# Supplemental Materials

*Pharmacogenomic Testing*

The GeneSight Psychotropic test included evaluation of genotypes for 58 alleles and variants across 8 genes (CYP1A2: 3497G>A, 2499A>T, 558C>A, 5166G>A, -2467T>delT, 5347C>T, 2473G>A, 5090C>T, -163C>A, 125C>G, 3533G>A, 2116G>A, -739T>G, 729C>T, -3860G>A,; CYP2C9: \*1, \*2, \*3, \*4, \*5, \*6; CYP2C19: \*1, \*2, \*3, \*4, \*5, \*6, \*7, \*8, \*17; CYP3A4: \*1, \*13, \*15A, \*22; CYP2B6: \*1, \*4, \*6, \*9; CYP2D6: \*1, \*2, \*2A, \*3, \*4, \*5, \*6, \*7, \*8, \*9, \*10, \*11, \*12, \*14, \*15, \*17, \*41, gene duplication; HTR2A: rs7997012 (-1438 G >A); SLC6A4: 44 bp promoter indel (5-HTTLPR). Psychotropic medications included antidepressants, and antipsychotics. The GeneSight ADHD test included evaluation of the genotypes of 20 alleles and variants across 3 genes (ADRA2A: -1291C>G; COMT: Val158Met; CYP2D6: \*1, \*2, \*2A, \*3, \*4, \*5, \*6, \*7, \*8, \*9, \*10, \*11, \*12, \*14, \*15, \*17, \*41, gene duplication. As a laboratory developed test, it has not been approved by the U.S. Food and Drug Administration.

# Supplemental Figure 1. Demographics and drug concentration/dose for each medication type.Diagram, engineering drawing  Description automatically generated

# Supplemental Table 1. Prescription and blood-drug measurement frequency by medication

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| **Medication** | **Panel** | **Prescription Frequency** (N†, %) | **Blood-Drug Measurements**(N) |
| Amitriptyline | Psychotropic | 2 (1%) | 0 |
| Aripiprazole | Psychotropic | 23 (11.3%) | 15 |
| Atomoxetine | ADHD | 2 (1%) | 1 |
| Bupropion | Psychotropic | 6 (2.9%) | 0 |
| Citalopram | Psychotropic | 3 (1.5%) | 1 |
| Clonidine | ADHD | 19 (9.3%) | 11 |
| Dexmethylphenidate | ADHD | 6 (2.9%) | 0 |
| Duloxetine | Psychotropic | 5 (2.5%) | 2 |
| Escitalopram | Psychotropic | 19 (9.3%) | 10 |
| Fluoxetine | Psychotropic | 18 (8.8%) | 10 |
| Guanfacine | ADHD | 10 (4.9%) | 3 |
| Haloperidol | Psychotropic | 1 (0.5%) | 1 |
| Lisdexamphetamine | ADHD | 9 (4.4%) | 0 |
| Lurasidone | Psychotropic | 1 (0.5%) | 0 |
| Methylphenidate | ADHD | 21 (10.3%) | 0 |
| Mirtazapine | Psychotropic | 1 (0.5%) | 0 |
| Olanzapine | Psychotropic | 3 (1.5%) | 2 |
| Paliperidone | Psychotropic | 1 (0.5%) | 0 |
| Quetiapine | Psychotropic | 4 (2%) | 1 |
| Risperidone | Psychotropic | 10 (4.9%) | 1 |
| Sertraline | Psychotropic | 21 (10.3%) | 6 |
| Thioridazine | Psychotropic | 1 (0.5%) | 0 |
| Thiothixene | Psychotropic | 1 (0.5%) | 0 |
| Trazodone | Psychotropic | 11 (5.4%) | 2 |
| Venlafaxine | Psychotropic | 4 (2%) | 2 |
| Vortioxetine | Psychotropic | 1 (0.5%) | 0 |

†N indicates the number of patients taking a given medication, patients could be taking more than 1 medication.