 4          | Male   | 0.43 | 385 | 1.16 (0.86-1.57) | 0.33       | 0.89                  | 1.46 (0.77-2.80)             | 0.99 (0.54-1.79)             | 1.15 (0.67-1.97)         | 1.13 (0.58-2.20)         | 0.85                | 0.98       |
|            |             |            | Female | 0.45 | 402 | 1.13 (0.83-1.54) | 0.43       | 0.74                  | 1.16 (0.59-2.27)             | 1.37 (0.80-2.36)             | 0.92 (0.45-1.88)         | 1.02 (0.56-1.83)         | 0.81                | 0.93       |
| rs6856558  | TDO2        | 4          | Male   | 0.36 | 386 | 1.15 (0.84-1.56) | 0.38       | 0.92                  | 1.10 (0.58-2.11)             | 0.87 (0.47-1.62)             | 1.53 (0.88-2.64)         | 1.07 (0.53-1.77)         | 0.60                | 0.97       |
|            |             |            | Female | 0.38 | 403 | 1.18 (0.87-1.61) | 0.29       | 0.59                  | 1.11 (0.54-2.25)             | 1.30 (0.75-2.23)             | 1.23 (0.60-2.51)         | 1.09 (0.61-1.94)         | 0.97                | 0.97       |
| rs9044     | TDO2        | 4          | Male   | 0.46 | 386 | 1.23 (0.77-1.96) | 0.39       | 0.91                  | 2.29 (0.69-7.60)             | 0.75 (0.30-1.87)             | 1.16 (0.49-2.72)         | 1.41 (0.56-3.60)         | 0.50                | 0.96       |
|            |             |            | Female | 0.49 | 403 | 1.11 (0.67-1.84) | 0.69       | 0.90                  | 1.36 (0.40-4.56)             | 1.68 (0.64-4.39)             | 0.63 (0.23-1.76)         | 1.00 (0.38-2.69)         | 0.56                | 0.87       |
| rs6856354  | TDO2        | 4          | Male   | 0.36 | 386 | 1.04 (0.76-1.41) | 0.83       | 0.83                  | 0.62 (0.29-1.30)             | 1.15 (0.62-2.14)             | 1.16 (0.66-2.03)         | 1.21 (0.63-2.30)         | 0.49                | 0.97       |
|            |             |            | Female | 0.36 | 402 | 0.81 (0.57-1.15) | 0.24       | 0.62                  | 0.81 (0.36-1.79)             | 0.67 (0.37-1.20)             | 1.42 (0.63-3.20)         | 0.73 (0.38-1.41)         | 0.49                | 0.90       |
| rs27074    | SLC6A3      | 5          | Male   | 0.09 | 386 | 0.67 (0.37-1.19) | 0.16       | 0.90                  | 0.57 (0.17-1.94)             | 0.41 (0.14-1.26)             | 0.89 (0.30-2.67)         | 1.24 (0.33-4.64)         | 0.59                | 0.99       |
|            |             |            | Female | 0.10 | 403 | 1.27 (0.74-2.18) | 0.38       | 0.99                  | 1.94 (0.64-5.90)             | 1.12 (0.45-2.78)             | 0.54 (0.14-2.18)         | 1.93 (0.66-5.67)         | 0.43                | 0.97       |
| rs11133762 | SLC6A3      | 5          | Male   | 0.01 | NA  | NA               | NA         | NA                    | NA                           | NA                           | NA                       | NA                       | NA                  | NA         |
|            |             |            | Female | 0.01 | NA  | NA               | NA         | NA                    | NA                           | NA                           | NA                       | NA                       | NA                  | NA         |
| rs10064525 | SLC6A3      | 5          | Male   | 0.06 | 382 | 0.69 (0.35-1.36) | 0.27       | 0.97                  | 0.26 (0.03-2.20)             | 0.17 (0.02-1.41)             | 1.44 (0.48-4.34)         | 0.98 (0.27-3.52)         | 0.15                | 0.82       |
|            |             |            | Female | 0.08 | 398 | 0.91 (0.48-1.73) | 0.77       | 1.00                  | NA                           | 1.42 (0.51-3.96)             | 0.80 (0.23-2.86)         | 1.05 (0.29-3.81)         | 0.21                | 0.85       |
| rs40184    | SLC6A3      | 5          | Male   | 0.48 | 380 | 0.83 (0.62-1.11) | 0.20       | 0.94                  | 0.91 (0.47-1.76)             | 0.85 (0.49-1.47)             | 0.75 (0.44-1.27)         | 0.84 (0.45-1.60)         | 0.98                | 0.98       |
|            |             |            | Female | 0.47 | 401 | 1.19 (0.86-1.64) | 0.29       | 0.98                  | 1.88 (0.85-4.16)             | 1.14 (0.65-1.98)             | 0.71 (0.36-1.40)         | 1.47 (0.78-2.77)         | 0.26                | 0.90       |
| rs11564767 | SLC6A3      | 5          | Male   | 0.06 | 386 | 0.57 (0.28-1.17) | 0.11       | 0.82                  | 0.37 (0.04-3.18)             | 0.14 (0.02-1.11)             | 0.50 (0.09-2.60)         | 1.30 (0.46-3.72)         | 0.17                | 0.86       |
|            |             |            | Female | 0.08 | 403 | 1.73 (0.95-3.15) | 0.08       | 0.72                  | 0.98 (0.20-4.92)             | 2.04 (0.74-5.67)             | 1.20 (0.27-5.36)         | 2.31 (0.80-6.68)         | 0.77                | 0.93       |
| rs11564764 | SLC6A3      | 5          | Male   | 0.06 | 386 | 0.59 (0.28-1.22) | 0.14       | 0.88                  | NA                           | 0.21 (0.03-1.70)             | 0.49 (0.09-2.59)         | 1.26 (0.47-3.36)         | 0.12                | 0.76       |
|            |             |            | Female | 0.07 | 403 | 1.40 (0.76-2.59) | 0.29       | 0.                    |                              |                              |                          |                          |                     |            |

| SNP        | Gene Region | Chromosome | Gender | MAF                    | N   | Marginal Effect       |            |         | Treatment Stratified Effects |                  |                  |                  | Test of Interaction |                 |
|------------|-------------|------------|--------|------------------------|-----|-----------------------|------------|---------|------------------------------|------------------|------------------|------------------|---------------------|-----------------|
|            |             |            |        |                        |     | Likelihood ratio test |            | Placebo | Bupropion                    | Patch            | Spray            | Observed P       | Adjusted P          |                 |
|            |             |            |        |                        |     | SNP OR (95% CI)       | Observed P |         |                              |                  |                  |                  |                     | SNP OR (95% CI) |
| rs6859392  | HTR1A       | 5          | Female | 0.28                   | 403 | 1.05 (0.75-1.48)      | 0.77       | 1.00    | 1.86 (0.93-3.70)             | 1.46 (0.78-2.73) | 0.73 (0.33-1.58) | 0.56 (0.27-1.15) | 0.05                | 0.40            |
|            |             |            | Male   | 0.31                   | 386 | 1.14 (0.74-1.75)      | 0.55       | 0.90    | 0.65 (0.25-1.69)             | 1.12 (0.48-2.61) | 1.45 (0.66-3.19) | 1.40 (0.57-3.44) | 0.59                | 0.80            |
| rs10085024 | HTR1A       | 5          | Female | 0.30                   | 402 | 0.73 (0.46-1.15)      | 0.18       | 0.32    | 0.97 (0.35-2.72)             | 0.46 (0.20-1.03) | 0.82 (0.32-2.15) | 0.95 (0.37-2.42) | 0.58                | 0.68            |
|            |             |            | Male   | 0.50                   | 386 | 0.91 (0.67-1.24)      | 0.54       | 0.89    | 1.03 (0.54-1.96)             | 1.12 (0.60-2.07) | 0.90 (0.51-1.60) | 0.64 (0.33-1.24) | 0.64                | 0.64            |
| rs1364043  | HTR1A       | 5          | Female | 0.48                   | 403 | 1.32 (0.95-1.83)      | 0.10       | 0.24    | 0.86 (0.43-1.73)             | 1.71 (0.97-3.00) | 1.28 (0.62-2.66) | 1.38 (0.69-2.75) | 0.51                | 0.75            |
|            |             |            | Male   | 0.25                   | 386 | 1.12 (0.73-1.73)      | 0.60       | 0.81    | 1.14 (0.44-2.92)             | 0.65 (0.28-1.53) | 1.12 (0.51-2.45) | 2.15 (0.85-5.44) | 0.32                | 0.56            |
| rs6295     | HTR1A       | 5          | Female | 0.21                   | 403 | 1.08 (0.68-1.73)      | 0.74       | 0.74    | 0.91 (0.31-2.67)             | 1.12 (0.49-2.56) | 0.95 (0.35-2.56) | 1.31 (0.53-3.27) | 0.95                | 0.95            |
|            |             |            | Male   | 0.49                   | 385 | 0.93 (0.68-1.26)      | 0.63       | 0.63    | 1.21 (0.63-2.33)             | 1.12 (0.60-2.08) | 0.86 (0.49-1.52) | 0.64 (0.33-1.24) | 0.51                | 0.73            |
| rs10042486 | HTR1A       | 5          | Female | 0.48                   | 401 | 1.32 (0.95-1.84)      | 0.09       | 0.25    | 0.84 (0.42-1.70)             | 1.74 (0.97-3.10) | 1.33 (0.65-2.73) | 1.38 (0.69-2.75) | 0.48                | 0.73            |
|            |             |            | Male   | 0.49                   | 384 | 0.92 (0.67-1.25)      | 0.58       | 0.81    | 1.08 (0.57-2.05)             | 1.12 (0.60-2.07) | 0.90 (0.51-1.60) | 0.64 (0.33-1.24) | 0.61                | 0.63            |
| rs13436914 | HTR1A       | 5          | Female | 0.48                   | 403 | 1.33 (0.96-1.84)      | 0.09       | 0.23    | 0.86 (0.43-1.73)             | 1.71 (0.97-3.00) | 1.33 (0.65-2.73) | 1.38 (0.69-2.75) | 0.51                | 0.75            |
|            |             |            | Male   | 1.27 × 10 <sup>3</sup> | NA  | NA                    | NA         | NA      | NA                           | NA               | NA               | NA               | NA                  | NA              |
| rs11954565 | DRD1        | 5          | Female | 1.24 × 10 <sup>3</sup> | NA  | NA                    | NA         | NA      | NA                           | NA               | NA               | NA               | NA                  | NA              |
|            |             |            | Male   | 0.34                   | 381 | 0.91 (0.59-1.41)      | 0.68       | 0.97    | 1.81 (0.68-4.83)             | 1.22 (0.53-2.84) | 0.63 (0.28-1.39) | 0.58 (0.23-1.45) | 0.24                | 0.88            |
| rs1587176  | DRD1        | 5          | Female | 0.36                   | 400 | 1.85 (1.14-3.00)      | 0.01       | 0.15    | 1.50 (0.48-4.63)             | 2.27 (0.97-5.27) | 2.15 (0.76-6.06) | 1.47 (0.59-3.68) | 0.88                | 0.99            |
|            |             |            | Male   | 0.19                   | 385 | 1.20 (0.82-1.75)      | 0.36       | 0.96    | 1.45 (0.57-3.70)             | 0.70 (0.32-1.52) | 1.84 (0.90-3.78) | 1.12 (0.55-2.28) | 0.32                | 0.94            |
| rs1310277  | DRD1        | 5          | Female | 0.16                   | 399 | 0.95 (0.61-1.47)      | 0.80       | 1.00    | 0.41 (0.10-1.69)             | 1.10 (0.49-2.44) | 1.62 (0.70-3.77) | 0.71 (0.29-1.77) | 0.28                | 0.91            |
|            |             |            | Male   | 0.12                   | 386 | 1.34 (0.87-2.08)      | 0.19       | 0.84    | 2.44 (0.93-6.38)             | 0.82 (0.35-1.91) | 1.55 (0.72-3.36) | 1.15 (0.41-3.22) | 0.38                | 0.96            |
| rs11739696 | DRD1        | 5          | Female | 0.13                   | 403 | 0.57 (0.33-0.97)      | 0.03       | 0.34    | 0.58 (0.16-2.13)             | 0.18 (0.05-0.63) | 1.12 (0.36-3.44) | 1.02 (0.40-2.61) | 0.07                | 0.43            |
|            |             |            | Male   | 0.37                   | 386 | 1.13 (0.84-1.53)      | 0.42       | 0.97    | 1.33 (0.68-2.57)             | 1.18 (0.66-2.12) | 1.03 (0.60-1.80) | 1.05 (0.54-2.02) | 0.94                | 0.94            |
| rs2453737  | DRD1        | 5          | Female | 0.37                   | 403 | 1.34 (0.97-1.86)      | 0.08       | 0.58    | 1.15 (0.56-2.33)             | 1.85 (1.04-3.29) | 1.22 (0.58-2.55) | 1.10 (0.58-2.09) | 0.61                | 0.99            |
|            |             |            | Male   | 0.37                   | 385 | 1.26 (0.81-1.95)      | 0.30       | 0.93    | 1.27 (0.48-3.34)             | 1.52 (0.64-3.61) | 1.04 (0.48-2.28) | 1.30 (0.52-3.27) | 0.94                | 1.00            |
| rs6881740  | DRD1        | 5          | Female | 0.38                   | 403 | 1.57 (0.97-2.53)      | 0.06       | 0.51    | 1.55 (0.50-4.78)             | 2.06 (0.87-4.86) | 1.31 (0.49-3.49) | 1.34 (0.54-3.35) | 0.89                | 0.98            |
|            |             |            | Male   | 0.35                   | 385 | 1.10 (0.81-1.49)      | 0.54       | 0.99    | 1.53 (0.77-3.04)             | 1.27 (0.70-2.29) | 0.92 (0.53-1.58) | 0.90 (0.47-1.71) | 0.58                | 0.99            |
| rs11742274 | DRD1        | 5          | Female | 0.36                   | 400 | 1.38 (0.99-1.91)      | 0.06       | 0.50    | 1.24 (0.60-2.53)             | 1.98 (1.10-3.55) | 1.15 (0.55-2.44) | 1.08 (0.57-2.08) | 0.50                | 0.99            |
|            |             |            | Male   | 0.19                   | 385 | 1.20 (0.83-1.74)      | 0.34       | 0.96    | 1.15 (0.50-2.64)             | 1.19 (0.54-2.59) | 1.04 (0.54-2.01) | 1.51 (0.71-3.20) | 0.91                | 1.00            |
| rs265971   | DRD1        | 5          | Female | 0.19                   | 402 | 0.84 (0.54-1.30)      | 0.44       | 0.98    | 1.17 (0.46-2.94)             | 0.57 (0.26-1.26) | 1.16 (0.44-3.07) | 0.83 (0.37-1.88) | 0.60                | 1.00            |
|            |             |            | Male   | 0.28                   | 385 | 0.74 (0.48-1.13)      | 0.16       | 0.84    | 0.46 (0.18-1.22)             | 0.92 (0.40-2.13) | 0.73 (0.33-1.59) | 0.87 (0.35-2.12) | 0.73                | 0.99            |
| rs265972   | DRD1        | 5          | Female | 0.29                   | 401 | 0.96 (0.60-1.52)      | 0.85       | 1.00    | 1.20 (0.43-3.36)             | 0.79 (0.35-1.78) | 0.76 (0.29-1.99) | 1.25 (0.50-3.11) | 0.82                | 0.98            |
|            |             |            | Male   | 0.47                   | 386 | 0.93 (0.69-1.25)      | 0.61       | 0.99    | 0.77 (0.40-1.49)             | 1.04 (0.58-1.88) | 0.72 (0.42-1.24) | 1.34 (0.71-2.52) | 0.45                | 0.97            |
| rs265973   | DRD1        | 5          | Female | 0.48                   | 402 | 0.82 (0.60-1.13)      | 0.23       | 0.89    | 0.99 (0.50-1.96)             | 0.56 (0.31-1.02) | 0.88 (0.44-1.77) | 1.02 (0.56-1.89) | 0.48                | 0.99            |
|            |             |            | Male   | 0.45                   | 386 | 0.78 (0.58-1.04)      | 0.09       | 0.67    | 0.57 (0.28-1.15)             | 0.83 (0.49-1.42) | 0.87 (0.51-1.47) | 0.81 (0.44-1.46) | 0.80                | 1.00            |
| rs265974   | DRD1        | 5          | Female | 0.45                   | 403 | 0.81 (0.58-1.13)      | 0.22       | 0.88    | 0.75 (0.35-1.59)             | 0.65 (0.35-1.20) | 0.85 (0.43-1.67) | 1.05 (0.56-1.96) | 0.73                | 0.99            |
|            |             |            | Male   | 0.35                   | 385 | 0.94 (0.61-1.45)      | 0.78       | 0.95    | 0.74 (0.29-1.90)             | 0.42 (0.18-0.98) | 2.28 (1.00-5.20) | 0.97 (0.40-2.34) | 0.04                | 0.91            |
| rs265975   | DRD1        | 5          | Female | 0.34                   | 402 | 0.71 (0.45-1.12)      | 0.14       | 0.76    | 0.72 (0.26-2.01)             | 0.46 (0.21-1.05) | 0.88 (0.33-2.31) | 1.00 (0.39-2.53) | 0.62                | 0.99            |
|            |             |            | Male   | 0.34                   | 386 | 0.94 (0.61-1.44)      | 0.77       | 0.96    | 0.79 (0.31-2.03)             | 0.37 (0.16-0.87) | 2.25 (0.99-5.13) | 1.06 (0.43-2.58) | 0.02                | 0.21            |
| rs265976   | DRD1        | 5          | Female | 0.34                   | 401 | 0.62 (0.39-0.99)      | 0.04       | 0.42    | 0.57 (0.20-1.59)             | 0.40 (0.17-0.91) | 0.87 (0.33-2.30) | 0.89 (0.35-2.26) | 0.53                | 0.99            |
|            |             |            | Male   | 0.19                   | 386 | 0.76 (0.48-1.20)      | 0.24       | 0.88    | 0.45 (0.13-1.48)             | 0.49 (0.20-1.18) | 1.85 (0.82-4.19) | 0.58 (0.22-1.50) | 0.08                | 0.53            |
| rs10476156 | DRD1        | 5          | Female | 0.18                   | 402 | 0.75 (0.46-1.23)      | 0.26       | 0.92    | 0.37 (0.10-1.37)             | 0.73 (0.30-1.79) | 0.93 (0.34-2.54) | 1.00 (0.39-2.53) | 0.61                | 0.99            |
|            |             |            | Male   | 0.15                   | 386 | 1.18 (0.78-1.77)      | 0.44       | 0.97    | 1.33 (0.55-3.24)             | 0.66 (0.23-1.89) | 1.30 (0.67-2.51) | 1.32 (0.58-2.98) | 0.70                | 1.00            |
| rs265977   | DRD1        | 5          | Female | 0.15                   | 403 | 0.67 (0.41-1.09)      | 0.09       | 0.63    | 1.12 (0.43-2.89)             | 0.32 (0.12-0.87) | 0.77 (0.24-2.44) | 0.85 (0.36-2.03) | 0.28                | 0.91            |
|            |             |            | Male   | 0.17                   | 385 | 0.82 (0.51-1.31)      | 0.40       | 0.96    | 0.50 (0.15-1.69)             | 0.56 (0.23-1.36) | 1.93 (0.83-4.49) | 0.59 (0.22-1.59) | 0.13                | 0.67            |
| rs863126   | DRD1        | 5          | Female | 0.17                   | 402 | 0.69 (0.41-1.14)      | 0.14       | 0.76    | 0.40 (0.11-1.51)             | 0.56 (0.22-1.47) | 0.68 (0.24-1.94) | 1.15 (0.45-3.93) | 0.58                | 0.99            |
|            |             |            | Male   | 0.32                   | 386 | 1.40 (0.91-2.15)      | 0.13       | 0.78    | 1.46 (0.56-3.77)             | 2.10 (0.89-4.97) | 1.21 (0.55-2.64) | 1.04 (0.43-2.52) | 0.70                | 0.99            |
| rs835616   | DRD1        | 5          | Female | 0.32                   | 403 | 1.59 (1.00-2.53)      | 0.05       | 0.45    | 1.58 (0.54-4.62)             | 2.61 (1.11-6.16) | 1.12 (0.43-2.92) | 1.21 (0.49-3.00) | 0.54                | 0.99            |
|            |             |            | Male   | 0.38                   | 384 | 0.75 (0.49-1.16)      | 0.19       | 0.84    | 0.47 (0.18-1.24)             | 1.09 (0.47-2.53) | 0.59 (0.27-1.31) | 0.98 (0.40-2.41) | 0.51                | 0.98            |
| rs835540   | DRD1        | 5          | Female | 0.35                   | 400 | 1.05 (0.66-1.67)      | 0.84       | 1.00    | 1.01 (0.36-2.81)             | 1.48 (0.65-3.38) | 1.19 (0.43-2.99) | 0.65 (0.26-1.59) | 0.60                | 0.99            |
|            |             |            | Male   | 0.26                   | 386 | 1.34 (0.87-2.06)      | 0.18       | 0.86    | 1.35 (0.51-3.54)             | 2.08 (0.89-4.87) | 1.16 (0.52-2.55) | 0.99 (0.41-2.39) | 0.65                | 1.00            |
| rs4867796  | DRD1        | 5          | Female | 0.25                   | 401 | 1.22 (0.76-1.93)      | 0.41       | 0.98    | 0.91 (0.33-2.53)             | 1.92 (0.84-4.40) | 0.73 (0.28-1.92) | 1.42 (0.57-3.53) | 0.45                | 0.98            |
|            |             |            | Male   | 0.16                   | 383 | 1.31 (0.90-1.91)      | 0.16       | 0.84    | 2.35 (1.05-5.25)             | 0.93 (0.40-2.15) | 1.40 (0.75-2.62) | 0.87 (0.37-2.06) | 0.30                | 0.94            |
| rs11746641 | DRD1        | 5          | Female | 0.18                   | 403 | 1.09 (0.71-1.68)      | 0.68       | 1.00    | 1.19 (0.40-3.55)             | 0.94 (0.47-1.89) | 0.75 (0.23-2.37) | 1.52 (0.70-3.27) | 0.72                | 0.96            |
|            |             |            | Male   | 0.16                   | 386 | 1.33 (0.90-1.96)      | 0.15       | 0.83    | 2.08 (0.93-4.65)             | 0.94 (0.37-2.43) | 1.47 (0.77-2.80) | 0.92 (0.40-2.12) | 0.46                | 0.96            |
| rs11749676 | DRD1        | 5          | Female | 0.17                   | 403 | 0.98 (0.63-1.53)      | 0.95       | 0.95    | 1.25 (0.42-3.74)             | 0.73 (0.34-1.57) | 0.83 (0.26-2.65) | 1.29 (0.61-2.71) | 0.72                | 1.00            |
|            |             |            | Male   | 0.41                   | 385 | 0.68 (0.44-1.05)      | 0.08       | 0.63    | 0.34 (0.13-0.89)             | 1.09 (0.45-2.61) | 0.57 (0.25-1.29) | 0.93 (0.37-2.30) | 0.28                | 0.92            |
| rs5326     | DRD1        | 5          | Female | 0.40                   | 402 | 1.04 (0.65-1.67)      | 0.87       | 1.00    | 1.19 (0.42-3.37)             | 0.75 (0.33-1.70) | 2.13 (0.68-6.62) | 0.85 (0.34-2.11) | 0.47                | 0.99            |
|            |             |            | Male   | 0.13                   | 386 | 0.98 (0.60-1.60)      | 0.95       | 0.95    | 0.56 (0.17-1.88)             | 1.31 (0.52-3.27) | 1.47 (0.61-3.53) | 0.59 (0.20-1.81) | 0.41                | 0.96            |
| rs265981   | DRD1        | 5          | Female | 0.13                   | 403 | 0.77 (0.45-1.34)      | 0.35       | 0.97    | 0.52 (0.14-1.95)             | 0.95 (0.35-2.56) | 0.78 (0.26-2.35) | 0.80 (0.27-3.22) | 0.91                | 0.91            |
|            |             |            | Male   | 0.41                   | 351 | 0.74 (0.47-1.16)      | 0.18       | 0.85    | 0.34 (0.12-0.94)             | 1.34 (0.54-3.34) | 0.67 (0.29-1.54) | 0.86 (0.34-2.17) | 0.25                | 0.89            |
| rs2168631  | DRD1        | 5          | Female | 0.40                   | 354 | 1.17 (0.71-1.92)      | 0.53       | 0.99    | 1.13 (0.38-3.30)             | 0.91 (0.38-2.18) | 2.74 (0.85-8.84) | 0.88 (0.34-2.28) | 0.42                | 0.97            |
|            |             |            | Male   | 0.17                   | 386 | 1.43 (0.98-2.09)      | 0.06       | 0.56    | 1.98 (0.90-4.37)             | 1.37 (0.58-3.21) | 1.50 (0.79-2.85) | 0.99 (0.44-2.23) | 0.68                | 1.00            |
| rs6878159  | DRD1        | 5          | Female | 0.18                   | 403 | 0.96 (0.63-1.48)      | 0.87       | 0.99    | 1.25 (0.42-3.74)             | 0.69 (0.33-1.43) | 1.04 (0.34-3.17) | 1.19 (0.58-2.46) | 0.71                | 1.00            |
|            |             |            | Male   | 0.01                   | NA  | NA                    | NA         | NA      | NA                           | NA               | NA               | NA               | NA                  | NA              |
| rs267417   | DRD1        | 5          | Female | 8.66 × 10 <sup>3</sup> | NA  | NA                    | NA         | NA      | NA                           | NA               | NA               | NA               | NA                  | NA              |
|            |             |            | Male   | 0.40                   | 386 | 0.66 (0.42-1.02)      | 0.06       | 0.54    | 0.26 (0.09-0.70)             | 1.41 (0.58-3.40) | 0.53 (0.24-1.20) | 0.84 (0.34-2.07) | 0.07                | 0.46            |
| rs2471005  | DRD1        | 5          |        |                        |     |                       |            |         |                              |                  |                  |                  |                     |                 |

| SNP        | Gene Region | Chromosome | Gender | MAF  | N   | Marginal Effect       |            |         | Treatment Stratified Effects |                  |                   |                  | Test of Interaction |            |            |
|------------|-------------|------------|--------|------|-----|-----------------------|------------|---------|------------------------------|------------------|-------------------|------------------|---------------------|------------|------------|
|            |             |            |        |      |     | Likelihood ratio test |            | Placebo | Bupropion                    | Patch            | Spray             | Observed P       | Adjusted P          | Observed P | Adjusted P |
|            |             |            |        |      |     | SNP OR (95% CI)       | Observed P |         |                              |                  |                   |                  |                     |            |            |
| rs9475195  | HCRTR2      | 6          | Female | 0.17 | 402 | 0.94 (0.61-1.44)      | 0.77       | 1.00    | 0.75 (0.28-2.02)             | 0.66 (0.29-1.51) | 0.99 (0.39-2.49)  | 1.52 (0.68-3.37) | 0.51                | 1.00       |            |
|            |             |            | Male   | 0.38 | 385 | 0.67 (0.43-1.05)      | 0.08       | 0.69    | 0.72 (0.28-1.86)             | 0.74 (0.31-1.79) | 0.61 (0.27-1.38)  | 0.65 (0.27-1.57) | 0.99                | 0.99       |            |
|            |             |            | Female | 0.41 | 403 | 0.76 (0.48-1.21)      | 0.25       | 0.96    | 1.10 (0.37-3.24)             | 0.84 (0.37-1.90) | 0.45 (0.17-1.18)  | 0.82 (0.31-2.15) | 0.64                | 1.00       |            |
| rs3134696  | HCRTR2      | 6          | Male   | 0.21 | 386 | 1.06 (0.74-1.53)      | 0.75       | 1.00    | 0.65 (0.28-1.50)             | 1.40 (0.70-2.80) | 1.14 (0.57-2.28)  | 1.10 (0.51-2.37) | 0.56                | 1.00       |            |
|            |             |            | Female | 0.19 | 402 | 0.92 (0.61-1.39)      | 0.69       | 1.00    | 0.67 (0.26-1.76)             | 0.68 (0.31-1.48) | 1.07 (0.45-2.54)  | 1.46 (0.65-3.26) | 0.49                | 1.00       |            |
| rs3122148  | HCRTR2      | 6          | Male   | 0.21 | 386 | 1.05 (0.73-1.51)      | 0.80       | 1.00    | 0.65 (0.28-1.50)             | 1.33 (0.66-2.68) | 1.14 (0.57-2.27)  | 1.10 (0.51-2.38) | 0.60                | 1.00       |            |
|            |             |            | Female | 0.19 | 401 | 0.89 (0.59-1.35)      | 0.59       | 1.00    | 0.67 (0.26-1.75)             | 0.67 (0.31-1.46) | 1.02 (0.43-2.42)  | 1.38 (0.62-3.07) | 0.54                | 1.00       |            |
| rs10498801 | HCRTR2      | 6          | Male   | 0.19 | 386 | 1.12 (0.72-1.74)      | 0.62       | 1.00    | 0.76 (0.28-2.04)             | 1.70 (0.72-4.04) | 0.91 (0.40-2.08)  | 1.26 (0.50-3.16) | 0.61                | 1.00       |            |
|            |             |            | Female | 0.18 | 403 | 0.92 (0.56-1.50)      | 0.73       | 1.00    | 0.61 (0.18-2.02)             | 0.58 (0.23-1.45) | 1.08 (0.39-3.01)  | 1.72 (0.68-4.35) | 0.34                | 0.97       |            |
| rs12111375 | HCRTR2      | 6          | Male   | 0.48 | 342 | 0.62 (0.35-1.11)      | 0.11       | 0.78    | 0.24 (0.07-0.84)             | 0.24 (0.07-0.80) | 1.00 (0.34-2.93)  | 2.37 (0.61-9.28) | 0.02                | 0.23       |            |
|            |             |            | Female | 0.49 | 367 | 0.98 (0.54-1.77)      | 0.94       | 0.94    | 1.29 (0.33-5.08)             | 1.02 (0.37-2.84) | 0.49 (0.15-1.55)  | 1.69 (0.41-6.92) | 0.55                | 1.00       |            |
| rs9367622  | HCRTR2      | 6          | Male   | 0.16 | 386 | 1.20 (0.76-1.90)      | 0.44       | 1.00    | 0.77 (0.28-2.13)             | 1.63 (0.64-4.15) | 1.19 (0.52-2.76)  | 1.30 (0.51-3.33) | 0.75                | 1.00       |            |
|            |             |            | Female | 0.15 | 403 | 0.89 (0.53-1.50)      | 0.67       | 1.00    | 0.86 (0.25-2.91)             | 0.40 (0.14-1.17) | 0.95 (0.33-2.72)  | 1.84 (0.71-4.76) | 0.20                | 0.87       |            |
| rs3134705  | HCRTR2      | 6          | Male   | 0.41 | 386 | 0.94 (0.60-1.46)      | 0.78       | 1.00    | 1.35 (0.46-3.91)             | 0.87 (0.37-2.05) | 0.97 (0.44-2.12)  | 0.75 (0.31-1.83) | 0.87                | 1.00       |            |
|            |             |            | Female | 0.38 | 403 | 1.08 (0.68-1.72)      | 0.75       | 1.00    | 0.70 (0.25-1.96)             | 0.88 (0.39-1.98) | 1.22 (0.47-3.18)  | 1.91 (0.67-5.39) | 0.54                | 1.00       |            |
| rs3122153  | HCRTR2      | 6          | Male   | 0.23 | 385 | 1.05 (0.73-1.51)      | 0.78       | 1.00    | 0.74 (0.33-1.66)             | 1.23 (0.63-2.41) | 1.16 (0.59-2.28)  | 1.06 (0.49-2.28) | 0.79                | 1.00       |            |
|            |             |            | Female | 0.20 | 402 | 0.82 (0.54-1.24)      | 0.35       | 0.98    | 0.49 (0.17-1.36)             | 0.68 (0.31-1.52) | 1.02 (0.43-2.42)  | 1.24 (0.56-2.75) | 0.45                | 0.99       |            |
| rs4142972  | HCRTR2      | 6          | Male   | 0.17 | 386 | 0.90 (0.56-1.43)      | 0.64       | 1.00    | 1.30 (0.50-3.39)             | 0.66 (0.25-1.72) | 1.05 (0.45-2.44)  | 0.69 (0.25-1.88) | 0.71                | 1.00       |            |
|            |             |            | Female | 0.18 | 403 | 1.30 (0.81-2.09)      | 0.28       | 0.97    | 1.33 (0.45-3.98)             | 1.38 (0.61-3.14) | 1.29 (0.47-3.51)  | 1.18 (0.46-3.02) | 1.00                | 1.00       |            |
| rs3122154  | HCRTR2      | 6          | Male   | 0.21 | 384 | 1.48 (1.01-2.16)      | 0.04       | 0.50    | 1.29 (0.58-2.87)             | 1.24 (0.59-2.61) | 1.68 (0.82-3.45)  | 1.76 (0.80-3.91) | 0.89                | 1.00       |            |
|            |             |            | Female | 0.20 | 403 | 1.32 (0.90-1.94)      | 0.16       | 0.88    | 1.35 (0.58-3.11)             | 1.07 (0.56-2.06) | 1.58 (0.73-3.42)  | 1.50 (0.62-3.64) | 0.88                | 1.00       |            |
| rs12662510 | HCRTR2      | 6          | Male   | 0.15 | 378 | 1.16 (0.72-1.85)      | 0.55       | 1.00    | 0.63 (0.22-1.82)             | 1.55 (0.61-3.91) | 1.35 (0.58-3.17)  | 1.19 (0.44-3.24) | 0.61                | 1.00       |            |
|            |             |            | Female | 0.15 | 399 | 0.89 (0.53-1.49)      | 0.66       | 1.00    | 0.95 (0.28-3.22)             | 0.36 (0.12-1.03) | 0.95 (0.33-2.73)  | 1.98 (0.76-5.16) | 0.12                | 0.69       |            |
| rs9370403  | HCRTR2      | 6          | Male   | 0.20 | 373 | 1.43 (0.96-2.11)      | 0.08       | 0.69    | 1.41 (0.63-3.12)             | 1.09 (0.47-2.53) | 1.47 (0.71-3.02)  | 1.77 (0.80-3.92) | 0.88                | 1.00       |            |
|            |             |            | Female | 0.19 | 386 | 1.20 (0.79-1.81)      | 0.39       | 0.99    | 0.91 (0.32-2.57)             | 0.92 (0.44-1.95) | 1.78 (0.83-3.83)  | 1.26 (0.53-3.00) | 0.61                | 1.00       |            |
| rs3134710  | HCRTR2      | 6          | Male   | 0.25 | 386 | 1.31 (0.85-2.02)      | 0.21       | 0.93    | 1.21 (0.47-3.10)             | 2.15 (0.92-5.05) | 1.34 (0.61-2.95)  | 0.80 (0.33-1.95) | 0.47                | 1.00       |            |
|            |             |            | Female | 0.25 | 403 | 0.79 (0.50-1.26)      | 0.32       | 0.98    | 0.42 (0.14-1.30)             | 0.45 (0.20-1.05) | 1.35 (0.52-3.52)  | 1.54 (0.62-3.83) | 0.10                | 0.63       |            |
| rs3122156  | HCRTR2      | 6          | Male   | 0.25 | 386 | 1.31 (0.85-2.02)      | 0.21       | 0.93    | 1.21 (0.47-3.10)             | 2.15 (0.92-5.05) | 1.34 (0.61-2.95)  | 0.80 (0.33-1.95) | 0.47                | 1.00       |            |
|            |             |            | Female | 0.25 | 403 | 0.79 (0.50-1.26)      | 0.32       | 0.98    | 0.42 (0.14-1.30)             | 0.45 (0.20-1.05) | 1.35 (0.52-3.52)  | 1.54 (0.62-3.83) | 0.10                | 0.63       |            |
| rs4311511  | HCRTR2      | 6          | Male   | 0.30 | 383 | 1.02 (0.73-1.43)      | 0.89       | 0.99    | 0.74 (0.33-1.63)             | 1.52 (0.78-2.96) | 1.14 (0.62-2.13)  | 0.76 (0.38-1.52) | 0.41                | 1.00       |            |
|            |             |            | Female | 0.28 | 399 | 0.85 (0.59-1.22)      | 0.37       | 0.99    | 0.47 (0.18-1.21)             | 0.72 (0.37-1.41) | 1.56 (0.75-3.23)  | 0.87 (0.42-1.82) | 0.20                | 0.87       |            |
| rs4311512  | HCRTR2      | 6          | Male   | 0.29 | 386 | 1.03 (0.73-1.44)      | 0.88       | 0.99    | 0.74 (0.33-1.63)             | 1.48 (0.77-2.86) | 1.17 (0.63-2.17)  | 0.76 (0.38-1.52) | 0.43                | 1.00       |            |
|            |             |            | Female | 0.27 | 403 | 0.84 (0.59-1.20)      | 0.34       | 0.98    | 0.44 (0.17-1.13)             | 0.73 (0.38-1.41) | 1.55 (0.75-3.22)  | 0.88 (0.42-1.83) | 0.17                | 0.82       |            |
| rs9382467  | HCRTR2      | 6          | Male   | 0.48 | 386 | 1.14 (0.69-1.87)      | 0.61       | 1.00    | 0.79 (0.26-2.38)             | 1.60 (0.62-4.17) | 1.51 (0.58-3.90)  | 0.76 (0.29-2.01) | 0.59                | 1.00       |            |
|            |             |            | Female | 0.45 | 402 | 1.04 (0.64-1.71)      | 0.86       | 1.00    | 0.57 (0.20-1.63)             | 0.83 (0.36-1.89) | 2.81 (0.73-10.85) | 1.26 (0.48-3.36) | 0.25                | 0.93       |            |
| rs9349768  | HCRTR2      | 6          | Male   | 0.22 | 386 | 1.09 (0.74-1.59)      | 0.66       | 1.00    | 0.99 (0.42-2.29)             | 1.18 (0.52-2.67) | 1.22 (0.60-2.47)  | 0.98 (0.48-2.00) | 0.96                | 1.00       |            |
|            |             |            | Female | 0.22 | 403 | 0.81 (0.55-1.19)      | 0.27       | 0.97    | 0.57 (0.22-1.51)             | 0.55 (0.27-1.14) | 1.36 (0.59-3.12)  | 1.03 (0.49-2.18) | 0.31                | 0.97       |            |
| rs7771240  | HCRTR2      | 6          | Male   | 0.29 | 386 | 1.07 (0.76-1.51)      | 0.69       | 1.00    | 0.74 (0.33-1.63)             | 1.57 (0.80-3.08) | 1.23 (0.65-2.32)  | 0.83 (0.42-1.64) | 0.42                | 1.00       |            |
|            |             |            | Female | 0.27 | 402 | 0.84 (0.59-1.21)      | 0.35       | 0.98    | 0.44 (0.17-1.15)             | 0.73 (0.38-1.41) | 1.56 (0.75-3.22)  | 0.88 (0.42-1.83) | 0.18                | 0.83       |            |
| rs9357850  | HCRTR2      | 6          | Male   | 0.22 | 386 | 1.14 (0.78-1.67)      | 0.51       | 1.00    | 0.98 (0.42-2.28)             | 1.18 (0.52-2.67) | 1.31 (0.63-2.72)  | 1.07 (0.53-2.18) | 0.96                | 1.00       |            |
|            |             |            | Female | 0.23 | 403 | 0.80 (0.54-1.17)      | 0.25       | 0.96    | 0.57 (0.22-1.51)             | 0.55 (0.27-1.14) | 1.26 (0.57-2.79)  | 1.03 (0.49-2.18) | 0.36                | 0.98       |            |
| rs9475210  | HCRTR2      | 6          | Male   | 0.07 | 386 | 0.92 (0.51-1.64)      | 0.77       | 1.00    | 0.29 (0.04-2.31)             | 1.86 (0.74-4.71) | 1.02 (0.33-3.12)  | 0.22 (0.03-1.83) | 0.09                | 0.65       |            |
|            |             |            | Female | 0.05 | 403 | 1.11 (0.54-2.31)      | 0.78       | 1.00    | NA                           | 2.61 (0.70-9.78) | 3.00 (0.67-13.37) | 0.51 (0.10-2.57) | 0.03                | 0.31       |            |
| rs4074181  | HCRTR2      | 6          | Male   | 0.22 | 386 | 1.14 (0.78-1.67)      | 0.51       | 1.00    | 0.98 (0.42-2.28)             | 1.18 (0.52-2.67) | 1.31 (0.63-2.72)  | 1.07 (0.53-2.18) | 0.96                | 1.00       |            |
|            |             |            | Female | 0.22 | 402 | 0.81 (0.55-1.19)      | 0.27       | 0.97    | 0.61 (0.23-1.61)             | 0.55 (0.27-1.14) | 1.26 (0.57-2.79)  | 1.01 (0.49-2.09) | 0.39                | 0.99       |            |
| rs3134711  | HCRTR2      | 6          | Male   | 0.29 | 386 | 1.07 (0.76-1.51)      | 0.69       | 1.00    | 0.74 (0.33-1.63)             | 1.57 (0.80-3.08) | 1.23 (0.65-2.32)  | 0.83 (0.42-1.64) | 0.42                | 1.00       |            |
|            |             |            | Female | 0.27 | 403 | 0.84 (0.59-1.20)      | 0.33       | 0.98    | 0.44 (0.17-1.13)             | 0.73 (0.38-1.41) | 1.55 (0.75-3.22)  | 0.87 (0.41-1.78) | 0.17                | 0.82       |            |
| rs7741664  | HCRTR2      | 6          | Male   | 0.26 | 386 | 1.14 (0.79-1.63)      | 0.49       | 1.00    | 0.87 (0.38-1.98)             | 1.51 (0.72-3.19) | 1.20 (0.62-2.32)  | 1.01 (0.49-2.06) | 0.78                | 1.00       |            |
|            |             |            | Female | 0.25 | 402 | 0.81 (0.56-1.17)      | 0.25       | 0.96    | 0.50 (0.19-1.31)             | 0.64 (0.32-1.27) | 1.35 (0.64-2.84)  | 0.91 (0.45-1.86) | 0.33                | 0.97       |            |
| rs9357853  | HCRTR2      | 6          | Male   | 0.26 | 386 | 1.14 (0.79-1.64)      | 0.49       | 1.00    | 0.87 (0.38-1.98)             | 1.44 (0.68-3.05) | 1.20 (0.62-2.32)  | 1.06 (0.52-2.16) | 0.83                | 1.00       |            |
|            |             |            | Female | 0.26 | 403 | 0.82 (0.57-1.18)      | 0.27       | 0.97    | 0.48 (0.18-1.23)             | 0.70 (0.36-1.36) | 1.35 (0.64-2.84)  | 0.91 (0.45-1.86) | 0.33                | 0.97       |            |
| rs3122167  | HCRTR2      | 6          | Male   | 0.30 | 386 | 1.05 (0.75-1.46)      | 0.79       | 1.00    | 0.74 (0.33-1.63)             | 1.57 (0.80-3.08) | 1.13 (0.62-2.06)  | 0.83 (0.42-1.64) | 0.45                | 1.00       |            |
|            |             |            | Female | 0.28 | 401 | 0.83 (0.58-1.18)      | 0.30       | 0.98    | 0.44 (0.17-1.13)             | 0.71 (0.37-1.36) | 1.56 (0.75-3.23)  | 0.87 (0.42-1.78) | 0.16                | 0.80       |            |
| rs3122169  | HCRTR2      | 6          | Male   | 0.19 | 385 | 1.11 (0.76-1.62)      | 0.58       | 1.00    | 1.48 (0.69-3.16)             | 0.82 (0.37-1.83) | 1.10 (0.54-2.22)  | 1.13 (0.53-2.42) | 0.78                | 1.00       |            |
|            |             |            | Female | 0.18 | 403 | 1.33 (0.90-1.97)      | 0.15       | 0.87    | 1.24 (0.53-2.87)             | 1.42 (0.66-3.05) | 1.44 (0.69-3.01)  | 1.23 (0.55-2.73) | 0.99                | 1.00       |            |
| rs2811239  | HCRTR2      | 6          | Male   | 0.19 | 386 | 1.24 (0.85-1.81)      | 0.27       | 0.97    | 1.77 (0.83-3.78)             | 0.93 (0.41-2.07) | 1.15 (0.58-2.31)  | 1.24 (0.58-2.65) | 0.71                | 1.00       |            |
|            |             |            | Female | 0.17 | 403 | 1.38 (0.93-2.04)      | 0.12       | 0.80    | 1.36 (0.58-3.22)             | 1.51 (0.67-3.39) | 1.44 (0.69-3.01)  | 1.23 (0.57-2.67) | 0.99                | 1.00       |            |
| rs2653342  | HCRTR2      | 6          | Male   | 0.16 | 386 | 1.23 (0.83-1.83)      | 0.30       | 0.98    | 1.13 (0.48-2.66)             | 1.06 (0.46-2.41) | 1.21 (0.60-2.43)  | 1.19 (0.71-3.54) | 0.91                | 1.00       |            |
|            |             |            | Female | 0.15 | 403 | 1.45 (0.96-2.20)      | 0.08       | 0.70    | 1.49 (0.61-3.64)             | 1.51 (0.66-3.46) | 1.66 (0.77-3.58)  | 1.55 (0.48-2.74) | 0.94                | 1.00       |            |
| rs2653343  | HCRTR2      | 6          | Male   | 0.20 | 386 | 1.27 (0.88-1.83)      | 0.21       | 0.93    | 0.99 (0.45-2.19)             | 1.36 (0.66-2.81) | 1.21 (0.61-2.40)  | 1.56 (0.73-3.35) | 0.86                | 1.00       |            |
|            |             |            | Female | 0.18 | 403 | 1.37 (0.92-2.03)      | 0.12       | 0.82    | 1.12 (0.49-2.55)             | 1.66 (0.77-3.57) | 1.59 (0.76-3.30)  | 1.09 (0.45-2.64) | 0.83                | 1.00       |            |
| rs2134294  | HCRTR2      | 6          | Male   | 0.47 | 385 | 1.17 (0.72-1.90)      | 0.53       | 1.00    | 0.72 (0.25-2.07)             | 1.63 (0.63-4.24) |                   |                  |                     |            |            |

