### SI Table 1. Provider Breakdown of Adjunctive and Atypical Antipsychotic-Adjunctive Therapy

| Episode | Provider                          | All Patients (n=455,082) | Any Adjunctive Therapy (n=40,315) | Atypical Antipsychotic-Adjunctive Therapy (n=8,024) |
|---------|-----------------------------------|--------------------------|----------------------------------|-----------------------------------------------|
|         |                                   | n                        | n                                | n     | %a  | Vs PCP | n     | %a  | Vs PCP |
| MDE 1   | PCP/General Medicine              | 249,795                  | 19,881                           | 8.0%  | --   | --     | 3,358 | 1.3% | --     |
|         | Psychiatrist/MH                   | 61,531                   | 8,919                            | 14.5% | 1.82 | 2,492  | 4.0%  | 3.01 | --     |
|         | Other/Unknown                     | 184,268                  | 15,669                           | 8.5%  | 1.07 | 3,344  | 1.8%  | 1.35 | --     |
| MDE 2   | PCP/General Medicine              | 28,943                   | 5,068                            | 17.5% | --   | --     | 847   | 2.9% | --     |
|         | Psychiatrist/MH                   | 8,509                    | 2,607                            | 30.6% | 1.75 | 845    | 9.9%  | 3.39 | --     |
|         | Other/Unknown                     | 19,843                   | 3,854                            | 19.4% | 1.11 | 910    | 4.6%  | 1.57 | --     |
| MDE 3   | PCP/General Medicine              | 3,796                    | 986                              | 26.0% | --   | --     | 172   | 4.5% | --     |
|         | Psychiatrist/MH                   | 1,437                    | 552                              | 38.4% | 1.48 | 184    | 12.8% | 2.83 | --     |
|         | Other/Unknown                     | 2,548                    | 680                              | 26.7% | 1.03 | 149    | 5.8%  | 1.29 | --     |
| MDE 4   | PCP/General Medicine              | 556                      | 174                              | 31.3% | --   | --     | 33    | 5.9% | --     |
|         | Psychiatrist/MH                   | 296                      | 121                              | 40.9% | 1.31 | 46     | 15.5% | 2.62 | --     |
|         | Other/Unknown                     | 390                      | 142                              | 36.4% | 1.16 | 33     | 8.5%  | 1.43 | --     |

*aPercentage is of all patients within the respective provider category for each MDE.

MDE, major depressive disorder; MH, mental health; PCP, primary care provider.
SI Figure 1. Monotherapy Antidepressant Usage\textsuperscript{a} by Major Depressive Episode and Line of Therapy

\textsuperscript{a}Each LOT was constructed at ingredient-level and grouped by antidepressant class for the graphs above.
SI Figure 2. Adjunctive Treatment Regimens\textsuperscript{a} by Major Depressive Episode and Line of Therapy

\textsuperscript{a}The top 30 combinations for each LOT are included in these figures. For the commercial cohort, AD+Mood stabilizer use was reported in LOT3 only during MDE2. In MDE3, there was AD+Mood stabilizer use in LOT2 and 3 only, and AD Combination+Antipsychotic use in LOT4 only. In MDE4, AD+Mood stabilizer use was reported in LOT1 and 2 only, and AD+Antipsychotic+Mood stabilizer and AD combination+Mood stabilizer use in LOT4 only.

\textsuperscript{b}As MDE1 LOT1 was required to be monotherapy, there are no adjunctive regimens for either cohort.

\textsuperscript{c}LOT4 of the Medicaid cohort was not reported due to small sample size and issues of privacy.

\textsuperscript{d}AD Combo includes patients treated with Bupropion + AD.
SI Figure 3. Adjunctive Regimens During Follow-Up

- AA-Adjunctive Therapy\(^{a,b}\)
- Mood Stabilizer-Adjunctive Therapy\(^{b}\)
- Antidepressant Combination

|                | % of Patients With Adjunctive Therapy |
|----------------|--------------------------------------|
| All Adjunctive Regimens \((n=40,315)\) | 19.9% \(4.6\%\) 75.5% |
| Top 30 Adjunctive Regimens \((n=27,380)\) | 10.3% 0.0% 89.7% |

\(^{a}\geq 1\) DSRM as part of adjunctive treatment regimen.
\(^{b}\)May include patients on antidepressant combination treatment within that LOT.
SI Figure 4. Proportion of Atypical Antipsychotic Use

Note: Medications that are FDA-approved for adjunctive MDD are in italics.

- Olanzapine only approved in combination with fluoxetine.
- Other = asenapine, fluoxetine/olanzapine, paliperidone, amitriptyline/perphenazine, cariprazine, iloperidone, and clozapine.

FDA, Food and Drug Administration; MDD, major depressive disorder.