eTable 1. Outcome Measures of Effectiveness in the Modified Intent to Treat Population

| | Paliperidone palmitate | Haloperidol decanoate | <i>P</i> Value: PP vs |
|---|---------------------------|--------------------------|--------------------------|
| Analysis | (n=145) | (n=145) | HD |
| Primary Efficacy Outcome: Efficacy failure prior to month 24 (censoring 90 days after last injection) | | | |
| Efficacy failure prior to month 24, No. of patients/Total No. | 49/145 | 47/145 | |
| Primary test of effect, site-stratified log rank test ^a | | | 0.90 |
| Kaplan-Meier efficacy failure probability (95% CI), at month 12 | 0.33 (0.246 to 0.409) | 0.34 (0.254 to 0.422) | |
| Kaplan-Meier efficacy failure probability (95% CI), at month 24 $^{\rm b}$ | 0.43 (0.323 to 0.529) | 0.41 (0.311 to 0.501) | |
| Site-stratified log rank test ^a | | | 0.90 |
| Reasons for censoring, No. of patients | | | |
| Completed follow-up | 47 | 52 | |
| Withdrew early | 27 | 33 | |
| Greater than 90 days since last LAI | 22 | 13 | |
| Secondary Efficacy Analysis | | | |
| Unstratified log rank test | | | 0.95 |
| Cox-model treatment comparisons, PP vs. HD ^c | | | |
| Adjusted hazard ratio (95% CI) | 0.98 (0.65 to 1.47) | | 0.93 |
| Site by treatment interaction ^a | | | 0.46 |
| Score test for equality of hazard ratios across three predefined time intervals: months 1 to 3, months 4 to 12, and months 13 to 24 | | | 0.57 |
| Sensitivity Analysis, without censoring 90 days after last injection | | | |
| Efficacy failure prior to month 24, No. of patients, Total No. | 51/145 | 47/145 | |
| Kaplan-Meier efficacy failure probability (95% CI), at month 12 | 0.33 (0.253 to 0.414) | 0.33 (0.249 to | |
| Kaplan-Meier efficacy failure probability (95% CI), at | 0.414) | 0.415) 0.39 (0.301 to | |

| month 24 | 0.507) | 0.483) | |
|---|----------------|----------------|------|
| Site-stratified log rank test ^a | | | 0.93 |
| Reasons for censoring, No. of patients | | | |
| Completed follow-up | 63 | 63 | |
| Withdrew early | 31 | 35 | |
| Subgroup Analysis, among those not hospitalized at | | | |
| randomization | | | |
| Efficacy failure prior to month 24, No. of patients/Total No. | 39/121 | 35/117 | |
| Kaplan-Meier efficacy failure probability (95% CI), at | 0.32 (0.226 to | 0.30 (0.206 to | |
| month 12 | 0.405) | 0.386) | |
| Kaplan-Meier efficacy failure probability (95% CI), at | 0.41 (0.297 to | 0.38 (0.273 to | |
| month 24 | 0.517) | 0.483) | |
| Site-stratified log rank test ^a | | | 0.91 |

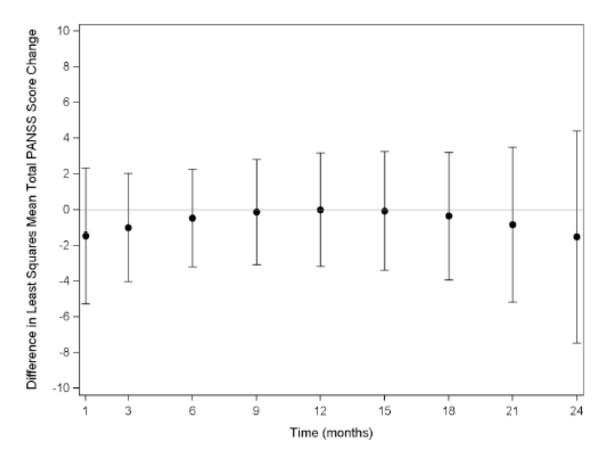
Abbreviations: CI, confidence interval; HD, haloperidol decanoate; LAI, Long-acting injectable; PP, paliperidone palmitate; SE, standard error.