| SNP        | Gene Region | Chromosome | Gender | MAF  | N   | Marginal Effect       |            |            | Treatment Stratified Effects |                  |                   |                  | Test of Interaction     |                         |
|------------|-------------|------------|--------|------|-----|-----------------------|------------|------------|------------------------------|------------------|-------------------|------------------|-------------------------|-------------------------|
|            |             |            |        |      |     | Likelihood ratio test |            | Placebo    | Bupropion                    | Patch            | Spray             | Observed P       |                         |                         |
|            |             |            |        |      |     | SNP OR (95% CI)       | Observed P | Adjusted P | SNP OR (95% CI)              | SNP OR (95% CI)  | SNP OR (95% CI)   |                  | SNP OR (95% CI)         |                         |
| rs11568817 | HTR1B       | 6          | Female | 0.28 | 402 | 0.88 (0.61-1.28)      | 0.51       | 1.00       | 0.79 (0.35-1.79)             | 1.31 (0.67-2.54) | 0.83 (0.37-1.85)  | 0.64 (0.30-1.36) | 0.54                    | 0.99                    |
|            |             |            | Male   | 0.47 | 386 | 1.17 (0.86-1.59)      | 0.32       | 0.98       | 0.96 (0.50-1.82)             | 1.67 (0.87-3.22) | 1.33 (0.78-2.29)  | 0.82 (0.42-1.58) | 0.40                    | 0.96                    |
| rs1228814  | HTR1B       | 6          | Female | 0.43 | 403 | 0.93 (0.66-1.29)      | 0.65       | 1.00       | 0.92 (0.43-1.98)             | 1.57 (0.86-2.86) | 0.65 (0.32-1.33)  | 0.67 (0.35-1.28) | 0.17                    | 0.75                    |
|            |             |            | Male   | 0.46 | 380 | 1.19 (0.88-1.62)      | 0.25       | 0.94       | 1.03 (0.54-1.96)             | 1.79 (0.90-3.56) | 1.33 (0.78-2.26)  | 0.82 (0.42-1.57) | 0.39                    | 0.96                    |
| rs4140535  | HTR1B       | 6          | Female | 0.43 | 395 | 0.90 (0.64-1.26)      | 0.52       | 1.00       | 0.81 (0.36-1.82)             | 1.70 (0.93-3.13) | 0.65 (0.32-1.33)  | 0.58 (0.29-1.15) | 0.08                    | 0.46                    |
|            |             |            | Male   | 0.38 | 386 | 0.72 (0.47-1.11)      | 0.14       | 0.83       | 0.65 (0.25-1.68)             | 0.40 (0.17-0.93) | 0.88 (0.40-1.94)  | 1.23 (0.49-3.08) | 0.31                    | 0.91                    |
| rs10806098 | HTR1B       | 6          | Female | 0.38 | 403 | 0.85 (0.53-1.36)      | 0.50       | 1.00       | 1.31 (0.45-3.85)             | 0.39 (0.17-0.87) | 1.24 (0.44-3.53)  | 1.25 (0.50-3.14) | 0.14                    | 0.68                    |
|            |             |            | Male   | 0.29 | 386 | 0.69 (0.45-1.07)      | 0.10       | 0.70       | 0.49 (0.18-1.27)             | 0.47 (0.20-1.12) | 1.14 (0.52-2.49)  | 0.76 (0.31-1.85) | 0.41                    | 0.96                    |
| rs1213365  | HTR1B       | 6          | Female | 0.28 | 403 | 0.94 (0.60-1.49)      | 0.80       | 1.00       | 1.06 (0.38-2.94)             | 0.68 (0.30-1.52) | 0.78 (0.30-2.01)  | 1.53 (0.62-3.79) | 0.58                    | 0.98                    |
|            |             |            | Male   | 0.47 | 356 | 0.73 (0.45-1.19)      | 0.21       | 0.92       | 0.88 (0.30-2.55)             | 0.53 (0.18-1.50) | 0.89 (0.39-2.03)  | 0.64 (0.24-1.71) | 0.86                    | 1.00                    |
| rs1213366  | HTR1B       | 6          | Female | 0.49 | 373 | 1.21 (0.70-2.07)      | 0.49       | 1.00       | 2.25 (0.59-8.53)             | 0.63 (0.24-1.67) | 0.86 (0.34-2.38)  | 1.75 (0.61-5.00) | 0.37                    | 0.93                    |
|            |             |            | Male   | 0.46 | 386 | 1.20 (0.88-1.62)      | 0.25       | 0.94       | 1.02 (0.54-1.96)             | 1.42 (0.76-2.68) | 1.51 (0.87-2.62)  | 0.85 (0.45-1.61) | 0.51                    | 0.99                    |
| rs1213369  | HTR1B       | 6          | Female | 0.43 | 403 | 0.94 (0.67-1.31)      | 0.70       | 1.00       | 0.97 (0.46-2.06)             | 1.46 (0.79-2.67) | 0.71 (0.35-1.44)  | 0.71 (0.37-1.35) | 0.33                    | 0.91                    |
|            |             |            | Male   | 0.42 | 386 | 0.65 (0.42-1.02)      | 0.06       | 0.56       | 0.66 (0.25-1.79)             | 0.35 (0.15-0.84) | 0.84 (0.38-1.87)  | 0.94 (0.37-2.38) | 0.40                    | 0.96                    |
| rs1213370  | HTR1B       | 6          | Female | 0.43 | 403 | 0.90 (0.55-1.47)      | 0.68       | 1.00       | 1.08 (0.37-3.18)             | 0.39 (0.17-0.91) | 1.37 (0.44-4.37)  | 1.62 (0.62-4.24) | 0.12                    | 0.61                    |
|            |             |            | Male   | 0.45 | 386 | 0.81 (0.51-1.28)      | 0.38       | 0.99       | 0.99 (0.35-2.78)             | 0.63 (0.25-1.56) | 0.90 (0.40-2.04)  | 0.80 (0.31-2.04) | 0.92                    | 0.99                    |
| rs1213371  | HTR1B       | 6          | Female | 0.47 | 403 | 1.27 (0.76-2.13)      | 0.36       | 0.99       | 2.12 (0.56-7.99)             | 0.70 (0.29-1.68) | 1.27 (0.42-3.84)  | 1.93 (0.68-5.45) | 0.39                    | 0.94                    |
|            |             |            | Male   | 0.46 | 385 | 1.20 (0.88-1.62)      | 0.25       | 0.94       | 1.03 (0.54-1.96)             | 1.39 (0.73-2.62) | 1.56 (0.89-2.73)  | 0.85 (0.45-1.61) | 0.50                    | 0.99                    |
| rs1936158  | HTR1B       | 6          | Female | 0.43 | 400 | 0.94 (0.67-1.31)      | 0.70       | 1.00       | 0.97 (0.46-2.06)             | 1.46 (0.80-2.68) | 0.70 (0.34-1.43)  | 0.71 (0.37-1.35) | 0.32                    | 0.90                    |
|            |             |            | Male   | 0.40 | 386 | 0.70 (0.45-1.08)      | 0.11       | 0.74       | 0.78 (0.29-2.08)             | 0.39 (0.17-0.91) | 0.82 (0.37-1.82)  | 1.02 (0.40-2.56) | 0.44                    | 0.98                    |
| rs12173930 | HTR1B       | 6          | Female | 0.41 | 403 | 0.80 (0.50-1.28)      | 0.35       | 0.99       | 1.13 (0.38-3.31)             | 0.29 (0.12-0.66) | 1.46 (0.49-4.34)  | 1.37 (0.54-3.52) | 0.03                    | 0.24                    |
|            |             |            | Male   | 0.11 | 384 | 1.07 (0.63-1.81)      | 0.80       | 0.99       | 1.67 (0.54-5.20)             | 1.34 (0.54-3.35) | 0.68 (0.23-2.00)  | 0.85 (0.27-2.66) | 0.65                    | 0.99                    |
| rs2798949  | HTR1B       | 6          | Female | 0.13 | 403 | 1.21 (0.71-2.04)      | 0.49       | 1.00       | 1.24 (0.42-3.69)             | 0.96 (0.36-2.61) | 1.73 (0.57-5.21)  | 1.11 (0.39-3.13) | 0.89                    | 0.89                    |
|            |             |            | Male   | 0.37 | 386 | 1.56 (0.99-2.45)      | 0.05       | 0.51       | 2.32 (0.81-6.64)             | 1.50 (0.63-3.55) | 2.20 (0.92-5.25)  | 0.80 (0.33-1.97) | 0.36                    | 0.95                    |
| rs9352483  | HTR1B       | 6          | Female | 0.34 | 402 | 0.71 (0.45-1.13)      | 0.15       | 0.86       | 1.19 (0.42-3.38)             | 0.74 (0.33-1.65) | 0.40 (0.15-1.07)  | 0.76 (0.30-1.93) | 0.51                    | 0.98                    |
|            |             |            | Male   | 0.14 | 385 | 0.91 (0.58-1.42)      | 0.67       | 0.99       | 0.61 (0.18-2.08)             | 0.70 (0.31-1.55) | 1.20 (0.54-2.64)  | 1.20 (0.44-3.26) | 0.66                    | 0.99                    |
| rs4543330  | HTR1B       | 6          | Female | 0.15 | 402 | 1.36 (0.89-2.07)      | 0.16       | 0.87       | 0.90 (0.31-2.57)             | 2.24 (1.13-4.41) | 1.28 (0.49-3.60)  | 0.78 (0.29-2.10) | 0.26                    | 0.88                    |
|            |             |            | Male   | 0.15 | 386 | 1.29 (0.85-1.97)      | 0.23       | 0.93       | 0.96 (0.36-2.54)             | 2.41 (1.10-5.28) | 1.23 (0.56-2.71)  | 0.75 (0.28-1.99) | 0.24                    | 0.87                    |
| rs1343491  | HTR1B       | 6          | Female | 0.15 | 402 | 0.96 (0.62-1.50)      | 0.87       | 1.00       | 1.49 (0.53-4.19)             | 1.16 (0.53-2.53) | 0.65 (0.25-1.70)  | 0.84 (0.37-1.92) | 0.65                    | 0.99                    |
|            |             |            | Male   | 0.08 | 386 | 0.83 (0.45-1.53)      | 0.55       | 1.00       | 0.64 (0.16-2.51)             | 1.06 (0.31-3.54) | 0.26 (0.05-1.26)  | 1.63 (0.58-4.57) | 0.22                    | 0.85                    |
| rs9638321  | CNRI        | 6          | Female | 0.09 | 403 | 0.94 (0.52-1.70)      | 0.85       | 1.00       | 1.38 (0.39-4.86)             | 0.38 (0.10-1.40) | 2.11 (0.71-6.29)  | 0.70 (0.21-2.38) | 0.19                    | 0.78                    |
|            |             |            | Male   | 0.12 | 386 | 0.77 (0.45-1.30)      | 0.32       | 0.97       | 0.83 (0.27-2.62)             | 0.94 (0.35-2.50) | 0.62 (0.22-1.79)  | 0.71 (0.25-2.06) | 0.95                    | 0.95                    |
| rs9353524  | CNRI        | 6          | Female | 0.11 | 403 | 0.71 (0.39-1.26)      | 0.23       | 0.89       | 1.09 (0.32-3.75)             | 0.52 (0.18-1.53) | 0.44 (0.11-1.71)  | 1.02 (0.35-2.98) | 0.64                    | 0.99                    |
|            |             |            | Male   | 0.22 | 384 | 0.91 (0.59-1.42)      | 0.69       | 1.00       | 0.54 (0.19-1.54)             | 1.05 (0.45-2.46) | 0.68 (0.30-1.55)  | 1.67 (0.69-4.04) | 0.34                    | 0.76                    |
| rs10485171 | CNRI        | 6          | Female | 0.21 | 403 | 0.77 (0.48-1.24)      | 0.28       | 0.89       | 0.54 (0.18-1.68)             | 1.11 (0.49-2.54) | 0.56 (0.20-1.56)  | 0.83 (0.32-2.08) | 0.67                    | 0.98                    |
|            |             |            | Male   | 0.41 | 385 | 0.79 (0.50-1.24)      | 0.30       | 0.97       | 0.39 (0.15-1.04)             | 0.81 (0.33-1.99) | 0.54 (0.24-1.21)  | 2.82 (0.94-8.45) | 0.03                    | 0.24                    |
| rs806365   | CNRI        | 6          | Female | 0.43 | 402 | 1.71 (1.03-2.85)      | 0.03       | 0.35       | 2.57 (0.69-9.66)             | 1.44 (0.61-3.42) | 5.16 (1.37-19.41) | 0.79 (0.31-2.02) | 0.10                    | 0.54                    |
|            |             |            | Male   | 0.46 | 385 | 1.05 (0.65-1.71)      | 0.84       | 1.00       | 1.38 (0.44-4.30)             | 2.31 (0.77-6.96) | 3.07 (1.11-8.47)  | 0.17 (0.07-0.45) | 7.01 × 10 <sup>-3</sup> | 1.05 × 10 <sup>-3</sup> |
| rs7766029  | CNRI        | 6          | Female | 0.44 | 400 | 0.74 (0.46-1.20)      | 0.23       | 0.90       | 0.40 (0.14-1.13)             | 0.64 (0.28-1.49) | 0.67 (0.25-1.84)  | 1.82 (0.63-5.24) | 0.21                    | 0.77                    |
|            |             |            | Male   | 0.50 | 386 | 1.21 (0.73-2.02)      | 0.46       | 0.99       | 1.88 (0.61-5.76)             | 1.89 (0.62-5.74) | 1.52 (0.56-4.14)  | 0.47 (0.18-1.23) | 0.16                    | 0.60                    |
| rs806366   | CNRI        | 6          | Female | 0.48 | 403 | 0.88 (0.53-1.46)      | 0.62       | 0.99       | 0.29 (0.10-0.83)             | 1.26 (0.50-3.19) | 0.79 (0.27-2.30)  | 1.68 (0.59-4.85) | 0.09                    | 0.52                    |
|            |             |            | Male   | 0.49 | 386 | 0.76 (0.47-1.23)      | 0.26       | 0.95       | 0.77 (0.29-2.07)             | 0.44 (0.18-1.08) | 0.76 (0.30-1.89)  | 1.76 (0.52-5.92) | 0.33                    | 0.80                    |
| rs806368   | CNRI        | 6          | Female | 0.49 | 402 | 0.75 (0.45-1.24)      | 0.27       | 0.89       | 1.41 (0.42-4.74)             | 0.91 (0.36-2.31) | 0.46 (0.17-1.27)  | 0.58 (0.21-1.63) | 0.49                    | 0.97                    |
|            |             |            | Male   | 0.23 | 383 | 0.87 (0.56-1.35)      | 0.54       | 1.00       | 0.52 (0.18-1.49)             | 1.08 (0.47-2.52) | 0.67 (0.30-1.53)  | 1.39 (0.57-3.38) | 0.45                    | 0.81                    |
| rs1049353  | CNRI        | 6          | Female | 0.21 | 399 | 0.76 (0.47-1.21)      | 0.25       | 0.89       | 0.72 (0.24-2.11)             | 0.95 (0.41-2.20) | 0.49 (0.18-1.38)  | 0.85 (0.34-2.14) | 0.79                    | 1.00                    |
|            |             |            | Male   | 0.25 | 383 | 0.96 (0.67-1.36)      | 0.81       | 1.00       | 1.11 (0.56-2.21)             | 0.44 (0.20-0.97) | 0.71 (0.34-1.49)  | 2.13 (1.05-4.30) | 0.02                    | 0.16                    |
| rs806369   | CNRI        | 6          | Female | 0.26 | 402 | 1.01 (0.70-1.46)      | 0.94       | 1.00       | 2.36 (1.00-5.59)             | 0.94 (0.49-1.80) | 0.93 (0.42-2.05)  | 0.67 (0.33-1.39) | 0.16                    | 0.72                    |
|            |             |            | Male   | 0.31 | 386 | 1.45 (0.94-2.24)      | 0.09       | 0.66       | 3.53 (1.23-10.09)            | 1.33 (0.57-3.10) | 3.11 (1.33-7.27)  | 0.30 (0.11-0.79) | 5.56 × 10 <sup>-3</sup> | 7.08 × 10 <sup>-3</sup> |
| rs806371   | CNRI        | 6          | Female | 0.30 | 403 | 0.84 (0.53-1.32)      | 0.45       | 0.97       | 0.35 (0.11-1.06)             | 0.87 (0.39-1.93) | 0.68 (0.26-1.80)  | 1.83 (0.73-4.57) | 0.13                    | 0.63                    |
|            |             |            | Male   | 0.13 | 386 | 1.16 (0.71-1.89)      | 0.56       | 1.00       | 0.54 (0.14-2.08)             | 1.43 (0.55-3.75) | 0.74 (0.30-1.80)  | 2.47 (0.96-6.35) | 0.17                    | 0.60                    |
| rs806374   | CNRI        | 6          | Female | 0.13 | 403 | 1.00 (0.59-1.70)      | 1.00       | 1.00       | 0.91 (0.27-3.09)             | 1.57 (0.61-4.05) | 0.62 (0.20-1.96)  | 0.96 (0.34-2.67) | 0.67                    | 0.99                    |
|            |             |            | Male   | 0.35 | 386 | 1.05 (0.77-1.42)      | 0.78       | 1.00       | 1.28 (0.64-2.55)             | 0.73 (0.39-1.36) | 1.04 (0.59-1.84)  | 1.31 (0.70-2.43) | 0.55                    | 0.87                    |
| rs806375   | CNRI        | 6          | Female | 0.35 | 401 | 0.73 (0.51-1.04)      | 0.08       | 0.58       | 0.88 (0.39-1.97)             | 0.66 (0.35-1.24) | 0.60 (0.28-1.29)  | 0.84 (0.42-1.67) | 0.88                    | 1.00                    |
|            |             |            | Male   | 0.49 | 385 | 0.92 (0.69-1.24)      | 0.59       | 1.00       | 0.49 (0.25-0.94)             | 1.42 (0.83-2.44) | 0.83 (0.48-1.46)  | 1.12 (0.57-2.17) | 0.08                    | 0.41                    |
| rs806376   | CNRI        | 6          | Female | 0.42 | 402 | 1.13 (0.82-1.56)      | 0.47       | 0.97       | 1.27 (0.64-2.49)             | 0.96 (0.52-1.77) | 1.52 (0.78-2.95)  | 0.91 (0.47-1.74) | 0.66                    | 0.99                    |
|            |             |            | Male   | 0.47 | 386 | 0.83 (0.50-1.36)      | 0.45       | 0.99       | 0.75 (0.26-2.19)             | 0.88 (0.34-2.30) | 0.60 (0.24-1.54)  | 1.24 (0.43-3.60) | 0.78                    | 0.94                    |
| rs806377   | CNRI        | 6          | Female | 0.47 | 402 | 1.10 (0.66-1.82)      | 0.72       | 1.00       | 1.61 (0.48-5.41)             | 1.15 (0.47-2.85) | 0.99 (0.35-2.75)  | 0.85 (0.31-2.32) | 0.87                    | 1.00                    |
|            |             |            | Male   | 0.44 | 386 | 1.00 (0.63-1.58)      | 0.99       | 0.99       | 4.03 (1.23-13.17)            | 0.43 (0.18-1.01) | 1.23 (0.50-3.02)  | 0.70 (0.27-1.86) | 0.01                    | 1.11                    |
| rs806378   | CNRI        | 6          | Female | 0.49 | 402 | 0.63 (0.38-1.06)      | 0.08       | 0.59       | 0.64 (0.21-1.92)             | 0.56 (0.22-1.42) | 0.50 (0.17-1.47)  | 0.89 (0.31-2.51) | 0.88                    | 0.98                    |
|            |             |            | Male   | 0.30 | 381 | 1.14 (0.84-1.56)      | 0.40       | 0.99       | 0.54 (0.26-1.14)             | 1.82 (1.01-3.29) | 1.36 (0.75-2.46)  | 1.00 (0.50-1.99) | 0.06                    | 0.38                    |
| rs2023239  | CNRI        | 6          | Female | 0.25 | 394 | 1.01 (0.69-1.48)      | 0.97       | 1.00       | 0.66 (0.26-1.62)             | 1.15 (0.56-2.36) | 1.36 (0.64-2.88)  | 0.91 (0.43-1.90) | 0.63                    | 0.99                    |
|            |             |            | Male   | 0.18 | 386 | 0.86 (0.58-1.29)      | 0.47       | 0.99       | 0.53 (0.21-1.36)             | 0.95 (0.44-2.08) | 0.53 (0.24-1.17)  | 2.02 (0.91-4.50) | 0.07                    | 0.39                    |
| rs806379   | CNRI        | 6          | Female | 0.17 | 403 | 1.35 (0.90-2.03)      |            |            |                              |                  |                   |                  |                         |                         |

| SNP        | Gene Region | Chromosome | Gender | MAF  | N   | Marginal Effect       |            |         | Treatment Stratified Effects |                  |                  |                  | Test of Interaction |            |            |
|------------|-------------|------------|--------|------|-----|-----------------------|------------|---------|------------------------------|------------------|------------------|------------------|---------------------|------------|------------|
|            |             |            |        |      |     | Likelihood ratio test |            | Placebo | Bupropion                    | Patch            | Spray            | Observed P       | Adjusted P          | Observed P | Adjusted P |
|            |             |            |        |      |     | SNP OR (95% CI)       | Observed P |         |                              |                  |                  |                  |                     |            |            |
| rs10457561 | EPB41L2     | 6          | Female | 0.30 | 403 | 1.17 (0.74-1.84)      | 0.51       | 0.99    | 1.32 (0.46-3.74)             | 0.88 (0.40-1.96) | 2.04 (0.76-5.46) | 0.93 (0.38-2.30) | 0.57                | 1.00       |            |
|            |             |            | Male   | 0.14 | 386 | 0.86 (0.52-1.41)      | 0.54       | 1.00    | 0.44 (0.13-1.45)             | 0.97 (0.34-2.72) | 0.90 (0.39-2.08) | 1.22 (0.45-3.30) | 0.60                | 1.00       |            |
| rs6569709  | EPB41L2     | 6          | Female | 0.17 | 403 | 1.22 (0.76-1.98)      | 0.41       | 0.99    | 2.17 (0.77-6.11)             | 1.21 (0.53-2.77) | 2.04 (0.74-5.60) | 0.38 (0.12-1.25) | 0.09                | 0.51       |            |
|            |             |            | Male   | 0.31 | 386 | 1.20 (0.89-1.63)      | 0.23       | 0.93    | 1.16 (0.63-2.16)             | 0.93 (0.50-1.74) | 1.72 (0.93-3.16) | 1.11 (0.61-2.03) | 0.56                | 1.00       |            |
| rs933063   | EPB41L2     | 6          | Female | 0.31 | 403 | 1.10 (0.77-1.56)      | 0.60       | 0.99    | 0.92 (0.44-1.93)             | 1.27 (0.69-2.34) | 1.07 (0.49-2.36) | 1.09 (0.53-2.24) | 0.93                | 1.00       |            |
|            |             |            | Male   | 0.30 | 386 | 0.92 (0.60-1.42)      | 0.72       | 1.00    | 1.69 (0.65-4.53)             | 0.86 (0.37-1.97) | 0.68 (0.31-1.48) | 0.89 (0.37-2.14) | 0.53                | 1.00       |            |
| rs3777432  | EPB41L2     | 6          | Female | 0.33 | 401 | 1.18 (0.74-1.88)      | 0.48       | 0.99    | 1.68 (0.57-4.92)             | 1.02 (0.45-2.29) | 1.57 (0.59-4.15) | 0.84 (0.34-2.11) | 0.70                | 1.00       |            |
|            |             |            | Male   | 0.15 | 386 | 0.86 (0.52-1.41)      | 0.54       | 1.00    | 0.44 (0.13-1.45)             | 0.97 (0.34-2.72) | 0.90 (0.39-2.08) | 1.22 (0.45-3.30) | 0.60                | 1.00       |            |
| rs915172   | EPB41L2     | 6          | Female | 0.17 | 403 | 1.29 (0.80-2.08)      | 0.30       | 0.96    | 2.04 (0.73-5.73)             | 1.28 (0.56-2.95) | 2.04 (0.75-5.61) | 0.50 (0.17-1.52) | 0.20                | 0.77       |            |
|            |             |            | Male   | 0.29 | 385 | 0.90 (0.58-1.38)      | 0.62       | 1.00    | 1.49 (0.58-3.85)             | 0.77 (0.33-1.77) | 0.67 (0.31-1.47) | 0.99 (0.41-2.39) | 0.61                | 1.00       |            |
| rs7775013  | EPB41L2     | 6          | Female | 0.32 | 403 | 1.26 (0.79-1.99)      | 0.33       | 0.97    | 1.68 (0.58-4.92)             | 0.88 (0.40-1.96) | 1.89 (0.71-5.06) | 1.10 (0.44-2.79) | 0.62                | 1.00       |            |
|            |             |            | Male   | 0.39 | 386 | 0.92 (0.68-1.24)      | 0.57       | 1.00    | 0.80 (0.42-1.50)             | 1.17 (0.64-2.14) | 0.86 (0.49-1.50) | 0.89 (0.49-1.64) | 0.83                | 0.83       |            |
| rs17059736 | EPB41L2     | 6          | Female | 0.36 | 403 | 0.89 (0.63-1.24)      | 0.48       | 0.99    | 0.87 (0.39-1.94)             | 0.85 (0.48-1.52) | 0.71 (0.35-1.42) | 1.18 (0.60-2.32) | 0.78                | 1.00       |            |
|            |             |            | Male   | 0.12 | 386 | 1.00 (0.59-1.68)      | 0.99       | 1.00    | 3.65 (1.23-10.87)            | 0.89 (0.33-2.36) | 0.66 (0.24-1.79) | 0.52 (0.16-1.74) | 0.06                | 0.40       |            |
| rs3777438  | EPB41L2     | 6          | Female | 0.14 | 403 | 0.81 (0.48-1.37)      | 0.43       | 0.99    | 0.53 (0.14-2.03)             | 0.46 (0.16-1.35) | 0.92 (0.30-2.79) | 1.52 (0.59-3.89) | 0.35                | 0.94       |            |
|            |             |            | Male   | 0.17 | 376 | 0.89 (0.58-1.37)      | 0.60       | 1.00    | 1.27 (0.51-3.17)             | 0.83 (0.39-1.79) | 0.94 (0.41-2.15) | 0.67 (0.27-1.71) | 0.81                | 0.96       |            |
| rs3822859  | EPB41L2     | 6          | Female | 0.17 | 394 | 0.91 (0.58-1.45)      | 0.70       | 1.00    | 1.06 (0.42-2.67)             | 0.62 (0.24-1.58) | 0.50 (0.17-1.46) | 1.86 (0.77-4.49) | 0.20                | 0.77       |            |
|            |             |            | Male   | 0.01 | NA  | NA                    | NA         | NA      | NA                           | NA               | NA               | NA               | NA                  | NA         |            |
| rs3798249  | EPB41L2     | 6          | Female | 0.02 | NA  | NA                    | NA         | NA      | NA                           | NA               | NA               | NA               | NA                  | NA         |            |
|            |             |            | Male   | 0.48 | 385 | 1.17 (0.72-1.90)      | 0.53       | 1.00    | 2.01 (0.66-6.15)             | 0.81 (0.30-2.24) | 1.53 (0.65-3.61) | 0.71 (0.27-1.88) | 0.42                | 0.98       |            |
| rs2839942  | EPB41L2     | 6          | Female | 0.49 | 403 | 1.00 (0.60-1.68)      | 0.99       | 0.99    | 0.72 (0.25-2.08)             | 1.29 (0.54-3.07) | 0.88 (0.29-2.71) | 1.08 (0.34-3.42) | 0.86                | 1.00       |            |
|            |             |            | Male   | 0.31 | 385 | 1.03 (0.67-1.59)      | 0.89       | 1.00    | 1.65 (0.63-4.33)             | 0.61 (0.26-1.41) | 1.68 (0.76-3.68) | 0.67 (0.28-1.62) | 0.18                | 0.76       |            |
| rs12206057 | EPB41L2     | 6          | Female | 0.32 | 402 | 1.30 (0.82-2.07)      | 0.26       | 0.94    | 0.99 (0.36-2.78)             | 2.05 (0.89-4.73) | 1.37 (0.51-3.65) | 0.88 (0.35-2.21) | 0.55                | 1.00       |            |
|            |             |            | Male   | 0.17 | 386 | 0.89 (0.58-1.34)      | 0.57       | 1.00    | 1.36 (0.56-3.31)             | 0.90 (0.43-1.91) | 0.79 (0.35-1.79) | 0.65 (0.25-1.64) | 0.71                | 1.00       |            |
| rs4897472  | EPB41L2     | 6          | Female | 0.17 | 403 | 0.92 (0.59-1.44)      | 0.71       | 1.00    | 1.01 (0.40-2.55)             | 0.68 (0.28-1.67) | 0.61 (0.23-1.61) | 1.64 (0.69-3.90) | 0.40                | 0.97       |            |
|            |             |            | Male   | 0.48 | 386 | 1.18 (0.73-1.92)      | 0.50       | 1.00    | 2.12 (0.70-6.43)             | 0.81 (0.30-2.24) | 1.53 (0.65-3.61) | 0.71 (0.27-1.88) | 0.39                | 0.98       |            |
| rs4897473  | EPB41L2     | 6          | Female | 0.49 | 403 | 1.00 (0.60-1.68)      | 0.99       | 0.99    | 0.72 (0.25-2.08)             | 1.29 (0.54-3.07) | 0.88 (0.29-2.71) | 1.08 (0.34-3.42) | 0.86                | 1.00       |            |
|            |             |            | Male   | 0.36 | 386 | 0.97 (0.71-1.32)      | 0.83       | 1.00    | 0.90 (0.47-1.75)             | 1.31 (0.71-2.43) | 0.76 (0.43-1.34) | 1.02 (0.53-1.97) | 0.63                | 1.00       |            |
| rs10499177 | EPB41L2     | 6          | Female | 0.33 | 403 | 0.83 (0.58-1.17)      | 0.28       | 0.95    | 0.66 (0.29-1.49)             | 0.78 (0.43-1.42) | 0.71 (0.33-1.51) | 1.18 (0.60-2.33) | 0.67                | 1.00       |            |
|            |             |            | Male   | 0.07 | 386 | 0.99 (0.56-1.77)      | 0.98       | 1.00    | 2.46 (0.83-7.27)             | 0.89 (0.30-2.65) | 1.34 (0.38-4.73) | 0.17 (0.02-1.32) | 0.05                | 0.37       |            |
| rs2068147  | EPB41L2     | 6          | Female | 0.10 | 403 | 1.21 (0.70-2.07)      | 0.50       | 0.99    | 1.10 (0.35-3.50)             | 0.79 (0.26-2.39) | 1.21 (0.39-3.73) | 1.93 (0.70-5.35) | 0.70                | 1.00       |            |
|            |             |            | Male   | 0.48 | 386 | 1.18 (0.73-1.92)      | 0.50       | 1.00    | 2.12 (0.70-6.43)             | 0.81 (0.30-2.24) | 1.53 (0.65-3.61) | 0.71 (0.27-1.88) | 0.39                | 0.98       |            |
| rs3777450  | EPB41L2     | 6          | Female | 0.49 | 403 | 1.00 (0.60-1.68)      | 0.99       | 0.99    | 0.72 (0.25-2.08)             | 1.29 (0.54-3.07) | 0.88 (0.29-2.71) | 1.08 (0.34-3.42) | 0.86                | 1.00       |            |
|            |             |            | Male   | 0.03 | NA  | NA                    | NA         | NA      | NA                           | NA               | NA               | NA               | NA                  | NA         |            |
| rs1999474  | EPB41L2     | 6          | Female | 0.02 | NA  | NA                    | NA         | NA      | NA                           | NA               | NA               | NA               | NA                  | NA         |            |
|            |             |            | Male   | 0.28 | 383 | 1.20 (0.87-1.65)      | 0.26       | 0.95    | 1.01 (0.53-1.94)             | 1.05 (0.54-2.06) | 1.75 (0.91-3.37) | 1.12 (0.61-2.07) | 0.63                | 1.00       |            |
| rs12528626 | EPB41L2     | 6          | Female | 0.27 | 403 | 1.07 (0.74-1.53)      | 0.72       | 1.00    | 0.81 (0.37-1.78)             | 1.37 (0.74-2.55) | 0.84 (0.39-1.82) | 1.25 (0.56-2.79) | 0.65                | 1.00       |            |
|            |             |            | Male   | 0.07 | 386 | 1.09 (0.61-1.93)      | 0.78       | 1.00    | 2.97 (1.01-8.70)             | 0.89 (0.30-2.66) | 1.34 (0.38-4.74) | 0.18 (0.02-1.45) | 0.04                | 0.29       |            |
| rs3777457  | EPB41L2     | 6          | Female | 0.09 | 403 | 1.19 (0.68-2.08)      | 0.54       | 0.99    | 1.17 (0.37-3.73)             | 0.60 (0.18-1.97) | 1.41 (0.41-4.91) | 1.94 (0.70-5.36) | 0.51                | 0.99       |            |
|            |             |            | Male   | 0.17 | 386 | 1.01 (0.64-1.59)      | 0.98       | 1.00    | 2.02 (0.75-5.41)             | 0.92 (0.39-2.21) | 0.84 (0.36-1.96) | 0.73 (0.27-2.01) | 0.48                | 0.99       |            |
| rs7766004  | EPB41L2     | 6          | Female | 0.17 | 403 | 0.85 (0.52-1.40)      | 0.53       | 0.99    | 0.95 (0.30-2.96)             | 0.55 (0.21-1.42) | 0.68 (0.23-1.91) | 1.46 (0.59-3.61) | 0.49                | 0.99       |            |
|            |             |            | Male   | 0.28 | 386 | 1.00 (0.65-1.53)      | 1.00       | 1.00    | 1.11 (0.43-2.90)             | 0.85 (0.37-1.95) | 1.48 (0.67-3.24) | 0.67 (0.27-1.63) | 0.58                | 1.00       |            |
| rs3822864  | EPB41L2     | 6          | Female | 0.27 | 403 | 1.15 (0.73-1.81)      | 0.55       | 0.99    | 0.91 (0.32-2.58)             | 1.59 (0.71-3.55) | 0.80 (0.31-2.08) | 1.25 (0.50-3.08) | 0.70                | 1.00       |            |
|            |             |            | Male   | 0.03 | NA  | NA                    | NA         | NA      | NA                           | NA               | NA               | NA               | NA                  | NA         |            |
| rs9321260  | EPB41L2     | 6          | Female | 0.02 | NA  | NA                    | NA         | NA      | NA                           | NA               | NA               | NA               | NA                  | NA         |            |
|            |             |            | Male   | 0.18 | 386 | 1.03 (0.65-1.61)      | 0.91       | 1.00    | 2.38 (0.89-6.33)             | 0.97 (0.41-2.29) | 0.84 (0.36-1.97) | 0.63 (0.23-1.72) | 0.26                | 0.89       |            |
| rs3777463  | EPB41L2     | 6          | Female | 0.19 | 403 | 0.96 (0.60-1.56)      | 0.88       | 1.00    | 0.84 (0.27-2.62)             | 0.78 (0.33-1.86) | 0.98 (0.35-2.74) | 1.32 (0.53-3.25) | 0.86                | 1.00       |            |
|            |             |            | Male   | 0.03 | NA  | NA                    | NA         | NA      | NA                           | NA               | NA               | NA               | NA                  | NA         |            |
| rs3777464  | EPB41L2     | 6          | Female | 0.02 | NA  | NA                    | NA         | NA      | NA                           | NA               | NA               | NA               | NA                  | NA         |            |
|            |             |            | Male   | 0.08 | 386 | 1.14 (0.63-2.06)      | 0.66       | 1.00    | 4.18 (1.37-12.74)            | 0.95 (0.32-2.86) | 1.14 (0.34-3.89) | 0.15 (0.02-1.23) | 0.01                | 0.11       |            |
| rs3777466  | EPB41L2     | 6          | Female | 0.11 | 403 | 1.20 (0.70-2.06)      | 0.51       | 0.99    | 0.78 (0.20-3.01)             | 0.81 (0.29-2.26) | 1.87 (0.60-5.83) | 1.66 (0.61-4.50) | 0.57                | 1.00       |            |
|            |             |            | Male   | 0.46 | 386 | 1.10 (0.81-1.49)      | 0.53       | 1.00    | 1.31 (0.71-2.44)             | 0.94 (0.52-1.71) | 1.32 (0.74-2.34) | 0.89 (0.47-1.68) | 0.71                | 1.00       |            |
| rs9492767  | EPB41L2     | 6          | Female | 0.46 | 403 | 1.04 (0.76-1.44)      | 0.80       | 1.00    | 0.81 (0.39-1.68)             | 1.12 (0.66-1.90) | 0.82 (0.40-1.71) | 1.42 (0.72-2.78) | 0.63                | 1.00       |            |
|            |             |            | Male   | 0.17 | 384 | 1.25 (0.79-1.98)      | 0.33       | 0.98    | 2.39 (0.91-6.26)             | 1.14 (0.47-2.75) | 1.00 (0.42-2.38) | 0.98 (0.37-2.60) | 0.52                | 1.00       |            |
| rs9375785  | EPB41L2     | 6          | Female | 0.19 | 401 | 1.24 (0.78-1.99)      | 0.37       | 0.98    | 0.99 (0.35-2.82)             | 1.54 (0.67-3.52) | 2.10 (0.77-5.74) | 0.70 (0.27-1.87) | 0.42                | 0.97       |            |
|            |             |            | Male   | 0.16 | 386 | 0.80 (0.52-1.23)      | 0.30       | 0.97    | 0.57 (0.21-1.57)             | 0.71 (0.28-1.77) | 0.84 (0.40-1.74) | 1.13 (0.45-2.81) | 0.78                | 0.99       |            |
| rs2297853  | EPB41L2     | 6          | Female | 0.18 | 402 | 1.26 (0.83-1.93)      | 0.28       | 0.95    | 1.76 (0.73-4.23)             | 1.25 (0.60-2.58) | 1.97 (0.81-4.78) | 0.49 (0.17-1.44) | 0.18                | 0.77       |            |
|            |             |            | Male   | 0.34 | 386 | 0.96 (0.62-1.47)      | 0.85       | 1.00    | 1.65 (0.63-4.34)             | 0.78 (0.34-1.81) | 0.84 (0.38-1.85) | 0.89 (0.37-2.15) | 0.66                | 1.00       |            |
| rs6941712  | EPB41L2     | 6          | Female | 0.36 | 401 | 1.31 (0.81-2.10)      | 0.27       | 0.95    | 1.98 (0.65-6.08)             | 1.13 (0.49-2.58) | 1.77 (0.65-4.87) | 0.88 (0.34-2.23) | 0.63                | 1.00       |            |
|            |             |            | Male   | 0.11 | 386 | 1.20 (0.71-2.02)      | 0.50       | 1.00    | 3.77 (1.31-10.85)            | 1.02 (0.39-2.63) | 0.82 (0.28-2.44) | 0.62 (0.18-2.09) | 0.10                | 0.53       |            |
| rs2105250  | EPB41L2     | 6          | Female | 0.13 | 403 | 1.02 (0.60-1.72)      | 0.95       | 1.00    | 0.92 (0.27-3.11)             | 0.88 (0.33-2.34) | 1.51 (0.52-4.40) | 0.91 (0.32-2.53) | 0.88                | 1.00       |            |
|            |             |            | Male   | 0.28 | 385 | 1.18 (0.85-1.63)      | 0.32       | 0.98    | 1.01 (0.53-1.94)             | 1.05 (0.54-2.06) | 1.77 (0.88-3.53) | 1.07 (0.58-1.99) | 0.63                | 1.00       |            |
| rs2095961  | EPB41L2     | 6          | Female | 0.27 | 402 | 1.08 (0.76-1.55)      | 0.66       | 1.00    | 0.75 (0.33-1.71)             | 1.28 (0.69-2.38) | 0.84 (0.39-1.82) | 1.56 (0.57-4.41) | 0.50                | 0.99       |            |
|            |             |            | Male   | 0.34 | 386 | 0.97 (0.63-1.48)      | 0.88       | 1.00    | 1.56 (0.59-4.11)             | 0.78 (0.34-1.81) | 0.90 (0.41-1.97) | 0.89 (0.37-2.15) | 0.74                | 1.00       |            |
| rs12527605 | EPB41L2     | 6          | Female | 0.36 | 403 | 1.30 (0.81-2.08)      | 0.28       | 0.95    | 1.99 (0.65-6.10)             | 1.09 (0.48-2.48) | 1.78 (0.65-4.89) | 0.88 (0.35-2.24) | 0.62                | 1.00       |            |
|            |             |            | Male   | 0.07 | 386 |                       |            |         |                              |                  |                  |                  |                     |            |            |

