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ABSTRACT: Objective: To assess the Patient Health Questionnaire (PHQ-9) as a predictor of relapse of depressive symptoms in treatment-resistant depression (TRD).

METHOD: Analysis included maintenance phase data from SUSTAIN-1 (NCT02493868), a randomized, double-blind, active-controlled study in TRD patients that evaluated efficacy of intranasal esketamine (ESK) + oral antidepressant (AD) vs AD + intranasal placebo in delaying relapse of depressive symptoms. A ≥50% reduction in initial symptom score and total score of ≤12 were considered as response and remission, respectively, using the Montgomery-Asberg Depression Rating Scale. PHQ-9 total score (range, 0-27), PHQ-2 total score (0-6), and individual items of the PHQ-9 (0-3) were examined as predictors of relapse. Data were collected every 2 weeks. Association between time-varying PHO-9 and event of depression relapse was evaluated in Andersen-Gill Cox model.

**RESULTS**: Of 176 stable remitters, 63 had a relapse event (ESK+AD [n=24]; AD+placebo [n=39]). Of 121 stable responders, 50 had a relapse event (ESK+AD [n=16]; AD+placebo [n=34]). Among stable remitters, PHQ-9 total score (HR; 95% CI [1.12; 1.04-1.21]) and PHQ-2 total score (1.58; 1.25-1.99) were associated with relapse risk. PHQ-9 items #1 (loss of pleasure, 2.07; 1.38-3.09), #2 (feeling down, 2.18; 1.51-3.15), #4 (feeling tired, 1.54; 1.13-2.11), and #6 (negative self-view, 2.27; 1.41-3.66) were associated with relapse risk. PHQ-2 total scale yielded the smallest Akaike's Information Criterion among stable remitters and responders.

CONCLUSION: PHQ-9, PHQ-2 total scores or individual items may be useful for predicting relapse of depressive symptoms among stable TRD patients.

Funding Acknowledgements: This study was sponsored by Janssen Research and Development, LLC.

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Assessment of Health-Related Quality of Life and **Health Status in Patients with Treatment-resistant Depression** 

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ABSTRACT: Objective: To assess health-related quality of life (HRQoL) and health status of patients with treatment resistant depression (TRD), treated with esketamine nasal spray+oral antidepressant (ESK+AD) vs oral antidepressant+placebo nasal spray (AD+PBO) using European Quality of Life Group-5-Dimension-5-Level (EQ-5D-5L). The EQ-5D-5L descriptive system consists of five domains relevant for patients with depression (mobility, self-care, usual activities, pain, anxiety/ depression) and the EQ-Visual Analogue Scale (EQ-VAS).

METHODS: Data from TRANSFORM-2 (NCT02418585), a randomized, double-blind short-term study were analyzed. Patients (18-64 years inclusive) with TRD were included. Patient reported health status change using EQ-5D-5L and EQ-VAS was measured from baseline to end of 4-week induction phase (endpoint). Each domain of EQ-5D-5L included 5 levels of perceived problems (L1: no problems; L5: extreme problems).

RESULTS: Full analysis set included 223 patients (ESK+AD: 114; AD+PBO: 109). At endpoint, mean (SD) change in health status index was 0.288 (0.2317) for ESK+AD group and 0.231 (0.2506) for AD+PBO group with higher score reflecting higher levels of functioning. At endpoint, percentage of patients reporting problems (grouped L2-L5 responses for each dimension) in ESK+AD vs AD+PBO group: mobility (13.5% vs 25.7%), self-care (16.2% vs 30.5%), usual activities (55.0% vs 71.4%), pain (38.7% vs 52.4%), and anxiety/depression (71.2% vs 78.1%). Mean (SD) change in EQ-VAS score at endpoint was 29.1 (26.32) for ESK+AD and 20.9 (26.60) for AD+PBO group.

