Assessment of a single-item Opioid Craving Visual Analog Scale (OC-VAS) in patients with opioid use disorder

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Aims: The association between opioid use and OC-VAS (0-100 mm), was evaluated using data from a randomized, double-blinded, placebo-controlled study.

Methods: Adults with moderate to severe OUD inducted and dose-stabilized on sublingual buprenorphine were randomized to receive up to 6 monthly injection of buprenorphine extended-release (BUP-XR) 300/300 mg, 300/100 mg (300 mg x 2, 100 mg x 4), or placebo. OC-VAS and opioid use were assessed at screening, randomization, and weekly throughout the study. 487 participants had randomized treatment and OC-VAS assessed at screening. Logistic regression was performed, with opioid used vs abstinence (negative UDS and self-reported) as outcome and OC-VAS as explanatory variable (with/without adjustment for risk factors), to explore the association between OC-VAS and opioid use assessed at the next week visit.

Results: The mean OC-VAS score was reduced substantially from screening (57.58) to the end of induction (6.87 at randomization), whereas the proportion of participants achieving abstinence increased from 0 to 40%. Greater OC-VAS reduction was associated with less opioid use at randomization, odds ratio [OR] (95% CI) of opioid use for 10-mm OC-VAS reduction: 0.91 (0.85, 0.97) and 0.88 (0.82, 0.94) after risk adjustment. During the randomized-treatment, low OC-VAS scores were maintained in the BUP-XR group, OR for OC-VAS >0 vs =0 is 1.57 (1.20, 2.05), indicating a binary association. For placebo-treated participants, OR for a 10-mm OC-VAS increase was 1.64 (1.26, 2.12), suggesting a linear association.

Conclusions: Predictive validity was demonstrated via significant relationships between OC-VAS score and subsequent opioid use.

Reference: Study NCT number (NCT02357901)