| SNP        | Gene Region | Chromosome | Gender | MAF                     | N   | Marginal Effect       |                         |                 | Treatment Stratified Effects |                    |                  |                  | Test of Interaction     |            |            |
|------------|-------------|------------|--------|-------------------------|-----|-----------------------|-------------------------|-----------------|------------------------------|--------------------|------------------|------------------|-------------------------|------------|------------|
|            |             |            |        |                         |     | Likelihood ratio test |                         | SNP OR (95% CI) | SNP OR (95% CI)              | SNP OR (95% CI)    | SNP OR (95% CI)  | SNP OR (95% CI)  | SNP OR (95% CI)         | Observed P | Adjusted P |
|            |             |            |        |                         |     | Observed P            | Adjusted P              |                 |                              |                    |                  |                  |                         |            |            |
| rs563649   | OPRM1       | 6          | Female | 0.15                    | 403 | 0.73 (0.46-1.18)      | 0.19                    | 0.88            | 0.87 (0.31-2.40)             | 0.77 (0.33-1.83)   | 0.67 (0.25-1.80) | 0.66 (0.26-1.68) | 0.98                    | 1.00       |            |
|            |             |            | Male   | 0.10                    | 386 | 1.03 (0.63-1.69)      | 0.92                    | 1.00            | 0.37 (0.09-1.54)             | 2.66 (1.03-6.87)   | 1.15 (0.42-3.19) | 0.60 (0.20-1.86) | 0.05                    | 0.46       |            |
| rs9322446  | OPRM1       | 6          | Female | 0.08                    | 403 | 0.88 (0.46-1.69)      | 0.69                    | 1.00            | 0.42 (0.09-1.99)             | 1.06 (0.33-3.36)   | 1.48 (0.42-5.19) | 0.75 (0.16-3.41) | 0.62                    | 1.00       |            |
|            |             |            | Male   | 0.14                    | 385 | 1.00 (0.63-1.57)      | 0.99                    | 0.99            | 0.95 (0.34-2.64)             | 0.79 (0.34-1.84)   | 1.22 (0.51-2.94) | 1.13 (0.44-2.88) | 0.90                    | 1.00       |            |
| rs9479757  | OPRM1       | 6          | Female | 0.16                    | 403 | 0.96 (0.62-1.50)      | 0.86                    | 1.00            | 1.26 (0.55-2.85)             | 1.10 (0.50-2.39)   | 0.54 (0.19-1.59) | 0.94 (0.35-2.50) | 0.64                    | 1.00       |            |
|            |             |            | Male   | 0.10                    | 385 | 0.79 (0.47-1.35)      | 0.39                    | 0.98            | 1.48 (0.59-3.70)             | 1.70 (0.67-4.31)   | 0.31 (0.08-1.17) | NA               | 2.18 × 10 <sup>-3</sup> | 0.04       |            |
| rs2075572  | OPRM1       | 6          | Female | 0.09                    | 403 | 0.43 (0.22-0.87)      | 9.60 × 10 <sup>-3</sup> | 0.14            | 1.22 (0.39-3.84)             | 0.24 (0.05-1.11)   | 0.44 (0.10-1.87) | 0.24 (0.05-1.12) | 0.27                    | 0.91       |            |
|            |             |            | Male   | 0.45                    | 386 | 0.95 (0.60-1.51)      | 0.82                    | 1.00            | 1.03 (0.37-2.88)             | 1.20 (0.47-3.09)   | 1.08 (0.47-2.48) | 0.59 (0.23-1.49) | 0.71                    | 0.99       |            |
| rs510587   | OPRM1       | 6          | Female | 0.40                    | 403 | 0.60 (0.38-0.96)      | 0.03                    | 0.37            | 0.82 (0.29-2.32)             | 0.72 (0.31-1.66)   | 0.95 (0.35-2.62) | 0.26 (0.10-0.67) | 0.22                    | 0.85       |            |
|            |             |            | Male   | 0.05                    | 386 | 0.73 (0.36-1.49)      | 0.38                    | 0.99            | 0.32 (0.04-2.72)             | 0.74 (0.14-4.06)   | 1.20 (0.42-3.46) | 0.47 (0.09-2.33) | 0.61                    | 0.99       |            |
| rs9282821  | OPRM1       | 6          | Female | 0.05                    | 403 | 1.46 (0.75-2.83)      | 0.28                    | 0.93            | 6.49 (1.81-23.29)            | 0.85 (0.27-2.66)   | 1.45 (0.31-6.73) | 0.34 (0.04-2.91) | 0.03                    | 0.27       |            |
|            |             |            | Male   | 0.44                    | 386 | 0.81 (0.60-1.09)      | 0.16                    | 0.86            | 0.83 (0.44-1.59)             | 1.12 (0.62-2.01)   | 0.91 (0.52-1.59) | 0.44 (0.22-0.88) | 0.21                    | 0.84       |            |
| rs540825   | OPRM1       | 6          | Female | 0.39                    | 403 | 0.72 (0.51-1.02)      | 0.06                    | 0.56            | 1.07 (0.50-2.31)             | 0.57 (0.32-1.03)   | 0.95 (0.44-2.05) | 0.59 (0.29-1.19) | 0.49                    | 0.99       |            |
|            |             |            | Male   | 0.26                    | 386 | 0.83 (0.58-1.17)      | 0.27                    | 0.96            | 0.85 (0.39-1.84)             | 0.57 (0.28-1.14)   | 1.23 (0.67-2.24) | 0.70 (0.31-1.57) | 0.39                    | 0.94       |            |
| rs548646   | OPRM1       | 6          | Female | 0.24                    | 403 | 1.00 (0.69-1.46)      | 0.98                    | 0.98            | 1.55 (0.65-3.73)             | 0.82 (0.44-1.53)   | 0.96 (0.41-2.25) | 1.03 (0.50-2.14) | 0.72                    | 1.00       |            |
|            |             |            | Male   | 0.35                    | 385 | 0.84 (0.61-1.16)      | 0.29                    | 0.96            | 1.13 (0.56-2.30)             | 0.87 (0.49-1.55)   | 0.99 (0.55-1.76) | 0.45 (0.20-0.98) | 0.30                    | 0.92       |            |
| rs3798683  | OPRM1       | 6          | Female | 0.33                    | 403 | 0.80 (0.56-1.14)      | 0.21                    | 0.90            | 1.60 (0.73-3.50)             | 0.63 (0.34-1.17)   | 0.82 (0.37-1.80) | 0.63 (0.31-1.29) | 0.27                    | 0.90       |            |
|            |             |            | Male   | 0.14                    | 386 | 1.04 (0.68-1.60)      | 0.84                    | 1.00            | 1.01 (0.43-2.37)             | 0.56 (0.21-1.48)   | 0.97 (0.46-2.02) | 2.56 (0.97-6.73) | 0.17                    | 0.83       |            |
| rs599548   | OPRM1       | 6          | Female | 0.16                    | 403 | 1.30 (0.84-2.01)      | 0.24                    | 0.93            | 1.37 (0.50-3.76)             | 1.67 (0.82-3.40)   | 1.06 (0.41-2.74) | 1.00 (0.40-2.55) | 0.81                    | 1.00       |            |
|            |             |            | Male   | 0.13                    | 385 | 1.09 (0.69-1.71)      | 0.71                    | 1.00            | 0.54 (0.18-1.64)             | 1.77 (0.77-4.03)   | 1.30 (0.52-3.23) | 0.89 (0.35-2.27) | 0.33                    | 0.93       |            |
| rs9322447  | OPRM1       | 6          | Female | 0.13                    | 403 | 0.84 (0.51-1.40)      | 0.51                    | 0.99            | 0.29 (0.06-1.35)             | 1.27 (0.57-2.84)   | 1.46 (0.49-4.35) | 0.55 (0.19-1.58) | 0.18                    | 0.82       |            |
|            |             |            | Male   | 0.49                    | 386 | 0.92 (0.68-1.25)      | 0.59                    | 1.00            | 0.87 (0.45-1.67)             | 1.30 (0.70-2.41)   | 1.09 (0.63-1.88) | 0.50 (0.25-1.00) | 0.19                    | 0.84       |            |
| rs618207   | OPRM1       | 6          | Female | 0.46                    | 403 | 0.78 (0.57-1.08)      | 0.14                    | 0.82            | 1.01 (0.48-2.11)             | 0.75 (0.43-1.31)   | 0.99 (0.49-1.99) | 0.57 (0.30-1.09) | 0.61                    | 1.00       |            |
|            |             |            | Male   | 0.35                    | 385 | 0.87 (0.63-1.19)      | 0.37                    | 0.99            | 1.13 (0.56-2.30)             | 0.92 (0.52-1.63)   | 0.99 (0.55-1.77) | 0.48 (0.22-1.04) | 0.37                    | 0.94       |            |
| rs1853384  | OPRM1       | 6          | Female | 0.33                    | 403 | 0.81 (0.57-1.16)      | 0.24                    | 0.90            | 1.60 (0.73-3.50)             | 0.63 (0.34-1.17)   | 0.82 (0.37-1.80) | 0.67 (0.33-1.37) | 0.29                    | 0.92       |            |
|            |             |            | Male   | 0.35                    | 386 | 0.86 (0.63-1.18)      | 0.36                    | 0.98            | 1.13 (0.56-2.30)             | 0.92 (0.52-1.63)   | 0.99 (0.55-1.76) | 0.47 (0.22-1.02) | 0.34                    | 0.93       |            |
| rs623956   | OPRM1       | 6          | Female | 0.33                    | 403 | 0.81 (0.57-1.16)      | 0.24                    | 0.90            | 1.60 (0.73-3.50)             | 0.63 (0.34-1.17)   | 0.82 (0.37-1.80) | 0.67 (0.33-1.37) | 0.29                    | 0.92       |            |
|            |             |            | Male   | 0.25                    | 366 | 0.90 (0.64-1.28)      | 0.57                    | 1.00            | 1.05 (0.46-2.38)             | 0.62 (0.31-1.27)   | 1.25 (0.68-2.29) | 0.75 (0.34-1.69) | 0.47                    | 0.97       |            |
| rs504932   | OPRM1       | 6          | Female | 0.24                    | 382 | 1.07 (0.73-1.57)      | 0.73                    | 1.00            | 1.42 (0.59-3.45)             | 0.90 (0.46-1.75)   | 1.09 (0.47-2.54) | 1.09 (0.53-2.24) | 0.88                    | 1.00       |            |
|            |             |            | Male   | 0.25                    | 385 | 0.88 (0.63-1.24)      | 0.47                    | 0.99            | 0.88 (0.41-1.91)             | 0.66 (0.34-1.30)   | 1.27 (0.70-2.32) | 0.72 (0.32-1.62) | 0.50                    | 0.98       |            |
| rs609148   | OPRM1       | 6          | Female | 0.24                    | 402 | 1.06 (0.73-1.54)      | 0.77                    | 1.00            | 1.54 (0.64-3.70)             | 0.86 (0.46-1.62)   | 1.03 (0.44-2.39) | 1.12 (0.54-2.30) | 0.77                    | 1.00       |            |
|            |             |            | Male   | 0.25                    | 385 | 0.88 (0.63-1.24)      | 0.47                    | 0.99            | 0.88 (0.41-1.91)             | 0.67 (0.34-1.30)   | 1.27 (0.69-2.31) | 0.72 (0.32-1.62) | 0.50                    | 0.98       |            |
| rs606148   | OPRM1       | 6          | Female | 0.24                    | 403 | 1.06 (0.73-1.54)      | 0.76                    | 1.00            | 1.55 (0.65-3.73)             | 0.86 (0.46-1.62)   | 1.03 (0.44-2.40) | 1.11 (0.54-2.29) | 0.77                    | 1.00       |            |
|            |             |            | Male   | 0.10                    | 386 | 0.86 (0.51-1.46)      | 0.58                    | 1.00            | 1.67 (0.63-4.44)             | 1.76 (0.71-4.36)   | 0.31 (0.08-1.17) | 0.15 (0.02-1.21) | 0.01                    | 1.15       |            |
| rs632395   | OPRM1       | 6          | Female | 0.09                    | 403 | 0.47 (0.24-0.92)      | 0.02                    | 0.22            | 1.33 (0.42-4.21)             | 0.24 (0.05-1.10)   | 0.61 (0.18-2.08) | 0.23 (0.05-1.05) | 0.20                    | 0.83       |            |
|            |             |            | Male   | 0.10                    | 386 | 0.89 (0.53-1.49)      | 0.66                    | 1.00            | 1.48 (0.59-3.70)             | 1.76 (0.71-4.36)   | 0.43 (0.13-1.43) | 0.15 (0.02-1.21) | 0.03                    | 0.28       |            |
| rs648893   | OPRM1       | 6          | Female | 0.09                    | 403 | 0.47 (0.24-0.92)      | 0.02                    | 0.22            | 1.33 (0.42-4.21)             | 0.24 (0.05-1.10)   | 0.61 (0.18-2.08) | 0.23 (0.05-1.05) | 0.20                    | 0.83       |            |
|            |             |            | Male   | 0.25                    | 384 | 0.90 (0.64-1.27)      | 0.54                    | 1.00            | 0.90 (0.42-1.95)             | 0.68 (0.35-1.34)   | 1.27 (0.69-2.32) | 0.74 (0.33-1.66) | 0.54                    | 0.99       |            |
| rs1323041  | OPRM1       | 6          | Female | 0.24                    | 403 | 1.06 (0.73-1.54)      | 0.76                    | 1.00            | 1.55 (0.65-3.73)             | 0.86 (0.46-1.62)   | 1.03 (0.44-2.40) | 1.11 (0.54-2.29) | 0.77                    | 1.00       |            |
|            |             |            | Male   | 0.49                    | 385 | 1.10 (0.68-1.81)      | 0.69                    | 1.00            | 1.43 (0.46-4.45)             | 1.42 (0.52-3.88)   | 1.29 (0.54-3.07) | 0.57 (0.21-1.52) | 0.51                    | 0.98       |            |
| rs512053   | OPRM1       | 6          | Female | 0.46                    | 403 | 0.73 (0.45-1.18)      | 0.20                    | 0.90            | 0.79 (0.27-2.29)             | 0.87 (0.36-2.14)   | 1.40 (0.49-4.02) | 0.32 (0.12-0.83) | 0.21                    | 0.83       |            |
|            |             |            | Male   | 0.08                    | 386 | 1.61 (0.94-2.76)      | 0.09                    | 0.66            | 1.42 (0.43-4.68)             | 1.91 (0.75-4.87)   | 1.60 (0.52-4.99) | 1.41 (0.45-4.38) | 0.97                    | 0.97       |            |
| rs642489   | OPRM1       | 6          | Female | 0.09                    | 403 | 0.79 (0.43-1.46)      | 0.45                    | 0.98            | 0.49 (0.10-2.37)             | 1.43 (0.51-3.99)   | 1.02 (0.28-3.73) | 0.39 (0.10-1.50) | 0.41                    | 0.97       |            |
|            |             |            | Male   | 0.25                    | 386 | 0.89 (0.63-1.25)      | 0.49                    | 1.00            | 0.88 (0.41-1.91)             | 0.67 (0.34-1.30)   | 1.27 (0.69-2.31) | 0.74 (0.33-1.65) | 0.51                    | 0.98       |            |
| rs613341   | OPRM1       | 6          | Female | 0.24                    | 403 | 1.06 (0.73-1.54)      | 0.76                    | 1.00            | 1.55 (0.65-3.73)             | 0.86 (0.46-1.62)   | 1.03 (0.44-2.40) | 1.11 (0.54-2.29) | 0.77                    | 1.00       |            |
|            |             |            | Male   | 0.09                    | 385 | 0.98 (0.58-1.66)      | 0.93                    | 1.00            | 1.81 (0.67-4.84)             | 1.91 (0.76-4.82)   | 0.43 (0.11-1.69) | 0.15 (0.02-1.21) | 0.02                    | 1.21       |            |
| rs1048508  | OPRM1       | 6          | Female | 0.09                    | 403 | 0.46 (0.23-0.92)      | 0.02                    | 0.22            | 1.33 (0.42-4.21)             | 0.13 (0.02-0.99)   | 0.61 (0.18-2.08) | 0.27 (0.06-1.23) | 0.13                    | 0.70       |            |
|            |             |            | Male   | 0.14                    | 385 | 0.98 (0.62-1.54)      | 0.93                    | 1.00            | 1.23 (0.41-3.71)             | 0.68 (0.26-1.77)   | 1.10 (0.50-2.46) | 1.01 (0.43-2.36) | 0.84                    | 1.00       |            |
| rs613355   | OPRM1       | 6          | Female | 0.15                    | 401 | 0.91 (0.57-1.45)      | 0.69                    | 1.00            | 1.12 (0.47-2.67)             | 0.93 (0.42-2.05)   | 0.73 (0.24-2.16) | 0.81 (0.29-2.27) | 0.93                    | 1.00       |            |
|            |             |            | Male   | 0.36                    | 386 | 0.83 (0.61-1.14)      | 0.26                    | 0.95            | 1.13 (0.56-2.30)             | 0.92 (0.53-1.62)   | 0.95 (0.53-1.71) | 0.40 (0.18-0.89) | 0.21                    | 0.84       |            |
| rs3735275  | DDC         | 7          | Female | 0.33                    | 403 | 0.76 (0.53-1.09)      | 0.14                    | 0.82            | 1.45 (0.64-3.27)             | 0.59 (0.31-1.10)   | 0.82 (0.37-1.80) | 0.65 (0.32-1.31) | 0.36                    | 0.97       |            |
|            |             |            | Male   | 0.15                    | 386 | 0.90 (0.56-1.45)      | 0.66                    | 1.00            | 0.96 (0.34-2.70)             | 0.99 (0.39-2.48)   | 0.69 (0.29-1.64) | 1.10 (0.39-3.11) | 0.91                    | 0.98       |            |
| rs4947510  | DDC         | 7          | Female | 0.19                    | 403 | 1.35 (0.85-2.16)      | 0.21                    | 0.90            | 1.49 (0.50-4.47)             | 0.85 (0.37-1.97)   | 1.18 (0.44-3.17) | 2.48 (0.99-6.20) | 0.40                    | 0.99       |            |
|            |             |            | Male   | 0.27                    | 386 | 1.20 (0.87-1.67)      | 0.27                    | 0.95            | 1.38 (0.70-2.72)             | 2.67 (1.33-5.36)   | 0.63 (0.34-1.20) | 1.02 (0.51-2.02) | 0.02                    | 0.21       |            |
| rs4947511  | DDC         | 7          | Female | 0.32                    | 403 | 1.06 (0.76-1.48)      | 0.74                    | 1.00            | 0.70 (0.32-1.52)             | 1.01 (0.56-1.84)   | 1.65 (0.79-3.43) | 1.07 (0.56-2.04) | 0.46                    | 0.99       |            |
|            |             |            | Male   | 5.08 × 10 <sup>-3</sup> | NA  | NA                    | NA                      | NA              | NA                           | NA                 | NA               | NA               | NA                      | NA         |            |
| rs11575553 | DDC         | 7          | Female | 4.95 × 10 <sup>-2</sup> | NA  | NA                    | NA                      | NA              | NA                           | NA                 | NA               | NA               | NA                      | NA         |            |
|            |             |            | Male   | 0.10                    | 386 | 1.79 (1.04-3.05)      | 0.04                    | 0.38            | 2.27 (0.74-6.94)             | 15.33 (3.18-74.04) | 0.67 (0.22-2.11) | 0.88 (0.32-2.42) | 1.74 × 10 <sup>-3</sup> | 0.03       |            |
| rs4947535  | DDC         | 7          | Female | 0.11                    | 403 | 0.94 (0.53-1.65)      | 0.82                    | 1.00            | 0.32 (0.07-1.50)             | 1.59 (0.61-4.16)   | 1.31 (0.42-4.12) | 0.71 (0.20-2.46) | 0.27                    | 0.93       |            |
|            |             |            | Male   | 0.27                    | 386 | 0.95 (0.62-1.46)      | 0.80                    | 1.00            | 1.46 (0.57-3.75)             | 0.65 (0.28-1.50)   | 0.87 (0.40-1.90) | 1.11 (0.45-2.74) | 0.63                    | 0.99       |            |
| rs730092   | DDC         | 7          | Female | 0.30                    | 403 | 1.29 (0.82-2.03)      | 0.27                    | 0.94            | 0.78 (0.28-2.23)             | 0.92 (0.41-2.03)   | 1.62 (0.62-4.24) | 2.45 (0.96-6.27) | 0.30                    | 0.95       |            |
|            |             |            | Male   | 0.40                    | 385 | 1.10 (0.82-1.48)      | 0.53                    | 1.00            | 1.40 (0.74-2.65)             | 1.78 (0.97-3.26)   | 0.70 (0.40-1.23) | 0.92 (0.49-1.73) | 0.12                    | 0.67       |            |
| rs11238131 | DDC         | 7          | Female | 0.45                    | 401 | 1.12 (0.81-1.53)      | 0.49                    | 1.00            | 0.51 (0.24-1.10)             | 1.11 (0.63-1.95)   | 1.77 (0.85-3.68) | 1.37 (0.76-2.47) | 0.10                    | 0.62       |            |
|            |             |            | Male   | 0.27                    | 386 | 0.95 (0.62-1.46)      | 0.80                    |                 |                              |                    |                  |                  |                         |            |            |

| SNP        | Gene Region | Chromosome | Gender | MAF  | N   | Marginal Effect       |                       |         | Treatment Stratified Effects |                    |                  |                  | Test of Interaction   |            |            |
|------------|-------------|------------|--------|------|-----|-----------------------|-----------------------|---------|------------------------------|--------------------|------------------|------------------|-----------------------|------------|------------|
|            |             |            |        |      |     | Likelihood ratio test |                       | Placebo | Bupropion                    | Patch              | Spray            | Observed P       | Adjusted P            | Observed P | Adjusted P |
|            |             |            |        |      |     | SNP OR (95% CI)       | Observed P            |         |                              |                    |                  |                  |                       |            |            |
| rs1817074  | DDC         | 7          | Female | 0.41 | 403 | 1.04 (0.65-1.67)      | 0.87                  | 1.00    | 3.31 (0.89-12.37)            | 0.97 (0.42-2.24)   | 1.24 (0.43-3.54) | 0.49 (0.20-1.22) | 0.10                  | 0.61       |            |
|            |             |            | Male   | 0.36 | 386 | 1.20 (0.87-1.66)      | 0.26                  | 0.95    | 0.97 (0.44-2.12)             | 1.91 (1.02-3.57)   | 0.99 (0.54-1.81) | 1.06 (0.57-1.95) | 0.40                  | 0.95       |            |
|            |             |            | Female | 0.38 | 403 | 0.80 (0.57-1.11)      | 0.18                  | 0.86    | 0.45 (0.20-1.00)             | 1.11 (0.62-2.01)   | 0.69 (0.33-1.42) | 0.90 (0.48-1.69) | 0.30                  | 0.95       |            |
| rs17635123 | DDC         | 7          | Male   | 0.12 | 386 | 1.54 (0.93-2.57)      | 0.10                  | 0.69    | 1.78 (0.63-5.02)             | 10.15 (2.61-39.46) | 0.71 (0.26-1.95) | 0.81 (0.30-2.24) | $4.10 \times 10^{-3}$ | 0.06       |            |
|            |             |            | Female | 0.14 | 403 | 0.92 (0.54-1.56)      | 0.75                  | 1.00    | 0.45 (0.12-1.70)             | 1.47 (0.57-3.83)   | 0.81 (0.28-2.34) | 1.01 (0.34-3.01) | 0.52                  | 0.99       |            |
| rs1470750  | DDC         | 7          | Male   | 0.43 | 386 | 0.81 (0.52-1.27)      | 0.36                  | 0.98    | 0.61 (0.22-1.66)             | 0.51 (0.21-1.22)   | 1.30 (0.57-2.95) | 0.94 (0.37-2.38) | 0.42                  | 0.95       |            |
|            |             |            | Female | 0.39 | 403 | 1.08 (0.68-1.73)      | 0.74                  | 1.00    | 1.73 (0.56-5.32)             | 0.87 (0.38-1.98)   | 2.24 (0.76-6.59) | 0.58 (0.23-1.43) | 0.20                  | 0.85       |            |
| rs2100280  | DDC         | 7          | Male   | 0.25 | 376 | 0.97 (0.68-1.37)      | 0.85                  | 1.00    | 0.60 (0.25-1.48)             | 1.85 (0.90-3.79)   | 0.74 (0.38-1.44) | 0.96 (0.51-1.79) | 0.18                  | 0.77       |            |
|            |             |            | Female | 0.27 | 398 | 0.71 (0.49-1.03)      | 0.07                  | 0.56    | 0.73 (0.34-1.60)             | 1.05 (0.53-2.08)   | 0.45 (0.20-1.01) | 0.69 (0.34-1.40) | 0.47                  | 0.99       |            |
| rs1451368  | DDC         | 7          | Male   | 0.26 | 386 | 1.06 (0.76-1.48)      | 0.73                  | 1.00    | 0.73 (0.32-1.68)             | 2.10 (1.07-4.11)   | 0.79 (0.42-1.48) | 0.96 (0.51-1.79) | 0.12                  | 0.66       |            |
|            |             |            | Female | 0.28 | 403 | 0.73 (0.51-1.04)      | 0.08                  | 0.61    | 0.72 (0.32-1.59)             | 0.96 (0.49-1.86)   | 0.45 (0.19-1.03) | 0.79 (0.41-1.54) | 0.56                  | 0.99       |            |
| rs10244632 | DDC         | 7          | Male   | 0.27 | 372 | 1.07 (0.77-1.49)      | 0.67                  | 1.00    | 0.71 (0.31-1.65)             | 2.22 (1.15-4.27)   | 0.81 (0.43-1.52) | 0.89 (0.47-1.69) | 0.07                  | 0.50       |            |
|            |             |            | Female | 0.30 | 385 | 0.67 (0.47-0.97)      | 0.03                  | 0.34    | 0.60 (0.27-1.35)             | 0.86 (0.43-1.69)   | 0.52 (0.23-1.17) | 0.70 (0.36-1.38) | 0.81                  | 1.00       |            |
| rs11575321 | DDC         | 7          | Male   | 0.10 | 386 | 1.40 (0.81-2.39)      | 0.23                  | 0.92    | 1.25 (0.38-4.07)             | 8.93 (2.28-35.01)  | 0.60 (0.21-1.72) | 0.93 (0.32-2.73) | $7.53 \times 10^{-3}$ | 0.10       |            |
|            |             |            | Female | 0.12 | 403 | 0.86 (0.49-1.54)      | 0.62                  | 1.00    | 0.56 (0.15-2.12)             | 1.24 (0.41-3.71)   | 0.76 (0.25-2.26) | 0.99 (0.31-3.16) | 0.81                  | 1.00       |            |
| rs11575313 | DDC         | 7          | Male   | 0.10 | 385 | 1.44 (0.84-2.48)      | 0.19                  | 0.88    | 1.25 (0.38-4.07)             | 8.91 (2.27-34.95)  | 0.65 (0.23-1.89) | 0.94 (0.32-2.74) | 0.01                  | 0.13       |            |
|            |             |            | Female | 0.12 | 403 | 0.86 (0.49-1.54)      | 0.62                  | 1.00    | 0.56 (0.15-2.12)             | 1.24 (0.41-3.71)   | 0.76 (0.25-2.26) | 0.99 (0.31-3.16) | 0.81                  | 1.00       |            |
| rs10268819 | DDC         | 7          | Male   | 0.14 | 347 | 1.03 (0.63-1.69)      | 0.90                  | 1.00    | 0.77 (0.24-2.51)             | 0.90 (0.31-2.59)   | 1.30 (0.58-2.91) | 1.02 (0.35-2.98) | 0.89                  | 1.00       |            |
|            |             |            | Female | 0.13 | 372 | 0.92 (0.56-1.51)      | 0.74                  | 1.00    | 1.41 (0.47-4.24)             | 0.94 (0.40-2.24)   | 0.32 (0.07-1.51) | 1.11 (0.46-2.63) | 0.40                  | 0.99       |            |
| rs3807552  | DDC         | 7          | Male   | 0.20 | 341 | 1.06 (0.66-1.70)      | 0.80                  | 1.00    | 1.14 (0.40-3.25)             | 1.33 (0.53-3.34)   | 0.96 (0.41-2.27) | 0.89 (0.33-2.40) | 0.94                  | 0.94       |            |
|            |             |            | Female | 0.21 | 369 | 1.42 (0.88-2.30)      | 0.15                  | 0.82    | 1.36 (0.47-3.94)             | 0.76 (0.31-1.88)   | 2.77 (0.98-7.87) | 1.70 (0.67-4.37) | 0.30                  | 0.95       |            |
| rs3779078  | DDC         | 7          | Male   | 0.19 | 386 | 1.05 (0.67-1.64)      | 0.84                  | 1.00    | 2.00 (0.76-5.21)             | 0.84 (0.35-2.03)   | 0.98 (0.43-2.19) | 0.80 (0.30-2.12) | 0.51                  | 0.98       |            |
|            |             |            | Female | 0.21 | 403 | 1.53 (0.97-2.43)      | 0.07                  | 0.57    | 1.68 (0.58-4.86)             | 0.86 (0.38-1.93)   | 2.32 (0.87-6.21) | 2.11 (0.84-5.26) | 0.36                  | 0.98       |            |
| rs6264     | DDC         | 7          | Male   | 0.00 | NA  | NA                    | NA                    | NA      | NA                           | NA                 | NA               | NA               | NA                    | NA         |            |
|            |             |            | Female | 0.00 | NA  | NA                    | NA                    | NA      | NA                           | NA                 | NA               | NA               | NA                    | NA         |            |
| rs2044859  | DDC         | 7          | Male   | 0.34 | 386 | 0.98 (0.64-1.51)      | 0.92                  | 0.99    | 1.85 (0.67-5.08)             | 0.79 (0.34-1.82)   | 1.14 (0.52-2.51) | 0.61 (0.25-1.50) | 0.39                  | 0.95       |            |
|            |             |            | Female | 0.37 | 403 | 1.35 (0.84-2.16)      | 0.21                  | 0.90    | 1.65 (0.56-4.42)             | 0.78 (0.35-1.77)   | 2.10 (0.77-5.71) | 1.55 (0.59-4.08) | 0.45                  | 0.99       |            |
| rs7786398  | DDC         | 7          | Male   | 0.44 | 386 | 0.93 (0.59-1.48)      | 0.77                  | 1.00    | 1.43 (0.46-4.44)             | 1.16 (0.49-2.76)   | 0.79 (0.33-1.87) | 0.65 (0.26-1.63) | 0.67                  | 0.99       |            |
|            |             |            | Female | 0.48 | 403 | 1.38 (0.82-2.34)      | 0.22                  | 0.90    | 1.98 (0.52-7.50)             | 1.00 (0.40-2.47)   | 2.76 (0.82-9.31) | 0.96 (0.36-2.56) | 0.45                  | 0.99       |            |
| rs10276473 | DDC         | 7          | Male   | 0.20 | 386 | 0.99 (0.63-1.54)      | 0.96                  | 0.96    | 1.85 (0.71-4.83)             | 0.67 (0.28-1.63)   | 0.92 (0.41-2.06) | 0.94 (0.36-2.44) | 0.48                  | 0.97       |            |
|            |             |            | Female | 0.21 | 402 | 1.58 (1.00-2.50)      | 0.05                  | 0.49    | 1.57 (0.54-4.53)             | 0.97 (0.43-2.19)   | 2.33 (0.87-6.22) | 2.11 (0.84-5.26) | 0.50                  | 0.99       |            |
| rs11765748 | DDC         | 7          | Male   | 0.48 | 385 | 1.03 (0.77-1.38)      | 0.85                  | 1.00    | 1.03 (0.50-2.13)             | 1.58 (0.91-2.74)   | 0.79 (0.45-1.38) | 0.83 (0.46-1.50) | 0.29                  | 0.89       |            |
|            |             |            | Female | 0.49 | 402 | 1.02 (0.74-1.41)      | 0.89                  | 0.98    | 1.06 (0.52-2.16)             | 0.88 (0.48-1.63)   | 1.01 (0.51-2.00) | 1.16 (0.64-2.08) | 0.94                  | 0.94       |            |
| rs7456339  | DDC         | 7          | Male   | 0.13 | 386 | 1.05 (0.70-1.59)      | 0.81                  | 1.00    | 0.81 (0.33-2.00)             | 3.09 (1.32-7.27)   | 0.52 (0.21-1.25) | 0.81 (0.32-2.06) | 0.02                  | 0.18       |            |
|            |             |            | Female | 0.15 | 403 | 0.64 (0.40-1.04)      | 0.06                  | 0.52    | 0.55 (0.19-1.62)             | 0.87 (0.35-2.17)   | 0.57 (0.22-1.42) | 0.61 (0.23-1.60) | 0.90                  | 0.99       |            |
| rs10499695 | DDC         | 7          | Male   | 0.49 | 386 | 0.87 (0.54-1.39)      | 0.55                  | 1.00    | 1.64 (0.49-5.55)             | 0.82 (0.34-2.00)   | 0.93 (0.38-2.27) | 0.55 (0.21-1.40) | 0.55                  | 0.99       |            |
|            |             |            | Female | 0.49 | 403 | 0.99 (0.58-1.69)      | 0.98                  | 0.98    | 1.61 (0.42-6.13)             | 0.84 (0.34-2.11)   | 1.08 (0.33-3.52) | 0.84 (0.31-2.26) | 0.85                  | 0.99       |            |
| rs4947644  | DDC         | 7          | Male   | 0.49 | 386 | 0.90 (0.55-1.47)      | 0.68                  | 1.00    | 1.51 (0.44-5.11)             | 0.32 (0.13-0.81)   | 1.96 (0.74-5.21) | 0.89 (0.33-2.40) | 0.04                  | 0.36       |            |
|            |             |            | Female | 0.48 | 403 | 1.06 (0.63-1.76)      | 0.84                  | 1.00    | 2.06 (0.54-7.83)             | 0.97 (0.37-2.52)   | 1.58 (0.53-4.66) | 0.55 (0.22-1.42) | 0.33                  | 0.96       |            |
| rs2329340  | DDC         | 7          | Male   | 0.32 | 386 | 1.09 (0.79-1.51)      | 0.60                  | 1.00    | 1.67 (0.83-3.35)             | 1.54 (0.84-2.83)   | 0.63 (0.33-1.20) | 0.88 (0.43-1.82) | 0.12                  | 0.67       |            |
|            |             |            | Female | 0.34 | 403 | 1.14 (0.82-1.59)      | 0.43                  | 0.90    | 0.97 (0.45-2.12)             | 0.97 (0.53-1.75)   | 1.27 (0.65-2.48) | 1.42 (0.73-2.76) | 0.81                  | 1.00       |            |
| rs10227616 | PRKAR2B     | 7          | Male   | 0.32 | 386 | 0.84 (0.55-1.30)      | 0.44                  | 0.99    | 0.37 (0.14-0.97)             | 1.16 (0.50-2.67)   | 1.05 (0.47-2.32) | 0.92 (0.38-2.25) | 0.29                  | 0.91       |            |
|            |             |            | Female | 0.34 | 403 | 1.27 (0.80-2.01)      | 0.30                  | 0.89    | 1.21 (0.42-3.43)             | 2.00 (0.86-4.63)   | 1.42 (0.54-3.70) | 0.69 (0.28-1.72) | 0.41                  | 0.96       |            |
| rs1544582  | PRKAR2B     | 7          | Male   | 0.48 | 385 | 1.38 (1.02-1.86)      | 0.04                  | 0.33    | 2.55 (1.22-5.35)             | 1.65 (0.89-3.08)   | 0.99 (0.59-1.67) | 1.14 (0.62-2.10) | 0.16                  | 0.75       |            |
|            |             |            | Female | 0.45 | 403 | 0.69 (0.50-0.95)      | 0.02                  | 0.21    | 0.72 (0.35-1.51)             | 0.52 (0.29-0.95)   | 0.72 (0.38-1.36) | 0.91 (0.47-1.75) | 0.67                  | 1.00       |            |
| rs2237649  | PRKAR2B     | 7          | Male   | 0.48 | 386 | 1.33 (0.99-1.80)      | 0.06                  | 0.48    | 2.55 (1.22-5.35)             | 1.65 (0.89-3.09)   | 0.94 (0.55-1.59) | 1.06 (0.58-1.95) | 0.12                  | 0.62       |            |
|            |             |            | Female | 0.45 | 401 | 0.70 (0.51-0.97)      | 0.03                  | 0.26    | 0.75 (0.36-1.56)             | 0.52 (0.29-0.94)   | 0.77 (0.41-1.45) | 0.88 (0.46-1.68) | 0.67                  | 1.00       |            |
| rs1476879  | PRKAR2B     | 7          | Male   | 0.48 | 386 | 1.36 (1.01-1.85)      | 0.04                  | 0.40    | 2.55 (1.22-5.35)             | 1.75 (0.93-3.30)   | 0.94 (0.55-1.59) | 1.09 (0.59-2.02) | 0.11                  | 0.61       |            |
|            |             |            | Female | 0.46 | 403 | 0.68 (0.49-0.94)      | 0.02                  | 0.18    | 0.72 (0.34-1.50)             | 0.52 (0.29-0.95)   | 0.72 (0.38-1.36) | 0.85 (0.45-1.62) | 0.73                  | 0.99       |            |
| rs6957586  | PRKAR2B     | 7          | Male   | 0.32 | 386 | 0.92 (0.60-1.42)      | 0.71                  | 1.00    | 0.37 (0.14-0.97)             | 1.24 (0.54-2.85)   | 1.05 (0.47-2.32) | 1.24 (0.51-2.99) | 0.21                  | 0.82       |            |
|            |             |            | Female | 0.34 | 402 | 1.25 (0.79-1.98)      | 0.34                  | 0.92    | 1.19 (0.42-3.38)             | 2.00 (0.86-4.63)   | 1.42 (0.54-3.70) | 0.66 (0.26-1.62) | 0.35                  | 0.94       |            |
| rs11766415 | PRKAR2B     | 7          | Male   | 0.42 | 386 | 0.96 (0.71-1.29)      | 0.78                  | 1.00    | 0.83 (0.43-1.59)             | 1.19 (0.64-2.20)   | 0.86 (0.50-1.48) | 1.01 (0.55-1.85) | 0.84                  | 0.97       |            |
|            |             |            | Female | 0.42 | 403 | 1.53 (1.11-2.12)      | $8.48 \times 10^{-3}$ | 0.10    | 0.90 (0.45-1.79)             | 2.42 (1.29-4.53)   | 2.77 (1.31-5.84) | 0.95 (0.51-1.76) | 0.03                  | 0.18       |            |
| rs3801969  | PRKAR2B     | 7          | Male   | 0.45 | 386 | 0.95 (0.71-1.28)      | 0.74                  | 1.00    | 0.84 (0.44-1.62)             | 1.35 (0.73-2.51)   | 0.86 (0.51-1.44) | 0.86 (0.45-1.63) | 0.66                  | 1.00       |            |
|            |             |            | Female | 0.44 | 403 | 1.31 (0.95-1.79)      | 0.09                  | 0.55    | 1.33 (0.67-2.66)             | 1.73 (0.93-3.21)   | 1.45 (0.75-2.84) | 0.93 (0.52-1.66) | 0.53                  | 0.99       |            |
| rs2536503  | PRKAR2B     | 7          | Male   | 0.13 | 386 | 0.94 (0.59-1.49)      | 0.79                  | 1.00    | 0.50 (0.14-1.84)             | 0.61 (0.27-1.42)   | 1.72 (0.64-4.61) | 1.39 (0.58-3.34) | 0.24                  | 0.86       |            |
|            |             |            | Female | 0.12 | 403 | 1.06 (0.65-1.75)      | 0.81                  | 0.81    | 1.21 (0.47-3.17)             | 0.63 (0.22-1.81)   | 1.30 (0.47-3.60) | 1.29 (0.48-3.45) | 0.70                  | 1.00       |            |
| rs2536504  | PRKAR2B     | 7          | Male   | 0.34 | 385 | 1.14 (0.84-1.55)      | 0.39                  | 0.99    | 1.87 (0.95-3.70)             | 0.98 (0.52-1.86)   | 1.04 (0.61-1.77) | 0.99 (0.52-1.87) | 0.46                  | 0.98       |            |
|            |             |            | Female | 0.34 | 403 | 0.63 (0.44-0.89)      | $7.57 \times 10^{-3}$ | 0.09    | 0.64 (0.29-1.41)             | 0.51 (0.27-0.98)   | 0.59 (0.28-1.24) | 0.81 (0.43-1.54) | 0.80                  | 1.00       |            |
| rs6960842  | PRKAR2B     | 7          | Male   | 0.42 | 385 | 1.05 (0.76-1.43)      | 0.78                  | 1.00    | 1.49 (0.74-2.99)             | 0.99 (0.53-1.87)   | 0.94 (0.54-1.63) | 0.94 (0.49-1.81) | 0.74                  | 0.97       |            |
|            |             |            | Female | 0.43 | 403 | 0.71 (0.51-0.98)      | 0.03                  | 0.27    | 0.62 (0.30-1.28)             | 0.62 (0.34-1.14)   | 0.59 (0.29-1.20) | 1.01 (0.55-1.84) | 0.60                  | 0.99       |            |
| rs17340577 | PRKAR2B     | 7          | Male   | 0.07 | 383 | 0.68 (0.36-1.28)      | 0.22                  | 0.90    | 0.20 (0.02-1.68)             | 1.02 (0.34-3.12)   | 0.65 (0.18-2.36) | 0.79 (0.24-2.55) | 0.52                  | 0.99       |            |
|            |             |            | Female |      |     |                       |                       |         |                              |                    |                  |                  |                       |            |            |

| SNP        | Gene Region | Chromosome | Gender | MAF  | N   | Marginal Effect       |            |         | Treatment Stratified Effects |                  |                  |                  | Test of Interaction |            |            |
|------------|-------------|------------|--------|------|-----|-----------------------|------------|---------|------------------------------|------------------|------------------|------------------|---------------------|------------|------------|
|            |             |            |        |      |     | Likelihood ratio test |            | Placebo | Bupropion                    | Patch            | Spray            | Observed P       | Adjusted P          | Observed P | Adjusted P |
|            |             |            |        |      |     | SNP OR (95% CI)       | Observed P |         |                              |                  |                  |                  |                     |            |            |
| rs2303928  | CDK5        | 7          | Female | 0.20 | 402 | 1.40 (0.88-2.24)      | 0.16       | 0.72    | 0.65 (0.21-2.00)             | 2.50 (1.09-5.74) | 1.12 (0.43-2.94) | 1.52 (0.60-3.84) | 0.26                | 0.85       |            |
|            |             |            | Male   | 0.39 | 386 | 0.83 (0.60-1.14)      | 0.25       | 0.85    | 0.59 (0.29-1.22)             | 0.68 (0.36-1.27) | 0.77 (0.43-1.40) | 1.58 (0.80-3.13) | 0.18                | 0.62       |            |
|            |             |            | Female | 0.40 | 403 | 0.71 (0.50-1.01)      | 0.06       | 0.34    | 0.75 (0.34-1.67)             | 0.73 (0.40-1.33) | 0.77 (0.38-1.57) | 0.60 (0.28-1.28) | 0.97                | 0.97       |            |
| rs2069459  | CDK5        | 7          | Male   | 0.39 | 385 | 1.12 (0.84-1.50)      | 0.45       | 0.95    | 0.48 (0.24-0.99)             | 1.54 (0.83-2.88) | 1.31 (0.79-2.19) | 1.34 (0.72-2.50) | 0.05                | 0.31       |            |
|            |             |            | Female | 0.37 | 402 | 1.08 (0.76-1.53)      | 0.68       | 0.98    | 1.20 (0.53-2.73)             | 1.40 (0.73-2.71) | 0.94 (0.45-1.96) | 0.86 (0.45-1.66) | 0.74                | 0.99       |            |
| rs891507   | CDK5        | 7          | Male   | 0.15 | 349 | 0.89 (0.57-1.38)      | 0.59       | 0.97    | 0.95 (0.37-2.46)             | 0.62 (0.26-1.53) | 1.35 (0.57-3.21) | 0.79 (0.32-1.90) | 0.66                | 0.87       |            |
|            |             |            | Female | 0.15 | 374 | 0.91 (0.57-1.43)      | 0.67       | 0.99    | 0.48 (0.15-1.59)             | 0.93 (0.41-2.09) | 0.92 (0.38-2.26) | 1.53 (0.56-4.17) | 0.51                | 0.98       |            |
| rs2069454  | CDK5        | 7          | Male   | 0.15 | 354 | 1.29 (0.83-2.02)      | 0.26       | 0.84    | 0.75 (0.28-1.98)             | 2.01 (0.89-4.57) | 1.29 (0.59-2.81) | 1.23 (0.34-5.50) | 0.48                | 0.84       |            |
|            |             |            | Female | 0.12 | 373 | 1.26 (0.77-2.07)      | 0.36       | 0.92    | 1.67 (0.67-4.21)             | 1.60 (0.64-3.95) | 1.10 (0.35-3.42) | 0.75 (0.25-2.26) | 0.66                | 0.99       |            |
| rs2069443  | CDK5        | 7          | Male   | 0.26 | 385 | 1.01 (0.72-1.42)      | 0.94       | 1.00    | 2.22 (1.00-4.94)             | 0.66 (0.33-1.33) | 1.03 (0.58-1.84) | 0.84 (0.41-1.70) | 0.14                | 0.54       |            |
|            |             |            | Female | 0.26 | 402 | 0.93 (0.63-1.36)      | 0.70       | 0.95    | 0.74 (0.30-1.78)             | 0.64 (0.30-1.35) | 1.31 (0.57-3.02) | 1.19 (0.60-2.35) | 0.49                | 0.98       |            |
| rs1549760  | CDK5        | 7          | Male   | 0.23 | 386 | 1.32 (0.85-2.04)      | 0.22       | 0.82    | 2.87 (1.09-7.56)             | 1.10 (0.47-2.60) | 1.42 (0.64-3.13) | 0.74 (0.30-1.82) | 0.23                | 0.66       |            |
|            |             |            | Female | 0.23 | 403 | 0.97 (0.61-1.54)      | 0.90       | 0.90    | 1.05 (0.37-2.94)             | 0.64 (0.27-1.51) | 1.38 (0.52-3.67) | 1.08 (0.44-2.66) | 0.68                | 0.99       |            |
| rs3793336  | CDK5        | 7          | Male   | 0.14 | 301 | 0.99 (0.59-1.66)      | 0.98       | 0.98    | 0.33 (0.08-1.31)             | 1.26 (0.42-3.76) | 2.22 (0.85-5.85) | 0.70 (0.26-1.91) | 0.10                | 0.48       |            |
|            |             |            | Female | 0.14 | 319 | 1.05 (0.64-1.70)      | 0.86       | 0.98    | 0.80 (0.23-2.77)             | 1.34 (0.59-3.08) | 0.82 (0.32-2.07) | 1.22 (0.42-3.55) | 0.83                | 0.99       |            |
| rs2303933  | CDK5        | 7          | Male   | 0.40 | 386 | 1.07 (0.69-1.67)      | 0.76       | 0.99    | 0.97 (0.36-2.65)             | 2.77 (1.05-7.34) | 0.80 (0.36-1.81) | 0.67 (0.28-1.62) | 0.13                | 0.55       |            |
|            |             |            | Female | 0.41 | 403 | 1.59 (0.96-2.63)      | 0.07       | 0.36    | 2.50 (0.67-9.38)             | 1.76 (0.70-4.37) | 1.23 (0.43-3.51) | 1.36 (0.54-3.43) | 0.84                | 0.96       |            |
| rs2303937  | CDK5        | 7          | Male   | 0.45 | 385 | 1.18 (0.74-1.89)      | 0.49       | 0.95    | 1.42 (0.51-3.95)             | 1.76 (0.65-4.75) | 0.84 (0.35-2.02) | 1.01 (0.40-2.56) | 0.70                | 0.70       |            |
|            |             |            | Female | 0.44 | 403 | 1.22 (0.74-2.04)      | 0.43       | 0.92    | 2.68 (0.57-12.64)            | 1.18 (0.48-2.89) | 0.89 (0.32-2.48) | 1.16 (0.45-2.97) | 0.67                | 0.99       |            |
| rs11765015 | CDK5        | 7          | Male   | 0.28 | 382 | 1.07 (0.77-1.51)      | 0.68       | 0.98    | 2.15 (0.97-4.78)             | 1.09 (0.57-2.07) | 0.92 (0.49-1.72) | 0.76 (0.37-1.54) | 0.25                | 0.64       |            |
|            |             |            | Female | 0.26 | 402 | 0.85 (0.59-1.24)      | 0.40       | 0.91    | 0.72 (0.31-1.67)             | 0.59 (0.28-1.24) | 1.14 (0.53-2.47) | 1.07 (0.55-2.08) | 0.55                | 0.98       |            |
| rs4733065  | CHRNA2      | 8          | Male   | 0.46 | 380 | 1.13 (0.70-1.81)      | 0.62       | 0.97    | 0.96 (0.35-2.65)             | 1.65 (0.63-4.33) | 1.02 (0.43-2.43) | 0.98 (0.37-2.62) | 0.84                | 1.00       |            |
|            |             |            | Female | 0.46 | 400 | 1.34 (0.80-2.24)      | 0.25       | 0.94    | 1.01 (0.32-3.19)             | 1.57 (0.67-3.63) | 1.65 (0.51-5.26) | 1.12 (0.40-3.13) | 0.90                | 0.90       |            |
| rs2278319  | CHRNA2      | 8          | Male   | 0.24 | 386 | 1.06 (0.75-1.51)      | 0.74       | 0.99    | 1.14 (0.50-2.62)             | 0.90 (0.47-1.75) | 0.79 (0.42-1.51) | 1.78 (0.86-3.69) | 0.39                | 0.99       |            |
|            |             |            | Female | 0.25 | 403 | 1.28 (0.90-1.83)      | 0.17       | 0.84    | 1.35 (0.62-2.93)             | 1.75 (0.91-3.38) | 0.83 (0.41-1.68) | 1.38 (0.67-2.82) | 0.49                | 0.98       |            |
| rs1106359  | CHRNA2      | 8          | Male   | 0.42 | 386 | 1.14 (0.84-1.55)      | 0.41       | 0.96    | 1.18 (0.62-2.24)             | 0.89 (0.49-1.62) | 1.54 (0.84-2.80) | 1.03 (0.54-1.95) | 0.63                | 1.00       |            |
|            |             |            | Female | 0.40 | 403 | 0.86 (0.63-1.18)      | 0.35       | 0.97    | 0.91 (0.43-1.93)             | 0.74 (0.43-1.28) | 0.79 (0.41-1.51) | 1.12 (0.58-2.15) | 0.80                | 0.98       |            |
| rs1879184  | CHRNA2      | 8          | Male   | 0.13 | 386 | 0.72 (0.43-1.20)      | 0.20       | 0.87    | 0.71 (0.23-2.19)             | 0.87 (0.34-2.25) | 0.50 (0.19-1.34) | 0.90 (0.31-2.62) | 0.84                | 1.00       |            |
|            |             |            | Female | 0.14 | 403 | 0.83 (0.49-1.41)      | 0.50       | 0.98    | 1.87 (0.61-5.72)             | 0.73 (0.29-1.86) | 1.06 (0.38-2.94) | 0.33 (0.09-1.22) | 0.22                | 0.76       |            |
| rs10093964 | CHRNA2      | 8          | Male   | 0.43 | 384 | 1.24 (0.78-1.96)      | 0.37       | 0.95    | 1.35 (0.49-3.75)             | 1.23 (0.51-3.00) | 1.76 (0.71-4.35) | 0.78 (0.31-1.96) | 0.67                | 1.00       |            |
|            |             |            | Female | 0.41 | 403 | 0.91 (0.57-1.46)      | 0.69       | 0.99    | 1.44 (0.47-4.43)             | 0.60 (0.26-1.37) | 0.84 (0.32-2.18) | 1.21 (0.46-3.19) | 0.57                | 0.98       |            |
| rs1879182  | CHRNA2      | 8          | Male   | 0.13 | 386 | 0.72 (0.43-1.20)      | 0.20       | 0.87    | 0.71 (0.23-2.19)             | 0.87 (0.34-2.25) | 0.50 (0.19-1.34) | 0.90 (0.31-2.62) | 0.84                | 1.00       |            |
|            |             |            | Female | 0.14 | 403 | 0.83 (0.49-1.41)      | 0.50       | 0.98    | 1.87 (0.61-5.72)             | 0.73 (0.29-1.86) | 1.06 (0.38-2.94) | 0.33 (0.09-1.22) | 0.22                | 0.76       |            |
| rs748283   | CHRNA2      | 8          | Male   | 0.49 | 386 | 0.98 (0.72-1.32)      | 0.87       | 1.00    | 0.90 (0.50-1.64)             | 1.11 (0.58-2.13) | 0.92 (0.52-1.61) | 1.01 (0.56-1.83) | 0.96                | 0.96       |            |
|            |             |            | Female | 0.49 | 403 | 1.17 (0.86-1.60)      | 0.33       | 0.97    | 0.76 (0.37-1.59)             | 1.35 (0.79-2.28) | 1.22 (0.64-2.34) | 1.26 (0.66-2.40) | 0.65                | 0.99       |            |
| rs1057137  | CHRNA2      | 8          | Male   | 0.40 | 379 | 1.11 (0.81-1.53)      | 0.50       | 0.95    | 1.20 (0.60-2.39)             | 0.74 (0.40-1.35) | 1.57 (0.86-2.86) | 1.12 (0.58-2.17) | 0.37                | 0.99       |            |
|            |             |            | Female | 0.39 | 401 | 0.87 (0.63-1.20)      | 0.39       | 0.98    | 1.05 (0.50-2.21)             | 0.66 (0.37-1.18) | 0.83 (0.43-1.59) | 1.11 (0.59-2.10) | 0.64                | 0.99       |            |
| rs735421   | CHRNA2      | 8          | Male   | 0.29 | 382 | 1.22 (0.79-1.88)      | 0.37       | 0.95    | 1.09 (0.42-2.84)             | 1.12 (0.48-2.62) | 1.14 (0.52-2.50) | 1.59 (0.65-3.91) | 0.93                | 0.99       |            |
|            |             |            | Female | 0.31 | 401 | 1.19 (0.75-1.89)      | 0.45       | 0.98    | 2.05 (0.69-6.06)             | 1.84 (0.82-4.14) | 0.44 (0.16-1.20) | 1.09 (0.44-2.69) | 0.11                | 0.56       |            |
| rs891394   | CHRNA2      | 8          | Male   | 0.25 | 386 | 1.02 (0.72-1.45)      | 0.91       | 0.91    | 1.03 (0.43-2.45)             | 0.97 (0.50-1.86) | 0.88 (0.45-1.70) | 1.26 (0.64-2.50) | 0.90                | 1.00       |            |
|            |             |            | Female | 0.27 | 403 | 1.19 (0.85-1.68)      | 0.31       | 0.97    | 0.94 (0.44-2.04)             | 1.98 (1.04-3.77) | 0.78 (0.39-1.56) | 1.26 (0.64-2.50) | 0.23                | 0.78       |            |
| rs3735757  | CHRNA2      | 8          | Male   | 0.13 | 386 | 0.69 (0.41-1.15)      | 0.15       | 0.78    | 0.65 (0.21-2.02)             | 0.87 (0.34-2.25) | 0.46 (0.17-1.23) | 0.90 (0.31-2.62) | 0.77                | 1.00       |            |
|            |             |            | Female | 0.14 | 398 | 0.80 (0.47-1.37)      | 0.41       | 0.98    | 1.04 (0.30-3.58)             | 0.72 (0.28-1.85) | 1.14 (0.41-3.20) | 0.49 (0.15-1.63) | 0.72                | 0.99       |            |
| rs2322581  | CHRNA2      | 8          | Male   | 0.17 | 386 | 0.71 (0.46-1.09)      | 0.12       | 0.72    | 0.62 (0.23-1.67)             | 1.09 (0.49-2.43) | 0.57 (0.25-1.29) | 0.63 (0.26-1.53) | 0.68                | 1.00       |            |
|            |             |            | Female | 0.15 | 403 | 0.73 (0.46-1.17)      | 0.18       | 0.86    | 0.90 (0.35-2.29)             | 0.78 (0.34-1.77) | 0.85 (0.32-2.24) | 0.46 (0.15-1.37) | 0.79                | 0.99       |            |
| rs891398   | CHRNA2      | 8          | Male   | 0.47 | 386 | 1.16 (0.85-1.57)      | 0.36       | 0.97    | 1.22 (0.53-2.77)             | 1.26 (0.68-2.33) | 0.94 (0.56-1.59) | 1.34 (0.74-2.42) | 0.82                | 1.00       |            |
|            |             |            | Female | 0.48 | 403 | 1.05 (0.77-1.45)      | 0.75       | 0.98    | 0.85 (0.42-1.73)             | 1.77 (1.01-3.12) | 0.78 (0.40-1.54) | 0.81 (0.42-1.56) | 0.17                | 0.67       |            |
| rs891399   | CHRNA2      | 8          | Male   | 0.13 | 386 | 0.75 (0.46-1.20)      | 0.22       | 0.89    | 0.50 (0.15-1.60)             | 1.14 (0.50-2.61) | 0.62 (0.26-1.48) | 0.74 (0.25-1.66) | 0.64                | 1.00       |            |
|            |             |            | Female | 0.13 | 403 | 0.78 (0.47-1.30)      | 0.34       | 0.97    | 1.11 (0.43-2.87)             | 0.60 (0.24-1.54) | 1.07 (0.40-2.85) | 0.49 (0.15-1.63) | 0.61                | 0.98       |            |
| rs2565062  | CHRNA2      | 8          | Male   | 0.13 | 386 | 0.75 (0.46-1.20)      | 0.22       | 0.89    | 0.50 (0.15-1.60)             | 1.14 (0.50-2.61) | 0.62 (0.26-1.48) | 0.74 (0.25-1.66) | 0.64                | 1.00       |            |
|            |             |            | Female | 0.13 | 403 | 0.79 (0.47-1.30)      | 0.34       | 0.97    | 1.12 (0.43-2.90)             | 0.60 (0.23-1.54) | 1.07 (0.40-2.85) | 0.49 (0.15-1.63) | 0.61                | 0.98       |            |
| rs2472554  | CHRNA2      | 8          | Male   | 0.30 | 386 | 1.19 (0.78-1.83)      | 0.42       | 0.96    | 1.53 (0.59-3.94)             | 1.05 (0.46-2.43) | 0.96 (0.44-2.10) | 1.45 (0.60-3.50) | 0.84                | 1.00       |            |
|            |             |            | Female | 0.31 | 403 | 0.81 (0.51-1.28)      | 0.36       | 0.97    | 2.06 (0.70-6.02)             | 0.31 (0.13-0.71) | 0.83 (0.32-2.16) | 1.31 (0.53-3.25) | 0.02                | 0.18       |            |
| rs2472553  | CHRNA2      | 8          | Male   | 0.13 | 386 | 0.68 (0.41-1.14)      | 0.14       | 0.78    | 0.47 (0.14-1.56)             | 0.87 (0.34-2.25) | 0.64 (0.26-1.60) | 0.77 (0.25-2.40) | 0.87                | 1.00       |            |
|            |             |            | Female | 0.13 | 403 | 0.93 (0.55-1.58)      | 0.79       | 0.95    | 1.73 (0.53-5.60)             | 0.80 (0.31-2.03) | 1.14 (0.41-3.19) | 0.53 (0.16-1.76) | 0.54                | 0.97       |            |
| rs7815010  | CHRNA2      | 8          | Male   | 0.25 | 386 | 0.98 (0.69-1.39)      | 0.90       | 0.99    | 0.66 (0.28-1.53)             | 1.33 (0.67-2.63) | 0.83 (0.44-1.56) | 1.17 (0.56-2.41) | 0.54                | 1.00       |            |
|            |             |            | Female | 0.25 | 403 | 0.87 (0.60-1.27)      | 0.47       | 0.98    | 0.80 (0.33-1.93)             | 0.76 (0.41-1.43) | 1.14 (0.52-2.49) | 0.88 (0.40-1.96) | 0.88                | 0.98       |            |
| rs2741339  | CHRNA2      | 8          | Male   | 0.28 | 386 | 1.28 (0.92-1.78)      | 0.14       | 0.78    | 1.86 (0.89-3.89)             | 1.11 (0.58-2.14) | 1.28 (0.69-2.36) | 1.09 (0.56-2.13) | 0.71                | 1.00       |            |
|            |             |            | Female | 0.26 | 403 | 1.43 (1.00-2.05)      | 0.05       | 0.45    | 1.08 (0.49-2.39)             | 2.33 (1.27-4.29) | 0.75 (0.34-1.64) | 1.07 (0.75-1.57) | 0.12                | 0.56       |            |
| rs2565059  | CHRNA2      | 8          | Male   | 0.18 | 385 | 1.43 (0.97-2.10)      | 0.07       | 0.55    | 2.65 (1.14-6.16)             | 1.33 (0.60-2.93) | 1.27 (0.62-2.60) | 1.03 (0.47-2.26) | 0.41                | 0.99       |            |
|            |             |            | Female | 0.19 | 403 | 1.47 (0.99-2.19)      | 0.06       | 0.49    | 1.45 (0.65-3.21)             | 3.23 (1.54-6.78) | 0.85 (0.37-1.98) | 0.86 (0.34-2.15) | 0.05                | 0.35       |            |
| rs2565055  | CHRNA2      | 8          | Male   | 0.24 | 386 | 1.57 (1.01-2.42)      | 0.04       | 0.40    | 2.08 (0.79-5.48)             | 1.74 (0.75-4.    |                  |                  |                     |            |            |