**CONCLUSION:** Greater improvement in HRQoL and health status using EQ-5D-5L and EQ-VAS was observed among patients with TRD treated with ESK+AD vs AD+PBO. Funding Acknowledgements: This study was sponsored by Janssen Research and Development, LLC.

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## Laryngeal Dystonia and Buccolingual Crisis: Dystonic Reactions in 2 Patients Receiving Prochlorperazine During Suboxone Therapy

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ABSTRACT: We report two cases of acute dystonia in patients after receiving prochlorperazine to address nausea in the context of buprenorphine/naloxone (Suboxone) therapy. Both were admitted for opioid withdrawal and developed nausea and vomiting refractory to ondansetron on the first hospital day.

Within six hours of receiving an intramuscular injection of ten milligrams of prochlorperazine, a 24-year-old Caucasian male developed buccolingual crisis (trismus and dysphagia). His symptoms resolved with repeated intramuscular doses of diphenhydramine, benztropine, and lorazepam.

A 31-year-old Caucasian female developed laryngeal dystonia (stridor) and buccolingual crisis (dysphagia, grimacing, and tongue protrusion) within thirty minutes of receiving ten milligrams of prochlorperazine intramuscularly. Given respiratory impairment, emergency airway protection was initiated, and the patient responded to repeated intramuscular doses of benztropine and lorazepam.

Although one patient was male and both were relatively young, they did not have other known risk factors for drug induced acute dystonic reactions including history of dystonic reactions, recent cocaine use, or low BMI. Neither patient had a history of exposure to antipsychotic medications and both had medical histories that were otherwise noncontributory. While both patients were at risk for or developing dehydration from nausea and vomiting, their electrolytes were within normal limits on admission, less than twelve hours earlier. We postulate potential etiologies that may possibly explain these events:

 The patients' reactions are consistent with the expected number in the general population to have acute dystonia secondary to prochlorperazine use. A small study in 2000 showed that 3.9% of patients

- receiving prochlorperazine for nausea in an emergency room setting experienced acute dystonia.
- 2) Could patients receiving intramuscular prochlorperazine during Suboxone therapy have increased risk for severe acute dystonic reactions? According to the European Medicines Agency, hypertonicity is a "common" side effect of Suboxone, occurring in 1% to 10% of patients.
- 3) Could there be potential interactions between Suboxone and prochlorperazine or between prochlorperazine and substances detected (or undetectable, such as designer drugs) via routine toxicology screening?
- 4) Could the acute dystonia be unrelated to medication interaction, but instead result from use of prochlorperazine in patients having rapid electrolyte shifts and exhibiting dehydration during acute opioid withdrawal?

Given the known risk of opioids, with or without prochlorperazine, to cause respiratory depression and these case reports of acute dystonia with the potential to cause airway impairment due to prochlorperazine administration, we encourage prescribers to exercise caution when utilizing prochlorperazine for the management of nausea and vomiting in patients receiving Suboxone for acute opioid withdrawal.

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# Oviposit Dysgeusia; Head Trauma Induced Chemosensory Noisome Egg Dysgeusia: The Miasma of Dante's Inferno-When Eggs Become

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**INTRODUCTION:** Post-traumatic dysgeusia with conversion of the taste of eggs rotten eggs has not heretofore been described.

METHOD: Case Report: A 60 year old right handed female 6 months prior to presentation sustained head trauma. Three days later she noted reduced taste and smell dysgeusia to eggs. Eggs tasted distorted, like rotten eggs. Raw egg whites had no smell or taste. Cooked egg whites had faint sulfur smell for 2-3 seconds and the taste of sulfur. Yolk of soft-boiled eggs, had no smell or taste. The white had no smell but an unbearable sulfur taste. Raw eggs had no smell. The yolk of hardboiled eggs had no smell and taste, the whites smelled and tasted like sulfur. Sunny side up eggs with yolk and white segregated had no smell but tasted, as they should. Sunny side up eggs with yolk and white mixed together has no smell but strong