**Supplementary Table 1. Overview of schedule of efficacy and safety assessments**

|  |  |
| --- | --- |
| **Assessment** | **Schedule of assessment**  |
| PANSS | Screening, Baseline, weeks 1, 2, 4, 6/ET |
| Cognitive test battery | Baseline, weeks 2, 4, 6 |
| CGI-S | Screening, Baseline, weeks 1, 2, 4, 6 |
| CGI-I | Weeks 1, 2, 4, 6 |
| Response rate | Weeks 1, 2, 4, 6 |
| SLOF | Baseline, week 6 |
| BIS-11 | Baseline, week 6 |
| AEs and SAEs | Screening, Baseline, weeks 1, 2, 4, 6/ET, follow upa |
| Concomitant medications | Screening, Baseline, weeks 1, 2, 4, 6/ET, follow upa |
| Body weight | Screening, Baseline, week 6/ET |
| Laboratory parameters | Screening, Baseline, week 6/ET |
| Vital signs | Screening, Baseline, weeks 1, 2, 4, 6/ET |
| ECGs | Screening, week 6 |
| SAS | Baseline, week 6/ET |
| BARS | Screening, Baseline, week 6/ET |
| AIMS | Screening, Baseline, week 6/ET |
| C-SSRS | Screening, Baseline, weeks 1, 2, 4, 6/ET |

AE, adverse event; AIMS, Abnormal Involuntary Movement Scale; BARS, Barnes Akathisia Rating Scale; BIS-11, Barratt Impulsiveness Scale-11-item; CGI-I, Clinical Global Impression-Improvement scale; CGI-S, Clinical Global Impression-Severity of illness scale; C-SSRS, Columbia Suicide Severity Rating Scale; ECG, electrocardiogram; ET, early termination; PANSS, Positive and Negative Syndrome Scale; SAEs, serious adverse events; SAS, Simpson Angus Scale; SLOF, Specific Levels of Functioning Scale.

aFollow up included up to 30 (+2) days after the last dose of the study drug.

**Supplementary Table 2. Change in body weight and BMI at week 6 from screening in patients with a weight gain of ≥ 7%**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Weight at screening (kg)** | **Change in weight at week 6 (kg)** | **Percentage weight gain at week 6 (%)** | **BMI at screening (kg/m­2)** | **Change in BMI at week 6 (kg/m­2)** |
| **Brexpiprazole** |
|  | 61.2 | 14.5 | 19.2 | 19.1 | 4.5 |
|  | 62.1 | 9.9 | 13.8 | 20.7 | 3.4 |
|  | 69.5 | 10.4 | 13.0 | 22.7 | 3.4 |
|  | 107.3 | 13.3 | 11.0 | 34.2 | 4.3 |
|  | 99.9 | 11.0 | 9.9 | 29.5 | 3.3 |
|  | 69.2 | 7.3 | 9.6 | 22.9 | 2.4 |
|  | 92.4 | 8.9 | 8.8 | 29.8 | 2.9 |
|  | 58.5 | 5.5 | 8.6 | 23.7 | 2.3 |
|  | 74.8 | 6.8 | 8.3 | 23.6 | 2.2 |
|  | 69.0 | 6.0 | 8.0 | 23.9 | 2.1 |
|  | 78.4 | 6.5 | 7.7 | 22.9 | 1.9 |
|  | 77.7 | 6.4 | 7.6 | 22.5 | 1.8 |
|  | 74.0 | 6.0 | 7.5 | 24.4 | 2.0 |
|  | 91.0 | 6.9 | 7.1 | 29.0 | 2.2 |
| **Aripiprazole** |
|  | 83.0 | 19.0 | 18.6 | 23.5 | 5.4 |
|  | 105.5 | 16.3 | 13.4 | 30.5 | 4.7 |
|  | 95.4 | 8.6 | 8.3 | 32.6 | 3.0 |
|  | 65.5 | 5.4 | 7.6 | 22.4 | 1.8 |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Weight at screening (kg)** | **Weight at week 6 (kg)** | **Change in weight at week 6 (kg)** | **BMI at baseline (kg/m­2)** | **BMI at week 6 (kg/m­2)** | **Change in BMI at week 6 (kg/m­2)** |
| **Top three patients with the highest weight gain at week 6** |  |
| **Brexpiprazole** |  |  |  |  |  |  |
|  | 61.2 | 75.7 | 14.5 | 19.1 | 23.6 | 4.5 |
|  | 107.3 | 120.6 | 13.3 | 34.2 | 38.5 | 4.3 |
|  | 99.9 | 110.9 | 11.0 | 29.5 | 32.8 | 3.3 |
| **Aripiprazole** |  |  |  |  |  |  |
|  | 83.0 | 102.0 | 19.0 | 23.5 | 28.9 | 5.4 |
|  | 105.5 | 121.8 | 16.3 | 30.5 | 35.2 | 4.7 |
|  | 95.4 | 104.0 | 8.6 | 32.6 | 35.6 | 3.0 |
| **Top three patients with the highest weight loss at week 6** |  |
| **Brexpiprazole** |  |  |  |  |  |  |
|  | 96.8 | 94.1 | −2.7 | 41.9 | 40.7 | −1.4 |
|  | 112.5 | 109.5 | −3.0 | 41.3 | 40.2 | −1.1 |
|  | 107.0 | 104.2 | −2.8 | 29.0 | 28.3 | −0.7 |
| **Aripiprazole** |  |  |  |  |  |  |
|  | 105.2 | 101.6 | −3.6 | 29.1 | 28.1 | −1.0 |
|  | 83.7 | 80.8 | −2.9 | 24.5 | 23.6 | −0.9 |
|  | 80.3 | 78.9 | −1.4 | 28.5 | 28.0 | −0.5 |

**Supplementary Table 3. Change in body weight and BMI at week 6 from screening in the patients with the greatest weight gain or weight loss at week 6**

**Supplementary Figure 1. Change in weight at week 6 by individual patient**