| SNP        | Gene Region | Chromosome | Gender | MAF  | N   | Marginal Effect       |            |         | Treatment Stratified Effects |                  |                  |                   | Test of Interaction |            |            |
|------------|-------------|------------|--------|------|-----|-----------------------|------------|---------|------------------------------|------------------|------------------|-------------------|---------------------|------------|------------|
|            |             |            |        |      |     | Likelihood ratio test |            | Placebo | Bupropion                    | Patch            | Spray            | Observed P        | Adjusted P          | Observed P | Adjusted P |
|            |             |            |        |      |     | SNP OR (95% CI)       | Observed P |         |                              |                  |                  |                   |                     |            |            |
| rs10819610 | FREQ        | 9          | Female | 0.50 | 400 | 1.00 (0.59-1.71)      | 0.99       | 1.00    | 0.90 (0.29-2.82)             | 1.22 (0.43-3.44) | 2.37 (0.70-8.05) | 0.47 (0.17-1.25)  | 0.21                | 0.88       |            |
|            |             |            | Male   | 0.27 | 385 | 0.73 (0.52-1.02)      | 0.06       | 0.74    | 0.89 (0.46-1.75)             | 0.67 (0.33-1.33) | 0.61 (0.32-1.18) | 0.79 (0.39-1.59)  | 0.86                | 1.00       |            |
|            |             |            | Female | 0.29 | 403 | 0.96 (0.67-1.37)      | 0.81       | 1.00    | 2.08 (0.95-4.56)             | 0.80 (0.43-1.49) | 1.10 (0.50-2.45) | 0.54 (0.25-1.20)  | 0.09                | 0.70       |            |
| rs3824544  | FREQ        | 9          | Male   | 0.25 | 380 | 0.85 (0.59-1.21)      | 0.36       | 1.00    | 0.91 (0.45-1.86)             | 0.89 (0.45-1.76) | 0.81 (0.42-1.54) | 0.78 (0.34-1.79)  | 0.99                | 1.00       |            |
|            |             |            | Female | 0.23 | 402 | 0.97 (0.67-1.39)      | 0.85       | 1.00    | 2.02 (0.89-4.60)             | 0.94 (0.53-1.68) | 0.95 (0.42-2.14) | 0.49 (0.20-1.22)  | 0.14                | 0.82       |            |
| rs7862394  | FREQ        | 9          | Male   | 0.32 | 386 | 0.83 (0.60-1.14)      | 0.24       | 0.99    | 0.89 (0.45-1.75)             | 0.65 (0.34-1.28) | 0.91 (0.50-1.65) | 0.86 (0.45-1.65)  | 0.89                | 1.00       |            |
|            |             |            | Female | 0.31 | 403 | 0.91 (0.64-1.28)      | 0.58       | 1.00    | 1.81 (0.85-3.86)             | 0.78 (0.44-1.38) | 0.98 (0.45-2.12) | 0.57 (0.26-1.23)  | 0.18                | 0.86       |            |
| rs10819611 | FREQ        | 9          | Male   | 0.32 | 386 | 0.83 (0.60-1.14)      | 0.25       | 0.99    | 0.79 (0.39-1.60)             | 0.66 (0.32-1.34) | 0.91 (0.51-1.65) | 0.93 (0.52-1.67)  | 0.88                | 1.00       |            |
|            |             |            | Female | 0.31 | 403 | 0.88 (0.63-1.25)      | 0.48       | 1.00    | 1.71 (0.81-3.58)             | 0.67 (0.37-1.22) | 1.01 (0.48-2.13) | 0.66 (0.32-1.36)  | 0.20                | 0.88       |            |
| rs1009502  | FREQ        | 9          | Male   | 0.32 | 378 | 0.69 (0.50-0.96)      | 0.02       | 0.42    | 0.68 (0.35-1.34)             | 0.72 (0.38-1.37) | 0.71 (0.38-1.35) | 0.64 (0.33-1.25)  | 1.00                | 1.00       |            |
|            |             |            | Female | 0.32 | 385 | 1.10 (0.78-1.56)      | 0.57       | 1.00    | 2.91 (1.33-6.35)             | 0.87 (0.47-1.59) | 1.20 (0.55-2.63) | 0.64 (0.31-1.30)  | 0.02                | 0.30       |            |
| rs1342043  | FREQ        | 9          | Male   | 0.14 | 383 | 1.08 (0.71-1.63)      | 0.72       | 1.00    | 0.38 (0.11-1.27)             | 1.27 (0.55-2.93) | 1.44 (0.66-3.17) | 1.36 (0.62-2.99)  | 0.19                | 0.95       |            |
|            |             |            | Female | 0.15 | 401 | 0.69 (0.43-1.13)      | 0.13       | 0.93    | 0.60 (0.17-2.07)             | 0.57 (0.24-1.35) | 1.00 (0.40-2.51) | 0.67 (0.25-1.83)  | 0.84                | 1.00       |            |
| rs7856531  | FREQ        | 9          | Male   | 0.47 | 386 | 0.76 (0.48-1.20)      | 0.24       | 0.99    | 0.45 (0.17-1.19)             | 0.86 (0.34-2.19) | 0.99 (0.41-2.39) | 0.80 (0.31-2.03)  | 0.67                | 1.00       |            |
|            |             |            | Female | 0.48 | 403 | 0.80 (0.49-1.32)      | 0.38       | 1.00    | 3.99 (0.85-18.70)            | 0.63 (0.28-1.46) | 1.24 (0.39-3.97) | 0.29 (0.11-0.78)  | 0.01                | 0.20       |            |
| rs7037293  | FREQ        | 9          | Male   | 0.13 | 382 | 1.11 (0.73-1.69)      | 0.62       | 1.00    | 0.42 (0.13-1.37)             | 1.50 (0.61-3.69) | 1.75 (0.80-3.87) | 1.05 (0.46-2.38)  | 0.16                | 0.93       |            |
|            |             |            | Female | 0.15 | 399 | 0.65 (0.40-1.06)      | 0.08       | 0.79    | 0.60 (0.17-2.10)             | 0.56 (0.23-1.34) | 0.93 (0.38-2.23) | 0.54 (0.19-1.54)  | 0.84                | 1.00       |            |
| rs7045735  | FREQ        | 9          | Male   | 0.39 | 344 | 0.79 (0.49-1.26)      | 0.32       | 1.00    | 0.49 (0.17-1.40)             | 1.09 (0.45-2.63) | 0.71 (0.30-1.69) | 0.91 (0.32-2.53)  | 0.70                | 1.00       |            |
|            |             |            | Female | 0.42 | 373 | 0.87 (0.53-1.43)      | 0.58       | 1.00    | 3.98 (0.84-18.72)            | 0.55 (0.24-1.27) | 0.96 (0.33-2.85) | 0.62 (0.24-1.62)  | 0.09                | 0.67       |            |
| rs7024495  | FREQ        | 9          | Male   | 0.48 | 386 | 0.90 (0.56-1.45)      | 0.67       | 1.00    | 0.57 (0.21-1.56)             | 1.08 (0.42-2.79) | 0.99 (0.41-2.39) | 1.01 (0.38-2.70)  | 0.80                | 1.00       |            |
|            |             |            | Female | 0.50 | 402 | 0.89 (0.53-1.48)      | 0.65       | 1.00    | 3.46 (0.73-16.27)            | 0.77 (0.33-1.80) | 1.64 (0.48-5.66) | 0.30 (0.11-0.81)  | 0.02                | 0.30       |            |
| rs7023210  | FREQ        | 9          | Male   | 0.48 | 385 | 0.86 (0.54-1.39)      | 0.55       | 1.00    | 0.53 (0.20-1.41)             | 0.99 (0.38-2.57) | 0.92 (0.38-2.24) | 1.12 (0.42-2.97)  | 0.73                | 1.00       |            |
|            |             |            | Female | 0.49 | 402 | 0.89 (0.53-1.48)      | 0.65       | 1.00    | 3.46 (0.74-16.31)            | 0.77 (0.33-1.81) | 1.53 (0.44-5.32) | 0.32 (0.12-0.88)  | 0.03                | 0.38       |            |
| rs947513   | FREQ        | 9          | Male   | 0.45 | 386 | 0.87 (0.64-1.18)      | 0.38       | 1.00    | 0.58 (0.30-1.12)             | 0.93 (0.48-1.80) | 0.84 (0.48-1.48) | 1.21 (0.68-2.15)  | 0.43                | 1.00       |            |
|            |             |            | Female | 0.45 | 403 | 0.88 (0.64-1.22)      | 0.45       | 1.00    | 1.05 (0.51-2.18)             | 1.01 (0.59-1.71) | 1.07 (0.51-2.25) | 0.51 (0.25-1.04)  | 0.37                | 0.98       |            |
| rs10819615 | FREQ        | 9          | Male   | 0.37 | 384 | 1.11 (0.72-1.73)      | 0.63       | 1.00    | 2.67 (0.97-7.34)             | 0.77 (0.31-1.91) | 1.00 (0.45-2.19) | 0.86 (0.35-2.11)  | 0.26                | 0.98       |            |
|            |             |            | Female | 0.34 | 400 | 1.14 (0.72-1.81)      | 0.57       | 1.00    | 0.82 (0.29-2.28)             | 1.04 (0.46-2.35) | 0.51 (0.19-1.36) | 3.85 (1.37-10.83) | 0.03                | 0.34       |            |
| rs3897499  | FREQ        | 9          | Male   | 0.36 | 383 | 1.00 (0.65-1.54)      | 0.99       | 0.99    | 0.91 (0.35-2.36)             | 0.75 (0.32-1.77) | 0.92 (0.42-2.03) | 1.64 (0.66-4.08)  | 0.65                | 1.00       |            |
|            |             |            | Female | 0.34 | 400 | 0.98 (0.62-1.55)      | 0.95       | 1.00    | 1.37 (0.48-3.90)             | 1.15 (0.52-2.57) | 1.78 (0.65-4.85) | 0.37 (0.15-0.95)  | 0.10                | 0.71       |            |
| rs4240446  | FREQ        | 9          | Male   | 0.14 | 370 | 1.14 (0.75-1.74)      | 0.54       | 1.00    | 0.57 (0.20-1.64)             | 1.68 (0.67-4.17) | 1.20 (0.51-2.85) | 1.32 (0.62-2.83)  | 0.42                | 1.00       |            |
|            |             |            | Female | 0.15 | 381 | 0.72 (0.44-1.19)      | 0.20       | 0.98    | 0.36 (0.08-1.61)             | 0.73 (0.32-1.70) | 1.07 (0.39-2.92) | 0.74 (0.27-2.03)  | 0.67                | 1.00       |            |
| rs10988645 | FREQ        | 9          | Male   | 0.30 | 386 | 0.75 (0.49-1.15)      | 0.18       | 0.97    | 0.88 (0.34-2.27)             | 0.86 (0.37-1.99) | 0.61 (0.28-1.34) | 0.70 (0.29-1.71)  | 0.92                | 1.00       |            |
|            |             |            | Female | 0.28 | 403 | 1.00 (0.63-1.57)      | 0.98       | 1.00    | 1.45 (0.51-4.12)             | 1.15 (0.52-2.54) | 1.32 (0.51-3.42) | 0.46 (0.18-1.21)  | 0.32                | 0.96       |            |
| rs3829905  | FREQ        | 9          | Male   | 0.36 | 328 | 0.96 (0.60-1.54)      | 0.88       | 1.00    | 0.91 (0.32-2.58)             | 0.91 (0.37-2.23) | 0.76 (0.32-1.77) | 1.55 (0.55-4.32)  | 0.76                | 1.00       |            |
|            |             |            | Female | 0.35 | 356 | 0.89 (0.55-1.44)      | 0.63       | 1.00    | 0.94 (0.31-2.80)             | 1.24 (0.54-2.88) | 1.49 (0.52-4.28) | 0.35 (0.13-0.94)  | 0.16                | 0.85       |            |
| rs2277200  | FREQ        | 9          | Male   | 0.33 | 386 | 0.74 (0.54-1.02)      | 0.07       | 0.75    | 0.83 (0.42-1.62)             | 0.76 (0.40-1.44) | 0.56 (0.30-1.04) | 0.90 (0.48-1.68)  | 0.73                | 1.00       |            |
|            |             |            | Female | 0.31 | 403 | 0.90 (0.63-1.29)      | 0.58       | 1.00    | 1.27 (0.59-2.77)             | 1.05 (0.56-1.97) | 0.99 (0.45-2.16) | 0.54 (0.26-1.12)  | 0.38                | 0.98       |            |
| rs2900286  | FREQ        | 9          | Male   | 0.33 | 386 | 0.76 (0.55-1.05)      | 0.10       | 0.84    | 0.83 (0.42-1.62)             | 0.78 (0.41-1.50) | 0.60 (0.32-1.11) | 0.90 (0.48-1.68)  | 0.82                | 1.00       |            |
|            |             |            | Female | 0.31 | 403 | 0.91 (0.64-1.30)      | 0.60       | 1.00    | 1.31 (0.61-2.83)             | 1.05 (0.56-1.97) | 0.99 (0.45-2.16) | 0.54 (0.26-1.12)  | 0.36                | 0.98       |            |
| rs7873936  | FREQ        | 9          | Male   | 0.19 | 386 | 1.38 (0.88-2.15)      | 0.16       | 0.95    | 1.19 (0.43-3.27)             | 0.65 (0.27-1.57) | 1.58 (0.69-3.62) | 3.11 (1.23-7.92)  | 0.11                | 0.82       |            |
|            |             |            | Female | 0.17 | 403 | 0.88 (0.54-1.45)      | 0.62       | 1.00    | 0.88 (0.28-2.74)             | 1.19 (0.52-2.73) | 0.95 (0.32-2.82) | 0.54 (0.19-1.52)  | 0.70                | 1.00       |            |
| rs7852859  | FREQ        | 9          | Male   | 0.12 | 386 | 0.91 (0.59-1.42)      | 0.68       | 1.00    | 0.86 (0.34-2.20)             | 0.61 (0.22-1.67) | 1.12 (0.52-2.41) | 1.02 (0.42-2.48)  | 0.80                | 1.00       |            |
|            |             |            | Female | 0.12 | 403 | 0.92 (0.55-1.54)      | 0.74       | 1.00    | 0.97 (0.31-3.04)             | 1.49 (0.65-3.43) | 0.66 (0.19-2.37) | 0.54 (0.17-1.65)  | 0.48                | 0.99       |            |
| rs1054879  | FREQ        | 9          | Male   | 0.45 | 386 | 1.10 (0.82-1.48)      | 0.53       | 1.00    | 0.82 (0.42-1.58)             | 0.93 (0.49-1.75) | 1.43 (0.82-2.47) | 1.19 (0.67-2.12)  | 0.57                | 1.00       |            |
|            |             |            | Female | 0.48 | 403 | 0.86 (0.63-1.18)      | 0.35       | 1.00    | 0.89 (0.43-1.86)             | 0.86 (0.49-1.49) | 1.75 (0.87-3.53) | 0.45 (0.23-0.88)  | 0.05                | 0.46       |            |
| rs13710    | FREQ        | 9          | Male   | 0.33 | 386 | 1.07 (0.78-1.48)      | 0.67       | 1.00    | 1.79 (0.88-3.62)             | 0.93 (0.46-1.86) | 1.12 (0.65-1.93) | 0.72 (0.37-1.42)  | 0.31                | 0.99       |            |
|            |             |            | Female | 0.29 | 403 | 1.11 (0.78-1.58)      | 0.57       | 1.00    | 1.09 (0.48-2.51)             | 1.13 (0.61-2.11) | 0.97 (0.45-2.09) | 1.21 (0.62-2.36)  | 0.98                | 0.98       |            |
| rs709611   | FREQ        | 9          | Male   | 0.31 | 382 | 1.16 (0.75-1.80)      | 0.50       | 1.00    | 2.07 (0.79-5.48)             | 0.92 (0.40-2.11) | 1.43 (0.65-3.15) | 0.67 (0.27-1.69)  | 0.35                | 0.99       |            |
|            |             |            | Female | 0.28 | 401 | 1.16 (0.73-1.83)      | 0.53       | 1.00    | 1.24 (0.45-3.45)             | 0.82 (0.37-1.83) | 1.30 (0.49-3.44) | 1.56 (0.63-3.86)  | 0.75                | 1.00       |            |
| rs7867364  | FREQ        | 9          | Male   | 0.18 | 386 | 1.00 (0.63-1.57)      | 0.98       | 1.00    | 2.72 (0.92-8.06)             | 0.60 (0.24-1.47) | 1.36 (0.61-3.04) | 0.59 (0.23-1.49)  | 0.10                | 0.80       |            |
|            |             |            | Female | 0.17 | 402 | 0.75 (0.45-1.23)      | 0.24       | 0.99    | 0.72 (0.21-2.41)             | 0.70 (0.30-1.66) | 0.49 (0.16-1.44) | 1.20 (0.46-3.15)  | 0.67                | 1.00       |            |
| rs7863731  | FREQ        | 9          | Male   | 0.37 | 383 | 1.00 (0.73-1.37)      | 0.99       | 1.00    | 0.99 (0.50-1.96)             | 1.45 (0.76-2.74) | 0.68 (0.38-1.20) | 1.16 (0.60-2.25)  | 0.35                | 0.99       |            |
|            |             |            | Female | 0.38 | 396 | 1.11 (0.79-1.56)      | 0.55       | 1.00    | 0.74 (0.36-1.53)             | 0.84 (0.45-1.56) | 1.83 (0.84-3.95) | 1.51 (0.77-2.96)  | 0.22                | 0.89       |            |
| rs1557123  | FREQ        | 9          | Male   | 0.08 | 386 | 0.93 (0.50-1.73)      | 0.81       | 1.00    | 1.05 (0.33-3.34)             | 0.21 (0.03-1.78) | 1.10 (0.36-3.40) | 1.42 (0.42-4.82)  | 0.37                | 1.00       |            |
|            |             |            | Female | 0.08 | 402 | 1.13 (0.60-2.10)      | 0.71       | 1.00    | 1.99 (0.61-6.54)             | 0.68 (0.20-2.26) | 2.54 (0.77-8.37) | 0.24 (0.03-2.00)  | 0.10                | 0.71       |            |
| rs7867693  | FREQ        | 9          | Male   | 0.13 | 386 | 1.14 (0.69-1.88)      | 0.62       | 1.00    | 1.79 (0.60-5.29)             | 0.55 (0.18-1.69) | 1.31 (0.51-3.34) | 1.24 (0.49-3.18)  | 0.48                | 1.00       |            |
|            |             |            | Female | 0.12 | 403 | 0.65 (0.37-1.14)      | 0.13       | 0.92    | 0.48 (0.10-2.29)             | 0.57 (0.21-1.56) | 0.66 (0.21-2.08) | 0.86 (0.31-2.39)  | 0.92                | 0.99       |            |
| rs7868148  | FREQ        | 9          | Male   | 0.27 | 386 | 1.14 (0.82-1.59)      | 0.42       | 1.00    | 1.06 (0.50-2.25)             | 1.89 (1.02-3.53) | 0.67 (0.36-1.22) | 1.42 (0.67-2.99)  | 0.11                | 0.82       |            |
|            |             |            | Female | 0.27 | 403 | 1.20 (0.84-1.72)      | 0.33       | 1.00    | 0.85 (0.39-1.85)             | 0.80 (0.39-1.65) | 2.02 (0.92-4.44) | 1.53 (0.78-2.99)  | 0.23                | 0.90       |            |
| rs10819621 | FREQ        | 9          | Male   | 0.15 | 385 | 1.04 (0.67-1.60)      | 0.87       | 1.00    | 0.99 (0.37-2.62)             | 1.12 (0.48-2.62) | 1.03 (0.49-2.19) | 1.00 (0.39-2.52)  | 1.00                | 1.00       |            |
|            |             |            | Female | 0.15 | 402 | 0.74 (0.46-1.20)      | 0.21       | 0.98    | 0.36 (0.08-1.71)             | 1.18 (0.54-2.58) | 0.59 (0.23-1.51) | 0.70 (0.27-1.82)  | 0.47                | 0.99       |            |
| rs10988653 | FREQ        | 9          | Male   | 0.39 | 386 | 1.04 (0.66-1.62)      | 0.87       | 1.00    | 0.86 (0.33-2.21)             | 1.20 (0.49-2.92) | 1.40 (0.62-3.15) | 0.71 (0.28-1.79)  | 0.70                |            |            |

| SNP        | Gene Region | Chromosome | Gender | MAF  | N   | Marginal Effect       |            |         | Treatment Stratified Effects |                  |                   |                   | Test of Interaction |            |            |
|------------|-------------|------------|--------|------|-----|-----------------------|------------|---------|------------------------------|------------------|-------------------|-------------------|---------------------|------------|------------|
|            |             |            |        |      |     | Likelihood ratio test |            | Placebo | Bupropion                    | Patch            | Spray             | Observed P        | Adjusted P          | Observed P | Adjusted P |
|            |             |            |        |      |     | SNP OR (95% CI)       | Observed P |         |                              |                  |                   |                   |                     |            |            |
| rs2519154  | DBH         | 9          | Female | 0.42 | 403 | 1.17 (0.72-1.90)      | 0.53       | 1.00    | 1.38 (0.45-4.25)             | 0.97 (0.42-2.25) | 1.20 (0.44-3.23)  | 1.29 (0.47-3.53)  | 0.96                | 1.00       |            |
|            |             |            | Male   | 0.43 | 386 | 0.82 (0.52-1.29)      | 0.39       | 0.98    | 0.41 (0.15-1.10)             | 0.92 (0.36-2.32) | 0.98 (0.44-2.19)  | 1.07 (0.40-2.85)  | 0.48                | 1.00       |            |
|            |             |            | Female | 0.40 | 402 | 1.31 (0.81-2.13)      | 0.27       | 0.96    | 1.75 (0.57-5.39)             | 1.24 (0.54-2.85) | 1.76 (0.59-5.21)  | 0.91 (0.36-2.32)  | 0.77                | 1.00       |            |
| rs2797853  | DBH         | 9          | Male   | 0.35 | 385 | 0.86 (0.56-1.33)      | 0.50       | 0.99    | 1.49 (0.55-3.99)             | 0.90 (0.39-2.12) | 0.58 (0.26-1.30)  | 0.84 (0.34-2.03)  | 0.54                | 1.00       |            |
|            |             |            | Female | 0.37 | 403 | 0.92 (0.58-1.46)      | 0.73       | 1.00    | 1.17 (0.41-3.33)             | 0.86 (0.37-1.96) | 0.89 (0.34-2.33)  | 0.86 (0.34-2.17)  | 0.97                | 1.00       |            |
| rs6479643  | DBH         | 9          | Male   | 0.36 | 386 | 1.11 (0.81-1.52)      | 0.52       | 0.99    | 1.01 (0.53-1.93)             | 0.96 (0.53-1.76) | 1.32 (0.68-2.55)  | 1.21 (0.64-2.27)  | 0.89                | 1.00       |            |
|            |             |            | Female | 0.38 | 403 | 1.22 (0.88-1.69)      | 0.23       | 0.95    | 1.13 (0.56-2.28)             | 1.21 (0.67-2.20) | 1.62 (0.83-3.17)  | 1.01 (0.52-1.95)  | 0.79                | 1.00       |            |
| rs77905    | DBH         | 9          | Male   | 0.46 | 383 | 0.69 (0.44-1.09)      | 0.12       | 0.82    | 0.96 (0.34-2.72)             | 0.42 (0.17-1.04) | 0.70 (0.31-1.60)  | 0.88 (0.34-2.30)  | 0.61                | 1.00       |            |
|            |             |            | Female | 0.48 | 403 | 1.12 (0.67-1.86)      | 0.66       | 1.00    | 1.10 (0.28-4.29)             | 0.68 (0.30-1.54) | 2.16 (0.62-7.52)  | 1.48 (0.54-4.03)  | 0.41                | 0.99       |            |
| rs2097628  | DBH         | 9          | Male   | 0.03 | NA  | NA                    | NA         | NA      | NA                           | NA               | NA                | NA                | NA                  | NA         |            |
|            |             |            | Female | 0.02 | NA  | NA                    | NA         | NA      | NA                           | NA               | NA                | NA                | NA                  | NA         |            |
| rs2073833  | DBH         | 9          | Male   | 0.40 | 352 | 0.87 (0.55-1.38)      | 0.55       | 0.97    | 1.45 (0.49-4.32)             | 0.70 (0.29-1.70) | 0.61 (0.27-1.39)  | 1.20 (0.45-3.22)  | 0.53                | 1.00       |            |
|            |             |            | Female | 0.41 | 379 | 1.36 (0.83-2.23)      | 0.21       | 0.95    | 0.81 (0.27-2.42)             | 1.16 (0.50-2.71) | 1.61 (0.56-4.68)  | 2.14 (0.80-5.68)  | 0.59                | 1.00       |            |
| rs6271     | DBH         | 9          | Male   | 0.08 | 384 | 0.71 (0.38-1.33)      | 0.27       | 0.97    | 0.20 (0.03-1.67)             | 1.13 (0.36-3.53) | 0.30 (0.08-1.12)  | 1.97 (0.61-6.37)  | 0.07                | 0.53       |            |
|            |             |            | Female | 0.08 | 400 | 0.74 (0.38-1.45)      | 0.37       | 0.99    | 0.42 (0.05-3.54)             | 0.99 (0.34-2.89) | 0.29 (0.06-1.42)  | 1.51 (0.41-5.57)  | 0.36                | 0.98       |            |
| rs10993948 | DBH         | 9          | Male   | 0.03 | NA  | NA                    | NA         | NA      | NA                           | NA               | NA                | NA                | NA                  | NA         |            |
|            |             |            | Female | 0.02 | NA  | NA                    | NA         | NA      | NA                           | NA               | NA                | NA                | NA                  | NA         |            |
| rs10993949 | DBH         | 9          | Male   | 0.03 | NA  | NA                    | NA         | NA      | NA                           | NA               | NA                | NA                | NA                  | NA         |            |
|            |             |            | Female | 0.02 | NA  | NA                    | NA         | NA      | NA                           | NA               | NA                | NA                | NA                  | NA         |            |
| rs3025425  | DBH         | 9          | Male   | 0.03 | NA  | NA                    | NA         | NA      | NA                           | NA               | NA                | NA                | NA                  | NA         |            |
|            |             |            | Female | 0.02 | NA  | NA                    | NA         | NA      | NA                           | NA               | NA                | NA                | NA                  | NA         |            |
| rs129883   | DBH         | 9          | Male   | 0.34 | 386 | 0.82 (0.60-1.14)      | 0.24       | 0.96    | 0.72 (0.35-1.51)             | 0.94 (0.47-1.84) | 0.76 (0.42-1.38)  | 0.90 (0.48-1.66)  | 0.94                | 1.00       |            |
|            |             |            | Female | 0.37 | 403 | 0.97 (0.69-1.38)      | 0.88       | 0.98    | 1.08 (0.46-2.51)             | 1.24 (0.68-2.24) | 0.67 (0.32-1.37)  | 0.94 (0.46-1.92)  | 0.61                | 1.00       |            |
| rs129915   | DBH         | 9          | Male   | 0.27 | 358 | 1.10 (0.71-1.72)      | 0.66       | 0.98    | 1.34 (0.50-3.62)             | 1.04 (0.44-2.48) | 0.85 (0.38-1.91)  | 1.40 (0.55-3.55)  | 0.84                | 1.00       |            |
|            |             |            | Female | 0.29 | 373 | 1.41 (0.87-2.26)      | 0.16       | 0.91    | 1.07 (0.36-3.18)             | 2.16 (0.92-5.07) | 1.18 (0.43-3.21)  | 1.19 (0.47-2.99)  | 0.69                | 1.00       |            |
| rs129884   | DBH         | 9          | Male   | 0.17 | 386 | 1.22 (0.81-1.81)      | 0.34       | 0.98    | 0.60 (0.23-1.57)             | 1.38 (0.64-2.97) | 1.54 (0.71-3.31)  | 1.41 (0.64-3.11)  | 0.42                | 0.99       |            |
|            |             |            | Female | 0.17 | 402 | 1.06 (0.68-1.64)      | 0.81       | 1.00    | 1.13 (0.40-3.19)             | 0.79 (0.34-1.83) | 3.01 (1.27-7.15)  | 0.46 (0.18-1.18)  | 0.02                | 0.21       |            |
| rs129886   | DBH         | 9          | Male   | 0.18 | 384 | 1.43 (0.96-2.13)      | 0.08       | 0.70    | 0.76 (0.30-1.93)             | 1.64 (0.77-3.51) | 2.08 (0.99-4.36)  | 1.29 (0.55-2.99)  | 0.39                | 0.99       |            |
|            |             |            | Female | 0.18 | 401 | 0.87 (0.56-1.36)      | 0.55       | 1.00    | 1.15 (0.47-2.81)             | 0.48 (0.19-1.24) | 2.27 (0.97-5.30)  | 0.44 (0.17-1.15)  | 0.03                | 0.26       |            |
| rs2073835  | DBH         | 9          | Male   | 0.29 | 354 | 1.01 (0.64-1.58)      | 0.97       | 0.97    | 1.31 (0.48-3.60)             | 0.92 (0.39-2.15) | 0.72 (0.32-1.61)  | 1.46 (0.55-3.84)  | 0.67                | 1.00       |            |
|            |             |            | Female | 0.31 | 378 | 1.33 (0.83-2.13)      | 0.23       | 0.96    | 0.72 (0.26-2.02)             | 2.14 (0.92-4.98) | 1.30 (0.47-3.55)  | 1.24 (0.49-3.12)  | 0.45                | 1.00       |            |
| rs12244716 | CALY        | 10         | Male   | 0.14 | 384 | 1.01 (0.65-1.56)      | 0.97       | 0.97    | 1.29 (0.52-3.22)             | 0.89 (0.36-2.18) | 1.31 (0.58-2.94)  | 0.68 (0.27-1.67)  | 0.67                | 0.67       |            |
|            |             |            | Female | 0.12 | 401 | 1.01 (0.61-1.67)      | 0.98       | 0.98    | 0.28 (0.06-1.27)             | 1.08 (0.43-2.70) | 1.79 (0.72-4.43)  | 1.24 (0.38-4.10)  | 0.14                | 0.36       |            |
| rs2275723  | CALY        | 10         | Male   | 0.10 | 384 | 1.07 (0.63-1.84)      | 0.80       | 0.93    | 1.64 (0.53-5.12)             | 0.69 (0.24-2.01) | 1.43 (0.53-3.84)  | 0.82 (0.26-2.57)  | 0.63                | 0.91       |            |
|            |             |            | Female | 0.09 | 399 | 0.89 (0.48-1.67)      | 0.72       | 0.98    | 0.17 (0.02-1.37)             | 1.31 (0.51-3.36) | 1.40 (0.31-6.21)  | 1.04 (0.24-4.41)  | 0.20                | 0.43       |            |
| rs2298122  | CALY        | 10         | Male   | 0.19 | 354 | 1.14 (0.76-1.71)      | 0.53       | 0.82    | 0.92 (0.37-2.29)             | 1.30 (0.59-2.91) | 1.61 (0.79-3.31)  | 0.70 (0.28-1.76)  | 0.50                | 0.84       |            |
|            |             |            | Female | 0.17 | 378 | 0.97 (0.62-1.52)      | 0.90       | 0.98    | 0.56 (0.19-1.61)             | 1.03 (0.46-2.29) | 1.58 (0.69-3.61)  | 0.76 (0.25-2.26)  | 0.45                | 0.50       |            |
| rs11101694 | CALY        | 10         | Male   | 0.13 | 353 | 0.87 (0.54-1.40)      | 0.57       | 0.79    | 0.76 (0.26-2.23)             | 0.65 (0.24-1.80) | 1.35 (0.59-3.09)  | 0.68 (0.24-1.94)  | 0.64                | 0.81       |            |
|            |             |            | Female | 0.12 | 379 | 1.16 (0.70-1.93)      | 0.57       | 0.93    | 0.27 (0.06-1.24)             | 1.33 (0.53-3.34) | 1.95 (0.78-4.91)  | 1.69 (0.49-5.18)  | 0.09                | 0.25       |            |
| rs10776672 | CALY        | 10         | Male   | 0.11 | 385 | 1.20 (0.75-1.93)      | 0.46       | 0.83    | 1.14 (0.45-2.90)             | 2.64 (0.94-7.44) | 1.41 (0.60-3.32)  | 0.30 (0.06-1.35)  | 0.07                | 0.24       |            |
|            |             |            | Female | 0.10 | 403 | 0.96 (0.57-1.62)      | 0.89       | 1.00    | 1.94 (0.68-5.54)             | 0.47 (0.15-1.43) | 1.14 (0.43-3.00)  | 0.91 (0.28-2.96)  | 0.31                | 0.52       |            |
| rs4838721  | CALY        | 10         | Male   | 0.19 | 386 | 1.17 (0.80-1.73)      | 0.42       | 0.80    | 1.32 (0.58-3.02)             | 1.50 (0.68-3.29) | 1.82 (0.88-3.79)  | 0.47 (0.19-1.15)  | 0.09                | 0.23       |            |
|            |             |            | Female | 0.17 | 403 | 0.95 (0.61-1.47)      | 0.81       | 0.99    | 0.74 (0.28-1.93)             | 0.99 (0.45-2.17) | 1.27 (0.58-2.78)  | 0.73 (0.25-2.14)  | 0.79                | 0.79       |            |
| rs7932167  | DRD4        | 11         | Male   | 0.23 | 385 | 0.94 (0.60-1.46)      | 0.79       | 1.00    | 0.96 (0.36-2.61)             | 0.76 (0.33-1.76) | 1.64 (0.74-3.59)  | 0.50 (0.18-1.42)  | 0.30                | 0.77       |            |
|            |             |            | Female | 0.21 | 402 | 1.19 (0.75-1.89)      | 0.47       | 0.95    | 2.20 (0.78-6.21)             | 1.65 (0.72-3.80) | 0.57 (0.21-1.56)  | 0.93 (0.36-2.36)  | 0.22                | 0.68       |            |
| rs12280580 | DRD4        | 11         | Male   | 0.30 | 386 | 1.10 (0.80-1.51)      | 0.55       | 1.00    | 0.47 (0.21-1.02)             | 1.61 (0.85-3.06) | 1.80 (0.98-3.32)  | 0.85 (0.45-1.60)  | 0.02                | 0.14       |            |
|            |             |            | Female | 0.28 | 403 | 0.99 (0.69-1.42)      | 0.96       | 1.00    | 1.00 (0.43-2.29)             | 1.63 (0.84-3.16) | 0.64 (0.29-1.41)  | 0.84 (0.43-1.63)  | 0.31                | 0.74       |            |
| rs4987059  | DRD4        | 11         | Male   | 0.06 | 385 | 0.84 (0.44-1.63)      | 0.61       | 1.00    | 0.32 (0.04-2.69)             | 1.46 (0.36-5.85) | 1.43 (0.54-3.83)  | 0.20 (0.02-1.66)  | 0.16                | 0.57       |            |
|            |             |            | Female | 0.05 | 403 | 1.59 (0.80-3.16)      | 0.20       | 0.76    | 2.08 (0.49-8.88)             | 1.53 (0.46-5.14) | 1.22 (0.32-4.68)  | 1.79 (0.39-8.36)  | 0.96                | 0.96       |            |
| rs936461   | DRD4        | 11         | Male   | 0.36 | 370 | 1.01 (0.74-1.38)      | 0.94       | 1.00    | 0.79 (0.37-1.68)             | 1.13 (0.62-2.07) | 1.34 (0.77-2.34)  | 0.72 (0.36-1.42)  | 0.47                | 0.89       |            |
|            |             |            | Female | 0.36 | 386 | 1.46 (1.01-2.09)      | 0.04       | 0.29    | 1.58 (0.69-3.64)             | 2.47 (1.28-4.79) | 0.93 (0.44-1.99)  | 1.02 (0.49-2.13)  | 0.19                | 0.66       |            |
| rs1800443  | DRD4        | 11         | Male   | 0.00 | NA  | NA                    | NA         | NA      | NA                           | NA               | NA                | NA                | NA                  | NA         |            |
|            |             |            | Female | 0.00 | NA  | NA                    | NA         | NA      | NA                           | NA               | NA                | NA                | NA                  | NA         |            |
| rs11246226 | DRD4        | 11         | Male   | 0.50 | 345 | 1.05 (0.76-1.44)      | 0.78       | 1.00    | 0.65 (0.31-1.36)             | 1.25 (0.65-2.39) | 1.72 (0.97-3.06)  | 0.63 (0.32-1.26)  | 0.07                | 0.35       |            |
|            |             |            | Female | 0.48 | 371 | 0.97 (0.70-1.36)      | 0.87       | 1.00    | 1.10 (0.53-2.30)             | 1.02 (0.56-1.85) | 1.02 (0.53-1.96)  | 0.76 (0.37-1.57)  | 0.90                | 0.99       |            |
| rs936465   | DRD4        | 11         | Male   | 0.47 | 341 | 1.10 (0.79-1.53)      | 0.57       | 1.00    | 0.73 (0.35-1.53)             | 1.69 (0.86-3.30) | 1.74 (0.98-3.10)  | 0.43 (0.20-0.96)  | 0.01                | 0.08       |            |
|            |             |            | Female | 0.45 | 369 | 0.96 (0.69-1.34)      | 0.81       | 1.00    | 1.21 (0.59-2.47)             | 1.21 (0.67-2.17) | 0.79 (0.40-1.54)  | 0.69 (0.34-1.41)  | 0.54                | 0.88       |            |
| rs10902188 | DRD4        | 11         | Male   | 0.09 | 386 | 0.61 (0.34-1.09)      | 0.08       | 0.51    | 0.54 (0.12-2.46)             | 0.89 (0.36-2.20) | 0.35 (0.12-1.04)  | 0.84 (0.15-4.63)  | 0.60                | 0.92       |            |
|            |             |            | Female | 0.09 | 403 | 1.01 (0.56-1.82)      | 0.97       | 0.97    | 1.34 (0.38-4.66)             | 2.02 (0.68-6.00) | 0.92 (0.25-3.13)  | 0.42 (0.12-1.54)  | 0.29                | 0.79       |            |
| rs6598007  | DRD4        | 11         | Male   | 0.06 | 386 | 1.18 (0.62-2.25)      | 0.62       | 1.00    | 2.10 (0.53-8.31)             | 0.75 (0.21-2.65) | 1.46 (0.48-4.40)  | 0.77 (0.14-4.07)  | 0.66                | 0.86       |            |
|            |             |            | Female | 0.06 | 403 | 1.66 (0.87-3.18)      | 0.13       | 0.65    | 1.29 (0.32-5.27)             | 0.83 (0.26-2.61) | 3.82 (0.82-17.82) | 3.07 (0.80-11.85) | 0.31                | 0.79       |            |
| rs4963126  | DRD4        | 11         | Male   | 0.45 | 386 | 1.00 (0.63-1.61)      | 0.99       | 0.99    | 1.45 (0.50-4.18)             | 0.59 (0.23-1.52) | 0.84 (0.36-1.96)  | 1.60 (0.59-4.34)  | 0.44                | 0.90       |            |
|            |             |            | Female | 0.49 | 402 | 1.23 (0.73-2.07)      | 0.44       | 0.96    | 1.68 (0.50-5.59)             | 0.74 (0.29-1.89) | 1.03 (0.36-2.96)  | 2.10 (0.69-6.36)  | 0.49                | 0.88       |            |
| rs11603404 | DRD4        | 11         | Male   | 0.13 | 386 | 0.98 (0.59-1.61)      | 0.92       | 1.00    | 1.15 (0.42-3.15)             | 0.81 (0.31-2.14) | 0.82 (0.27-2.50)  | 1.15 (0.44-3.10)  | 0.93                | 0.93       |            |
|            |             |            | Female | 0.14 | 403 | 1.20 (0.72-1.99)      | 0.48       | 0.93    | 0.90 (0.29-2.81)             | 1.02 (0.42-2.47) | 2.16 (0.80-5.86)  | 0.99 (0.31-3.17)  | 0.61                | 0.91       |            |
| rs1004446  | TH          | 11         | Male   | 0.37 | 385 | 1.07 (0.78-1.47)      | 0.66       | 0.99    | 1.26 (0.62-2.57)             | 1.08 (0.53-2.22) | 1.                |                   |                     |            |            |

