major depression disorder with 65–75% of MDD patients reporting some form of sleep disturbance. Sleep disturbance can precede the onset of a depressive episode and frequently remain after other symptoms of depression have remitted. If insomnia is a transdiagnostic process, then treatment of insomnia should lead to significant improvement in depressive symptoms. The objective of this meta-analysis is to quantify the efficacy of cognitive behavioral therapy for insomnia (CBT-I) for improving insomnia and depressive symptoms in adults with comorbidity. This is the first meta-analysis to exclude samples with minimal or mild depressive symptoms at baseline.

**Methods:** Meta-analytic techniques were used to evaluate relevant studies and estimate a combined effect for CBT-I on 1) insomnia symptoms and 2) depressive symptoms. Articles were obtained using key word searches for PsycINFO, PsycARTICLES, MEDLINE, and CINAHL as well as hand searching article reference lists and relevant reviews.

**Results:** Thirteen CBT-I treatment studies were identified that included samples with at least moderate depressive symptoms at baseline. CBT-I produced a combined effect of $d = 1.49$ (95% *CI*: 1.25–1.74; $p < 0.001$) on depressive symptoms and a combined effect of $d = 0.73$ (95% *CI*: 0.64–0.83; $p < 0.001$) on depressive symptoms. Moderator analyses showed a significant effect for mean age of sample ($B = -0.03$, $SE = 0.011$, $F = 7.734$, $p < 0.05$).

**Conclusion:** CBT-I is an effective treatment for individuals with comorbid insomnia and depression. This meta-analysis lends support to considering insomnia as a transdiagnostic process by showing the efficacy of CBT-I in depressed patients. CBT-I may be less effective in elderly samples. Future studies need to test CBT-I in other comorbidities and conduct more rigorous randomized trials comparing CBT-I to other treatments for depression. CBT-I is a standardized, effective treatment that should be made available in multiple care settings including primary care, hospitals, and mental health clinics.

**Support (If Any):** None to report.

## 0441

### ATTENTIONAL BIAS TOWARD HYPNOTIC-RELATED CUES IN LONG-TERM HYPNOTIC USERS: AN ERP STUDY

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**Introduction:** Although hypnotic drugs are often suggested for short-term use, prolonged usage of the hypnotics are common in clinical settings. There has been a concern that whether this practice will lead to drug dependence. Attentional bias to drug-related cues has been indicated as an important factor in substance dependence. This study aims to examine the attentional bias toward hypnotics in long-term hypnotic users by measuring event-related potential (ERP) elicited by hypnotic-related pictures.

**Methods:** 22 insomnia patients were recruited from communities; 13 of them were long-term hypnotic users (> 6 months; LTH group), and 9 of them had not been using hypnotics for 6 months and had never used hypnotics for longer than 3 months (control group). Participants came to the laboratory for a night. An oddball task (20:80) was administered, which included 2 blocks with 32 hypnotic-related or sleep-related (non-target), 96 neutral (non-target), and 32 animal pictures (target) presented on a computer screen in each block. Participants were required to respond to animal pictures as targets. ERPs induced by stimuli were recorded during the task. A polysomnography was conducted afterward to rule out other sleep disorders. The differences of the amplitude and latency of P3 wave, as an index for attentional processing, between groups at Fz, Cz, Pz, F3, F4, C3, C4, P3, P4 channels were evaluated.

**Results:** Both the amplitude and latency of P3 toward hypnotic-related stimuli in LTH group are significantly larger than in control group (amplitude: U=28, p=0.042; and U=25, p=0.025 at F3, C3 channel, respectively; latency: U=29, p=0.049; U=26, p=0.030; and U=24, p=0.021 at Fz, Cz, C4 channel, respectively). There are no significant differences in the amplitude and latency of P3 toward neutral stimuli between two groups.

**Conclusion:** The result shows an enhanced attentional processing toward hypnotic-related stimuli in long-term hypnotic users. The attentional bias toward substance-related cues, which has been shown as a crucial predictor of craving, suggests that there may be an underlying cognitive process associated with substance dependent development in long-term hypnotic use.

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## 0442

### SAFETY AND EFFICACY OF SUVOREXANT IN A REAL WORLD SETTING: RESULTS FROM THE DRUG USE-RESULTS SURVEY IN JAPAN

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**Introduction:** Following the launch of a new medication and its introduction into clinical practice, a more diverse patient population than that studied in the original clinical development program may receive treatment. In Japan, a drug use-results survey, an exploratory prospective observational survey, is a mandatory post-marketing regulatory requirement.

**Methods:** Survey subjects comprised Japanese insomnia patients who initiated treatment with suvorexant for the first time. The observation period was from the start of suvorexant up to 6 months. Throughout the observation period, information was collected via a physician's standard medical interview.

**Results:** We collected data on 3428 survey subjects from 884 medical institutions. A majority of the subjects were female (60.9%), elderly (over 65 years old: 54.1%) and had not previously been prescribed any insomnia medication or had not been prescribed any insomnia medication in 49days (60.7%). As subjects had several concurrent conditions, the population was more clinically diverse than that in the original clinical development program. The percentage of subjects with an adverse drug reaction was 9.7% and the most common adverse drug reactions were somnolence (3.6%), insomnia (1.2%) and dizziness (1.1%).

The proportion of subjects determined as "improved" by the physicians was 74.1%. The median sleep latency changed from 60 minutes at pre-dose to 50 minutes at Week 1 and was subsequently maintained at up to 30 minutes through Month 6. The median total sleep time per night changed from 300 minutes at pre-dose to 360 minutes at Week 1 and this improvement was subsequently maintained through Month 6.

**Conclusion:** These data suggest that suvorexant is effective in a more medically diverse population than studied in the clinical development program, with a tolerability profile comparable to the clinical trials and consistent with the product label.

**Support (If Any):** MSD K.K., Japan.