The availability of 3 dose strengths provides options for Aripiprazole concentrations decline minimally when the time since last injection is 6 to 12 weeks. In the past 36 weeks, Continuation of 882 mg and 662 mg in the presence of inducer, or increasing 441 mg to 662 mg is required. In the final PopPK model, Monte Carlo simulations were used to assess the potential impact of co-drug interaction and the effect of metabolic enzyme polymorphisms on aripiprazole exposure. The extended PK profile of AL results in sustained therapeutic coverage following a missed AL dose. Therefore, no aripiprazole supplementation is required when the time from the last injection is ≤ 6 weeks. For doses ≤ 8 weeks, 441 mg q4wk and 882 mg q6wk were evaluated. Evaluation of the impact of strong CYP3A4 or CYP3A4 inducers, or CYP3A4 inhibitors on the PK of aripiprazole using the PSPP model showed moderate changes in the systemic exposure of aripiprazole, irrespective of CYP2D6 metabolizer status, when the drug was administered for ≤ 8 weeks. A population pharmacokinetic (PopPK) model of AL developed using data collected from 616 subjects with schizophrenia was used to evaluate the impact of missed doses and re-initiation of treatment with monthly AL administration. The PopPK model was also used to assess an additional dose regimen, 882 mg administered every 4 weeks. Aripiprazole is subsequently metabolized by CYP3A4 and CYP2D6. The PopPK model was developed using data collected from 616 subjects with schizophrenia who were treated with aripiprazole for a minimum of 12 weeks following discontinuation of the fourth monthly AL dose. Based on simulations using the PopPK model, a dosing interval of every 4 weeks for the 882 mg dose resulted in aripiprazole concentrations within the therapeutic window established for 882 mg and every 4 weeks. Evaluation of the impact of strong CYP3A4 or CYP3A4 inducers, or CYP3A4 inhibitors on the PK of aripiprazole using the PSPP model showed moderate changes in the systemic exposure of aripiprazole, irrespective of CYP2D6 metabolizer status, when the drug was administered for ≤ 8 weeks. The final PopPK model, Monte Carlo simulations were used to assess the potential impact of co-drug interaction and the effect of metabolic enzyme polymorphisms on aripiprazole exposure. The extended PK profile of AL results in sustained therapeutic coverage following a missed AL dose. Therefore, no aripiprazole supplementation is required when the time from the last injection is ≤ 6 weeks. For doses ≤ 8 weeks, 441 mg q4wk and 882 mg q6wk were evaluated. Evaluation of the impact of strong CYP3A4 or CYP3A4 inducers, or CYP3A4 inhibitors on the PK of aripiprazole using the PSPP model showed moderate changes in the systemic exposure of aripiprazole, irrespective of CYP2D6 metabolizer status, when the drug was administered for ≤ 8 weeks.