| SNP        | Gene Region | Chromosome | Gender | MAF                    | N   | Marginal Effect       |                         |         | Treatment Stratified Effects |                  |                  |                  | Test of Interaction P |            |            |
|------------|-------------|------------|--------|------------------------|-----|-----------------------|-------------------------|---------|------------------------------|------------------|------------------|------------------|-----------------------|------------|------------|
|            |             |            |        |                        |     | Likelihood ratio test |                         | Placebo | Bupropion                    | Patch            | Spray            | Observed P       | Adjusted P            | Observed P | Adjusted P |
|            |             |            |        |                        |     | SNP OR (95% CI)       | Observed P              |         |                              |                  |                  |                  |                       |            |            |
| rs6265     | BDNF        | 11         | Female | 0.26                   | 396 | 1.13 (0.78-1.63)      | 0.53                    | 0.95    | 0.83 (0.32-2.11)             | 1.33 (0.72-2.49) | 1.30 (0.58-2.89) | 0.98 (0.48-2.01) | 0.81                  | 1.00       |            |
|            |             |            | Male   | 0.19                   | 386 | 0.65 (0.43-0.98)      | 0.04                    | 0.28    | 0.66 (0.29-1.52)             | 0.55 (0.23-1.31) | 0.45 (0.21-0.99) | 1.19 (0.52-2.74) | 0.42                  | 0.94       |            |
| rs11030101 | BDNF        | 11         | Female | 0.18                   | 403 | 1.09 (0.72-1.64)      | 0.69                    | 0.99    | 0.69 (0.25-1.91)             | 1.32 (0.60-2.90) | 0.94 (0.42-2.13) | 1.39 (0.65-3.00) | 0.66                  | 1.00       |            |
|            |             |            | Male   | 0.46                   | 385 | 0.88 (0.55-1.42)      | 0.61                    | 0.96    | 0.57 (0.21-1.56)             | 1.22 (0.46-3.27) | 1.29 (0.54-3.06) | 0.59 (0.23-1.55) | 0.47                  | 0.96       |            |
| rs11030104 | BDNF        | 11         | Female | 0.48                   | 403 | 0.61 (0.36-1.03)      | 0.07                    | 0.43    | 0.85 (0.25-2.91)             | 0.48 (0.18-1.28) | 0.67 (0.24-1.85) | 0.57 (0.21-1.55) | 0.91                  | 0.99       |            |
|            |             |            | Male   | 0.21                   | 386 | 0.71 (0.48-1.05)      | 0.08                    | 0.48    | 0.86 (0.40-1.85)             | 0.51 (0.22-1.23) | 0.56 (0.27-1.18) | 1.00 (0.46-2.18) | 0.60                  | 0.85       |            |
| rs1401635  | BDNF        | 11         | Female | 0.20                   | 403 | 1.21 (0.82-1.77)      | 0.34                    | 0.87    | 0.78 (0.31-1.96)             | 1.33 (0.61-2.90) | 1.09 (0.52-2.29) | 1.63 (0.80-3.33) | 0.62                  | 1.00       |            |
|            |             |            | Male   | 0.30                   | 385 | 1.21 (0.87-1.67)      | 0.26                    | 0.81    | 1.40 (0.66-2.94)             | 1.35 (0.74-2.45) | 0.81 (0.44-1.52) | 1.47 (0.76-2.87) | 0.54                  | 0.97       |            |
| rs12291063 | BDNF        | 11         | Female | 0.27                   | 403 | 1.18 (0.82-1.69)      | 0.37                    | 0.87    | 1.27 (0.56-2.89)             | 1.34 (0.71-2.51) | 1.28 (0.59-2.78) | 0.89 (0.44-1.83) | 0.85                  | 1.00       |            |
|            |             |            | Male   | 1.27 × 10 <sup>3</sup> | NA  | NA                    | NA                      | NA      | NA                           | NA               | NA               | NA               | NA                    | NA         |            |
| rs2049045  | BDNF        | 11         | Female | 3.71 × 10 <sup>3</sup> | NA  | NA                    | NA                      | NA      | NA                           | NA               | NA               | NA               | NA                    | NA         |            |
|            |             |            | Male   | 0.19                   | 386 | 0.62 (0.41-0.95)      | 0.02                    | 0.20    | 0.57 (0.24-1.35)             | 0.55 (0.23-1.31) | 0.45 (0.21-0.99) | 1.19 (0.52-2.75) | 0.41                  | 0.93       |            |
| rs11030107 | BDNF        | 11         | Female | 0.17                   | 403 | 1.03 (0.68-1.57)      | 0.89                    | 1.00    | 0.72 (0.26-1.97)             | 1.32 (0.60-2.90) | 0.77 (0.33-1.81) | 1.36 (0.61-3.02) | 0.61                  | 1.00       |            |
|            |             |            | Male   | 0.26                   | 377 | 1.45 (0.94-2.23)      | 0.09                    | 0.49    | 1.11 (0.42-2.93)             | 1.89 (0.81-4.40) | 0.82 (0.37-1.81) | 2.88 (1.13-7.31) | 0.19                  | 0.78       |            |
| rs10835210 | BDNF        | 11         | Female | 0.22                   | 396 | 1.03 (0.64-1.65)      | 0.91                    | 0.99    | 0.56 (0.17-1.89)             | 1.30 (0.58-2.92) | 1.51 (0.57-4.01) | 0.79 (0.31-2.03) | 0.52                  | 0.99       |            |
|            |             |            | Male   | 0.42                   | 386 | 1.08 (0.78-1.49)      | 0.66                    | 0.96    | 0.82 (0.41-1.64)             | 1.26 (0.68-2.34) | 1.32 (0.72-2.42) | 0.89 (0.44-1.79) | 0.67                  | 0.99       |            |
| rs7103873  | BDNF        | 11         | Female | 0.48                   | 403 | 0.67 (0.48-0.94)      | 0.02                    | 0.17    | 0.82 (0.40-1.68)             | 0.64 (0.36-1.15) | 0.64 (0.32-1.28) | 0.64 (0.32-1.30) | 0.95                  | 0.95       |            |
|            |             |            | Male   | 0.46                   | 386 | 0.90 (0.56-1.44)      | 0.66                    | 0.98    | 0.57 (0.21-1.56)             | 1.22 (0.46-3.25) | 1.28 (0.54-3.06) | 0.64 (0.25-1.66) | 0.51                  | 0.97       |            |
| rs6484320  | BDNF        | 11         | Female | 0.48                   | 403 | 0.62 (0.37-1.04)      | 0.07                    | 0.45    | 0.80 (0.23-2.77)             | 0.48 (0.18-1.28) | 0.74 (0.27-2.02) | 0.57 (0.21-1.55) | 0.90                  | 0.99       |            |
|            |             |            | Male   | 0.22                   | 386 | 0.67 (0.45-0.98)      | 0.04                    | 0.28    | 0.86 (0.40-1.85)             | 0.48 (0.20-1.15) | 0.55 (0.27-1.14) | 0.84 (0.39-1.81) | 0.67                  | 0.71       |            |
| rs1013402  | BDNF        | 11         | Female | 0.20                   | 403 | 1.21 (0.83-1.75)      | 0.33                    | 0.86    | 0.78 (0.31-1.96)             | 1.31 (0.62-2.77) | 1.05 (0.51-2.17) | 1.65 (0.84-3.24) | 0.58                  | 1.00       |            |
|            |             |            | Male   | 0.31                   | 386 | 1.40 (0.91-2.14)      | 0.13                    | 0.59    | 1.62 (0.62-4.19)             | 1.84 (0.79-4.28) | 0.82 (0.38-1.79) | 1.81 (0.72-4.54) | 0.46                  | 0.96       |            |
| rs988748   | BDNF        | 11         | Female | 0.27                   | 402 | 1.09 (0.69-1.72)      | 0.71                    | 0.99    | 1.03 (0.37-2.88)             | 1.35 (0.61-3.00) | 1.42 (0.54-3.75) | 0.69 (0.28-1.70) | 0.66                  | 1.00       |            |
|            |             |            | Male   | 0.22                   | 386 | 0.67 (0.45-0.98)      | 0.04                    | 0.28    | 0.86 (0.40-1.85)             | 0.48 (0.20-1.15) | 0.55 (0.27-1.14) | 0.84 (0.39-1.81) | 0.67                  | 0.71       |            |
| rs10767664 | BDNF        | 11         | Female | 0.21                   | 403 | 1.20 (0.83-1.73)      | 0.34                    | 0.88    | 0.75 (0.29-1.89)             | 1.31 (0.62-2.77) | 1.05 (0.51-2.17) | 1.65 (0.84-3.24) | 0.54                  | 0.99       |            |
|            |             |            | Male   | 0.22                   | 384 | 0.64 (0.41-1.00)      | 0.05                    | 0.33    | 0.97 (0.37-2.52)             | 0.40 (0.16-0.99) | 0.56 (0.25-1.26) | 0.86 (0.34-2.16) | 0.51                  | 0.97       |            |
| rs2030324  | BDNF        | 11         | Female | 0.20                   | 403 | 1.40 (0.87-2.23)      | 0.17                    | 0.62    | 0.92 (0.31-2.73)             | 1.37 (0.58-3.24) | 1.49 (0.57-3.89) | 1.82 (0.73-4.54) | 0.82                  | 1.00       |            |
|            |             |            | Male   | 0.48                   | 385 | 0.95 (0.70-1.30)      | 0.75                    | 0.94    | 1.33 (0.68-2.59)             | 0.86 (0.46-1.60) | 0.62 (0.34-1.11) | 1.31 (0.69-2.47) | 0.24                  | 0.84       |            |
| rs11030119 | BDNF        | 11         | Female | 0.47                   | 403 | 1.29 (0.92-1.80)      | 0.14                    | 0.55    | 0.87 (0.41-1.84)             | 1.44 (0.80-2.58) | 1.29 (0.64-2.60) | 1.53 (0.77-3.03) | 0.70                  | 1.00       |            |
|            |             |            | Male   | 0.29                   | 386 | 1.29 (0.93-1.79)      | 0.13                    | 0.59    | 1.55 (0.74-3.24)             | 1.39 (0.75-2.58) | 0.88 (0.47-1.67) | 1.56 (0.80-3.06) | 0.58                  | 0.92       |            |
| rs7934165  | BDNF        | 11         | Female | 0.26                   | 403 | 1.14 (0.78-1.65)      | 0.50                    | 0.94    | 1.11 (0.47-2.64)             | 1.18 (0.61-2.30) | 1.43 (0.63-3.22) | 0.93 (0.45-1.89) | 0.89                  | 1.00       |            |
|            |             |            | Male   | 0.48                   | 384 | 0.76 (0.46-1.26)      | 0.29                    | 0.80    | 1.15 (0.37-3.63)             | 0.87 (0.32-2.37) | 0.35 (0.13-0.93) | 1.14 (0.39-3.33) | 0.31                  | 0.91       |            |
| rs11030121 | BDNF        | 11         | Female | 0.47                   | 400 | 1.27 (0.75-2.18)      | 0.37                    | 0.88    | 0.60 (0.21-1.73)             | 1.71 (0.70-4.15) | 1.29 (0.37-4.55) | 1.74 (0.52-5.84) | 0.47                  | 0.97       |            |
|            |             |            | Male   | 0.30                   | 385 | 1.25 (0.90-1.72)      | 0.19                    | 0.70    | 1.61 (0.78-3.32)             | 1.27 (0.69-2.33) | 0.85 (0.45-1.60) | 1.49 (0.77-2.86) | 0.53                  | 0.97       |            |
| rs12273363 | BDNF        | 11         | Female | 0.27                   | 403 | 1.14 (0.79-1.65)      | 0.49                    | 0.94    | 1.05 (0.44-2.51)             | 1.27 (0.68-2.40) | 1.35 (0.59-3.04) | 0.93 (0.45-1.89) | 0.89                  | 1.00       |            |
|            |             |            | Male   | 0.20                   | 381 | 1.35 (0.87-2.10)      | 0.18                    | 0.71    | 1.39 (0.52-3.73)             | 1.18 (0.50-2.75) | 0.98 (0.44-2.20) | 2.34 (0.94-5.81) | 0.54                  | 0.96       |            |
| rs908867   | BDNF        | 11         | Female | 0.16                   | 400 | 1.26 (0.77-2.07)      | 0.35                    | 0.88    | 0.84 (0.25-2.87)             | 2.39 (0.99-5.75) | 1.17 (0.44-3.11) | 0.84 (0.32-2.23) | 0.37                  | 0.94       |            |
|            |             |            | Male   | 0.09                   | 385 | 1.15 (0.69-1.90)      | 0.60                    | 0.98    | 1.63 (0.65-4.09)             | 2.15 (0.76-6.11) | 0.52 (0.15-1.77) | 0.79 (0.28-2.19) | 0.24                  | 0.87       |            |
| rs1491850  | BDNF        | 11         | Female | 0.10                   | 403 | 1.05 (0.61-1.82)      | 0.86                    | 1.00    | 1.59 (0.57-4.49)             | 0.46 (0.15-1.44) | 1.35 (0.39-4.71) | 1.43 (0.50-4.16) | 0.33                  | 0.92       |            |
|            |             |            | Male   | 0.43                   | 384 | 0.83 (0.60-1.15)      | 0.27                    | 0.80    | 0.88 (0.41-1.88)             | 0.62 (0.30-1.26) | 0.68 (0.39-1.19) | 1.32 (0.71-2.46) | 0.35                  | 0.93       |            |
| rs2049048  | BDNF        | 11         | Female | 0.37                   | 402 | 1.34 (0.97-1.86)      | 0.07                    | 0.46    | 0.97 (0.46-2.03)             | 2.05 (1.11-3.80) | 1.11 (0.60-2.07) | 1.31 (0.68-2.54) | 0.39                  | 0.95       |            |
|            |             |            | Male   | 0.16                   | 386 | 0.94 (0.62-1.44)      | 0.79                    | 0.79    | 0.99 (0.35-2.79)             | 1.25 (0.51-3.06) | 0.52 (0.23-1.20) | 1.28 (0.62-2.66) | 0.37                  | 0.93       |            |
| rs11214589 | ANKK1       | 11         | Female | 0.13                   | 403 | 0.67 (0.41-1.09)      | 0.10                    | 0.49    | 0.58 (0.18-1.86)             | 0.29 (0.10-0.86) | 1.12 (0.34-3.69) | 1.14 (0.49-2.62) | 0.17                  | 0.73       |            |
|            |             |            | Male   | 0.48                   | 367 | 0.59 (0.36-0.97)      | 0.04                    | 0.47    | 0.79 (0.24-2.58)             | 0.16 (0.06-0.44) | 0.91 (0.38-2.16) | 1.27 (0.40-4.04) | 0.12                  | 0.72       |            |
| rs94938010 | ANKK1       | 11         | Female | 0.49                   | 383 | 1.39 (0.78-2.48)      | 0.26                    | 0.91    | 0.90 (0.28-2.85)             | 1.65 (0.59-4.58) | 1.22 (0.37-4.00) | 2.06 (0.53-8.01) | 0.80                  | 1.00       |            |
|            |             |            | Male   | 0.14                   | 386 | 1.08 (0.69-1.68)      | 0.74                    | 1.00    | 0.99 (0.40-2.45)             | 1.69 (0.66-4.32) | 0.99 (0.45-2.18) | 0.86 (0.33-2.26) | 0.76                  | 1.00       |            |
| rs754672   | ANKK1       | 11         | Female | 0.15                   | 403 | 1.51 (0.98-2.32)      | 0.06                    | 0.52    | 2.06 (0.92-4.63)             | 1.62 (0.76-3.47) | 1.51 (0.61-3.76) | 0.87 (0.32-2.37) | 0.61                  | 0.99       |            |
|            |             |            | Male   | 0.46                   | 386 | 0.97 (0.61-1.55)      | 0.91                    | 1.00    | 1.58 (0.51-4.89)             | 1.00 (0.40-2.52) | 1.25 (0.52-2.98) | 0.51 (0.21-1.27) | 0.40                  | 1.00       |            |
| rs3897584  | ANKK1       | 11         | Female | 0.48                   | 402 | 0.66 (0.40-1.09)      | 0.11                    | 0.68    | 1.06 (0.31-3.60)             | 0.46 (0.19-1.10) | 0.97 (0.33-2.82) | 0.55 (0.21-1.43) | 0.59                  | 1.00       |            |
|            |             |            | Male   | 0.34                   | 385 | 0.99 (0.64-1.52)      | 0.96                    | 1.00    | 0.92 (0.36-2.38)             | 1.24 (0.53-2.90) | 1.15 (0.52-2.51) | 0.69 (0.28-1.67) | 0.78                  | 1.00       |            |
| rs10891545 | ANKK1       | 11         | Female | 0.34                   | 401 | 0.53 (0.33-0.84)      | 6.37 × 10 <sup>-3</sup> | 0.11    | 0.65 (0.23-1.83)             | 0.32 (0.14-0.73) | 1.02 (0.39-2.65) | 0.46 (0.18-1.15) | 0.32                  | 0.95       |            |
|            |             |            | Male   | 0.13                   | 386 | 0.90 (0.54-1.48)      | 0.67                    | 1.00    | 0.99 (0.35-2.79)             | 1.11 (0.38-3.22) | 0.95 (0.39-2.29) | 0.60 (0.20-1.82) | 0.87                  | 1.00       |            |
| rs94938012 | ANKK1       | 11         | Female | 0.15                   | 403 | 1.50 (0.91-2.47)      | 0.11                    | 0.67    | 3.80 (1.32-10.95)            | 1.15 (0.47-2.79) | 1.48 (0.52-4.21) | 0.90 (0.31-2.61) | 0.23                  | 0.89       |            |
|            |             |            | Male   | 0.33                   | 386 | 0.97 (0.63-1.48)      | 0.87                    | 1.00    | 0.95 (0.37-2.44)             | 1.16 (0.50-2.69) | 1.03 (0.47-2.26) | 0.74 (0.30-1.80) | 0.91                  | 1.00       |            |
| rs7123797  | ANKK1       | 11         | Female | 0.33                   | 402 | 0.47 (0.29-0.74)      | 1.09 × 10 <sup>-3</sup> | 0.02    | 0.65 (0.23-1.82)             | 0.23 (0.10-0.54) | 0.89 (0.34-2.32) | 0.46 (0.19-1.15) | 0.18                  | 0.85       |            |
|            |             |            | Male   | 0.34                   | 385 | 0.95 (0.62-1.46)      | 0.82                    | 1.00    | 0.95 (0.37-2.44)             | 1.16 (0.50-2.69) | 0.99 (0.45-2.17) | 0.74 (0.30-1.80) | 0.91                  | 1.00       |            |
| rs12360992 | ANKK1       | 11         | Female | 0.34                   | 402 | 0.46 (0.29-0.73)      | 8.58 × 10 <sup>-4</sup> | 0.02    | 0.65 (0.23-1.82)             | 0.23 (0.10-0.54) | 0.83 (0.32-2.16) | 0.46 (0.19-1.15) | 0.21                  | 0.89       |            |
|            |             |            | Male   | 0.46                   | 386 | 0.93 (0.59-1.48)      | 0.77                    | 1.00    | 1.43 (0.46-4.44)             | 0.88 (0.35-2.17) | 1.07 (0.44-2.58) | 0.64 (0.26-1.58) | 0.72                  | 1.00       |            |
| rs4590907  | ANKK1       | 11         | Female | 0.48                   | 402 | 0.63 (0.38-1.03)      | 0.07                    | 0.53    | 1.68 (0.44-6.44)             | 0.36 (0.15-0.84) | 0.80 (0.28-2.28) | 0.55 (0.21-1.44) | 0.23                  | 0.90       |            |
|            |             |            | Male   | 0.13                   | 386 | 1.01 (0.64-1.61)      | 0.95                    | 1.00    | 1.10 (0.44-2.72)             | 1.27 (0.48-3.35) | 1.05 (0.47-2.32) | 0.65 (0.21-2.00) | 0.83                  | 1.00       |            |
| rs17115439 | ANKK1       | 11         | Female | 0.15                   | 403 | 1.56 (1.00-2.42)      | 0.05                    | 0.47    | 2.93 (1.21-7.11)             | 1.31 (0.58-2.95) | 1.24 (0.49-3.10) | 1.24 (0.48-3.17) | 0.45                  | 0.98       |            |
|            |             |            | Male   | 0.33                   | 386 | 0.94 (0.61-1.44)      | 0.77                    | 1.00    | 0.89 (0.35-2.30)             | 1.16 (0.50-2.69) | 0.98 (0.45-2.13) | 0.74 (0.30-1.80) | 0.91                  | 1.00       |            |
| rs11214596 | ANKK1       | 11         | Female | 0.33                   | 403 | 0.47 (0.30-0.75)      | 1.45 × 10 <sup>-3</sup> | 0.03    | 0.64 (0.23-1.80)             | 0.26 (0.11-0.61) | 0.83 (0.32-2.17) | 0.46             |                       |            |            |

| SNP        | Gene Region | Chromosome | Gender | MAF  | N   | Marginal Effect       |                         |         | Treatment Stratified Effects |                  |                  |                   | Test of Interaction |            |            |
|------------|-------------|------------|--------|------|-----|-----------------------|-------------------------|---------|------------------------------|------------------|------------------|-------------------|---------------------|------------|------------|
|            |             |            |        |      |     | Likelihood ratio test |                         | Placebo | Bupropion                    | Patch            | Spray            | Observed P        | Adjusted P          | Observed P | Adjusted P |
|            |             |            |        |      |     | SNP OR (95% CI)       | Observed P              |         |                              |                  |                  |                   |                     |            |            |
| rs1076562  | DRD2        | 11         | Male   | 0.23 | 386 | 0.99 (0.64-1.53)      | 0.95                    | 1.00    | 1.37 (0.53-3.55)             | 1.24 (0.53-2.93) | 1.23 (0.56-2.73) | 0.43 (0.17-1.10)  | 0.24                | 0.96       |            |
|            |             |            | Female | 0.25 | 403 | 1.12 (0.71-1.78)      | 0.63                    | 0.99    | 1.32 (0.47-3.69)             | 0.84 (0.37-1.91) | 1.60 (0.60-4.27) | 1.03 (0.41-2.61)  | 0.77                | 1.00       |            |
| rs2471851  | DRD2        | 11         | Male   | 0.16 | 386 | 1.13 (0.75-1.69)      | 0.56                    | 1.00    | 1.40 (0.61-3.19)             | 1.31 (0.63-2.71) | 0.85 (0.39-1.88) | 1.01 (0.40-2.56)  | 0.81                | 1.00       |            |
|            |             |            | Female | 0.17 | 403 | 0.59 (0.36-0.96)      | 0.03                    | 0.33    | 0.30 (0.07-1.35)             | 0.38 (0.16-0.92) | 1.02 (0.39-2.67) | 0.92 (0.36-2.39)  | 0.27                | 0.93       |            |
| rs7122246  | DRD2        | 11         | Male   | 0.39 | 385 | 0.93 (0.60-1.45)      | 0.76                    | 1.00    | 1.68 (0.58-4.90)             | 0.97 (0.41-2.29) | 0.95 (0.42-2.13) | 0.57 (0.23-1.38)  | 0.49                | 1.00       |            |
|            |             |            | Female | 0.41 | 402 | 0.71 (0.45-1.14)      | 0.16                    | 0.76    | 0.66 (0.23-1.90)             | 0.51 (0.23-1.17) | 1.21 (0.45-3.24) | 0.71 (0.28-1.78)  | 0.63                | 0.99       |            |
| rs4436578  | DRD2        | 11         | Male   | 0.11 | 386 | 1.00 (0.62-1.61)      | 0.99                    | 1.00    | 1.07 (0.40-2.82)             | 1.12 (0.39-3.23) | 0.85 (0.37-1.94) | 1.09 (0.41-2.91)  | 0.97                | 1.00       |            |
|            |             |            | Female | 0.13 | 403 | 1.89 (1.22-2.90)      | 4.37 × 10 <sup>-3</sup> | 0.08    | 2.98 (1.32-6.73)             | 1.78 (0.81-3.90) | 1.47 (0.58-3.73) | 1.43 (0.55-3.70)  | 0.60                | 1.00       |            |
| rs4587762  | DRD2        | 11         | Male   | 0.40 | 386 | 0.92 (0.59-1.44)      | 0.73                    | 1.00    | 1.78 (0.62-5.15)             | 0.96 (0.41-2.28) | 0.88 (0.39-1.98) | 0.57 (0.23-1.39)  | 0.44                | 1.00       |            |
|            |             |            | Female | 0.42 | 403 | 0.72 (0.45-1.15)      | 0.17                    | 0.79    | 0.66 (0.23-1.91)             | 0.48 (0.21-1.10) | 1.42 (0.52-3.88) | 0.69 (0.28-1.73)  | 0.43                | 0.98       |            |
| rs4586205  | DRD2        | 11         | Male   | 0.24 | 385 | 0.99 (0.64-1.52)      | 0.96                    | 1.00    | 1.37 (0.53-3.56)             | 1.31 (0.56-3.05) | 1.08 (0.49-2.38) | 0.49 (0.20-1.22)  | 0.35                | 0.99       |            |
|            |             |            | Female | 0.25 | 403 | 1.20 (0.76-1.91)      | 0.43                    | 0.97    | 1.35 (0.48-3.76)             | 1.04 (0.46-2.33) | 1.60 (0.60-4.26) | 1.03 (0.41-2.62)  | 0.90                | 1.00       |            |
| rs4620755  | DRD2        | 11         | Male   | 0.11 | 385 | 1.00 (0.62-1.62)      | 0.99                    | 1.00    | 1.05 (0.40-2.78)             | 1.03 (0.33-3.15) | 0.91 (0.40-2.07) | 1.09 (0.41-2.91)  | 0.99                | 1.00       |            |
|            |             |            | Female | 0.13 | 403 | 1.74 (1.12-2.70)      | 0.01                    | 0.21    | 3.08 (1.35-6.98)             | 1.28 (0.55-2.98) | 1.47 (0.58-3.72) | 1.43 (0.55-3.70)  | 0.44                | 0.98       |            |
| rs7125415  | DRD2        | 11         | Male   | 0.09 | 386 | 1.20 (0.68-2.10)      | 0.53                    | 1.00    | 1.92 (0.56-6.61)             | 0.95 (0.29-3.13) | 1.10 (0.40-2.98) | 1.15 (0.38-3.46)  | 0.87                | 1.00       |            |
|            |             |            | Female | 0.10 | 403 | 1.77 (1.02-3.08)      | 0.05                    | 0.45    | 3.59 (1.18-10.97)            | 1.33 (0.48-3.73) | 2.42 (0.76-7.76) | 0.97 (0.31-3.06)  | 0.36                | 0.97       |            |
| rs4936270  | DRD2        | 11         | Male   | 0.09 | 384 | 1.09 (0.64-1.84)      | 0.76                    | 1.00    | 0.97 (0.30-3.13)             | 0.55 (0.16-1.88) | 1.94 (0.81-4.62) | 0.81 (0.23-2.81)  | 0.35                | 0.99       |            |
|            |             |            | Female | 0.11 | 403 | 1.97 (1.23-3.16)      | 5.41 × 10 <sup>-3</sup> | 0.09    | 2.05 (0.85-4.93)             | 1.09 (0.42-2.80) | 2.81 (1.04-7.59) | 2.72 (0.96-7.72)  | 0.48                | 0.99       |            |
| rs4274224  | DRD2        | 11         | Male   | 0.47 | 385 | 0.88 (0.55-1.40)      | 0.58                    | 1.00    | 1.46 (0.52-4.08)             | 0.59 (0.25-1.43) | 0.98 (0.38-2.52) | 0.78 (0.31-2.00)  | 0.60                | 1.00       |            |
|            |             |            | Female | 0.46 | 403 | 1.17 (0.70-1.96)      | 0.54                    | 0.99    | 1.40 (0.42-4.69)             | 0.85 (0.35-2.05) | 1.22 (0.42-3.49) | 1.52 (0.53-4.35)  | 0.84                | 1.00       |            |
| rs4245148  | DRD2        | 11         | Male   | 0.09 | 385 | 1.09 (0.64-1.85)      | 0.75                    | 1.00    | 0.97 (0.30-3.13)             | 0.55 (0.16-1.88) | 1.94 (0.81-4.62) | 0.82 (0.24-2.86)  | 0.36                | 0.99       |            |
|            |             |            | Female | 0.12 | 403 | 1.92 (1.20-3.07)      | 7.59 × 10 <sup>-3</sup> | 0.12    | 1.86 (0.77-4.48)             | 1.09 (0.42-2.80) | 2.81 (1.04-7.58) | 2.72 (0.96-7.72)  | 0.48                | 0.99       |            |
| rs4460839  | DRD2        | 11         | Male   | 0.08 | 385 | 1.07 (0.60-1.90)      | 0.82                    | 1.00    | 1.26 (0.35-4.55)             | 0.61 (0.18-2.09) | 1.70 (0.64-4.54) | 0.82 (0.24-2.86)  | 0.59                | 1.00       |            |
|            |             |            | Female | 0.11 | 402 | 1.92 (1.11-3.34)      | 0.02                    | 0.28    | 2.38 (0.80-7.06)             | 0.78 (0.23-2.62) | 2.55 (0.80-8.18) | 2.72 (0.96-7.71)  | 0.37                | 0.97       |            |
| rs7122454  | DRD2        | 11         | Male   | 0.15 | 386 | 1.14 (0.75-1.73)      | 0.54                    | 1.00    | 1.10 (0.41-2.93)             | 1.32 (0.63-2.78) | 1.21 (0.59-2.51) | 0.81 (0.29-2.23)  | 0.89                | 1.00       |            |
|            |             |            | Female | 0.14 | 403 | 1.07 (0.69-1.67)      | 0.77                    | 1.00    | 0.37 (0.10-1.35)             | 1.64 (0.72-3.75) | 1.33 (0.55-3.24) | 1.02 (0.45-2.29)  | 0.22                | 0.91       |            |
| rs7131056  | DRD2        | 11         | Male   | 0.41 | 385 | 1.12 (0.83-1.52)      | 0.46                    | 1.00    | 0.99 (0.52-1.90)             | 1.12 (0.62-2.01) | 1.18 (0.68-2.07) | 1.18 (0.61-2.28)  | 0.98                | 1.00       |            |
|            |             |            | Female | 0.46 | 403 | 1.09 (0.79-1.51)      | 0.59                    | 0.99    | 2.15 (0.93-4.97)             | 0.78 (0.45-1.35) | 1.07 (0.57-2.00) | 1.19 (0.60-2.36)  | 0.24                | 0.91       |            |
| rs11214611 | DRD2        | 11         | Male   | 0.15 | 386 | 1.17 (0.77-1.78)      | 0.46                    | 1.00    | 1.10 (0.41-2.93)             | 1.44 (0.69-3.02) | 1.21 (0.59-2.51) | 0.81 (0.29-2.23)  | 0.84                | 1.00       |            |
|            |             |            | Female | 0.14 | 403 | 1.07 (0.69-1.67)      | 0.77                    | 1.00    | 0.37 (0.10-1.35)             | 1.64 (0.72-3.75) | 1.33 (0.55-3.24) | 1.02 (0.45-2.29)  | 0.22                | 0.90       |            |
| rs10891552 | DRD2        | 11         | Male   | 0.05 | NA  | NA                    | NA                      | NA      | NA                           | NA               | NA               | NA                | NA                  | NA         |            |
|            |             |            | Female | 0.03 | NA  | NA                    | NA                      | NA      | NA                           | NA               | NA               | NA                | NA                  | NA         | NA         |
| rs4630328  | DRD2        | 11         | Male   | 0.38 | 385 | 0.76 (0.55-1.05)      | 0.10                    | 0.76    | 0.66 (0.30-1.46)             | 0.71 (0.39-1.27) | 0.71 (0.38-1.34) | 0.99 (0.53-1.83)  | 0.82                | 1.00       |            |
|            |             |            | Female | 0.35 | 403 | 0.89 (0.64-1.25)      | 0.50                    | 0.99    | 0.75 (0.31-1.82)             | 1.00 (0.56-1.79) | 0.83 (0.44-1.59) | 0.90 (0.46-1.77)  | 0.95                | 0.95       |            |
| rs11214613 | DRD2        | 11         | Male   | 0.08 | 385 | 0.99 (0.57-1.74)      | 0.98                    | 1.00    | 1.09 (0.34-3.53)             | 0.45 (0.12-1.75) | 1.67 (0.68-4.10) | 0.69 (0.17-2.76)  | 0.39                | 1.00       |            |
|            |             |            | Female | 0.10 | 403 | 1.89 (1.15-3.10)      | 0.01                    | 0.19    | 2.43 (1.00-5.90)             | 0.41 (0.09-1.86) | 2.80 (1.04-7.56) | 2.72 (0.96-7.70)  | 0.08                | 0.54       |            |
| rs4938019  | DRD2        | 11         | Male   | 0.16 | 386 | 1.16 (0.76-1.75)      | 0.49                    | 1.00    | 1.03 (0.39-2.74)             | 1.44 (0.69-3.02) | 1.09 (0.53-2.25) | 0.98 (0.37-2.62)  | 0.91                | 1.00       |            |
|            |             |            | Female | 0.15 | 402 | 1.05 (0.67-1.63)      | 0.84                    | 0.95    | 0.37 (0.10-1.35)             | 1.62 (0.71-3.71) | 1.33 (0.55-3.24) | 0.96 (0.42-2.17)  | 0.22                | 0.91       |            |
| rs1799978  | DRD2        | 11         | Male   | 0.06 | 385 | 1.36 (0.70-2.64)      | 0.36                    | 1.00    | 2.54 (0.77-8.38)             | 1.39 (0.34-5.63) | 1.13 (0.28-4.55) | 0.76 (0.19-3.05)  | 0.61                | 1.00       |            |
|            |             |            | Female | 0.05 | 403 | 0.91 (0.41-2.01)      | 0.81                    | 0.99    | 0.96 (0.19-4.85)             | 1.22 (0.34-4.39) | 0.64 (0.06-6.67) | 0.66 (0.13-3.35)  | 0.93                | 0.99       |            |
| rs10891556 | DRD2        | 11         | Male   | 0.18 | 378 | 1.23 (0.78-1.93)      | 0.38                    | 1.00    | 1.98 (0.74-5.32)             | 1.73 (0.72-4.19) | 0.95 (0.41-2.18) | 0.74 (0.28-1.97)  | 0.41                | 1.00       |            |
|            |             |            | Female | 0.17 | 397 | 1.05 (0.63-1.72)      | 0.86                    | 0.86    | 0.60 (0.20-1.87)             | 1.28 (0.52-3.17) | 1.44 (0.50-4.12) | 0.98 (0.36-2.61)  | 0.68                | 0.99       |            |
| rs6589377  | DRD2        | 11         | Male   | 0.38 | 386 | 0.78 (0.57-1.07)      | 0.12                    | 0.83    | 0.68 (0.31-1.46)             | 0.74 (0.41-1.33) | 0.71 (0.38-1.34) | 0.99 (0.53-1.83)  | 0.85                | 1.00       |            |
|            |             |            | Female | 0.35 | 403 | 0.89 (0.64-1.25)      | 0.51                    | 0.99    | 0.76 (0.31-1.86)             | 1.00 (0.56-1.79) | 0.83 (0.44-1.59) | 0.90 (0.46-1.77)  | 0.96                | 0.96       |            |
| rs2110113  | CALM1       | 14         | Male   | 0.12 | 386 | 1.13 (0.70-1.82)      | 0.62                    | 0.84    | 0.75 (0.24-3.22)             | 2.76 (1.06-7.16) | 0.83 (0.35-1.97) | 0.77 (0.25-2.38)  | 0.16                | 0.46       |            |
|            |             |            | Female | 0.12 | 403 | 1.14 (0.72-1.82)      | 0.58                    | 0.98    | 1.01 (0.34-3.00)             | 0.74 (0.29-1.86) | 1.09 (0.40-2.94) | 1.99 (0.84-4.73)  | 0.47                | 0.91       |            |
| rs3814847  | CALM1       | 14         | Male   | 0.37 | 386 | 0.96 (0.62-1.48)      | 0.84                    | 0.84    | 0.89 (0.33-2.45)             | 2.12 (0.88-5.08) | 0.76 (0.34-1.66) | 0.58 (0.24-1.40)  | 0.18                | 0.45       |            |
|            |             |            | Female | 0.34 | 403 | 0.99 (0.62-1.55)      | 0.95                    | 1.00    | 2.43 (0.73-8.03)             | 0.97 (0.43-2.15) | 0.88 (0.34-2.29) | 0.61 (0.25-1.51)  | 0.31                | 0.76       |            |
| rs12885713 | CALM1       | 14         | Male   | 0.45 | 385 | 1.29 (0.81-2.06)      | 0.28                    | 0.52    | 1.81 (0.53-6.12)             | 1.92 (0.74-4.95) | 1.14 (0.51-2.56) | 0.84 (0.34-2.09)  | 0.59                | 0.59       |            |
|            |             |            | Female | 0.43 | 401 | 1.09 (0.68-1.77)      | 0.71                    | 0.99    | 2.11 (0.56-7.95)             | 0.87 (0.38-1.97) | 1.03 (0.38-2.79) | 1.07 (0.41-2.76)  | 0.72                | 0.72       |            |
| rs3213718  | CALM1       | 14         | Male   | 0.43 | 386 | 1.31 (0.83-2.09)      | 0.25                    | 0.48    | 1.81 (0.54-6.15)             | 2.03 (0.81-5.09) | 1.01 (0.46-2.26) | 0.97 (0.39-2.40)  | 0.57                | 0.62       |            |
|            |             |            | Female | 0.41 | 403 | 1.13 (0.70-1.82)      | 0.61                    | 0.97    | 2.50 (0.67-9.41)             | 0.92 (0.41-2.08) | 0.90 (0.34-2.39) | 1.13 (0.44-2.92)  | 0.57                | 0.87       |            |
| rs5871     | CALM1       | 14         | Male   | 0.07 | 386 | 2.00 (1.16-3.45)      | 0.01                    | 0.07    | 3.00 (1.02-8.80)             | 1.02 (0.36-2.87) | 1.96 (0.65-5.90) | 3.20 (0.89-11.54) | 0.43                | 0.81       |            |
|            |             |            | Female | 0.07 | 402 | 1.36 (0.74-2.50)      | 0.32                    | 0.84    | 1.00 (0.20-5.10)             | 0.94 (0.33-2.70) | 1.63 (0.42-6.25) | 2.20 (0.73-6.65)  | 0.70                | 0.89       |            |
| rs3814843  | CALM1       | 14         | Male   | 0.04 | NA  | NA                    | NA                      | NA      | NA                           | NA               | NA               | NA                | NA                  | NA         |            |
|            |             |            | Female | 0.04 | NA  | NA                    | NA                      | NA      | NA                           | NA               | NA               | NA                | NA                  | NA         | NA         |
| rs8006462  | CALM1       | 14         | Male   | 0.34 | 383 | 1.35 (0.87-2.08)      | 0.18                    | 0.51    | 0.97 (0.36-2.56)             | 2.29 (0.95-5.48) | 1.37 (0.63-2.99) | 0.99 (0.41-2.39)  | 0.50                | 0.79       |            |
|            |             |            | Female | 0.32 | 402 | 1.08 (0.68-1.70)      | 0.75                    | 0.98    | 1.89 (0.61-5.85)             | 1.59 (0.71-3.57) | 0.92 (0.35-2.41) | 0.51 (0.20-1.28)  | 0.21                | 0.58       |            |
| rs2896135  | CALM1       | 14         | Male   | 0.42 | 386 | 1.27 (0.94-1.70)      | 0.11                    | 0.40    | 1.10 (0.58-2.09)             | 1.55 (0.86-2.79) | 0.98 (0.57-1.67) | 1.67 (0.87-3.18)  | 0.53                | 0.77       |            |
|            |             |            | Female | 0.38 | 402 | 1.06 (0.76-1.46)      | 0.74                    | 0.99    | 1.43 (0.67-3.06)             | 1.24 (0.72-2.15) | 0.88 (0.44-1.75) | 0.78 (0.39-1.53)  | 0.57                | 0.93       |            |
| rs876259   | CALM1       | 14         | Male   | 0.07 | 386 | 1.47 (0.87-2.49)      | 0.16                    | 0.48    | 1.59 (0.52-4.88)             | 0.93 (0.35-2.45) | 0.95 (0.32-2.83) | 4.75 (1.33-16.97) | 0.16                | 0.48       |            |
|            |             |            | Female | 0.06 | 403 | 1.01 (0.53-1.95)      | 0.97                    | 0.97    | 1.01 (0.20-5.00)             | 0.57 (0.16-1.99) | 1.96 (0.40-9.64) | 1.29 (0.43-3.91)  | 0.63                | 0.91       |            |
| rs12895068 | CALM1       | 14         | Male   | 0.07 | 386 | 1.38 (0.83-2.32)      | 0.22                    | 0.56    | 1.37 (0.49-3.87)             | 0.86 (0.32-2.25) | 0.95 (0.32-2.83) | 4.75 (1.33-16.97) | 0.14                | 0.44       |            |
|            |             |            | Female | 0.06 | 402 | 1.03 (0.54-2.00)      | 0.92                    | 1.00    | 1.01 (0.20-5.09)             | 0.60 (0.17-2.10) | 1.97 (0.40-9.68) | 1.29              |                     |            |            |