^a For site-stratified analyses, low enrolling study sites (e.g., sites with fewer than 14 randomized patients) were combined to create one or more "pooled sites" with between 14 and 30 patients prior to examining outcome data by coded treatment group. Pooling was primarily based on the number of patients per site and secondarily on service delivery characteristics and location. ^b Confidence intervals are calculated using Greenwood's SE formula for the last observed event time and should be interpreted with caution.

^c The Cox proportional hazards model controlled for baseline PANSS score and pooled site.

eFigure 1—Differences (Paliperidone Palmitate minus Haloperidol Decnoate) in Least Square Mean Total PANSS (Positive and Negative Syndrome Scale) with 95% Confidence Intervals for selected months since first injection

PANSS was analyzed using a mixed effects linear model including fixed effects for treatment, site, baseline PANSS score, time, time², and treatment by time (linear and quadratic) interaction (with spatial spherical covariance structure). The response variables for each participant included the change from baseline in total PANSS score at all observed measurement times within 90 days of the patient's last injection. Bars represent 95% confidence intervals. Visits were scheduled quarterly. A few patients who discontinued treatment early contributed data at Month 1.



| 95% Co | 95% Confidence intervals for Differences of Least Squares Means Paliperidone Palmitate minus Haloperidol Decanoate | | | |
|--------|---|--------------------|--------------------|--|
| Month | Differences of Least Squares Means | Lower 95% boundary | Upper 95% boundary | |
| 1 | -1.4771 | -5.2792 | 2.3251 | |
| 3 | -1.0041 | -4.0360 | 2.0277 | |
| 6 | -0.4653 | -3.1919 | 2.2614 | |
| 9 | -0.1310 | -3.0821 | 2.8201 | |
| 12 | -0.00142 | -3.1873 | 3.1845 | |
| 15 | -0.07646 | -3.3969 | 3.2440 | |
| 18 | -0.3561 | -3.9263 | 3.2140 | |
| 21 | -0.8404 | -5.1850 | 3.5041 | |
| 24 | -1.5294 | -7.4586 | 4.3998 | |

| Treatment | Month | N |
|------------------------|-------|-----|
| Haloperidol decanoate | 1 | 5 |
| Paliperidone palmitate | 1 | 4 |
| Haloperidol decanoate | 3 | 131 |
| Paliperidone palmitate | 3 | 136 |
| Haloperidol decanoate | 6 | 103 |
| Paliperidone palmitate | 6 | 105 |
| Haloperidol decanoate | 9 | 87 |
| Paliperidone palmitate | 9 | 82 |
| Haloperidol decanoate | 12 | 73 |
| Paliperidone palmitate | 12 | 77 |
| Haloperidol decanoate | 15 | 59 |
| Paliperidone palmitate | 15 | 53 |
| Haloperidol decanoate | 18 | 46 |
| Paliperidone palmitate | 18 | 44 |
| Haloperidol decanoate | 21 | 42 |
| Paliperidone palmitate | 21 | 38 |
| Haloperidol decanoate | 24 | 26 |
| Paliperidone palmitate | 24 | 19 |

Number of patients with PANSS at time intervals

eTable 2. Reasons for efficacy failure cited by adjudication committee among those judged to have efficacy failure (each efficacy failure could have multiple contributing reasons)

| | Paliperidone | Haloperidol |
|---|--------------|-------------|
| | Palmitate | Decanoate |
| | (N=49) | (N=47) |
| Psychiatric hospitalization | 44 (89.8%) | 34 (72.3%) |
| Crisis intervention | 16 (32.7%) | 16 (34.0%) |
| Oral antipsychotic could not be discontinued | 9 (18.3%) | 6 (12.8%) |
| within 8 weeks | | |
| Clinician decision to discontinue study | 34 (69.4%) | 28 (59.6%) |
| medication due to inadequate effect | | |
| Clinician decision that ongoing adjunctive oral | 9 (18.4%) | 11 (23.4%) |
| antipsychotic medication needed | | |