RBP-6000 BUPRENORPHINE MONTHLY DEPOT DEMONSTRATES EFFICACY, SAFETY, AND EXPOSURE/RESPONSE RELATIONSHIP IN OPIOID USE DISORDER

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Aim:
This study (NCT02357901) assessed efficacy and safety of RBP-6000, a monthly buprenorphine subcutaneous injection for treatment of opioid use disorder (OUD).

Methods:
Adults with moderate-severe OUD received up to 2-weeks open-label sublingual buprenorphine/naloxone. Eligible subjects were randomized to a 24-week double-blind treatment phase with RBP-6000 (300/300 [6 doses x 300 mg] or 300/100 [2 doses x 300 mg, then 4 doses x 100 mg]) or placebo (6 doses x PBO) plus counselling. The primary endpoint was the cumulative distribution function of the percentage of opioid-negative urine samples combined with self-reports negative for opioid use from Weeks 5-24 (percentage abstinence). Treatment-emergent adverse events (TEAEs) were collected.

Results:
A total of 504 subjects were randomized: 300/300 (n=201); 300/100 (n=203); PBO (n=100). Both active treatment groups were significantly superior to PBO on the primary endpoint ($P<0.0001$), with mean percentage abstinence of 41.3% (300/300), 42.7% (300/100 mg), and 5.0% (PBO). Exposure-response modelling showed that buprenorphine plasma concentrations above 2 ng/mL led to an improvement in abstinence and reduction of opioid craving. The percentages of subjects with any TEAE were 66.7% (300/300), 76.4% (300/100), and 56.0% (PBO). No TEAEs were reported in >10% of subjects in either active treatment group. No serious TEAEs (2.7% [RBP-6000], 5.0% [PBO]) were considered related to study drug.

Conclusion:
Treatment with RBP-6000 significantly reduced illicit opioid use compared to PBO with an acceptable safety/tolerability profile in adults with OUD. The data establish a relationship between buprenorphine plasma concentrations, predicted whole-brain mu-opioid receptor occupancy, abstinence, craving, and withdrawal symptoms.

Disclosure of Interest Statement:
SL, BH, CL, DL, PF, CH are employees of Indivior Inc., Richmond VA