| SNP        | Gene Region   | Chromosome | Gender | MAF  | N   | Marginal Effect       |                         |         | Treatment Stratified Effects |                  |                  |                   | Test of Interaction     |                 |
|------------|---------------|------------|--------|------|-----|-----------------------|-------------------------|---------|------------------------------|------------------|------------------|-------------------|-------------------------|-----------------|
|            |               |            |        |      |     | Likelihood ratio test |                         | Placebo | Bupropion                    | Patch            | Spray            | Observed P        | Adjusted P              |                 |
|            |               |            |        |      |     | SNP OR (95% CI)       | Observed P              |         |                              |                  |                  |                   |                         | SNP OR (95% CI) |
| rs10438342 | CHRNA7        | 15         | Male   | 0.38 | 384 | 0.90 (0.58-1.39)      | 0.63                    | 1.00    | 1.51 (0.55-4.18)             | 0.67 (0.29-1.57) | 0.71 (0.32-1.57) | 1.10 (0.44-2.77)  | 0.57                    | 1.00            |
|            |               |            | Female | 0.37 | 399 | 0.73 (0.46-1.15)      | 0.18                    | 0.88    | 0.48 (0.17-1.35)             | 0.89 (0.39-2.01) | 0.47 (0.18-1.26) | 1.19 (0.46-3.08)  | 0.45                    | 0.98            |
| rs11852956 | CHRNA7        | 15         | Male   | 0.22 | 385 | 1.48 (1.02-2.14)      | 0.04                    | 0.47    | 1.89 (0.92-3.88)             | 1.49 (0.71-3.13) | 1.08 (0.55-2.12) | 1.17 (0.73-3.98)  | 0.71                    | 1.00            |
|            |               |            | Female | 0.23 | 401 | 0.99 (0.67-1.47)      | 0.96                    | 1.00    | 1.67 (0.74-3.77)             | 0.97 (0.47-1.97) | 0.36 (0.13-1.04) | 1.18 (0.57-2.44)  | 0.13                    | 0.73            |
| rs1039394  | CHRNA7        | 15         | Male   | 0.06 | 384 | 1.13 (0.63-2.04)      | 0.67                    | 1.00    | 1.52 (0.40-5.79)             | 1.15 (0.34-3.86) | 0.90 (0.30-2.69) | 1.17 (0.39-3.54)  | 0.95                    | 0.95            |
|            |               |            | Female | 0.05 | 399 | 0.54 (0.24-1.25)      | 0.13                    | 0.81    | 0.47 (0.06-3.61)             | 1.34 (0.36-4.97) | 0.22 (0.03-1.73) | 0.35 (0.04-0.98)  | 0.42                    | 0.99            |
| rs16956223 | CHRNA7        | 15         | Male   | 0.17 | 386 | 0.64 (0.42-0.98)      | 0.03                    | 0.45    | 0.84 (0.33-2.15)             | 0.47 (0.20-1.09) | 0.67 (0.31-1.46) | 0.69 (0.28-1.70)  | 0.83                    | 0.97            |
|            |               |            | Female | 0.16 | 403 | 0.64 (0.39-1.04)      | 0.06                    | 0.60    | 0.36 (0.10-1.27)             | 0.53 (0.21-1.30) | 0.53 (0.16-1.71) | 1.15 (0.52-2.56)  | 0.36                    | 0.98            |
| rs1392808  | CHRNA7        | 15         | Male   | 0.17 | 382 | 0.66 (0.43-1.01)      | 0.05                    | 0.56    | 0.84 (0.33-2.15)             | 0.46 (0.20-1.09) | 0.67 (0.31-1.46) | 0.80 (0.32-2.00)  | 0.78                    | 0.95            |
|            |               |            | Female | 0.15 | 400 | 0.63 (0.38-1.03)      | 0.05                    | 0.55    | 0.37 (0.10-1.30)             | 0.53 (0.21-1.30) | 0.53 (0.16-1.72) | 1.10 (0.48-2.49)  | 0.44                    | 0.99            |
| rs904952   | CHRNA7        | 15         | Male   | 0.49 | 381 | 0.96 (0.58-1.59)      | 0.88                    | 1.00    | 0.47 (0.17-1.26)             | 0.61 (0.22-1.67) | 0.99 (0.37-2.70) | 3.38 (1.03-11.05) | 0.05                    | 0.49            |
|            |               |            | Female | 0.48 | 400 | 1.05 (0.63-1.76)      | 0.85                    | 1.00    | 0.81 (0.26-2.56)             | 2.31 (0.90-5.95) | 0.70 (0.23-2.08) | 0.67 (0.25-1.78)  | 0.22                    | 0.90            |
| rs7402321  | CHRNA7        | 15         | Male   | 0.37 | 372 | 1.37 (0.99-1.91)      | 0.06                    | 0.59    | 2.66 (1.29-5.48)             | 1.46 (0.73-2.90) | 1.20 (0.67-2.15) | 0.80 (0.40-1.63)  | 0.11                    | 0.76            |
|            |               |            | Female | 0.38 | 391 | 0.85 (0.60-1.20)      | 0.35                    | 0.97    | 1.02 (0.46-2.26)             | 0.57 (0.30-1.09) | 1.04 (0.50-2.18) | 0.98 (0.49-1.94)  | 0.55                    | 1.00            |
| rs7175359  | CHRNA7        | 15         | Male   | 0.49 | 384 | 0.91 (0.55-1.50)      | 0.72                    | 1.00    | 0.47 (0.17-1.26)             | 0.61 (0.22-1.67) | 1.07 (0.40-2.86) | 2.34 (0.78-7.05)  | 0.14                    | 0.81            |
|            |               |            | Female | 0.47 | 403 | 1.08 (0.65-1.79)      | 0.78                    | 1.00    | 0.81 (0.26-2.57)             | 2.27 (0.88-5.84) | 0.77 (0.26-2.27) | 0.70 (0.26-1.85)  | 0.27                    | 0.94            |
| rs2651418  | CHRNA7        | 15         | Male   | 0.49 | 380 | 0.91 (0.54-1.53)      | 0.74                    | 1.00    | 0.40 (0.15-1.09)             | 0.77 (0.26-2.26) | 0.89 (0.32-2.44) | 2.84 (0.87-9.33)  | 0.08                    | 0.65            |
|            |               |            | Female | 0.49 | 400 | 1.01 (0.60-1.70)      | 0.98                    | 0.98    | 0.71 (0.22-2.26)             | 1.96 (0.79-4.89) | 0.63 (0.21-1.91) | 0.76 (0.27-2.18)  | 0.33                    | 0.97            |
| rs2611605  | CHRNA7        | 15         | Male   | 0.18 | 384 | 0.90 (0.60-1.36)      | 0.62                    | 1.00    | 0.93 (0.36-2.39)             | 2.27 (1.06-4.90) | 0.57 (0.25-1.26) | 0.46 (0.18-1.17)  | 0.03                    | 0.32            |
|            |               |            | Female | 0.20 | 402 | 0.99 (0.66-1.48)      | 0.97                    | 1.00    | 0.88 (0.38-2.05)             | 1.09 (0.52-2.30) | 1.29 (0.54-3.06) | 0.78 (0.34-1.80)  | 0.85                    | 1.00            |
| rs17178176 | CHRNA7        | 15         | Male   | 0.25 | 385 | 0.99 (0.70-1.41)      | 0.97                    | 0.97    | 0.81 (0.33-1.99)             | 1.89 (0.99-3.62) | 1.00 (0.53-1.88) | 0.49 (0.21-1.06)  | 0.06                    | 0.53            |
|            |               |            | Female | 0.25 | 403 | 0.88 (0.60-1.30)      | 0.52                    | 0.99    | 0.63 (0.25-1.59)             | 1.01 (0.52-1.94) | 0.97 (0.41-2.29) | 0.87 (0.39-1.92)  | 0.86                    | 1.00            |
| rs2337980  | CHRNA7        | 15         | Male   | 0.45 | 384 | 1.22 (0.90-1.66)      | 0.21                    | 0.94    | 1.59 (0.78-3.24)             | 1.30 (0.71-2.39) | 1.22 (0.69-2.15) | 0.92 (0.49-1.73)  | 0.71                    | 0.99            |
|            |               |            | Female | 0.43 | 402 | 0.89 (0.64-1.24)      | 0.48                    | 0.99    | 0.64 (0.30-1.38)             | 1.08 (0.60-1.93) | 1.20 (0.62-2.34) | 0.62 (0.30-1.30)  | 0.42                    | 0.99            |
| rs7164518  | CHRNA7        | 15         | Male   | 0.18 | 381 | 0.76 (0.50-1.14)      | 0.17                    | 0.92    | 0.67 (0.23-1.97)             | 1.38 (0.67-2.86) | 0.68 (0.31-1.48) | 0.45 (0.19-1.06)  | 0.23                    | 0.94            |
|            |               |            | Female | 0.17 | 398 | 0.79 (0.50-1.25)      | 0.31                    | 0.97    | 0.85 (0.30-2.37)             | 0.62 (0.27-1.44) | 1.01 (0.36-2.87) | 0.84 (0.37-1.90)  | 0.90                    | 0.99            |
| rs4275821  | CHRNA5        | 15         | Male   | 0.35 | 386 | 0.77 (0.50-1.19)      | 0.23                    | 0.70    | 1.25 (0.48-3.24)             | 0.89 (0.37-2.12) | 0.71 (0.32-1.57) | 0.47 (0.19-1.16)  | 0.51                    | 0.97            |
|            |               |            | Female | 0.38 | 403 | 0.74 (0.47-1.17)      | 0.20                    | 0.78    | 1.10 (0.37-3.23)             | 0.27 (0.12-0.62) | 0.54 (0.20-1.44) | 2.58 (0.98-6.79)  | 3.49 × 10 <sup>-3</sup> | 0.02            |
| rs2036527  | CHRNA5        | 15         | Male   | 0.41 | 386 | 0.87 (0.64-1.19)      | 0.38                    | 0.85    | 0.62 (0.30-1.28)             | 0.76 (0.43-1.34) | 1.04 (0.56-1.92) | 1.13 (0.60-2.12)  | 0.56                    | 0.95            |
|            |               |            | Female | 0.40 | 402 | 1.00 (0.73-1.37)      | 1.00                    | 1.00    | 0.83 (0.39-1.76)             | 1.41 (0.79-2.55) | 1.12 (0.61-2.08) | 0.65 (0.33-1.27)  | 0.34                    | 0.80            |
| rs684513   | CHRNA5        | 15         | Male   | 0.17 | 384 | 1.61 (1.02-2.54)      | 0.04                    | 0.28    | 1.21 (0.45-3.22)             | 1.33 (0.52-3.44) | 3.58 (1.48-8.67) | 1.05 (0.43-2.54)  | 0.20                    | 0.67            |
|            |               |            | Female | 0.15 | 402 | 1.68 (1.02-2.76)      | 0.04                    | 0.31    | 2.11 (0.71-6.27)             | 1.59 (0.64-3.99) | 1.66 (0.61-4.51) | 1.50 (0.56-3.99)  | 0.97                    | 1.00            |
| rs871058   | CHRNA5        | 15         | Male   | 0.33 | 386 | 0.73 (0.48-1.13)      | 0.16                    | 0.64    | 1.21 (0.47-3.11)             | 0.89 (0.37-2.12) | 0.69 (0.31-1.53) | 0.41 (0.17-1.01)  | 0.41                    | 0.92            |
|            |               |            | Female | 0.37 | 403 | 0.75 (0.47-1.18)      | 0.21                    | 0.80    | 1.31 (0.45-3.86)             | 0.24 (0.10-0.55) | 0.59 (0.22-1.56) | 2.44 (0.95-6.28)  | 1.78 × 10 <sup>-3</sup> | 0.01            |
| rs667282   | CHRNA5        | 15         | Male   | 0.20 | 386 | 1.66 (1.07-2.59)      | 0.02                    | 0.19    | 1.42 (0.55-3.66)             | 1.42 (0.56-3.57) | 3.09 (1.35-7.08) | 1.07 (0.45-2.59)  | 0.34                    | 0.87            |
|            |               |            | Female | 0.16 | 403 | 1.46 (0.90-2.36)      | 0.13                    | 0.63    | 1.92 (0.66-5.61)             | 1.31 (0.55-3.13) | 1.61 (0.60-4.36) | 1.21 (0.46-3.17)  | 0.92                    | 0.99            |
| rs601079   | CHRNA5        | 15         | Male   | 0.39 | 386 | 0.76 (0.49-1.19)      | 0.23                    | 0.71    | 1.38 (0.53-3.63)             | 1.30 (0.53-3.21) | 0.35 (0.15-0.81) | 0.65 (0.27-1.58)  | 0.10                    | 0.44            |
|            |               |            | Female | 0.44 | 403 | 0.79 (0.49-1.27)      | 0.33                    | 0.91    | 1.03 (0.33-3.23)             | 0.32 (0.14-0.76) | 0.68 (0.25-1.88) | 2.16 (0.80-5.87)  | 0.03                    | 0.15            |
| rs637137   | CHRNA5        | 15         | Male   | 0.20 | 386 | 1.70 (1.09-2.65)      | 0.02                    | 0.15    | 1.42 (0.55-3.67)             | 1.42 (0.56-3.57) | 3.33 (1.44-7.70) | 1.08 (0.45-2.59)  | 0.28                    | 0.79            |
|            |               |            | Female | 0.16 | 403 | 1.46 (0.90-2.36)      | 0.13                    | 0.63    | 1.92 (0.66-5.61)             | 1.31 (0.55-3.13) | 1.61 (0.60-4.36) | 1.21 (0.46-3.17)  | 0.92                    | 0.99            |
| rs692780   | CHRNA5        | 15         | Male   | 0.35 | 386 | 0.73 (0.47-1.12)      | 0.15                    | 0.62    | 1.07 (0.42-2.75)             | 1.07 (0.45-2.57) | 0.52 (0.23-1.16) | 0.51 (0.21-1.25)  | 0.45                    | 0.94            |
|            |               |            | Female | 0.38 | 403 | 0.87 (0.55-1.39)      | 0.56                    | 0.98    | 1.07 (0.36-3.15)             | 0.35 (0.15-0.81) | 0.69 (0.26-1.84) | 2.80 (1.06-7.38)  | 0.01                    | 0.07            |
| rs555018   | CHRNA3;CHRNA5 | 15         | Male   | 0.39 | 386 | 0.71 (0.46-1.10)      | 0.13                    | 0.57    | 1.23 (0.48-3.19)             | 1.14 (0.47-2.78) | 0.32 (0.14-0.76) | 0.65 (0.27-1.58)  | 0.12                    | 0.48            |
|            |               |            | Female | 0.44 | 403 | 0.79 (0.49-1.27)      | 0.33                    | 0.91    | 1.03 (0.33-3.23)             | 0.32 (0.14-0.76) | 0.68 (0.25-1.88) | 2.16 (0.80-5.87)  | 0.03                    | 0.15            |
| rs647041   | CHRNA3;CHRNA5 | 15         | Male   | 0.39 | 385 | 0.68 (0.44-1.06)      | 0.09                    | 0.44    | 0.98 (0.38-2.52)             | 1.24 (0.51-3.00) | 0.32 (0.14-0.76) | 0.61 (0.25-1.50)  | 0.15                    | 0.55            |
|            |               |            | Female | 0.44 | 403 | 0.77 (0.48-1.25)      | 0.30                    | 0.88    | 1.03 (0.33-3.23)             | 0.32 (0.14-0.76) | 0.68 (0.25-1.88) | 2.04 (0.75-5.56)  | 0.04                    | 0.19            |
| rs514743   | CHRNA3;CHRNA5 | 15         | Male   | 0.35 | 386 | 0.72 (0.46-1.11)      | 0.14                    | 0.58    | 1.00 (0.39-2.55)             | 1.16 (0.49-2.77) | 0.49 (0.21-1.09) | 0.51 (0.21-1.25)  | 0.38                    | 0.90            |
|            |               |            | Female | 0.39 | 403 | 0.93 (0.58-1.48)      | 0.76                    | 1.00    | 1.07 (0.36-3.15)             | 0.35 (0.15-0.81) | 0.69 (0.26-1.83) | 3.96 (1.40-11.23) | 2.79 × 10 <sup>-3</sup> | 0.02            |
| rs578776   | CHRNA3;CHRNA5 | 15         | Male   | 0.24 | 386 | 1.75 (1.21-2.54)      | 2.86 × 10 <sup>-3</sup> | 0.03    | 1.86 (0.83-4.19)             | 1.67 (0.74-3.77) | 1.83 (0.97-3.47) | 1.64 (0.77-3.50)  | 0.99                    | 0.99            |
|            |               |            | Female | 0.21 | 403 | 0.94 (0.63-1.39)      | 0.75                    | 1.00    | 1.19 (0.50-2.79)             | 0.94 (0.42-2.06) | 1.36 (0.60-3.11) | 0.61 (0.29-1.29)  | 0.49                    | 0.84            |
| rs6495307  | CHRNA3;CHRNA5 | 15         | Male   | 0.39 | 386 | 0.72 (0.46-1.12)      | 0.14                    | 0.60    | 1.29 (0.49-3.39)             | 1.16 (0.48-2.83) | 0.32 (0.14-0.76) | 0.65 (0.27-1.58)  | 0.11                    | 0.44            |
|            |               |            | Female | 0.44 | 403 | 0.77 (0.48-1.25)      | 0.30                    | 0.88    | 1.03 (0.33-3.23)             | 0.32 (0.14-0.76) | 0.68 (0.25-1.88) | 2.04 (0.75-5.56)  | 0.04                    | 0.19            |
| rs1051730  | CHRNA3;CHRNA5 | 15         | Male   | 0.40 | 381 | 0.92 (0.67-1.25)      | 0.59                    | 0.97    | 0.61 (0.31-1.22)             | 0.82 (0.46-1.47) | 1.26 (0.69-2.32) | 1.06 (0.57-2.00)  | 0.42                    | 0.93            |
|            |               |            | Female | 0.39 | 400 | 1.01 (0.73-1.39)      | 0.96                    | 0.99    | 0.86 (0.40-1.85)             | 1.37 (0.76-2.48) | 1.15 (0.63-2.09) | 0.66 (0.34-1.29)  | 0.38                    | 0.82            |
| rs3743078  | CHRNA3;CHRNA5 | 15         | Male   | 0.21 | 386 | 1.55 (1.00-2.40)      | 0.05                    | 0.31    | 1.20 (0.46-3.09)             | 1.35 (0.55-3.31) | 2.84 (1.25-6.46) | 1.07 (0.45-2.59)  | 0.37                    | 0.89            |
|            |               |            | Female | 0.16 | 403 | 1.34 (0.83-2.18)      | 0.24                    | 0.83    | 1.28 (0.43-3.82)             | 1.31 (0.55-3.14) | 1.61 (0.60-4.36) | 1.21 (0.46-3.17)  | 0.98                    | 1.00            |
| rs3743077  | CHRNA3;CHRNA5 | 15         | Male   | 0.36 | 361 | 0.67 (0.42-1.05)      | 0.08                    | 0.41    | 1.50 (0.55-4.04)             | 1.05 (0.42-2.63) | 0.31 (0.13-0.73) | 0.50 (0.20-1.29)  | 0.07                    | 0.35            |
|            |               |            | Female | 0.42 | 384 | 0.76 (0.47-1.24)      | 0.27                    | 0.85    | 0.96 (0.30-3.05)             | 0.31 (0.13-0.74) | 0.65 (0.23-1.79) | 2.15 (0.78-5.89)  | 0.03                    | 0.15            |
| rs1317286  | CHRNA3;CHRNA5 | 15         | Male   | 0.41 | 384 | 0.94 (0.69-1.28)      | 0.68                    | 0.96    | 0.70 (0.35-1.37)             | 0.86 (0.48-1.54) | 1.20 (0.65-2.21) | 1.04 (0.54-1.98)  | 0.67                    | 0.89            |
|            |               |            | Female | 0.40 | 401 | 1.01 (0.73-1.39)      | 0.95                    | 1.00    | 0.80 (0.37-1.72)             | 1.44 (0.80-2.59) | 1.12 (0.61-2.04) | 0.67 (0.34-1.31)  | 0.34                    | 0.80            |
| rs938682   | CHRNA3        | 15         | Male   | 0.20 | 386 | 1.58 (1.01-2.45)      | 0.04                    | 0.28    | 1.36 (0.53-3.54)             | 1.29 (0.52-3.22) | 2.84 (1.25-6.46) | 1.07 (0.45-2.59)  | 0.39                    | 0.91            |
|            |               |            | Female | 0.16 | 403 | 1.38 (0.85-2.24)      | 0.20                    | 0.78    | 1.48 (0.49-4.45)             | 1.31 (0.55-3.14) | 1.61 (0.60-4.36) | 1.21 (0.46-3.17)  | 0.98                    | 1.00            |
| rs4887069  | CHRNA3;CHRNA4 |            |        |      |     |                       |                         |         |                              |                  |                  |                   |                         |                 |

| SNP        | Gene Region | Chromosome | Gender | MAF                   | N   | Marginal Effect       |            |            | Treatment Stratified Effects |                  |                   |                  | Test of Interaction   |                 |            |            |            |            |
|------------|-------------|------------|--------|-----------------------|-----|-----------------------|------------|------------|------------------------------|------------------|-------------------|------------------|-----------------------|-----------------|------------|------------|------------|------------|
|            |             |            |        |                       |     | Likelihood ratio test |            |            | SNP OR (95% CI)              | SNP OR (95% CI)  | SNP OR (95% CI)   | SNP OR (95% CI)  | SNP OR (95% CI)       | SNP OR (95% CI) | Observed P | Adjusted P | Observed P | Adjusted P |
|            |             |            |        |                       |     | SNP OR (95% CI)       | Observed P | Adjusted P |                              |                  |                   |                  |                       |                 |            |            |            |            |
| rs13380693 | CREBBP      | 16         | Male   | 0.02                  | NA  | NA                    | NA         | NA         | NA                           | NA               | NA                | NA               | NA                    | NA              | NA         | NA         | NA         |            |
|            |             |            | Female | 0.02                  | NA  | NA                    | NA         | NA         | NA                           | NA               | NA                | NA               | NA                    | NA              | NA         | NA         | NA         |            |
| rs12051375 | CREBBP      | 16         | Male   | $5.08 \times 10^{-3}$ | NA  | NA                    | NA         | NA         | NA                           | NA               | NA                | NA               | NA                    | NA              | NA         | NA         | NA         |            |
|            |             |            | Female | $8.66 \times 10^{-3}$ | NA  | NA                    | NA         | NA         | NA                           | NA               | NA                | NA               | NA                    | NA              | NA         | NA         | NA         |            |
| rs130002   | CREBBP      | 16         | Male   | $5.08 \times 10^{-3}$ | NA  | NA                    | NA         | NA         | NA                           | NA               | NA                | NA               | NA                    | NA              | NA         | NA         | NA         |            |
|            |             |            | Female | $8.66 \times 10^{-3}$ | NA  | NA                    | NA         | NA         | NA                           | NA               | NA                | NA               | NA                    | NA              | NA         | NA         | NA         |            |
| rs8052927  | CREBBP      | 16         | Male   | 0.02                  | NA  | NA                    | NA         | NA         | NA                           | NA               | NA                | NA               | NA                    | NA              | NA         | NA         | NA         |            |
|            |             |            | Female | 0.02                  | NA  | NA                    | NA         | NA         | NA                           | NA               | NA                | NA               | NA                    | NA              | NA         | NA         | NA         |            |
| rs130021   | CREBBP      | 16         | Male   | 0.35                  | 386 | 0.96 (0.69-1.32)      | 0.79       | 0.99       | 1.67 (0.78-3.57)             | 0.68 (0.35-1.32) | 0.97 (0.54-1.72)  | 0.87 (0.45-1.69) | 0.36                  | 0.91            |            |            |            |            |
|            |             |            | Female | 0.37                  | 403 | 1.21 (0.87-1.69)      | 0.26       | 0.89       | 1.47 (0.68-3.15)             | 1.28 (0.71-2.31) | 0.99 (0.51-1.92)  | 1.20 (0.61-2.35) | 0.89                  | 0.98            |            |            |            |            |
| rs130025   | CREBBP      | 16         | Male   | 0.02                  | NA  | NA                    | NA         | NA         | NA                           | NA               | NA                | NA               | NA                    | NA              | NA         | NA         | NA         |            |
|            |             |            | Female | 0.01                  | NA  | NA                    | NA         | NA         | NA                           | NA               | NA                | NA               | NA                    | NA              | NA         | NA         | NA         |            |
| rs8046065  | CREBBP      | 16         | Male   | 0.12                  | 386 | 1.07 (0.65-1.76)      | 0.80       | 0.96       | 0.55 (0.14-2.13)             | 1.18 (0.45-3.11) | 1.35 (0.58-3.16)  | 1.04 (0.35-3.08) | 0.71                  | 0.97            |            |            |            |            |
|            |             |            | Female | 0.12                  | 403 | 0.98 (0.57-1.68)      | 0.94       | 0.94       | 0.49 (0.13-1.85)             | 1.12 (0.43-2.91) | 1.12 (0.36-3.47)  | 1.23 (0.43-3.55) | 0.69                  | 1.00            |            |            |            |            |
| rs3789033  | CREBBP      | 16         | Male   | 0.22                  | 386 | 0.85 (0.58-1.23)      | 0.37       | 0.97       | 1.08 (0.50-2.35)             | 0.50 (0.23-1.10) | 0.98 (0.48-2.02)  | 0.97 (0.47-1.98) | 0.48                  | 0.94            |            |            |            |            |
|            |             |            | Female | 0.24                  | 403 | 1.14 (0.78-1.67)      | 0.50       | 0.97       | 1.32 (0.59-2.94)             | 1.06 (0.53-2.13) | 1.04 (0.46-2.33)  | 1.19 (0.55-2.56) | 0.97                  | 0.97            |            |            |            |            |
| rs8047652  | CREBBP      | 16         | Male   | 0.02                  | NA  | NA                    | NA         | NA         | NA                           | NA               | NA                | NA               | NA                    | NA              | NA         | NA         | NA         |            |
|            |             |            | Female | 0.02                  | NA  | NA                    | NA         | NA         | NA                           | NA               | NA                | NA               | NA                    | NA              | NA         | NA         | NA         |            |
| rs13334803 | CREBBP      | 16         | Male   | 0.02                  | NA  | NA                    | NA         | NA         | NA                           | NA               | NA                | NA               | NA                    | NA              | NA         | NA         | NA         |            |
|            |             |            | Female | 0.01                  | NA  | NA                    | NA         | NA         | NA                           | NA               | NA                | NA               | NA                    | NA              | NA         | NA         | NA         |            |
| rs130046   | CREBBP      | 16         | Male   | 0.02                  | NA  | NA                    | NA         | NA         | NA                           | NA               | NA                | NA               | NA                    | NA              | NA         | NA         | NA         |            |
|            |             |            | Female | 0.01                  | NA  | NA                    | NA         | NA         | NA                           | NA               | NA                | NA               | NA                    | NA              | NA         | NA         | NA         |            |
| rs11644593 | CREBBP      | 16         | Male   | 0.10                  | 386 | 0.89 (0.53-1.51)      | 0.66       | 1.00       | 1.16 (0.36-3.76)             | 1.76 (0.64-4.87) | 0.52 (0.19-1.39)  | 0.67 (0.21-2.13) | 0.34                  | 0.91            |            |            |            |            |
|            |             |            | Female | 0.11                  | 403 | 1.28 (0.78-2.10)      | 0.34       | 0.94       | 1.76 (0.55-5.70)             | 1.53 (0.68-3.45) | 0.90 (0.32-2.57)  | 1.06 (0.36-3.14) | 0.80                  | 1.00            |            |            |            |            |
| rs1296720  | CREBBP      | 16         | Male   | 0.20                  | 386 | 0.89 (0.60-1.31)      | 0.54       | 1.00       | 1.31 (0.52-3.29)             | 1.15 (0.51-2.56) | 0.66 (0.33-1.31)  | 0.78 (0.36-1.69) | 0.59                  | 0.96            |            |            |            |            |
|            |             |            | Female | 0.18                  | 402 | 1.11 (0.74-1.65)      | 0.62       | 0.99       | 1.38 (0.55-3.45)             | 1.64 (0.81-3.31) | 1.22 (0.55-2.73)  | 0.48 (0.18-1.24) | 0.17                  | 0.71            |            |            |            |            |
| rs4567717  | CREBBP      | 16         | Male   | 0.02                  | NA  | NA                    | NA         | NA         | NA                           | NA               | NA                | NA               | NA                    | NA              | NA         | NA         | NA         |            |
|            |             |            | Female | 0.01                  | NA  | NA                    | NA         | NA         | NA                           | NA               | NA                | NA               | NA                    | NA              | NA         | NA         | NA         |            |
| rs2540038  | CREBBP      | 16         | Male   | 0.01                  | NA  | NA                    | NA         | NA         | NA                           | NA               | NA                | NA               | NA                    | NA              | NA         | NA         | NA         |            |
|            |             |            | Female | $9.93 \times 10^{-3}$ | NA  | NA                    | NA         | NA         | NA                           | NA               | NA                | NA               | NA                    | NA              | NA         | NA         | NA         |            |
| rs2239316  | CREBBP      | 16         | Male   | 0.26                  | 386 | 0.94 (0.66-1.34)      | 0.72       | 1.00       | 1.53 (0.70-3.33)             | 0.40 (0.19-0.87) | 1.23 (0.64-2.39)  | 1.07 (0.52-2.18) | 0.06                  | 0.35            |            |            |            |            |
|            |             |            | Female | 0.27                  | 403 | 1.20 (0.83-1.72)      | 0.34       | 0.94       | 1.48 (0.68-3.23)             | 0.96 (0.48-1.90) | 1.33 (0.61-2.89)  | 1.17 (0.60-2.29) | 0.86                  | 0.99            |            |            |            |            |
| rs7202140  | CREBBP      | 16         | Male   | 0.02                  | NA  | NA                    | NA         | NA         | NA                           | NA               | NA                | NA               | NA                    | NA              | NA         | NA         | NA         |            |
|            |             |            | Female | 0.02                  | NA  | NA                    | NA         | NA         | NA                           | NA               | NA                | NA               | NA                    | NA              | NA         | NA         | NA         |            |
| rs2526687  | CREBBP      | 16         | Male   | 0.01                  | NA  | NA                    | NA         | NA         | NA                           | NA               | NA                | NA               | NA                    | NA              | NA         | NA         | NA         |            |
|            |             |            | Female | $9.90 \times 10^{-3}$ | NA  | NA                    | NA         | NA         | NA                           | NA               | NA                | NA               | NA                    | NA              | NA         | NA         | NA         |            |
| rs12453682 | PPP1R1B     | 17         | Male   | 0.31                  | 386 | 0.85 (0.55-1.31)      | 0.46       | 0.84       | 0.60 (0.23-1.55)             | 0.77 (0.33-1.78) | 0.80 (0.36-1.74)  | 1.40 (0.57-3.45) | 0.61                  | 0.98            |            |            |            |            |
|            |             |            | Female | 0.33                  | 403 | 0.92 (0.58-1.46)      | 0.72       | 0.72       | 1.03 (0.37-2.87)             | 0.67 (0.30-1.51) | 1.74 (0.64-4.76)  | 0.73 (0.29-1.79) | 0.47                  | 0.54            |            |            |            |            |
| rs1877032  | PPP1R1B     | 17         | Male   | 0.10                  | 345 | 0.72 (0.39-1.30)      | 0.27       | 0.71       | 0.37 (0.07-1.85)             | 0.54 (0.16-1.85) | 0.95 (0.33-2.73)  | 0.99 (0.33-2.96) | 0.68                  | 0.97            |            |            |            |            |
|            |             |            | Female | 0.08                  | 366 | 0.65 (0.33-1.26)      | 0.18       | 0.53       | 1.28 (0.35-4.62)             | 0.22 (0.05-1.01) | 1.06 (0.24-4.57)  | 0.76 (0.23-2.51) | 0.28                  | 0.59            |            |            |            |            |
| rs1874228  | PPP1R1B     | 17         | Male   | 0.25                  | 381 | 0.90 (0.58-1.39)      | 0.62       | 0.86       | 0.97 (0.37-2.55)             | 0.59 (0.25-1.38) | 0.86 (0.38-1.94)  | 1.40 (0.57-3.43) | 0.59                  | 0.98            |            |            |            |            |
|            |             |            | Female | 0.29                  | 399 | 1.12 (0.71-1.78)      | 0.62       | 0.80       | 1.05 (0.37-2.94)             | 0.87 (0.39-1.95) | 2.62 (0.97-7.09)  | 0.79 (0.32-1.94) | 0.27                  | 0.59            |            |            |            |            |
| rs879606   | PPP1R1B     | 17         | Male   | 0.16                  | 386 | 1.32 (0.89-1.96)      | 0.18       | 0.56       | 1.19 (0.48-2.97)             | 1.07 (0.52-2.20) | 1.56 (0.72-3.39)  | 1.53 (0.68-3.45) | 0.88                  | 0.97            |            |            |            |            |
|            |             |            | Female | 0.20                  | 402 | 1.38 (0.93-2.04)      | 0.11       | 0.39       | 1.18 (0.51-2.69)             | 1.46 (0.74-2.86) | 3.42 (1.33-8.78)  | 0.70 (0.30-1.66) | 0.09                  | 0.26            |            |            |            |            |
| rs1495099  | PPP1R1B     | 17         | Male   | 0.29                  | 381 | 0.83 (0.54-1.27)      | 0.38       | 0.77       | 0.65 (0.25-1.67)             | 0.73 (0.31-1.68) | 0.89 (0.40-1.96)  | 1.07 (0.44-2.63) | 0.87                  | 1.00            |            |            |            |            |
|            |             |            | Female | 0.31                  | 397 | 1.11 (0.70-1.77)      | 0.65       | 0.75       | 1.16 (0.42-3.22)             | 0.85 (0.37-1.93) | 1.82 (0.68-4.85)  | 0.98 (0.39-2.44) | 0.69                  | 0.74            |            |            |            |            |
| rs907094   | PPP1R1B     | 17         | Male   | 0.23                  | 386 | 1.13 (0.79-1.60)      | 0.51       | 0.85       | 0.96 (0.43-2.16)             | 0.98 (0.50-1.94) | 1.30 (0.68-2.49)  | 1.25 (0.62-2.53) | 0.90                  | 0.90            |            |            |            |            |
|            |             |            | Female | 0.26                  | 403 | 1.18 (0.84-1.67)      | 0.35       | 0.73       | 1.11 (0.53-2.32)             | 1.22 (0.65-2.27) | 1.93 (0.88-4.24)  | 0.83 (0.41-1.66) | 0.45                  | 0.70            |            |            |            |            |
| rs1874224  | PPP1R1B     | 17         | Male   | 0.02                  | NA  | NA                    | NA         | NA         | NA                           | NA               | NA                | NA               | NA                    | NA              | NA         | NA         | NA         |            |
|            |             |            | Female | $8.66 \times 10^{-3}$ | NA  | NA                    | NA         | NA         | NA                           | NA               | NA                | NA               | NA                    | NA              | NA         | NA         | NA         |            |
| rs9892427  | PPP1R1B     | 17         | Male   | 0.07                  | 386 | 1.02 (0.59-1.77)      | 0.95       | 0.95       | 0.77 (0.21-2.81)             | 0.69 (0.22-2.14) | 1.06 (0.39-2.85)  | 1.78 (0.60-5.24) | 0.65                  | 0.98            |            |            |            |            |
|            |             |            | Female | 0.06                  | 403 | 0.75 (0.36-1.59)      | 0.45       | 0.80       | 1.46 (0.41-5.12)             | 0.34 (0.07-1.58) | 0.39 (0.04-3.43)  | 1.29 (0.29-5.68) | 0.38                  | 0.68            |            |            |            |            |
| rs9972882  | PPP1R1B     | 17         | Male   | 0.25                  | 386 | 0.78 (0.51-1.21)      | 0.27       | 0.64       | 0.52 (0.19-1.44)             | 0.65 (0.28-1.52) | 0.86 (0.39-1.92)  | 1.17 (0.49-2.83) | 0.64                  | 0.99            |            |            |            |            |
|            |             |            | Female | 0.29                  | 403 | 1.14 (0.72-1.81)      | 0.57       | 0.78       | 1.25 (0.45-3.47)             | 1.01 (0.45-2.25) | 1.65 (0.62-4.41)  | 0.91 (0.37-2.24) | 0.82                  | 0.82            |            |            |            |            |
| rs12953076 | CRHRI       | 17         | Male   | 0.19                  | 385 | 1.18 (0.82-1.71)      | 0.37       | 0.95       | 0.79 (0.34-1.86)             | 0.96 (0.44-2.11) | 1.29 (0.67-2.48)  | 1.72 (0.85-3.49) | 0.52                  | 0.90            |            |            |            |            |
|            |             |            | Female | 0.16                  | 403 | 1.50 (0.98-2.30)      | 0.07       | 0.36       | 1.51 (0.58-3.96)             | 1.20 (0.56-2.60) | 2.80 (1.09-7.19)  | 1.17 (0.50-2.72) | 0.49                  | 0.49            |            |            |            |            |
| rs4074461  | CRHRI       | 17         | Male   | 0.43                  | 386 | 1.01 (0.75-1.36)      | 0.95       | 0.99       | 0.81 (0.41-1.61)             | 0.72 (0.40-1.31) | 1.64 (0.95-2.82)  | 0.93 (0.50-1.73) | 0.19                  | 0.67            |            |            |            |            |
|            |             |            | Female | 0.49                  | 400 | 1.17 (0.84-1.63)      | 0.35       | 0.68       | 2.52 (1.12-5.68)             | 1.26 (0.72-2.22) | 0.80 (0.40-1.61)  | 0.85 (0.43-1.65) | 0.12                  | 0.48            |            |            |            |            |
| rs12944712 | CRHRI       | 17         | Male   | 0.45                  | 386 | 0.91 (0.57-1.45)      | 0.69       | 1.00       | 1.72 (0.56-5.27)             | 1.44 (0.57-3.65) | 0.45 (0.20-1.03)  | 0.86 (0.32-2.34) | 0.17                  | 0.65            |            |            |            |            |
|            |             |            | Female | 0.41                  | 403 | 0.59 (0.37-0.94)      | 0.03       | 0.19       | 0.16 (0.05-0.49)             | 0.99 (0.45-2.21) | 0.29 (0.10-0.86)  | 1.44 (0.52-3.97) | 6.62 $\times 10^{-3}$ | 0.05            |            |            |            |            |
| rs4792887  | CRHRI       | 17         | Male   | 0.12                  | 386 | 0.92 (0.58-1.45)      | 0.71       | 1.00       | 0.43 (0.11-1.65)             | 1.12 (0.45-2.77) | 0.85 (0.38-1.88)  | 1.23 (0.52-2.91) | 0.57                  | 0.88            |            |            |            |            |
|            |             |            | Female | 0.11                  | 403 | 1.47 (0.92-2.36)      | 0.11       | 0.40       | 2.67 (0.91-7.84)             | 1.12 (0.52-2.38) | 3.67 (1.06-12.70) | 0.81 (0.28-2.32) | 0.15                  | 0.54            |            |            |            |            |
| rs16940646 | CRHRI       | 17         | Male   | 0.12                  | 385 | 0.98 (0.62-1.55)      | 0.93       | 1.00       | 0.70 (0.21-2.40)             | 1.12 (0.45-2.78) | 0.85 (0.38-1.88)  | 1.23 (0.52-2.90) | 0.86                  | 0.98            |            |            |            |            |
|            |             |            | Female | 0.11                  | 403 | 1.50 (0.93-2.40)      | 0.10       | 0.39       | 2.67 (0.91-7.84)             | 1.17 (0.55-2.49) | 3.67 (1.06-12.70) | 0.81 (0.28-2.32) | 0.16                  | 0.57            |            |            |            |            |
| rs242924   | CRHRI       | 17         | Male   | 0.42                  | 385 | 0.77 (0.49-1.20)      | 0.25       | 0.87       | 0.55 (0.21-1.43)             | 0.46 (0.19-1.09) | 1.61 (0.67-3.88)  | 0.81 (0.32-2.02) | 0.20                  | 0.66            |            |            |            |            |
|            |             |            | Female | 0.47                  | 403 | 0.97 (0.59-1.62)      | 0.92       | 0.92       | 1.46 (0.44-4.89)             | 2.57 (0.89-7.41) | 0.48 (0.18-1.28)  | 0.51 (0.19-1.39) | 0.05                  | 0.27            |            |            |            |            |
| rs242942   | CRHRI       | 17         | Male   | 0.13                  | 386 | 1.25 (0.81-1.94)      | 0.32       | 0.93       | 1.33 (0.47-3.74)             | 1.13 (0.44-2.92) | 1.52 (0.75-3.09)  | 0.94 (0.37-2.42) | 0.87                  | 0.87            |            |            |            |            |
|            |             |            | Female | 0.12                  | 403 | 1.51 (0.92-2.46)      | 0.11       | 0.41       | 1.38 (0.47-4.07)             | 0.78 (0.35-1.75) | 6.51 (1.50-28.28) | 2.27 (0.83-6.15) | 0.06                  | 0.27            |            |            |            |            |
| rs81189    | CRHRI       | 17         | Male   | 0.46                  | 385 | 1.00 (                |            |            |                              |                  |                   |                  |                       |                 |            |            |            |            |

| SNP        | Gene Region | Chromosome | Gender | MAF  | N   | Marginal Effect       |            |            | Treatment Stratified Effects |                  |                   |                  | Test of Interaction     |            |
|------------|-------------|------------|--------|------|-----|-----------------------|------------|------------|------------------------------|------------------|-------------------|------------------|-------------------------|------------|
|            |             |            |        |      |     | Likelihood ratio test |            |            | Placebo                      | Bupropion        | Patch             | Spray            | Observed P              | Adjusted P |
|            |             |            |        |      |     | SNP OR (95% CI)       | Observed P | Adjusted P | SNP OR (95% CI)              | SNP OR (95% CI)  | SNP OR (95% CI)   | SNP OR (95% CI)  |                         |            |
| rs9912608  | GRB2        | 17         | Female | 0.25 | 403 | 1.09 (0.69-1.72)      | 0.72       | 0.86       | 0.33 (0.10-1.09)             | 1.73 (0.77-3.89) | 0.73 (0.28-1.96)  | 1.95 (0.78-4.85) | 0.05                    | 0.13       |
|            |             |            | Male   | 0.27 | 386 | 0.85 (0.55-1.31)      | 0.47       | 0.93       | 1.40 (0.53-3.67)             | 0.45 (0.18-1.11) | 1.14 (0.52-2.50)  | 0.72 (0.29-1.77) | 0.30                    | 0.71       |
|            |             |            | Female | 0.25 | 402 | 1.08 (0.68-1.70)      | 0.75       | 0.82       | 0.33 (0.10-1.09)             | 1.69 (0.75-3.79) | 0.73 (0.27-1.95)  | 1.95 (0.78-4.86) | 0.05                    | 0.14       |
| rs4789172  | GRB2        | 17         | Male   | 0.48 | 386 | 1.24 (0.93-1.66)      | 0.15       | 0.57       | 1.23 (0.63-2.42)             | 1.67 (0.97-2.87) | 1.17 (0.68-1.99)  | 0.90 (0.47-1.70) | 0.53                    | 0.90       |
|            |             |            | Female | 0.49 | 402 | 0.93 (0.67-1.30)      | 0.68       | 0.97       | 2.52 (1.11-5.75)             | 0.68 (0.37-1.23) | 1.21 (0.62-2.37)  | 0.52 (0.26-1.02) | 0.01                    | 0.05       |
| rs1369299  | GRB2        | 17         | Male   | 0.18 | 385 | 0.94 (0.59-1.49)      | 0.80       | 0.94       | 0.96 (0.37-2.46)             | 0.96 (0.37-2.50) | 1.10 (0.47-2.56)  | 0.74 (0.28-1.95) | 0.94                    | 1.00       |
|            |             |            | Female | 0.18 | 403 | 0.75 (0.46-1.23)      | 0.25       | 0.67       | 0.40 (0.11-1.52)             | 1.01 (0.44-2.29) | 0.84 (0.30-2.33)  | 0.66 (0.24-1.81) | 0.68                    | 0.80       |
| rs4789176  | GRB2        | 17         | Male   | 0.18 | 386 | 0.93 (0.59-1.48)      | 0.76       | 0.92       | 0.96 (0.37-2.47)             | 0.96 (0.37-2.50) | 1.10 (0.47-2.56)  | 0.71 (0.27-1.86) | 0.92                    | 1.00       |
|            |             |            | Female | 0.18 | 403 | 0.75 (0.46-1.23)      | 0.25       | 0.67       | 0.40 (0.11-1.52)             | 1.01 (0.44-2.29) | 0.84 (0.30-2.33)  | 0.66 (0.24-1.81) | 0.68                    | 0.80       |
| rs4350602  | GRB2        | 17         | Male   | 0.30 | 386 | 0.91 (0.65-1.27)      | 0.58       | 0.94       | 1.41 (0.71-2.83)             | 0.72 (0.37-1.38) | 1.05 (0.56-1.98)  | 0.65 (0.32-1.33) | 0.37                    | 0.81       |
|            |             |            | Female | 0.29 | 403 | 1.15 (0.80-1.65)      | 0.44       | 0.89       | 0.64 (0.27-1.52)             | 1.31 (0.72-2.41) | 0.88 (0.39-1.99)  | 1.84 (0.90-3.77) | 0.24                    | 0.51       |
| rs9902966  | GRB2        | 17         | Male   | 0.20 | 385 | 0.95 (0.60-1.49)      | 0.81       | 0.91       | 0.88 (0.34-2.25)             | 1.04 (0.41-2.62) | 1.01 (0.44-2.35)  | 0.86 (0.34-2.16) | 0.99                    | 0.99       |
|            |             |            | Female | 0.19 | 402 | 0.70 (0.43-1.15)      | 0.15       | 0.49       | 0.38 (0.10-1.43)             | 1.01 (0.44-2.30) | 0.79 (0.28-2.19)  | 0.57 (0.21-1.54) | 0.60                    | 0.73       |
| rs4789178  | GRB2        | 17         | Male   | 0.20 | 385 | 0.93 (0.59-1.47)      | 0.77       | 0.92       | 0.85 (0.33-2.18)             | 1.01 (0.40-2.56) | 1.01 (0.44-2.35)  | 0.86 (0.34-2.16) | 0.99                    | 1.00       |
|            |             |            | Female | 0.19 | 403 | 0.73 (0.45-1.18)      | 0.19       | 0.57       | 0.38 (0.10-1.43)             | 1.09 (0.48-2.46) | 0.79 (0.28-2.18)  | 0.57 (0.21-1.54) | 0.53                    | 0.65       |
| rs4789182  | GRB2        | 17         | Male   | 0.32 | 386 | 0.79 (0.52-1.22)      | 0.29       | 0.77       | 1.23 (0.45-3.30)             | 0.53 (0.22-1.23) | 0.97 (0.44-2.11)  | 0.67 (0.28-1.63) | 0.56                    | 0.87       |
|            |             |            | Female | 0.30 | 402 | 1.11 (0.70-1.75)      | 0.65       | 0.96       | 0.55 (0.19-1.58)             | 1.97 (0.86-4.50) | 0.69 (0.26-1.82)  | 1.43 (0.58-3.54) | 0.18                    | 0.40       |
| rs2053156  | GRB2        | 17         | Male   | 0.20 | 386 | 0.94 (0.60-1.48)      | 0.79       | 0.93       | 0.85 (0.33-2.18)             | 1.04 (0.41-2.62) | 1.01 (0.44-2.35)  | 0.86 (0.34-2.16) | 0.98                    | 1.00       |
|            |             |            | Female | 0.19 | 403 | 0.73 (0.45-1.18)      | 0.19       | 0.57       | 0.38 (0.10-1.43)             | 1.09 (0.48-2.46) | 0.79 (0.28-2.18)  | 0.57 (0.21-1.54) | 0.53                    | 0.65       |
| rs9909076  | GRB2        | 17         | Male   | 0.20 | 386 | 0.94 (0.60-1.48)      | 0.79       | 0.93       | 0.85 (0.33-2.18)             | 1.04 (0.41-2.62) | 1.01 (0.44-2.35)  | 0.86 (0.34-2.16) | 0.98                    | 1.00       |
|            |             |            | Female | 0.19 | 403 | 0.73 (0.45-1.18)      | 0.19       | 0.57       | 0.38 (0.10-1.43)             | 1.09 (0.48-2.46) | 0.79 (0.28-2.18)  | 0.57 (0.21-1.54) | 0.53                    | 0.65       |
| rs4788891  | GRB2        | 17         | Male   | 0.20 | 386 | 0.94 (0.60-1.48)      | 0.79       | 0.93       | 0.85 (0.33-2.18)             | 1.04 (0.41-2.62) | 1.01 (0.44-2.35)  | 0.86 (0.34-2.16) | 0.98                    | 1.00       |
|            |             |            | Female | 0.19 | 403 | 0.74 (0.46-1.21)      | 0.23       | 0.64       | 0.43 (0.11-1.62)             | 1.09 (0.48-2.46) | 0.79 (0.28-2.19)  | 0.57 (0.21-1.54) | 0.60                    | 0.73       |
| rs4789189  | GRB2        | 17         | Male   | 0.20 | 383 | 0.99 (0.63-1.55)      | 0.95       | 0.99       | 0.85 (0.33-2.18)             | 1.16 (0.47-2.88) | 1.01 (0.44-2.35)  | 0.93 (0.37-2.37) | 0.97                    | 1.00       |
|            |             |            | Female | 0.19 | 402 | 0.72 (0.44-1.17)      | 0.18       | 0.55       | 0.38 (0.10-1.43)             | 1.07 (0.47-2.41) | 0.79 (0.28-2.18)  | 0.57 (0.21-1.54) | 0.55                    | 0.67       |
| rs9908820  | GRB2        | 17         | Male   | 0.33 | 386 | 0.79 (0.52-1.22)      | 0.29       | 0.78       | 1.14 (0.42-3.08)             | 0.59 (0.25-1.37) | 0.97 (0.44-2.11)  | 0.63 (0.26-1.54) | 0.69                    | 0.93       |
|            |             |            | Female | 0.30 | 403 | 1.09 (0.69-1.72)      | 0.71       | 0.92       | 0.58 (0.20-1.64)             | 1.86 (0.82-4.24) | 0.75 (0.29-1.99)  | 1.28 (0.52-3.15) | 0.28                    | 0.46       |
| rs8065441  | GRB2        | 17         | Male   | 0.13 | 386 | 0.91 (0.56-1.50)      | 0.72       | 0.94       | 0.69 (0.26-1.86)             | 1.16 (0.42-3.20) | 1.38 (0.53-3.56)  | 0.61 (0.21-1.75) | 0.61                    | 0.90       |
|            |             |            | Female | 0.14 | 402 | 0.86 (0.51-1.46)      | 0.58       | 0.96       | 0.55 (0.14-2.08)             | 0.85 (0.35-2.03) | 0.97 (0.33-2.86)  | 1.11 (0.37-3.28) | 0.87                    | 0.87       |
| rs12608148 | ADCYAP1     | 18         | Male   | 0.27 | 386 | 0.86 (0.56-1.32)      | 0.50       | 0.98       | 0.37 (0.13-1.01)             | 0.93 (0.40-2.15) | 1.16 (0.53-2.54)  | 1.11 (0.46-2.69) | 0.29                    | 0.79       |
|            |             |            | Female | 0.31 | 402 | 0.78 (0.50-1.23)      | 0.28       | 0.95       | 0.54 (0.19-1.52)             | 0.91 (0.41-2.03) | 0.59 (0.23-1.55)  | 1.08 (0.44-2.65) | 0.69                    | 0.96       |
| rs4797325  | ADCYAP1     | 18         | Male   | 0.42 | 381 | 0.92 (0.68-1.25)      | 0.60       | 0.94       | 0.51 (0.24-1.07)             | 0.65 (0.35-1.23) | 1.23 (0.71-2.12)  | 1.43 (0.75-2.71) | 0.08                    | 0.42       |
|            |             |            | Female | 0.42 | 396 | 0.77 (0.55-1.08)      | 0.13       | 0.76       | 0.78 (0.36-1.68)             | 0.81 (0.44-1.49) | 0.61 (0.31-1.20)  | 0.92 (0.46-1.85) | 0.86                    | 0.97       |
| rs1599789  | ADCYAP1     | 18         | Male   | 0.27 | 386 | 0.87 (0.61-1.25)      | 0.45       | 0.97       | 0.73 (0.32-1.67)             | 0.58 (0.28-1.21) | 1.09 (0.55-2.15)  | 1.16 (0.58-2.29) | 0.48                    | 0.96       |
|            |             |            | Female | 0.24 | 403 | 0.92 (0.63-1.33)      | 0.64       | 0.99       | 0.80 (0.32-2.00)             | 0.68 (0.35-1.31) | 0.84 (0.38-1.83)  | 1.63 (0.78-3.40) | 0.35                    | 0.86       |
| rs2040176  | ADCYAP1     | 18         | Male   | 0.11 | 386 | 0.86 (0.51-1.46)      | 0.58       | 0.94       | 0.35 (0.07-1.70)             | 1.32 (0.49-3.52) | 0.87 (0.34-2.20)  | 0.88 (0.30-2.57) | 0.54                    | 0.90       |
|            |             |            | Female | 0.12 | 403 | 0.86 (0.49-1.51)      | 0.59       | 0.99       | 0.49 (0.13-1.88)             | 0.39 (0.13-1.13) | 2.20 (0.64-7.52)  | 1.72 (0.59-5.03) | 0.08                    | 0.40       |
| rs1916610  | ADCYAP1     | 18         | Male   | 0.46 | 386 | 1.14 (0.83-1.55)      | 0.42       | 0.97       | 2.25 (1.08-4.66)             | 1.48 (0.79-2.79) | 0.80 (0.46-1.41)  | 0.74 (0.38-1.45) | 0.06                    | 0.37       |
|            |             |            | Female | 0.46 | 403 | 1.29 (0.93-1.80)      | 0.13       | 0.77       | 1.48 (0.71-3.11)             | 1.75 (0.94-3.26) | 1.35 (0.70-2.59)  | 0.74 (0.37-1.48) | 0.30                    | 0.85       |
| rs11081411 | ADCYAP1     | 18         | Male   | 0.17 | 381 | 0.87 (0.53-1.41)      | 0.56       | 0.96       | 0.82 (0.29-2.30)             | 0.35 (0.12-1.04) | 1.19 (0.47-3.06)  | 1.40 (0.57-3.45) | 0.22                    | 0.70       |
|            |             |            | Female | 0.13 | 401 | 1.04 (0.61-1.78)      | 0.89       | 0.99       | 1.57 (0.45-5.53)             | 1.04 (0.44-2.45) | 0.40 (0.10-1.60)  | 1.58 (0.54-4.61) | 0.39                    | 0.86       |
| rs11665625 | ADCYAP1     | 18         | Male   | 0.47 | 385 | 1.44 (1.05-1.97)      | 0.02       | 0.23       | 2.92 (1.39-6.12)             | 1.23 (0.63-2.41) | 1.07 (0.63-1.82)  | 1.38 (0.73-2.61) | 0.15                    | 0.60       |
|            |             |            | Female | 0.44 | 402 | 1.02 (0.74-1.41)      | 0.91       | 0.91       | 1.20 (0.57-2.52)             | 1.37 (0.80-2.35) | 0.71 (0.34-1.46)  | 0.77 (0.38-1.55) | 0.40                    | 0.83       |
| rs12961210 | ADCYAP1     | 18         | Male   | 0.32 | 384 | 1.49 (1.07-2.06)      | 0.02       | 0.19       | 2.79 (1.37-5.66)             | 2.00 (1.01-3.98) | 0.97 (0.54-1.71)  | 1.02 (0.49-2.14) | 0.07                    | 0.38       |
|            |             |            | Female | 0.32 | 403 | 1.21 (0.86-1.71)      | 0.28       | 0.95       | 1.40 (0.68-2.87)             | 1.58 (0.86-2.89) | 1.15 (0.55-2.42)  | 0.74 (0.35-1.57) | 0.45                    | 0.86       |
| rs9635870  | ADCYAP1     | 18         | Male   | 0.30 | 380 | 0.85 (0.62-1.16)      | 0.29       | 0.94       | 0.62 (0.28-1.36)             | 0.66 (0.35-1.23) | 0.95 (0.53-1.70)  | 1.15 (0.64-2.08) | 0.48                    | 0.94       |
|            |             |            | Female | 0.27 | 397 | 0.88 (0.63-1.23)      | 0.45       | 0.99       | 0.52 (0.21-1.27)             | 0.75 (0.43-1.34) | 1.13 (0.58-2.21)  | 1.25 (0.64-2.42) | 0.33                    | 0.87       |
| rs2846579  | ADCYAP1     | 18         | Male   | 0.11 | 386 | 0.88 (0.52-1.49)      | 0.64       | 0.89       | 0.35 (0.07-1.70)             | 1.21 (0.46-3.18) | 1.00 (0.40-2.48)  | 0.88 (0.30-2.57) | 0.57                    | 0.89       |
|            |             |            | Female | 0.12 | 403 | 0.93 (0.54-1.63)      | 0.80       | 1.00       | 0.49 (0.13-1.88)             | 0.39 (0.13-1.13) | 3.26 (0.95-11.18) | 1.72 (0.59-5.04) | 0.03                    | 0.19       |
| rs2846583  | ADCYAP1     | 18         | Male   | 0.28 | 386 | 0.81 (0.53-1.24)      | 0.33       | 0.95       | 0.35 (0.13-0.95)             | 0.82 (0.35-1.89) | 1.16 (0.53-2.54)  | 1.02 (0.42-2.49) | 0.26                    | 0.75       |
|            |             |            | Female | 0.31 | 403 | 0.82 (0.52-1.29)      | 0.39       | 0.99       | 0.92 (0.33-2.56)             | 0.85 (0.38-1.89) | 0.59 (0.23-1.55)  | 0.95 (0.38-2.32) | 0.90                    | 0.90       |
| rs2846584  | ADCYAP1     | 18         | Male   | 0.27 | 385 | 0.83 (0.54-1.28)      | 0.41       | 0.97       | 0.40 (0.14-1.09)             | 0.81 (0.35-1.88) | 1.18 (0.54-2.58)  | 1.03 (0.42-2.52) | 0.37                    | 0.89       |
|            |             |            | Female | 0.30 | 403 | 0.87 (0.55-1.37)      | 0.54       | 0.99       | 0.92 (0.33-2.56)             | 0.93 (0.42-2.08) | 0.60 (0.23-1.57)  | 0.85 (0.32-2.59) | 0.85                    | 0.97       |
| rs8192595  | ADCYAP1     | 18         | Male   | 0.10 | 386 | 0.59 (0.33-1.05)      | 0.06       | 0.51       | 0.18 (0.02-1.48)             | 0.97 (0.31-2.97) | 0.57 (0.21-1.56)  | 0.63 (0.20-1.92) | 0.50                    | 0.91       |
|            |             |            | Female | 0.09 | 403 | 0.79 (0.44-1.41)      | 0.42       | 0.99       | 1.32 (0.38-4.60)             | 1.05 (0.36-3.04) | 1.56 (0.55-4.43)  | NA               | 5.36 × 10 <sup>-3</sup> | 0.05       |
| rs11659736 | ADCYAP1     | 18         | Male   | 0.37 | 385 | 0.82 (0.53-1.27)      | 0.38       | 0.97       | 0.92 (0.35-2.41)             | 0.69 (0.30-1.60) | 0.89 (0.40-1.98)  | 0.82 (0.33-2.06) | 0.97                    | 1.00       |
|            |             |            | Female | 0.37 | 403 | 0.75 (0.47-1.20)      | 0.22       | 0.92       | 1.30 (0.46-3.69)             | 0.46 (0.20-1.05) | 1.36 (0.48-3.82)  | 0.55 (0.22-1.37) | 0.25                    | 0.81       |
| rs7228988  | ADCYAP1     | 18         | Male   | 0.31 | 386 | 0.90 (0.65-1.24)      | 0.51       | 0.97       | 0.86 (0.40-1.83)             | 0.96 (0.52-1.78) | 0.91 (0.51-1.62)  | 0.85 (0.44-1.64) | 0.99                    | 0.99       |
|            |             |            | Female | 0.31 | 402 | 0.83 (0.57-1.20)      | 0.31       | 0.97       | 1.27 (0.62-2.61)             | 0.53 (0.26-1.06) | 1.18 (0.51-2.74)  | 0.68 (0.31-1.48) | 0.26                    | 0.83       |
| rs11663172 | ADCYAP1     | 18         | Male   | 0.41 | 386 | 0.76 (0.49-1.19)      | 0.23       | 0.90       | 0.66 (0.25-1.71)             | 0.40 (0.17-0.95) | 0.91 (0.29-1.73)  | 1.48 (0.56-3.87) | 0.23                    | 0.71       |
|            |             |            | Female | 0.42 | 402 | 0.82 (0.51-1.33)      | 0.33       | 0.98       | 1.29 (0.44-3.79)             | 0.41 (0.18-0.97) | 2.21 (0.66-7.48)  | 0.65 (0.26-1.66) | 0.10                    | 0.47       |
| rs17501755 | ADCYAP1     | 18         | Male   | 0.30 | 386 | 0.81 (0.53-1.25)      | 0.35       | 0          |                              |                  |                   |                  |                         |            |

| SNP        | Gene Region | Chromosome | Gender | MAF                     | N   | Marginal Effect       |            |         | Treatment Stratified Effects |                  |                  |                  | Test of Interaction |            |            |
|------------|-------------|------------|--------|-------------------------|-----|-----------------------|------------|---------|------------------------------|------------------|------------------|------------------|---------------------|------------|------------|
|            |             |            |        |                         |     | Likelihood ratio test |            | Placebo | Bupropion                    | Patch            | Spray            | Observed P       | Adjusted P          | Observed P | Adjusted P |
|            |             |            |        |                         |     | SNP OR (95% CI)       | Observed P |         |                              |                  |                  |                  |                     |            |            |
| rs6141600  | EPB41L1     | 20         | Female | 0.23                    | 401 | 0.96 (0.60-1.53)      | 0.86       | 0.99    | 1.39 (0.50-3.88)             | 0.85 (0.38-1.93) | 0.82 (0.31-2.20) | 0.95 (0.37-2.46) | 0.88                | 0.95       |            |
|            |             |            | Male   | 0.30                    | 370 | 0.68 (0.44-1.05)      | 0.08       | 0.31    | 0.53 (0.19-1.42)             | 0.44 (0.18-1.06) | 0.92 (0.42-2.03) | 0.91 (0.36-2.30) | 0.53                | 0.70       |            |
| rs6121156  | EPB41L1     | 20         | Female | 0.27                    | 395 | 0.94 (0.59-1.49)      | 0.78       | 1.00    | 1.29 (0.46-3.60)             | 0.82 (0.36-1.83) | 1.13 (0.43-2.98) | 0.72 (0.28-1.88) | 0.82                | 0.93       |            |
|            |             |            | Male   | 3.81 × 10 <sup>-3</sup> | NA  | NA                    | NA         | NA      | NA                           | NA               | NA               | NA               | NA                  | NA         |            |
| rs6142512  | EPB41L1     | 20         | Female | 1.24 × 10 <sup>-3</sup> | NA  | NA                    | NA         | NA      | NA                           | NA               | NA               | NA               | NA                  | NA         |            |
|            |             |            | Male   | 0.16                    | 386 | 0.70 (0.43-1.12)      | 0.13       | 0.33    | 0.67 (0.22-2.07)             | 0.47 (0.17-1.26) | 1.20 (0.52-2.77) | 0.53 (0.20-1.38) | 0.47                | 0.68       |            |
| rs1474976  | EPB41L1     | 20         | Female | 0.18                    | 403 | 1.00 (0.61-1.61)      | 0.99       | 0.99    | 1.73 (0.62-4.84)             | 0.59 (0.25-1.39) | 1.42 (0.53-3.83) | 0.87 (0.30-2.51) | 0.37                | 0.60       |            |
|            |             |            | Male   | 0.09                    | 386 | 0.64 (0.35-1.16)      | 0.13       | 0.41    | 0.78 (0.23-2.69)             | 1.39 (0.54-3.59) | 0.19 (0.04-0.89) | 0.37 (0.08-1.79) | 0.10                | 0.23       |            |
| rs6121163  | EPB41L1     | 20         | Female | 0.12                    | 403 | 1.55 (0.92-2.62)      | 0.11       | 0.36    | 0.71 (0.18-2.76)             | 2.23 (0.86-5.73) | 2.13 (0.68-6.67) | 1.35 (0.51-3.56) | 0.51                | 0.73       |            |
|            |             |            | Male   | 0.06                    | NA  | NA                    | NA         | NA      | NA                           | NA               | NA               | NA               | NA                  | NA         |            |
| rs7266316  | EPB41L1     | 20         | Female | 0.05                    | NA  | NA                    | NA         | NA      | NA                           | NA               | NA               | NA               | NA                  | NA         |            |
|            |             |            | Male   | 0.00                    | NA  | NA                    | NA         | NA      | NA                           | NA               | NA               | NA               | NA                  | NA         |            |
| rs6060831  | EPB41L1     | 20         | Female | 1.24 × 10 <sup>-3</sup> | NA  | NA                    | NA         | NA      | NA                           | NA               | NA               | NA               | NA                  | NA         |            |
|            |             |            | Male   | 0.00                    | NA  | NA                    | NA         | NA      | NA                           | NA               | NA               | NA               | NA                  | NA         |            |
| rs6058429  | EPB41L1     | 20         | Female | 0.00                    | NA  | NA                    | NA         | NA      | NA                           | NA               | NA               | NA               | NA                  | NA         |            |
|            |             |            | Male   | 0.06                    | NA  | NA                    | NA         | NA      | NA                           | NA               | NA               | NA               | NA                  | NA         |            |
| rs6060845  | EPB41L1     | 20         | Female | 0.05                    | NA  | NA                    | NA         | NA      | NA                           | NA               | NA               | NA               | NA                  | NA         |            |
|            |             |            | Male   | 0.24                    | 386 | 0.79 (0.51-1.22)      | 0.28       | 0.41    | 0.68 (0.25-1.82)             | 0.61 (0.26-1.45) | 1.26 (0.57-2.77) | 0.64 (0.26-1.57) | 0.57                | 0.67       |            |
| rs2247688  | EPB41L1     | 20         | Female | 0.25                    | 402 | 1.13 (0.72-1.79)      | 0.59       | 0.95    | 1.39 (0.50-3.89)             | 1.01 (0.45-2.24) | 1.02 (0.39-2.67) | 1.23 (0.49-3.10) | 0.96                | 0.96       |            |
|            |             |            | Male   | 0.24                    | 386 | 0.86 (0.56-1.33)      | 0.51       | 0.51    | 0.73 (0.27-1.94)             | 0.83 (0.35-1.97) | 1.41 (0.64-3.10) | 0.54 (0.22-1.35) | 0.45                | 0.67       |            |
| rs6121179  | EPB41L1     | 20         | Female | 0.25                    | 403 | 0.99 (0.63-1.57)      | 0.98       | 1.00    | 1.44 (0.51-4.01)             | 0.86 (0.39-1.92) | 1.00 (0.38-2.61) | 0.88 (0.35-2.23) | 0.88                | 0.91       |            |
|            |             |            | Male   | 0.18                    | 385 | 0.77 (0.49-1.22)      | 0.27       | 0.45    | 0.54 (0.18-1.65)             | 0.90 (0.37-2.22) | 1.31 (0.59-2.94) | 0.40 (0.15-1.09) | 0.27                | 0.45       |            |
| rs6119707  | EPB41L1     | 20         | Female | 0.19                    | 400 | 1.11 (0.69-1.78)      | 0.68       | 0.98    | 1.82 (0.65-5.12)             | 0.63 (0.27-1.50) | 1.48 (0.56-3.93) | 1.12 (0.40-3.12) | 0.40                | 0.64       |            |
|            |             |            | Male   | 0.00                    | NA  | NA                    | NA         | NA      | NA                           | NA               | NA               | NA               | NA                  | NA         |            |
| rs11700361 | EPB41L1     | 20         | Female | 0.00                    | NA  | NA                    | NA         | NA      | NA                           | NA               | NA               | NA               | NA                  | NA         |            |
|            |             |            | Male   | 0.16                    | 386 | 0.77 (0.48-1.23)      | 0.27       | 0.48    | 0.78 (0.25-2.43)             | 0.73 (0.28-1.86) | 1.12 (0.49-2.54) | 0.47 (0.17-1.27) | 0.62                | 0.62       |            |
| rs709050   | EPB41L1     | 20         | Female | 0.18                    | 402 | 1.22 (0.76-1.97)      | 0.41       | 0.80    | 2.18 (0.77-6.12)             | 0.65 (0.27-1.55) | 1.73 (0.65-4.64) | 1.19 (0.42-3.35) | 0.28                | 0.50       |            |
|            |             |            | Male   | 0.19                    | 385 | 0.79 (0.50-1.24)      | 0.30       | 0.39    | 0.52 (0.17-1.60)             | 0.82 (0.34-1.98) | 1.37 (0.62-3.05) | 0.47 (0.18-1.25) | 0.31                | 0.50       |            |
| rs965808   | GNAS        | 20         | Female | 0.19                    | 403 | 1.06 (0.66-1.71)      | 0.81       | 0.99    | 1.89 (0.68-5.30)             | 0.57 (0.24-1.34) | 1.33 (0.49-3.57) | 1.21 (0.43-3.40) | 0.31                | 0.52       |            |
|            |             |            | Male   | 0.24                    | 386 | 1.01 (0.71-1.43)      | 0.96       | 1.00    | 0.80 (0.36-1.77)             | 0.80 (0.39-1.63) | 1.12 (0.59-2.15) | 1.34 (0.68-2.66) | 0.67                | 1.00       |            |
| rs3761264  | GNAS        | 20         | Female | 0.25                    | 402 | 0.97 (0.67-1.38)      | 0.85       | 1.00    | 0.82 (0.35-1.96)             | 0.66 (0.34-1.31) | 1.53 (0.75-3.11) | 1.05 (0.52-2.13) | 0.38                | 0.96       |            |
|            |             |            | Male   | 0.43                    | 385 | 1.06 (0.67-1.69)      | 0.80       | 1.00    | 1.99 (0.69-5.71)             | 0.92 (0.37-2.29) | 1.15 (0.48-2.79) | 0.66 (0.26-1.67) | 0.47                | 0.99       |            |
| rs6064714  | GNAS        | 20         | Female | 0.45                    | 403 | 0.95 (0.59-1.55)      | 0.85       | 1.00    | 3.83 (0.82-17.93)            | 0.93 (0.40-2.15) | 0.74 (0.28-1.98) | 0.58 (0.23-1.49) | 0.15                | 0.72       |            |
|            |             |            | Male   | 0.14                    | 385 | 0.65 (0.39-1.09)      | 0.10       | 0.77    | 0.36 (0.10-1.38)             | 0.89 (0.32-2.52) | 0.61 (0.25-1.46) | 0.80 (0.29-2.20) | 0.72                | 1.00       |            |
| rs1800900  | GNAS        | 20         | Female | 0.13                    | 402 | 1.09 (0.64-1.88)      | 0.74       | 1.00    | 1.62 (0.54-4.87)             | 0.99 (0.43-3.21) | 0.59 (0.11-3.11) | 1.20 (0.40-3.62) | 0.77                | 1.00       |            |
|            |             |            | Male   | 0.39                    | 338 | 1.03 (0.74-1.43)      | 0.88       | 1.00    | 0.97 (0.48-1.98)             | 0.91 (0.48-1.75) | 1.04 (0.56-1.91) | 1.24 (0.60-2.54) | 0.94                | 1.00       |            |
| rs4810147  | GNAS        | 20         | Female | 0.39                    | 371 | 1.00 (0.72-1.37)      | 0.98       | 1.00    | 0.61 (0.27-1.35)             | 0.68 (0.38-1.23) | 1.56 (0.81-3.03) | 1.48 (0.77-2.84) | 0.09                | 0.55       |            |
|            |             |            | Male   | 0.47                    | 386 | 0.94 (0.58-1.53)      | 0.82       | 1.00    | 2.07 (0.68-6.35)             | 0.82 (0.32-2.09) | 1.11 (0.44-2.76) | 0.49 (0.19-1.25) | 0.25                | 0.90       |            |
| rs6015389  | GNAS        | 20         | Female | 0.47                    | 403 | 1.03 (0.63-1.68)      | 0.91       | 1.00    | 4.16 (0.89-19.45)            | 0.89 (0.38-2.07) | 0.87 (0.32-2.37) | 0.66 (0.25-1.69) | 0.16                | 0.74       |            |
|            |             |            | Male   | 0.36                    | 384 | 0.80 (0.52-1.24)      | 0.33       | 0.99    | 1.31 (0.50-3.45)             | 0.52 (0.21-1.25) | 0.60 (0.27-1.32) | 1.19 (0.49-2.89) | 0.36                | 0.97       |            |
| rs6026561  | GNAS        | 20         | Female | 0.34                    | 398 | 1.32 (0.83-2.11)      | 0.23       | 0.96    | 0.62 (0.22-1.75)             | 0.71 (0.32-1.61) | 2.64 (0.97-7.20) | 3.00 (1.11-8.12) | 0.03                | 0.28       |            |
|            |             |            | Male   | 0.36                    | 383 | 0.81 (0.52-1.25)      | 0.35       | 0.99    | 1.32 (0.50-3.45)             | 0.51 (0.21-1.25) | 0.62 (0.28-1.37) | 1.18 (0.48-2.88) | 0.37                | 0.98       |            |
| rs8125112  | GNAS        | 20         | Female | 0.34                    | 402 | 1.36 (0.85-2.15)      | 0.19       | 0.94    | 0.67 (0.24-1.88)             | 0.74 (0.33-1.65) | 2.64 (0.97-7.20) | 3.00 (1.11-8.11) | 0.04                | 0.34       |            |
|            |             |            | Male   | 0.15                    | 374 | 0.80 (0.51-1.26)      | 0.33       | 0.99    | 0.79 (0.29-2.14)             | 0.92 (0.37-2.27) | 0.48 (0.20-1.16) | 1.27 (0.52-3.07) | 0.48                | 0.99       |            |
| rs6064716  | GNAS        | 20         | Female | 0.14                    | 393 | 1.09 (0.69-1.71)      | 0.71       | 1.00    | 1.12 (0.43-2.92)             | 1.67 (0.87-3.21) | 0.25 (0.03-2.13) | 0.65 (0.24-1.81) | 0.16                | 0.75       |            |
|            |             |            | Male   | 0.12                    | 386 | 0.69 (0.43-1.13)      | 0.13       | 0.86    | 0.90 (0.34-2.40)             | 0.56 (0.18-1.73) | 0.69 (0.29-1.60) | 0.65 (0.25-1.73) | 0.94                | 0.94       |            |
| rs2145288  | GNAS        | 20         | Female | 0.12                    | 403 | 1.14 (0.70-1.85)      | 0.60       | 1.00    | 1.29 (0.50-3.32)             | 1.42 (0.70-2.88) | 0.32 (0.04-2.82) | 0.92 (0.31-2.70) | 0.52                | 0.99       |            |
|            |             |            | Male   | 0.27                    | 386 | 0.99 (0.70-1.40)      | 0.95       | 1.00    | 0.54 (0.23-1.28)             | 0.91 (0.46-1.78) | 1.23 (0.66-2.27) | 1.27 (0.63-2.57) | 0.39                | 0.99       |            |
| rs6026567  | GNAS        | 20         | Female | 0.29                    | 402 | 1.01 (0.73-1.42)      | 0.93       | 1.00    | 0.80 (0.35-1.83)             | 0.76 (0.41-1.44) | 1.14 (0.60-2.16) | 1.46 (0.75-2.81) | 0.49                | 0.99       |            |
|            |             |            | Male   | 0.43                    | 386 | 1.09 (0.82-1.47)      | 0.55       | 1.00    | 0.86 (0.43-1.72)             | 1.36 (0.76-2.45) | 1.20 (0.69-2.10) | 0.95 (0.54-1.68) | 0.72                | 1.00       |            |
| rs12625436 | GNAS        | 20         | Female | 0.42                    | 403 | 0.97 (0.69-1.35)      | 0.84       | 1.00    | 0.96 (0.45-2.06)             | 1.32 (0.73-2.39) | 0.82 (0.40-1.66) | 0.78 (0.41-1.49) | 0.64                | 1.00       |            |
|            |             |            | Male   | 0.40                    | 386 | 1.07 (0.80-1.44)      | 0.66       | 1.00    | 0.86 (0.41-1.79)             | 1.21 (0.67-2.21) | 1.15 (0.68-1.95) | 1.00 (0.57-1.77) | 0.88                | 1.00       |            |
| rs7271854  | GNAS        | 20         | Female | 0.40                    | 403 | 1.13 (0.81-1.58)      | 0.48       | 1.00    | 1.22 (0.55-2.70)             | 1.57 (0.87-2.83) | 0.95 (0.47-1.91) | 0.81 (0.41-1.61) | 0.49                | 0.98       |            |
|            |             |            | Male   | 0.40                    | 377 | 0.96 (0.61-1.51)      | 0.86       | 1.00    | 0.71 (0.27-1.86)             | 1.46 (0.59-3.61) | 1.30 (0.55-3.05) | 0.56 (0.23-1.40) | 0.39                | 0.98       |            |
| rs4810148  | GNAS        | 20         | Female | 0.38                    | 400 | 0.98 (0.61-1.57)      | 0.92       | 1.00    | 1.18 (0.35-4.00)             | 1.00 (0.44-2.30) | 0.84 (0.32-2.19) | 0.97 (0.39-2.40) | 0.98                | 0.98       |            |
|            |             |            | Male   | 0.35                    | 386 | 1.14 (0.74-1.76)      | 0.56       | 1.00    | 0.64 (0.25-1.66)             | 2.37 (0.97-5.78) | 1.24 (0.55-2.82) | 0.79 (0.33-1.91) | 0.19                | 0.81       |            |
| rs2180696  | GNAS        | 20         | Female | 0.33                    | 403 | 1.11 (0.70-1.75)      | 0.66       | 1.00    | 1.43 (0.46-4.44)             | 1.04 (0.47-2.30) | 1.14 (0.44-2.95) | 0.99 (0.40-2.44) | 0.96                | 1.00       |            |
|            |             |            | Male   | 0.41                    | 386 | 1.18 (0.75-1.86)      | 0.47       | 1.00    | 0.91 (0.35-2.38)             | 1.55 (0.65-3.73) | 1.84 (0.74-4.53) | 0.69 (0.28-1.70) | 0.40                | 0.98       |            |
| rs6026574  | GNAS        | 20         | Female | 0.39                    | 403 | 0.75 (0.47-1.19)      | 0.22       | 0.96    | 0.67 (0.22-2.02)             | 0.59 (0.27-1.33) | 0.85 (0.33-2.21) | 0.97 (0.39-2.42) | 0.87                | 1.00       |            |
|            |             |            | Male   | 0.35                    | 384 | 0.76 (0.49-1.17)      | 0.21       | 0.95    | 0.67 (0.26-1.73)             | 0.83 (0.36-1.93) | 0.57 (0.25-1.28) | 1.07 (0.44-2.60) | 0.76                | 1.00       |            |
| rs4812042  | GNAS        | 20         | Female | 0.38                    | 402 | 1.25 (0.78-2.02)      | 0.35       | 0.99    | 1.15 (0.40-3.27)             | 1.96 (0.81-4.75) | 0.57 (0.21-1.50) | 1.68 (0.62-4.55) | 0.27                | 0.89       |            |
|            |             |            | Male   | 0.40                    | 386 | 0.86 (0.56-1.35)      | 0.52       | 1.00    | 1.14 (0.43-2.99)             | 0.65 (0.27-1.56) | 0.83 (0.36-1.89) | 0.97 (0.39-2.39) | 0.86                | 1.00       |            |
| rs6092704  | GNAS        | 20         | Female | 0.42                    | 403 | 1.38 (0.84-2.26)      | 0.20       | 0.94    | 1.53 (0.49-4.73)             | 2.11 (0.85-5.25) | 0.57 (0.21-1.52) | 1.80 (0.63-5.10) | 0.24                | 0.86       |            |
|            |             |            | Male   | 0.12                    | 386 | 1.22 (0.78-1.92)      | 0.39       | 1.00    | 1.09 (0.37-3.24)             | 0.68 (0.27-1.71) | 2.03 (0.92-4.50) | 1.23 (0.46-3.31) | 0.35                | 0.97       |            |
| rs2057291  | GNAS        | 20         | Female | 0.08                    | 403 | 0.96 (0.55-1.70)      | 0.90       | 1.00    | 1.09 (0.27-4.35)             | 0.31 (0.09-1.08) | 1.25 (0.40-3.89) | 2.34 (0.81-6.76) | 0.07                | 0.53       |            |
|            |             |            | Male   | 0.36                    | 386 | 0.96 (0.62-1.49)      | 0.87       | 1.00    | 0.95 (0.37-2.45)             | 0.83 (0.35-1.94) | 0.91 (0.41-2.03) | 1.23 (0.50-2.98) | 0.93                | 1.00       |            |
| rs6128461  | GNAS        | 20         | Female | 0.38                    | 403 | 1.21 (0.75-1.94)      | 0.43       | 1.00    | 0.91 (0.32-2.55)             | 1.71 (0.72-4.04) | 0.67 (0.25-1.78) | 1.75 (0.65-4.73) | 0.42                | 0.9        |            |

| SNP        | Gene Region | Chromosome | Gender | MAF  | N   | Marginal Effect       |                         |            | Treatment Stratified Effects |                  |                   |                   | Test of Interaction     |                 |       |  |            |            |
|------------|-------------|------------|--------|------|-----|-----------------------|-------------------------|------------|------------------------------|------------------|-------------------|-------------------|-------------------------|-----------------|-------|--|------------|------------|
|            |             |            |        |      |     | Likelihood ratio test |                         |            | Placebo                      |                  | Bupropion         |                   | Patch                   |                 | Spray |  | Observed P | Adjusted P |
|            |             |            |        |      |     | SNP OR (95% CI)       | Observed P              | Adjusted P | SNP OR (95% CI)              | SNP OR (95% CI)  | SNP OR (95% CI)   | SNP OR (95% CI)   | SNP OR (95% CI)         | SNP OR (95% CI) |       |  |            |            |
| rs2273504  | CHRNA4      | 20         | Female | 0.44 | 377 | 1.54 (0.91-2.60)      | 0.10                    | 0.42       | 1.50 (0.45-5.04)             | 0.79 (0.33-1.88) | 2.27 (0.72-7.12)  | 3.05 (0.93-10.01) | 0.25                    | 0.75            |       |  |            |            |
|            |             |            | Male   | 0.16 | 347 | 1.25 (0.81-1.92)      | 0.32                    | 0.86       | 1.87 (0.72-4.83)             | 0.69 (0.29-1.64) | 1.61 (0.65-4.01)  | 1.32 (0.60-2.93)  | 0.41                    | 0.94            |       |  |            |            |
|            |             |            | Female | 0.18 | 367 | 1.18 (0.77-1.82)      | 0.45                    | 0.81       | 1.04 (0.30-3.56)             | 0.80 (0.36-1.76) | 1.99 (0.78-5.11)  | 1.31 (0.61-2.81)  | 0.51                    | 0.96            |       |  |            |            |
| rs6010918  | CHRNA4      | 20         | Male   | 0.06 | NA  | NA                    | NA                      | NA         | NA                           | NA               | NA                | NA                | NA                      | NA              |       |  |            |            |
|            |             |            | Female | 0.04 | NA  | NA                    | NA                      | NA         | NA                           | NA               | NA                | NA                | NA                      | NA              |       |  |            |            |
| rs2273505  | CHRNA4      | 20         | Male   | 0.07 | 353 | 0.57 (0.27-1.17)      | 0.11                    | 0.53       | 0.60 (0.15-2.38)             | 0.61 (0.15-2.51) | 0.55 (0.16-1.92)  | 0.45 (0.05-4.05)  | 1.00                    | 1.00            |       |  |            |            |
|            |             |            | Female | 0.07 | 379 | 1.27 (0.63-2.53)      | 0.51                    | 0.76       | 2.14 (0.58-7.88)             | 1.27 (0.38-4.18) | 1.12 (0.20-6.37)  | 0.80 (0.19-3.30)  | 0.79                    | 0.98            |       |  |            |            |
| rs755203   | CHRNA4      | 20         | Male   | 0.44 | 354 | 1.10 (0.68-1.78)      | 0.70                    | 0.99       | 1.49 (0.47-4.73)             | 0.62 (0.25-1.54) | 1.55 (0.66-3.66)  | 1.05 (0.37-3.01)  | 0.48                    | 0.96            |       |  |            |            |
|            |             |            | Female | 0.42 | 379 | 1.69 (1.00-2.85)      | 0.04                    | 0.25       | 1.96 (0.58-6.56)             | 0.88 (0.38-2.04) | 4.49 (1.18-17.14) | 1.93 (0.62-5.90)  | 0.19                    | 0.64            |       |  |            |            |
| rs4809549  | CHRNA4      | 20         | Male   | 0.47 | 385 | 1.00 (0.74-1.35)      | 1.00                    | 1.00       | 1.43 (0.74-2.75)             | 0.80 (0.44-1.44) | 0.99 (0.55-1.77)  | 0.94 (0.51-1.73)  | 0.63                    | 0.99            |       |  |            |            |
|            |             |            | Female | 0.48 | 403 | 0.59 (0.42-0.83)      | 1.99 × 10 <sup>-3</sup> | 0.02       | 0.78 (0.37-1.64)             | 0.48 (0.26-0.89) | 0.60 (0.29-1.23)  | 0.59 (0.30-1.18)  | 0.81                    | 0.95            |       |  |            |            |
| rs7281533  | CLIC6       | 21         | Male   | 0.21 | 386 | 0.91 (0.63-1.31)      | 0.60                    | 1.00       | 0.97 (0.43-2.16)             | 0.46 (0.20-1.05) | 1.25 (0.66-2.39)  | 1.06 (0.50-2.25)  | 0.26                    | 0.66            |       |  |            |            |
|            |             |            | Female | 0.23 | 403 | 0.75 (0.51-1.12)      | 0.15                    | 0.69       | 0.55 (0.19-1.62)             | 0.81 (0.39-1.66) | 1.01 (0.47-2.18)  | 0.62 (0.28-1.35)  | 0.75                    | 1.00            |       |  |            |            |
| rs2409531  | CLIC6       | 21         | Male   | 0.21 | 386 | 0.91 (0.63-1.31)      | 0.60                    | 1.00       | 0.97 (0.43-2.16)             | 0.46 (0.20-1.05) | 1.31 (0.68-2.49)  | 1.01 (0.47-2.14)  | 0.24                    | 0.65            |       |  |            |            |
|            |             |            | Female | 0.23 | 403 | 0.75 (0.51-1.12)      | 0.15                    | 0.69       | 0.55 (0.19-1.62)             | 0.81 (0.39-1.66) | 1.01 (0.47-2.18)  | 0.62 (0.28-1.35)  | 0.75                    | 1.00            |       |  |            |            |
| rs7281040  | CLIC6       | 21         | Male   | 0.21 | 385 | 0.92 (0.64-1.33)      | 0.67                    | 1.00       | 0.99 (0.44-2.24)             | 0.46 (0.20-1.05) | 1.31 (0.68-2.49)  | 1.06 (0.50-2.25)  | 0.23                    | 0.63            |       |  |            |            |
|            |             |            | Female | 0.23 | 403 | 0.75 (0.51-1.12)      | 0.15                    | 0.69       | 0.55 (0.19-1.62)             | 0.81 (0.39-1.66) | 1.01 (0.47-2.18)  | 0.62 (0.28-1.35)  | 0.75                    | 1.00            |       |  |            |            |
| rs2834578  | CLIC6       | 21         | Male   | 0.40 | 386 | 1.30 (0.83-2.04)      | 0.24                    | 0.88       | 2.80 (1.02-7.72)             | 1.16 (0.48-2.83) | 1.14 (0.51-2.55)  | 0.89 (0.36-2.23)  | 0.37                    | 0.70            |       |  |            |            |
|            |             |            | Female | 0.39 | 403 | 0.90 (0.56-1.44)      | 0.66                    | 0.99       | 1.94 (0.58-6.45)             | 0.62 (0.27-1.40) | 0.91 (0.35-2.59)  | 0.86 (0.35-2.12)  | 0.46                    | 0.95            |       |  |            |            |
| rs2236610  | CLIC6       | 21         | Male   | 0.17 | 381 | 0.90 (0.56-1.44)      | 0.65                    | 1.00       | 0.76 (0.27-2.14)             | 0.44 (0.16-1.16) | 1.75 (0.75-4.12)  | 0.95 (0.34-2.65)  | 0.20                    | 0.58            |       |  |            |            |
|            |             |            | Female | 0.17 | 391 | 0.73 (0.44-1.22)      | 0.23                    | 0.77       | 0.56 (0.15-2.13)             | 0.69 (0.27-1.74) | 0.90 (0.35-2.36)  | 0.74 (0.26-2.12)  | 0.95                    | 1.00            |       |  |            |            |
| rs2834586  | CLIC6       | 21         | Male   | 0.19 | 386 | 0.99 (0.68-1.44)      | 0.95                    | 1.00       | 1.30 (0.59-2.87)             | 0.48 (0.20-1.15) | 1.28 (0.68-2.42)  | 1.01 (0.46-2.23)  | 0.26                    | 0.65            |       |  |            |            |
|            |             |            | Female | 0.19 | 403 | 0.72 (0.47-1.11)      | 0.13                    | 0.67       | 0.47 (0.13-1.65)             | 0.57 (0.25-1.28) | 1.47 (0.60-3.17)  | 0.51 (0.20-1.29)  | 0.20                    | 0.65            |       |  |            |            |
| rs2834587  | CLIC6       | 21         | Male   | 0.35 | 386 | 0.77 (0.50-1.19)      | 0.24                    | 0.88       | 0.33 (0.13-0.88)             | 0.52 (0.23-1.21) | 0.85 (0.38-1.89)  | 2.16 (0.87-5.38)  | 0.03                    | 0.17            |       |  |            |            |
|            |             |            | Female | 0.35 | 403 | 1.03 (0.64-1.63)      | 0.92                    | 0.99       | 1.07 (0.38-2.98)             | 0.81 (0.35-1.86) | 1.34 (0.49-3.67)  | 1.05 (0.42-2.59)  | 0.90                    | 1.00            |       |  |            |            |
| rs2186287  | CLIC6       | 21         | Male   | 0.34 | 381 | 0.72 (0.47-1.12)      | 0.14                    | 0.70       | 0.31 (0.11-0.84)             | 0.43 (0.18-1.01) | 0.81 (0.36-1.80)  | 2.25 (0.90-5.61)  | 0.01                    | 0.10            |       |  |            |            |
|            |             |            | Female | 0.35 | 401 | 1.04 (0.65-1.66)      | 0.87                    | 0.99       | 1.09 (0.39-3.05)             | 0.83 (0.35-1.93) | 1.34 (0.49-3.67)  | 1.05 (0.42-2.59)  | 0.91                    | 1.00            |       |  |            |            |
| rs2834590  | CLIC6       | 21         | Male   | 0.16 | 386 | 1.01 (0.67-1.53)      | 0.96                    | 0.96       | 0.30 (0.09-0.99)             | 1.36 (0.53-2.96) | 0.69 (0.31-1.53)  | 2.19 (0.98-4.88)  | 0.02                    | 0.13            |       |  |            |            |
|            |             |            | Female | 0.16 | 403 | 1.39 (0.89-2.18)      | 0.15                    | 0.69       | 1.28 (0.45-3.64)             | 1.56 (0.74-3.30) | 1.26 (0.37-3.72)  | 1.65 (0.58-3.35)  | 0.98                    | 0.98            |       |  |            |            |
| rs2070367  | CLIC6       | 21         | Male   | 0.21 | 386 | 0.91 (0.58-1.42)      | 0.68                    | 1.00       | 0.72 (0.27-1.92)             | 0.51 (0.20-1.27) | 1.69 (0.75-3.77)  | 0.94 (0.36-2.42)  | 0.25                    | 0.67            |       |  |            |            |
|            |             |            | Female | 0.20 | 403 | 0.72 (0.44-1.17)      | 0.18                    | 0.69       | 0.43 (0.11-1.61)             | 0.76 (0.33-1.77) | 1.11 (0.43-2.88)  | 0.56 (0.20-1.60)  | 0.65                    | 1.00            |       |  |            |            |
| rs6517254  | CLIC6       | 21         | Male   | 0.38 | 386 | 0.67 (0.43-1.04)      | 0.08                    | 0.48       | 0.28 (0.11-0.75)             | 0.43 (0.18-1.01) | 0.88 (0.39-2.00)  | 1.74 (0.70-4.34)  | 0.03                    | 0.17            |       |  |            |            |
|            |             |            | Female | 0.38 | 403 | 1.04 (0.65-1.67)      | 0.86                    | 1.00       | 0.96 (0.35-2.68)             | 0.84 (0.35-1.99) | 1.34 (0.49-3.67)  | 1.14 (0.46-2.84)  | 0.91                    | 1.00            |       |  |            |            |
| rs3819041  | CLIC6       | 21         | Male   | 0.42 | 386 | 1.08 (0.69-1.69)      | 0.74                    | 1.00       | 2.44 (0.85-6.95)             | 1.06 (0.44-2.60) | 0.82 (0.36-1.87)  | 0.77 (0.31-1.94)  | 0.33                    | 0.66            |       |  |            |            |
|            |             |            | Female | 0.40 | 403 | 0.81 (0.51-1.29)      | 0.38                    | 0.89       | 1.44 (0.47-4.43)             | 0.64 (0.28-1.45) | 0.76 (0.29-2.00)  | 0.77 (0.31-1.94)  | 0.71                    | 1.00            |       |  |            |            |
| rs2834600  | CLIC6       | 21         | Male   | 0.13 | 386 | 0.88 (0.54-1.45)      | 0.62                    | 1.00       | 0.41 (0.12-1.37)             | 0.89 (0.35-2.29) | 0.72 (0.29-1.80)  | 2.22 (0.80-6.18)  | 0.17                    | 0.57            |       |  |            |            |
|            |             |            | Female | 0.14 | 403 | 1.70 (1.03-2.80)      | 0.04                    | 0.30       | 1.90 (0.59-6.20)             | 1.89 (0.83-4.26) | 1.06 (0.35-3.26)  | 1.96 (0.72-5.35)  | 0.83                    | 1.00            |       |  |            |            |
| rs2834603  | CLIC6       | 21         | Male   | 0.08 | 386 | 0.82 (0.43-1.54)      | 0.53                    | 0.99       | 0.32 (0.07-1.53)             | 0.84 (0.20-3.63) | 1.21 (0.41-3.56)  | 1.06 (0.30-3.80)  | 0.51                    | 0.83            |       |  |            |            |
|            |             |            | Female | 0.05 | 403 | 0.92 (0.43-1.98)      | 0.84                    | 1.00       | 0.81 (0.16-4.02)             | 1.50 (0.40-5.59) | 1.76 (0.36-6.66)  | 0.24 (0.03-2.03)  | 0.36                    | 0.88            |       |  |            |            |
| rs2834604  | CLIC6       | 21         | Male   | 0.33 | 386 | 0.87 (0.62-1.21)      | 0.41                    | 0.98       | 0.68 (0.28-1.61)             | 0.67 (0.34-1.33) | 0.92 (0.53-1.59)  | 1.21 (0.62-2.36)  | 0.61                    | 0.82            |       |  |            |            |
|            |             |            | Female | 0.37 | 403 | 1.18 (0.84-1.66)      | 0.34                    | 0.88       | 1.12 (0.51-2.45)             | 0.96 (0.50-1.86) | 1.34 (0.67-2.69)  | 1.33 (0.70-2.53)  | 0.88                    | 1.00            |       |  |            |            |
| rs2834605  | CLIC6       | 21         | Male   | 0.12 | 386 | 0.96 (0.60-1.56)      | 0.88                    | 1.00       | 0.34 (0.09-1.29)             | 1.04 (0.41-2.61) | 0.83 (0.37-1.90)  | 2.55 (0.90-7.23)  | 0.10                    | 0.43            |       |  |            |            |
|            |             |            | Female | 0.14 | 403 | 1.43 (0.88-2.32)      | 0.15                    | 0.68       | 1.48 (0.47-4.74)             | 1.68 (0.74-3.81) | 1.06 (0.35-3.25)  | 1.38 (0.55-3.48)  | 0.93                    | 1.00            |       |  |            |            |
| rs11088294 | CLIC6       | 21         | Male   | 0.24 | 381 | 0.95 (0.61-1.48)      | 0.83                    | 1.00       | 0.91 (0.34-2.41)             | 1.21 (0.53-2.79) | 0.63 (0.26-1.49)  | 1.19 (0.49-2.88)  | 0.69                    | 0.69            |       |  |            |            |
|            |             |            | Female | 0.27 | 402 | 1.00 (0.64-1.58)      | 0.99                    | 0.99       | 0.72 (0.25-2.04)             | 0.75 (0.34-1.68) | 1.27 (0.49-3.32)  | 1.51 (0.61-3.72)  | 0.59                    | 0.99            |       |  |            |            |
| rs1107470  | CLIC6       | 21         | Male   | 0.21 | 386 | 1.20 (0.77-1.87)      | 0.41                    | 0.97       | 0.62 (0.23-1.68)             | 0.90 (0.37-2.16) | 1.34 (0.60-2.97)  | 2.67 (1.04-6.83)  | 0.17                    | 0.55            |       |  |            |            |
|            |             |            | Female | 0.19 | 402 | 1.43 (0.90-2.29)      | 0.14                    | 0.68       | 0.79 (0.26-2.46)             | 2.02 (0.90-4.54) | 1.16 (0.43-3.16)  | 1.68 (0.66-4.28)  | 0.55                    | 0.98            |       |  |            |            |
| rs4485648  | COMT        | 22         | Male   | 0.20 | 386 | 0.94 (0.65-1.37)      | 0.76                    | 1.00       | 1.00 (0.41-2.44)             | 1.02 (0.50-2.09) | 1.24 (0.62-2.47)  | 0.62 (0.29-1.34)  | 0.60                    | 0.99            |       |  |            |            |
|            |             |            | Female | 0.18 | 403 | 0.91 (0.59-1.43)      | 0.69                    | 0.91       | 0.61 (0.19-1.92)             | 0.63 (0.28-1.40) | 1.17 (0.46-3.19)  | 1.59 (0.66-3.82)  | 0.37                    | 0.92            |       |  |            |            |
| rs1840265  | COMT        | 22         | Male   | 0.31 | 386 | 0.96 (0.63-1.47)      | 0.84                    | 1.00       | 0.67 (0.26-1.73)             | 1.21 (0.53-2.77) | 0.60 (0.27-1.32)  | 1.82 (0.74-4.46)  | 0.24                    | 0.87            |       |  |            |            |
|            |             |            | Female | 0.27 | 402 | 0.88 (0.56-1.39)      | 0.58                    | 0.99       | 1.41 (0.50-3.93)             | 2.08 (0.92-4.72) | 0.55 (0.21-1.44)  | 0.31 (0.12-0.81)  | 0.01                    | 0.11            |       |  |            |            |
| rs1837828  | COMT        | 22         | Male   | 0.44 | 385 | 0.79 (0.50-1.25)      | 0.31                    | 0.99       | 0.77 (0.28-2.12)             | 0.62 (0.25-1.54) | 1.29 (0.54-3.08)  | 0.58 (0.23-1.42)  | 0.57                    | 0.99            |       |  |            |            |
|            |             |            | Female | 0.50 | 403 | 1.30 (0.76-2.23)      | 0.33                    | 0.98       | 0.89 (0.28-2.81)             | 1.15 (0.43-3.07) | 0.99 (0.36-2.75)  | 3.25 (1.07-11.88) | 0.41                    | 0.92            |       |  |            |            |
| rs2871047  | COMT        | 22         | Male   | 0.05 | 384 | 1.28 (0.63-2.65)      | 0.50                    | 1.00       | 2.92 (0.54-15.63)            | 0.81 (0.25-2.55) | 1.68 (0.32-8.80)  | 1.66 (0.29-9.46)  | 0.65                    | 0.99            |       |  |            |            |
|            |             |            | Female | 0.06 | 400 | 1.50 (0.75-3.00)      | 0.26                    | 0.95       | 0.99 (0.20-5.02)             | 1.42 (0.39-5.15) | 3.16 (0.76-13.10) | 1.08 (0.26-4.59)  | 0.68                    | 0.98            |       |  |            |            |
| rs6518592  | COMT        | 22         | Male   | 0.40 | 386 | 0.88 (0.65-1.21)      | 0.44                    | 1.00       | 0.82 (0.41-1.63)             | 0.95 (0.51-1.75) | 0.91 (0.51-1.60)  | 0.85 (0.44-1.62)  | 0.99                    | 0.99            |       |  |            |            |
|            |             |            | Female | 0.45 | 403 | 1.07 (0.78-1.48)      | 0.66                    | 0.99       | 1.07 (0.51-2.22)             | 0.75 (0.43-1.30) | 1.06 (0.53-2.12)  | 1.86 (0.94-3.65)  | 0.24                    | 0.81            |       |  |            |            |
| rs737865   | COMT        | 22         | Male   | 0.31 | 386 | 1.05 (0.76-1.46)      | 0.75                    | 1.00       | 0.70 (0.34-1.44)             | 1.13 (0.55-2.31) | 0.72 (0.38-1.33)  | 2.11 (1.11-4.01)  | 0.06                    | 0.42            |       |  |            |            |
|            |             |            | Female | 0.28 | 403 | 0.82 (0.57-1.19)      | 0.30                    | 0.96       | 1.25 (0.58-2.70)             | 1.86 (0.92-3.73) | 0.64 (0.30-1.36)  | 0.28 (0.12-0.67)  | 3.23 × 10 <sup>-3</sup> | 0.04            |       |  |            |            |
| rs1544325  | COMT        | 22         | Male   | 0.40 | 386 | 0.82 (0.52-1.27)      | 0.37                    | 1.00       | 0.67 (0.26-1.78)             | 0.86 (0.35-2.10) | 0.95 (0.42-2.14)  | 0.75 (0.31-1.83)  | 0.95                    | 1.00            |       |  |            |            |
|            |             |            | Female | 0.46 | 402 | 1.15 (0.70-1.91)      | 0.58                    | 1.00       | 1.05 (0.34-3.29)             | 0.62 (0.26-1.50) | 1.43 (0.50-4.03)  | 2.18 (0.77-6.18)  | 0.32                    | 0.88            |       |  |            |            |
| rs174675   | COMT        | 22         | Male   | 0.28 | 385 | 1.14 (0.74-1.76)      | 0.54                    | 1.00       | 1.42 (0.55-3.67)             | 0.79 (0.34-1.83) | 1.99 (0.90-4.39)  | 0.69 (0.28-1.69)  | 0.25                    | 0.88            |       |  |            |            |
|            |             |            |        |      |     |                       |                         |            |                              |                  |                   |                   |                         |                 |       |  |            |            |

| SNP        | Gene Region | Chromosome | Gender | MAF                     | N   | Marginal Effect       |            |            | Treatment Stratified Effects |                  |                   |                  | Test of Interaction     |                 |            |            |            |            |
|------------|-------------|------------|--------|-------------------------|-----|-----------------------|------------|------------|------------------------------|------------------|-------------------|------------------|-------------------------|-----------------|------------|------------|------------|------------|
|            |             |            |        |                         |     | Likelihood ratio test |            |            | SNP OR (95% CI)              | SNP OR (95% CI)  | SNP OR (95% CI)   | SNP OR (95% CI)  | SNP OR (95% CI)         | SNP OR (95% CI) | Observed P | Adjusted P | Observed P | Adjusted P |
|            |             |            |        |                         |     | SNP OR (95% CI)       | Observed P | Adjusted P |                              |                  |                   |                  |                         |                 |            |            |            |            |
| rs2276005  | MAPK1       | 22         | Female | 0.04                    | NA  | NA                    | NA         | NA         | NA                           | NA               | NA                | NA               | NA                      | NA              | NA         | NA         | NA         |            |
|            |             |            | Male   | 0.04                    | NA  | NA                    | NA         | NA         | NA                           | NA               | NA                | NA               | NA                      | NA              | NA         | NA         | NA         |            |
|            |             |            | Female | 0.04                    | NA  | NA                    | NA         | NA         | NA                           | NA               | NA                | NA               | NA                      | NA              | NA         | NA         | NA         | NA         |
| rs13515    | MAPK1       | 22         | Male   | 0.21                    | 384 | 0.98 (0.67-1.44)      | 0.94       | 0.94       | 0.60 (0.26-1.38)             | 1.33 (0.63-2.82) | 1.41 (0.71-2.81)  | 0.69 (0.29-1.65) | 0.29                    | 0.67            |            |            |            |            |
|            |             |            | Female | 0.18                    | 403 | 1.02 (0.68-1.52)      | 0.93       | 1.00       | 0.81 (0.30-2.18)             | 1.36 (0.66-2.79) | 1.37 (0.62-3.06)  | 0.62 (0.26-1.45) | 0.43                    | 0.80            |            |            |            |            |
| rs1063311  | MAPK1       | 22         | Male   | 0.46                    | 383 | 0.94 (0.69-1.29)      | 0.71       | 0.97       | 0.83 (0.43-1.62)             | 0.84 (0.46-1.52) | 1.37 (0.77-2.45)  | 0.73 (0.36-1.46) | 0.48                    | 0.81            |            |            |            |            |
|            |             |            | Female | 0.43                    | 399 | 0.99 (0.72-1.36)      | 0.96       | 0.99       | 0.77 (0.38-1.56)             | 0.61 (0.34-1.09) | 3.08 (1.36-6.98)  | 0.97 (0.53-1.80) | 8.76 × 10 <sup>-3</sup> | 0.04            |            |            |            |            |
| rs5755074  | MAPK1       | 22         | Male   | 0.04                    | NA  | NA                    | NA         | NA         | NA                           | NA               | NA                | NA               | NA                      | NA              | NA         | NA         | NA         |            |
|            |             |            | Female | 0.04                    | NA  | NA                    | NA         | NA         | NA                           | NA               | NA                | NA               | NA                      | NA              | NA         | NA         | NA         |            |
| rs2266966  | MAPK1       | 22         | Male   | 0.46                    | 386 | 0.93 (0.68-1.27)      | 0.66       | 0.97       | 0.83 (0.43-1.62)             | 0.80 (0.44-1.45) | 1.38 (0.77-2.45)  | 0.73 (0.36-1.46) | 0.46                    | 0.79            |            |            |            |            |
|            |             |            | Female | 0.43                    | 402 | 0.99 (0.72-1.37)      | 0.97       | 0.99       | 0.81 (0.40-1.62)             | 0.60 (0.33-1.07) | 3.08 (1.36-6.98)  | 0.97 (0.53-1.80) | 8.72 × 10 <sup>-3</sup> | 0.04            |            |            |            |            |
| rs17759598 | MAPK1       | 22         | Male   | 0.17                    | 385 | 1.09 (0.73-1.62)      | 0.69       | 0.98       | 0.41 (0.15-1.13)             | 1.71 (0.79-3.69) | 1.63 (0.78-3.42)  | 0.85 (0.34-2.13) | 0.07                    | 0.29            |            |            |            |            |
|            |             |            | Female | 0.14                    | 403 | 0.78 (0.49-1.26)      | 0.31       | 0.85       | 0.84 (0.28-2.51)             | 0.53 (0.20-1.38) | 1.71 (0.71-4.15)  | 0.47 (0.17-1.33) | 0.20                    | 0.56            |            |            |            |            |
| rs2298432  | MAPK1       | 22         | Male   | 0.36                    | 386 | 0.96 (0.71-1.31)      | 0.82       | 0.97       | 0.78 (0.37-1.66)             | 1.20 (0.67-2.15) | 0.77 (0.45-1.31)  | 1.24 (0.63-2.44) | 0.55                    | 0.79            |            |            |            |            |
|            |             |            | Female | 0.35                    | 402 | 1.04 (0.75-1.45)      | 0.81       | 1.00       | 1.00 (0.45-2.21)             | 1.43 (0.83-2.48) | 0.99 (0.49-2.00)  | 0.69 (0.34-1.38) | 0.43                    | 0.70            |            |            |            |            |
| rs4821263  | MAPK1       | 22         | Male   | 0.04                    | NA  | NA                    | NA         | NA         | NA                           | NA               | NA                | NA               | NA                      | NA              | NA         | NA         | NA         |            |
|            |             |            | Female | 0.04                    | NA  | NA                    | NA         | NA         | NA                           | NA               | NA                | NA               | NA                      | NA              | NA         | NA         | NA         |            |
| rs743409   | MAPK1       | 22         | Male   | 0.44                    | 385 | 1.20 (0.89-1.64)      | 0.23       | 0.75       | 0.87 (0.43-1.75)             | 1.70 (0.91-3.15) | 0.89 (0.52-1.55)  | 1.65 (0.87-3.12) | 0.25                    | 0.64            |            |            |            |            |
|            |             |            | Female | 0.47                    | 403 | 0.98 (0.73-1.33)      | 0.92       | 1.00       | 1.42 (0.71-2.85)             | 1.09 (0.64-1.86) | 0.57 (0.28-1.15)  | 1.00 (0.56-1.79) | 0.30                    | 0.68            |            |            |            |            |
| rs2283791  | MAPK1       | 22         | Male   | 0.46                    | 382 | 0.93 (0.68-1.27)      | 0.63       | 0.96       | 0.83 (0.42-1.62)             | 0.80 (0.44-1.45) | 1.37 (0.77-2.44)  | 0.73 (0.36-1.46) | 0.46                    | 0.80            |            |            |            |            |
|            |             |            | Female | 0.43                    | 403 | 1.01 (0.73-1.38)      | 0.97       | 0.97       | 0.81 (0.40-1.62)             | 0.63 (0.35-1.12) | 3.08 (1.36-6.98)  | 0.97 (0.53-1.80) | 0.01                    | 0.05            |            |            |            |            |
| rs9607272  | MAPK1       | 22         | Male   | 0.25                    | 386 | 0.88 (0.57-1.35)      | 0.55       | 0.97       | 1.55 (0.60-3.98)             | 0.40 (0.16-0.96) | 1.28 (0.59-2.79)  | 0.76 (0.31-1.85) | 0.13                    | 0.43            |            |            |            |            |
|            |             |            | Female | 0.24                    | 403 | 1.15 (0.72-1.82)      | 0.56       | 0.98       | 1.15 (0.41-3.18)             | 0.74 (0.33-1.70) | 1.92 (0.72-5.13)  | 1.26 (0.50-3.18) | 0.54                    | 0.65            |            |            |            |            |
| rs11704205 | MAPK1       | 22         | Male   | 0.45                    | 386 | 1.17 (0.86-1.60)      | 0.31       | 0.82       | 0.83 (0.41-1.69)             | 1.57 (0.85-2.89) | 0.89 (0.52-1.55)  | 1.66 (0.86-3.20) | 0.28                    | 0.69            |            |            |            |            |
|            |             |            | Female | 0.47                    | 403 | 0.99 (0.73-1.34)      | 0.94       | 1.00       | 1.52 (0.75-3.08)             | 1.07 (0.63-1.83) | 0.57 (0.28-1.15)  | 1.00 (0.56-1.79) | 0.26                    | 0.62            |            |            |            |            |
| rs999550   | MAPK1       | 22         | Male   | 0.45                    | 386 | 1.17 (0.86-1.60)      | 0.31       | 0.82       | 0.83 (0.41-1.69)             | 1.57 (0.85-2.89) | 0.89 (0.52-1.55)  | 1.66 (0.86-3.20) | 0.28                    | 0.69            |            |            |            |            |
|            |             |            | Female | 0.47                    | 403 | 0.99 (0.73-1.34)      | 0.94       | 1.00       | 1.52 (0.75-3.08)             | 1.07 (0.63-1.83) | 0.57 (0.28-1.15)  | 1.00 (0.56-1.79) | 0.26                    | 0.62            |            |            |            |            |
| rs2298434  | MAPK1       | 22         | Male   | 0.04                    | NA  | NA                    | NA         | NA         | NA                           | NA               | NA                | NA               | NA                      | NA              | NA         | NA         | NA         |            |
|            |             |            | Female | 0.04                    | NA  | NA                    | NA         | NA         | NA                           | NA               | NA                | NA               | NA                      | NA              | NA         | NA         | NA         |            |
| rs9610355  | MAPK1       | 22         | Male   | 0.04                    | NA  | NA                    | NA         | NA         | NA                           | NA               | NA                | NA               | NA                      | NA              | NA         | NA         | NA         |            |
|            |             |            | Female | 0.04                    | NA  | NA                    | NA         | NA         | NA                           | NA               | NA                | NA               | NA                      | NA              | NA         | NA         | NA         |            |
| rs3788332  | MAPK1       | 22         | Male   | 0.45                    | 386 | 1.17 (0.86-1.60)      | 0.31       | 0.82       | 0.83 (0.41-1.69)             | 1.57 (0.85-2.89) | 0.89 (0.52-1.55)  | 1.66 (0.86-3.20) | 0.28                    | 0.69            |            |            |            |            |
|            |             |            | Female | 0.47                    | 401 | 0.98 (0.72-1.34)      | 0.92       | 1.00       | 1.57 (0.77-3.19)             | 1.04 (0.61-1.79) | 0.57 (0.29-1.16)  | 1.00 (0.55-1.79) | 0.25                    | 0.60            |            |            |            |            |
| rs999704   | MAPK1       | 22         | Male   | 0.00                    | NA  | NA                    | NA         | NA         | NA                           | NA               | NA                | NA               | NA                      | NA              | NA         | NA         | NA         |            |
|            |             |            | Female | 1.24 × 10 <sup>-3</sup> | NA  | NA                    | NA         | NA         | NA                           | NA               | NA                | NA               | NA                      | NA              | NA         | NA         | NA         |            |
| rs1892848  | MAPK1       | 22         | Male   | 0.45                    | 386 | 1.17 (0.86-1.60)      | 0.31       | 0.82       | 0.83 (0.41-1.69)             | 1.57 (0.85-2.89) | 0.89 (0.52-1.55)  | 1.66 (0.86-3.20) | 0.28                    | 0.69            |            |            |            |            |
|            |             |            | Female | 0.47                    | 403 | 0.99 (0.73-1.34)      | 0.94       | 1.00       | 1.52 (0.75-3.08)             | 1.07 (0.63-1.83) | 0.57 (0.28-1.15)  | 1.00 (0.56-1.79) | 0.26                    | 0.62            |            |            |            |            |
| rs9610375  | MAPK1       | 22         | Male   | 0.49                    | 377 | 0.75 (0.45-1.24)      | 0.27       | 0.79       | 0.78 (0.26-2.37)             | 0.87 (0.33-2.29) | 0.76 (0.31-1.84)  | 0.59 (0.20-1.76) | 0.96                    | 0.96            |            |            |            |            |
|            |             |            | Female | 0.48                    | 397 | 0.78 (0.48-1.27)      | 0.32       | 0.85       | 0.56 (0.19-1.64)             | 0.38 (0.16-0.88) | 6.54 (1.38-30.93) | 0.66 (0.25-1.71) | 3.48 × 10 <sup>-3</sup> | 0.02            |            |            |            |            |
| rs755694   | MAPK1       | 22         | Male   | 0.43                    | 386 | 1.13 (0.72-1.80)      | 0.59       | 0.97       | 0.77 (0.29-2.07)             | 2.77 (0.99-7.73) | 0.56 (0.24-1.30)  | 1.66 (0.64-4.34) | 0.07                    | 0.30            |            |            |            |            |
|            |             |            | Female | 0.45                    | 403 | 1.02 (0.63-1.67)      | 0.93       | 1.00       | 1.92 (0.58-6.39)             | 0.77 (0.33-1.81) | 1.13 (0.39-3.26)  | 0.86 (0.34-2.20) | 0.64                    | 0.65            |            |            |            |            |
| rs8136867  | MAPK1       | 22         | Male   | 0.43                    | 385 | 1.14 (0.72-1.81)      | 0.57       | 0.96       | 0.77 (0.29-2.07)             | 2.77 (0.99-7.73) | 0.56 (0.24-1.30)  | 1.71 (0.65-4.46) | 0.07                    | 0.29            |            |            |            |            |
|            |             |            | Female | 0.45                    | 402 | 1.04 (0.64-1.69)      | 0.88       | 1.00       | 1.88 (0.57-6.28)             | 0.82 (0.35-1.92) | 1.13 (0.39-3.26)  | 0.86 (0.34-2.20) | 0.69                    | 0.69            |            |            |            |            |
| rs2876981  | MAPK1       | 22         | Male   | 0.42                    | 386 | 0.78 (0.50-1.24)      | 0.30       | 0.82       | 0.55 (0.21-1.47)             | 0.86 (0.37-2.02) | 1.15 (0.50-2.65)  | 0.56 (0.21-1.52) | 0.62                    | 0.73            |            |            |            |            |
|            |             |            | Female | 0.39                    | 403 | 0.82 (0.52-1.31)      | 0.41       | 0.92       | 0.72 (0.26-2.03)             | 0.46 (0.21-1.05) | 3.70 (1.21-11.30) | 0.55 (0.22-1.36) | 0.01                    | 0.06            |            |            |            |            |
| rs9610470  | MAPK1       | 22         | Male   | 0.26                    | 386 | 0.85 (0.55-1.30)      | 0.45       | 0.93       | 1.45 (0.56-3.73)             | 0.43 (0.18-1.02) | 1.20 (0.55-2.62)  | 0.71 (0.29-1.72) | 0.20                    | 0.58            |            |            |            |            |
|            |             |            | Female | 0.25                    | 403 | 1.13 (0.71-1.80)      | 0.60       | 0.98       | 0.97 (0.35-2.70)             | 0.74 (0.33-1.69) | 2.08 (0.78-5.51)  | 1.26 (0.50-3.17) | 0.45                    | 0.56            |            |            |            |            |
| rs4821401  | MAPK1       | 22         | Male   | 0.04                    | NA  | NA                    | NA         | NA         | NA                           | NA               | NA                | NA               | NA                      | NA              | NA         | NA         | NA         |            |
|            |             |            | Female | 0.04                    | NA  | NA                    | NA         | NA         | NA                           | NA               | NA                | NA               | NA                      | NA              | NA         | NA         | NA         |            |
| rs755745   | MAPK1       | 22         | Male   | 0.04                    | NA  | NA                    | NA         | NA         | NA                           | NA               | NA                | NA               | NA                      | NA              | NA         | NA         | NA         |            |
|            |             |            | Female | 0.04                    | NA  | NA                    | NA         | NA         | NA                           | NA               | NA                | NA               | NA                      | NA              | NA         | NA         | NA         |            |
| rs999891   | MAPK1       | 22         | Male   | 0.00                    | NA  | NA                    | NA         | NA         | NA                           | NA               | NA                | NA               | NA                      | NA              | NA         | NA         | NA         |            |
|            |             |            | Female | 1.24 × 10 <sup>-3</sup> | NA  | NA                    | NA         | NA         | NA                           | NA               | NA                | NA               | NA                      | NA              | NA         | NA         | NA         |            |
| rs9612225  | GNAZ        | 22         | Male   | 0.26                    | 383 | 0.93 (0.65-1.33)      | 0.69       | 0.99       | 0.66 (0.29-1.54)             | 1.06 (0.55-2.06) | 0.66 (0.34-1.29)  | 1.65 (0.78-3.48) | 0.25                    | 0.77            |            |            |            |            |
|            |             |            | Female | 0.25                    | 401 | 1.11 (0.77-1.60)      | 0.59       | 0.97       | 1.02 (0.46-2.27)             | 0.80 (0.39-1.66) | 1.25 (0.59-2.64)  | 1.49 (0.72-3.07) | 0.67                    | 0.97            |            |            |            |            |
| rs13054331 | GNAZ        | 22         | Male   | 0.26                    | 386 | 0.91 (0.64-1.30)      | 0.61       | 1.00       | 0.63 (0.27-1.45)             | 1.06 (0.55-2.07) | 0.66 (0.34-1.29)  | 1.56 (0.75-3.26) | 0.26                    | 0.78            |            |            |            |            |
|            |             |            | Female | 0.25                    | 403 | 1.10 (0.76-1.59)      | 0.62       | 0.98       | 0.93 (0.42-2.08)             | 0.82 (0.39-1.69) | 1.28 (0.61-2.70)  | 1.49 (0.72-3.07) | 0.65                    | 0.97            |            |            |            |            |
| rs9624019  | GNAZ        | 22         | Male   | 0.09                    | 385 | 0.88 (0.51-1.52)      | 0.65       | 1.00       | 0.97 (0.29-3.25)             | 0.85 (0.31-2.38) | 0.77 (0.26-2.28)  | 0.97 (0.35-2.71) | 0.99                    | 0.99            |            |            |            |            |
|            |             |            | Female | 0.11                    | 402 | 1.20 (0.72-1.98)      | 0.49       | 0.99       | 0.31 (0.04-2.41)             | 3.16 (1.34-7.44) | 1.11 (0.41-3.03)  | 0.50 (0.15-1.67) | 0.02                    | 0.13            |            |            |            |            |
| rs3788337  | GNAZ        | 22         | Male   | 0.36                    | 385 | 0.99 (0.64-1.53)      | 0.97       | 0.97       | 0.63 (0.24-1.63)             | 1.34 (0.56-3.19) | 0.53 (0.24-1.18)  | 2.53 (0.94-6.78) | 0.06                    | 0.33            |            |            |            |            |
|            |             |            | Female | 0.37                    | 402 | 1.32 (0.82-2.13)      | 0.24       | 0.90       | 0.70 (0.25-1.95)             | 1.60 (0.70-3.65) | 1.45 (0.51-4.10)  | 1.66 (0.63-4.37) | 0.59                    | 0.98            |            |            |            |            |
| rs3788339  | GNAZ        | 22         | Male   | 0.10                    | 386 | 0.87 (0.52-1.46)      | 0.61       | 1.00       | 1.81 (0.65-4.99)             | 0.97 (0.38-2.51) | 0.44 (0.13-1.47)  | 0.69 (0.25-1.94) | 0.33                    | 0.82            |            |            |            |            |
|            |             |            | Female | 0.13                    | 403 | 1.22 (0.76-1.95)      |            |            |                              |                  |                   |                  |                         |                 |            |            |            |            |

| SNP        | Gene Region | Chromosome | Gender | MAF  | N   | Marginal Effect       |            |         | Treatment Stratified Effects |                    |                   |                   | Test of Interaction     |                 |
|------------|-------------|------------|--------|------|-----|-----------------------|------------|---------|------------------------------|--------------------|-------------------|-------------------|-------------------------|-----------------|
|            |             |            |        |      |     | Likelihood ratio test |            | Placebo | Bupropion                    | Patch              | Spray             | Observed P        | Adjusted P              |                 |
|            |             |            |        |      |     | SNP OR (95% CI)       | Observed P |         |                              |                    |                   |                   |                         | SNP OR (95% CI) |
| rs2076370  | PRKCABP     | 22         | Female | 0.33 | 403 | 1.11 (0.70-1.74)      | 0.67       | 1.00    | 3.17 (1.03-9.74)             | 1.56 (0.69-3.55)   | 0.41 (0.15-1.08)  | 0.79 (0.32-1.96)  | 0.03                    | 0.12            |
|            |             |            | Male   | 0.39 | 380 | 1.08 (0.79-1.47)      | 0.63       | 1.00    | 0.83 (0.42-1.63)             | 1.44 (0.78-2.67)   | 1.77 (0.99-3.15)  | 0.52 (0.26-1.04)  | 0.03                    | 0.12            |
| rs760975   | PRKCABP     | 22         | Female | 0.38 | 397 | 1.00 (0.72-1.39)      | 0.99       | 0.99    | 1.16 (0.54-2.49)             | 0.75 (0.42-1.36)   | 1.01 (0.53-1.96)  | 1.26 (0.66-2.43)  | 0.68                    | 0.92            |
|            |             |            | Male   | 0.38 | 381 | 1.08 (0.69-1.70)      | 0.72       | 1.00    | 0.72 (0.27-1.90)             | 1.96 (0.76-5.06)   | 1.75 (0.76-4.05)  | 0.50 (0.20-1.23)  | 0.09                    | 0.27            |
| rs7289911  | PRKCABP     | 22         | Female | 0.39 | 402 | 0.96 (0.60-1.52)      | 0.85       | 1.00    | 1.55 (0.46-5.16)             | 0.62 (0.28-1.38)   | 0.87 (0.33-2.31)  | 1.35 (0.54-3.38)  | 0.50                    | 0.80            |
|            |             |            | Male   | 0.02 | NA  | NA                    | NA         | NA      | NA                           | NA                 | NA                | NA                | NA                      | NA              |
| rs2012859  | PRKCABP     | 22         | Female | 0.03 | NA  | NA                    | NA         | NA      | NA                           | NA                 | NA                | NA                | NA                      | NA              |
|            |             |            | Male   | 0.30 | 384 | 1.02 (0.66-1.56)      | 0.94       | 0.99    | 0.98 (0.38-2.51)             | 0.99 (0.43-2.29)   | 0.77 (0.35-1.69)  | 1.54 (0.64-3.74)  | 0.72                    | 0.76            |
| rs2076371  | PRKCABP     | 22         | Female | 0.29 | 403 | 0.66 (0.42-1.05)      | 0.08       | 0.41    | 0.31 (0.10-0.94)             | 1.01 (0.45-2.23)   | 1.58 (0.61-4.12)  | 0.31 (0.15-0.79)  | 0.03                    | 0.13            |
|            |             |            | Male   | 0.28 | 385 | 0.95 (0.62-1.46)      | 0.80       | 1.00    | 0.37 (0.13-1.02)             | 1.75 (0.75-4.11)   | 1.84 (0.83-4.05)  | 0.45 (0.18-1.11)  | 0.01                    | 0.05            |
| rs1004764  | PRKCABP     | 22         | Female | 0.28 | 403 | 1.01 (0.64-1.59)      | 0.98       | 1.00    | 2.87 (0.87-9.46)             | 0.56 (0.25-1.28)   | 1.24 (0.48-3.22)  | 0.84 (0.34-2.09)  | 0.13                    | 0.35            |
|            |             |            | Male   | 0.39 | 386 | 1.11 (0.71-1.74)      | 0.63       | 0.99    | 0.77 (0.30-1.98)             | 1.46 (0.58-3.70)   | 2.27 (0.97-5.30)  | 0.53 (0.22-1.28)  | 0.09                    | 0.26            |
| rs2076372  | PRKCABP     | 22         | Female | 0.38 | 402 | 0.94 (0.59-1.50)      | 0.80       | 1.00    | 1.58 (0.47-5.27)             | 0.67 (0.30-1.49)   | 0.72 (0.27-1.89)  | 1.35 (0.54-3.38)  | 0.51                    | 0.80            |
|            |             |            | Male   | 0.28 | 386 | 1.01 (0.66-1.54)      | 0.97       | 0.97    | 1.05 (0.41-2.70)             | 1.03 (0.45-2.39)   | 0.72 (0.33-1.58)  | 1.44 (0.60-3.47)  | 0.72                    | 0.72            |
| rs8135665  | PRKCABP     | 22         | Female | 0.25 | 401 | 0.60 (0.38-0.96)      | 0.03       | 0.22    | 0.21 (0.06-0.77)             | 1.09 (0.49-2.46)   | 1.04 (0.39-2.75)  | 0.34 (0.13-0.87)  | 0.05                    | 0.20            |
|            |             |            | Male   | 0.20 | 354 | 1.03 (0.70-1.49)      | 0.89       | 1.00    | 0.86 (0.36-2.05)             | 0.72 (0.33-1.55)   | 1.10 (0.58-2.09)  | 1.69 (0.74-3.89)  | 0.48                    | 0.79            |
| rs5756908  | PRKCABP     | 22         | Female | 0.21 | 379 | 1.21 (0.84-1.76)      | 0.31       | 0.88    | 2.24 (0.96-5.22)             | 0.93 (0.50-1.74)   | 0.53 (0.20-1.41)  | 1.76 (0.89-3.49)  | 0.08                    | 0.29            |
|            |             |            | Male   | 0.50 | 386 | 1.20 (0.73-1.99)      | 0.47       | 0.97    | 1.22 (0.39-3.83)             | 0.94 (0.38-2.33)   | 0.78 (0.30-1.98)  | 3.47 (0.93-13.01) | 0.26                    | 0.56            |
| rs2267366  | PRKCABP     | 22         | Female | 0.48 | 403 | 1.03 (0.62-1.73)      | 0.90       | 1.00    | 1.13 (0.37-3.52)             | 1.57 (0.57-4.31)   | 0.73 (0.27-2.01)  | 0.86 (0.30-2.42)  | 0.74                    | 0.90            |
|            |             |            | Male   | 0.13 | 386 | 1.04 (0.66-1.63)      | 0.87       | 1.00    | 1.17 (0.43-3.15)             | 0.56 (0.23-1.36)   | 0.53 (0.21-1.38)  | 4.39 (1.61-11.94) | 5.38 × 10 <sup>-3</sup> | 0.03            |
| rs5905613  | MAOA        | X          | Female | 0.16 | 403 | 0.94 (0.61-1.46)      | 0.79       | 1.00    | 1.39 (0.57-3.42)             | 0.85 (0.41-1.77)   | 0.36 (0.08-1.57)  | 1.25 (0.54-2.92)  | 0.34                    | 0.71            |
|            |             |            | Male   | 0.30 | 386 | 1.29 (0.82-2.05)      | 0.28       | 0.90    | 1.29 (0.47-3.56)             | 0.79 (0.31-2.00)   | 1.29 (0.55-3.04)  | 2.13 (0.85-5.32)  | 0.52                    | 0.93            |
| rs4824657  | MAOA        | X          | Female | 0.27 | 403 | 0.72 (0.46-1.04)      | 0.08       | 0.57    | 0.54 (0.22-1.37)             | 0.67 (0.34-1.33)   | 0.78 (0.36-1.69)  | 0.87 (0.43-1.74)  | 0.87                    | 1.00            |
|            |             |            | Male   | 0.30 | 370 | 1.27 (0.79-2.02)      | 0.33       | 0.94    | 1.05 (0.36-3.03)             | 0.85 (0.32-2.28)   | 1.29 (0.55-3.06)  | 2.01 (0.81-5.01)  | 0.62                    | 0.98            |
| rs3788862  | MAOA        | X          | Female | 0.27 | 387 | 0.76 (0.53-1.11)      | 0.15       | 0.78    | 0.55 (0.22-1.38)             | 0.74 (0.38-1.45)   | 0.86 (0.40-1.87)  | 0.89 (0.44-1.81)  | 0.85                    | 1.00            |
|            |             |            | Male   | 0.30 | 385 | 1.27 (0.80-2.01)      | 0.31       | 0.93    | 1.27 (0.46-3.49)             | 0.79 (0.31-2.00)   | 1.29 (0.55-3.04)  | 1.99 (0.80-4.95)  | 0.58                    | 0.96            |
| rs5906883  | MAOA        | X          | Female | 0.27 | 403 | 0.73 (0.50-1.05)      | 0.09       | 0.61    | 0.53 (0.21-1.33)             | 0.66 (0.34-1.29)   | 0.87 (0.40-1.86)  | 0.86 (0.42-1.76)  | 0.80                    | 1.00            |
|            |             |            | Male   | 0.30 | 386 | 1.25 (0.79-1.98)      | 0.34       | 0.94    | 1.20 (0.44-3.30)             | 0.79 (0.31-2.00)   | 1.29 (0.55-3.04)  | 1.99 (0.80-4.95)  | 0.81                    | 0.96            |
| rs1465108  | MAOA        | X          | Female | 0.28 | 403 | 0.72 (0.49-1.05)      | 0.08       | 0.57    | 0.51 (0.20-1.30)             | 0.67 (0.34-1.33)   | 0.86 (0.41-1.88)  | 0.83 (0.41-1.68)  | 0.81                    | 1.00            |
|            |             |            | Male   | 0.30 | 386 | 1.25 (0.79-1.98)      | 0.34       | 0.94    | 1.20 (0.44-3.30)             | 0.79 (0.31-2.00)   | 1.29 (0.55-3.04)  | 1.99 (0.80-4.95)  | 0.58                    | 0.96            |
| rs5906957  | MAOA        | X          | Female | 0.28 | 403 | 0.71 (0.49-1.04)      | 0.07       | 0.55    | 0.51 (0.20-1.30)             | 0.66 (0.34-1.29)   | 0.86 (0.39-1.88)  | 0.83 (0.41-1.68)  | 0.81                    | 1.00            |
|            |             |            | Male   | 0.26 | 385 | 1.15 (0.71-1.87)      | 0.58       | 0.98    | 1.92 (0.59-5.47)             | 0.47 (0.17-1.32)   | 1.00 (0.39-2.59)  | 1.99 (0.79-5.02)  | 0.14                    | 0.45            |
| rs909525   | MAOA        | X          | Female | 0.23 | 403 | 0.79 (0.54-1.16)      | 0.23       | 0.88    | 0.57 (0.22-1.44)             | 0.72 (0.35-1.51)   | 0.79 (0.36-1.77)  | 1.05 (0.53-2.10)  | 0.75                    | 1.00            |
|            |             |            | Male   | 0.35 | 386 | 1.50 (0.96-2.33)      | 0.08       | 0.53    | 1.24 (0.47-3.31)             | 1.41 (0.59-3.35)   | 1.22 (0.53-2.82)  | 2.34 (0.96-5.75)  | 0.71                    | 0.99            |
| rs2283725  | MAOA        | X          | Female | 0.31 | 403 | 0.76 (0.53-1.08)      | 0.12       | 0.72    | 0.70 (0.31-1.56)             | 0.55 (0.29-1.06)   | 1.13 (0.53-2.40)  | 0.84 (0.43-1.65)  | 0.55                    | 1.00            |
|            |             |            | Male   | 0.35 | 386 | 1.50 (0.96-2.33)      | 0.08       | 0.53    | 1.24 (0.47-3.31)             | 1.41 (0.59-3.35)   | 1.22 (0.53-2.82)  | 2.34 (0.96-5.75)  | 0.71                    | 0.99            |
| rs3027399  | MAOA        | X          | Female | 0.31 | 403 | 0.75 (0.53-1.07)      | 0.11       | 0.68    | 0.70 (0.31-1.56)             | 0.55 (0.29-1.06)   | 1.13 (0.53-2.40)  | 0.81 (0.42-1.59)  | 0.55                    | 1.00            |
|            |             |            | Male   | 0.02 | NA  | NA                    | NA         | NA      | NA                           | NA                 | NA                | NA                | NA                      | NA              |
| rs2205718  | MAOA        | X          | Female | 0.08 | 403 | 1.09 (0.59-2.02)      | 0.78       | 1.00    | 0.41 (0.09-1.98)             | 1.18 (0.40-3.43)   | 1.05 (0.29-3.86)  | 2.51 (0.71-8.90)  | 0.34                    | 0.95            |
|            |             |            | Male   | 0.31 | 386 | 1.13 (0.72-1.79)      | 0.60       | 0.94    | 1.65 (0.61-4.46)             | 0.58 (0.22-1.49)   | 1.00 (0.42-2.37)  | 1.84 (0.75-4.55)  | 0.29                    | 0.73            |
| rs2072743  | MAOA        | X          | Female | 0.29 | 403 | 0.71 (0.49-1.04)      | 0.07       | 0.55    | 0.61 (0.26-1.44)             | 0.66 (0.34-1.28)   | 0.93 (0.40-2.14)  | 0.72 (0.35-1.48)  | 0.90                    | 1.00            |
|            |             |            | Male   | 0.36 | 384 | 1.23 (0.79-1.92)      | 0.35       | 0.94    | 1.31 (0.49-3.50)             | 1.07 (0.45-2.54)   | 0.89 (0.39-2.06)  | 1.99 (0.81-4.87)  | 0.62                    | 0.98            |
| rs979606   | MAOA        | X          | Female | 0.33 | 403 | 0.73 (0.51-1.04)      | 0.08       | 0.58    | 0.83 (0.39-1.77)             | 0.53 (0.28-1.01)   | 1.21 (0.54-2.71)  | 0.67 (0.34-1.31)  | 0.65                    | 0.98            |
|            |             |            | Male   | 0.31 | 385 | 1.13 (0.71-1.78)      | 0.61       | 0.95    | 1.65 (0.61-4.46)             | 0.56 (0.22-1.46)   | 1.00 (0.42-2.37)  | 1.84 (0.75-4.55)  | 0.27                    | 0.70            |
| rs3027409  | MAOA        | X          | Female | 0.29 | 403 | 0.71 (0.49-1.04)      | 0.07       | 0.55    | 0.61 (0.26-1.44)             | 0.66 (0.34-1.28)   | 0.93 (0.40-2.14)  | 0.72 (0.35-1.48)  | 0.90                    | 1.00            |
|            |             |            | Male   | 0.05 | 386 | 1.40 (0.55-3.57)      | 0.98       | 0.97    | NA                           | 10.16 (1.13-91.17) | 0.47 (0.05-7.71)  | 1.26 (0.22-7.40)  | 0.04                    | 0.16            |
| rs2064070  | MAOA        | X          | Female | 0.04 | 403 | 0.99 (0.42-2.31)      | 0.98       | 0.98    | 2.28 (0.61-8.55)             | NA                 | 4.05 (0.62-26.47) | 0.50 (0.05-4.65)  | 0.02                    | 0.14            |
|            |             |            | Male   | 0.31 | 384 | 1.20 (0.76-1.91)      | 0.43       | 0.96    | 1.61 (0.59-4.37)             | 0.63 (0.24-1.63)   | 1.16 (0.50-2.73)  | 1.84 (0.75-4.55)  | 0.38                    | 0.81            |
| rs6009257  | MAOA        | X          | Female | 0.30 | 402 | 0.77 (0.54-1.11)      | 0.16       | 0.80    | 0.60 (0.25-1.41)             | 0.68 (0.35-1.29)   | 0.78 (0.33-1.82)  | 1.04 (0.55-1.99)  | 0.72                    | 1.00            |
|            |             |            | Male   | 0.44 | 386 | 1.35 (0.88-2.08)      | 0.17       | 0.77    | 1.21 (0.47-3.17)             | 1.42 (0.62-3.28)   | 1.03 (0.47-2.28)  | 1.97 (0.81-4.81)  | 0.75                    | 0.99            |
| rs3027415  | MAOA        | X          | Female | 0.40 | 403 | 0.78 (0.57-1.09)      | 0.14       | 0.77    | 0.86 (0.42-1.73)             | 0.46 (0.25-0.87)   | 0.70 (0.33-1.48)  | 1.36 (0.74-2.48)  | 0.10                    | 0.56            |
|            |             |            | Male   | 0.21 | 386 | 0.69 (0.40-1.19)      | 0.18       | 0.78    | 0.84 (0.24-2.92)             | 0.59 (0.21-1.70)   | 0.70 (0.27-1.83)  | 0.71 (0.23-2.21)  | 0.98                    | 0.98            |
| rs3027416  | MAOA        | X          | Female | 0.24 | 401 | 0.94 (0.64-1.39)      | 0.76       | 1.00    | 0.90 (0.36-2.20)             | 0.81 (0.41-1.60)   | 0.99 (0.43-2.26)  | 1.15 (0.53-2.49)  | 0.92                    | 1.00            |
|            |             |            | Male   | 0.00 | NA  | NA                    | NA         | NA      | NA                           | NA                 | NA                | NA                | NA                      | NA              |
| rs3027421  | MAOB        | X          | Female | 0.00 | NA  | NA                    | NA         | NA      | NA                           | NA                 | NA                | NA                | NA                      | NA              |
|            |             |            | Male   | 0.00 | NA  | NA                    | NA         | NA      | NA                           | NA                 | NA                | NA                | NA                      | NA              |
| rs3027431  | MAOB        | X          | Female | 0.01 | 403 | 4.86 (0.85-27.78)     | 0.07       | 0.54    | NA                           | NA                 | NA                | NA                | NA                      | NA              |
|            |             |            | Male   | 0.00 | NA  | NA                    | NA         | NA      | NA                           | NA                 | NA                | NA                | NA                      | NA              |
| rs12558036 | MAOB        | X          | Female | 0.01 | 403 | 4.79 (1.08-21.19)     | 0.04       | 0.36    | NA                           | NA                 | NA                | NA                | NA                      | NA              |
|            |             |            | Male   | 0.00 | NA  | NA                    | NA         | NA      | NA                           | NA                 | NA                | NA                | NA                      | NA              |
| rs1040398  | MAOB        | X          | Female | 0.01 | 403 | 4.86 (0.85-27.78)     | 0.07       | 0.54    | NA                           | NA                 | NA                | NA                | NA                      | NA              |
|            |             |            | Male   | 0.00 | NA  | NA                    | NA         | NA      | NA                           | NA                 | NA                | NA                | NA                      | NA              |
| rs1799836  | MAOB        | X          | Female | 0.01 | 403 | 4.86 (0.85-27.78)     | 0.07       | 0.54    | NA                           | NA                 | NA                | NA                | NA                      | NA              |
|            |             |            | Male   | 0.44 | 386 | 1.05 (0.68-1.62)      | 0.82       | 0.82    | 0.77 (0.29-2.03)             | 1.09 (0.47-2.51)   | 0.86 (0.38-1.94)  | 1.67 (0.69-4.07)  | 0.63                    | 0.97            |
| rs10521432 | MAOB        | X          | Female | 0.48 | 403 | 0.88 (0.63-1.21)      | 0.42       | 0.94    | 1.12 (0.55-2.26)             | 0.72 (0.41-1.29)   | 0.76 (0.36-1.61)  | 1.00 (0.54-1.87)  | 0.75                    | 1.00            |
|            |             |            | Male   | 0.27 | 386 | 0.92 (0.57-1.49)      | 0.74       | 0.95    | 0.85 (0.27-2.67)             | 0.96 (0.40-2.29)   | 0.75 (0.30-1.88)  | 1.18 (0.45-3.07)  | 0.92                    | 1.00            |
| rs7888450  | MAOB        | X          | Female | 0.30 | 402 | 0.99 (0.69-1.43)      | 0.97       | 1.00    | 1.14 (0.53-2.45)             | 0.70 (0.37-1.      |                   |                   |                         |                 |

| SNP       | Gene Region | Chromosome | Gender | MAF  | N   | Marginal Effect       |            |            | Treatment Stratified Effects |                  |                  |                  | Test of Interaction |            |
|-----------|-------------|------------|--------|------|-----|-----------------------|------------|------------|------------------------------|------------------|------------------|------------------|---------------------|------------|
|           |             |            |        |      |     | Likelihood ratio test |            |            | Placebo                      | Bupropion        | Patch            | Spray            | Observed P          | Adjusted P |
|           |             |            |        |      |     | SNP OR (95% CI)       | Observed P | Adjusted P | SNP OR (95% CI)              | SNP OR (95% CI)  | SNP OR (95% CI)  | SNP OR (95% CI)  |                     |            |
| rs5945185 | FLNA        | X          | Female | 0.10 | 374 | 0.73 (0.41-1.30)      | 0.28       | 0.58       | 0.71 (0.16-3.25)             | 0.81 (0.32-2.06) | 0.32 (0.09-1.21) | 1.40 (0.45-4.30) | 0.39                | 0.69       |
|           |             |            | Male   | 0.20 | 349 | 0.58 (0.32-1.06)      | 0.07       | 0.20       | 0.44 (0.11-1.72)             | 1.12 (0.41-3.10) | 0.58 (0.18-1.80) | 0.16 (0.02-1.31) | 0.30                | 0.30       |
| rs1064816 | FLNA        | X          | Female | 0.23 | 378 | 0.80 (0.55-1.19)      | 0.27       | 0.58       | 1.23 (0.55-2.74)             | 0.63 (0.31-1.28) | 0.68 (0.30-1.56) | 0.89 (0.40-1.98) | 0.64                | 0.64       |
|           |             |            | Male   | 0.22 | 236 | 2.32 (0.82-6.53)      | 0.12       | 0.29       | 16.72 (1.52-184.43)          | 1.46 (0.31-6.95) | 0.54 (0.05-5.56) | NA               | 0.10                | 0.20       |
| rs17428   | FLNA        | X          | Female | 0.24 | 383 | 1.10 (0.75-1.60)      | 0.63       | 0.63       | 0.54 (0.21-1.37)             | 1.47 (0.82-2.62) | 0.87 (0.35-2.16) | 1.40 (0.62-3.18) | 0.26                | 0.62       |
|           |             |            | Male   | 0.19 | 354 | 0.58 (0.32-1.07)      | 0.07       | 0.21       | 0.50 (0.13-1.97)             | 1.15 (0.42-3.17) | 0.53 (0.17-1.63) | 0.16 (0.02-1.30) | 0.29                | 0.33       |
|           |             |            | Female | 0.22 | 379 | 0.82 (0.55-1.21)      | 0.30       | 0.51       | 1.29 (0.57-2.94)             | 0.65 (0.32-1.31) | 0.68 (0.30-1.56) | 0.89 (0.40-1.98) | 0.61                | 0.63       |