

with a Genomind psychopharmacologist, regardless of ICD diagnosis on the requisition form. Data were extracted from de-identified consult notes entered by the psychopharmacologist. Consultants made a total symptom severity assessment based on CGI-S (Clinician Global Impression Severity) criteria. Most patients were described as mildly (15%), moderately (59%), or markedly ill (21%). The most common presenting symptoms identified in the cohort were “Anxious” (61.6%), “Depressed” (61.1%), “Inattentive” (37.8%) and “Hyperactive” (11.4%). The most common co-occurring symptoms in patients with a depressive presentation were “Anxious” (68.1%), “Inattentive” (16.0%), “Manic/Hypomanic” (11.1%), “Insomnia” (9.8%) and “Irritable/Angry” (7.4%). The most common co-occurring symptoms in patients presenting with anxiety were “Depressed” (67.6%), “Inattentive” (20.9%), “Panic” (11.5%), “Worry/Rumination” (11.2%) and “Hyperactive” (11.1%). This analysis suggests that PGx testing is commonly being utilized in patients with symptoms of anxiety, mood lability and inattentiveness. Future PGx research should prioritize the selection of patients with these symptoms to generate evidence that matches the real-world users of commercial PGx services.

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## Utilization of Psychiatric Pharmacogenomic Testing by Primary Care Physicians and Advanced Practice Providers: Confidence and Implementation Barriers

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**Introduction.** Pharmacogenomic (PGx) testing identifies individual genetic variation that may inform medication treatment. Sentiment and barriers may limit PGx testing. Here we compare confidence in utilizing PGx testing and barriers to implementation by type of provider and treatment condition as identified in a survey.

**Methods.** Healthcare providers in the primary care setting were targeted between November 2022 and February 2023 via the Medscape Members paid market research program. The survey included 5 demographic, 5 multiple-choice, and 4 multi-component five-point Likert scale questions to assess PGx sentiments, use, and education in mental health (e.g., depression) and

primary care (e.g., cardiovascular disease) conditions. Responses were descriptively compared.

**Results.** Of 305 U.S. provider respondents [40% nurse practitioners (NPs), 33% frontline MDs/DOs, 3% physician assistants (PAs), 24% other], 32% of NPs/PAs and 29% of MDs/DOs had used PGx testing for mental health conditions. The major barriers to adopt PGx testing were similar for mental health and primary care conditions yet differed by provider type. NPs/PAs (72-77%) were more concerned with patient cost than MDs/DOs (46-55%), whereas MDs/DOs were more concerned with evidence of clinical utility (54-59%) than NPs/PAs (40-42%). In respondents who use PGx testing, MDs/DOs reported slightly more confidence utilizing PGx than NPs/PAs. For both groups, confidence in using PGx for mental health conditions was somewhat greater than for non-mental health conditions.

**Conclusions.** These data illuminate the implementation barriers and confidence levels of clinicians utilizing PGx testing. Increasing awareness around patient cost and evidence of clinical utility for PGx testing may improve utilization.

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## Sustained Improvements in Chorea Associated with Huntington Disease with Once-Daily Valbenazine: Interim Results from a Long-Term Open-Label Study

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**Introduction.** In a recently published Phase 3 trial (KINECT™-HD; NCT04102579), once-daily treatment with valbenazine significantly improved chorea versus placebo in adults with Huntington disease (HD). Individuals who completed KINECT-HD, along with de novo participants, were allowed to enroll in KINECT™-HD2 (NCT04400331), the first long-term study of once-daily valbenazine for chorea associated with HD. Pre-planned interim analyses from this ongoing study were conducted to evaluate the maintenance of valbenazine’s effect on chorea and its long-term safety in adults with HD.

**Methods.** All KINECT-HD2 participants start valbenazine at 40 mg with increases to 60 mg (Week 2) and 80 mg (Week 4); target maintenance dose is 80 mg once daily until end of treatment (up to 156 weeks). Concomitant antipsychotic medications

are allowed. Efficacy outcomes, analyzed by study visit, include mean changes from baseline in Unified Huntington's Disease Rating Scale (UHDRS<sup>®</sup>) Total Maximal Chorea (TMC) score and response status for Clinical Global Impression of Change (CGI-C) and Patient Global Impression of Change (PGI-C). Responders are defined as participants with a score  $\leq 2$  (rating of "much improved" or better). Efficacy outcomes up to Week 50 (~1 year) are reported. Treatment-emergent adverse events (TEAEs) are presented for all participants who received  $\geq 1$  dose of study drug, regardless of time in study (2 to 104 weeks). All interim outcomes were analyzed descriptively.

**Results.** Of 127 participants enrolled at the time of analysis, 98 (77.2%) had completed KINECT-HD and 29 (22.8%) were newly enrolled. Of 125 participants who received treatment, 65 (52.0%) were female and 118 (94.4%) were white; mean age ( $\pm$ SD) was 54.8 ( $\pm$ 11.5) years. A mean reduction in TMC score was observed by Week 2 with valbenazine 40 mg (-3.4 [ $\pm$ 3.1], n=118); mean reductions were sustained from Week 8 (5.6 [ $\pm$ 3.6], n=110) to Week 50 (-5.8 [ $\pm$ 4.1], n=66) (all valbenazine doses). At Week 50, 76.9% (50/65) of participants met the pre-defined threshold for CGI-C response; 74.2% (49/66) met the threshold for PGI-C response. Analyses in participants taking concomitant antipsychotic medications are ongoing and will be presented at the meeting. Of the 125 participants who received treatment, 119 (95.2%) reported at least 1 TEAE and 17 (13.6%) discontinued due to a TEAE. The most commonly reported TEAEs were falls (30.4%), fatigue (24.0%), and somnolence (24.0%).

**Conclusions.** Interim TMC data from KINECT-HD2 indicated chorea improvement with once-daily valbenazine by Week 2 (3.4 [ $\pm$ 3.1] with 40 mg), similar to KINECT-HD Week 2 results (-2.9 [ $\pm$ 3.0]). The interim analyses also indicated that long-term treatment with valbenazine was well tolerated and provided clinically meaningful improvement in chorea severity for up to ~1 year.

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paucity of data regarding the course of TD in patients no longer taking antipsychotics, a meta-analysis of 3 long-term valbenazine studies was conducted in subgroups with and without concomitant antipsychotic use at baseline.

**Methods.** KINECT<sup>TM</sup>-3 (NCT02274558), KINECT<sup>TM</sup>-4 (NCT02405091), and JKINECT (NCT03176771) data were analyzed in study completers taking antipsychotics at baseline (AP+) and those who were not (AP-). The Abnormal Involuntary Movement Scale (AIMS) total score was used to measure TD severity at baseline, Wk48 (end of valbenazine treatment), and Wk52 (4 weeks after valbenazine withdrawal). The meta-analysis implemented a random-effects model that weighted each study based on inverse variance, adjusted for between-study variance.

**Results.** Of 576 enrolled patients, 336 (58.3%) were study completers and included for analysis: AP+ (n=269); AP- (n=67). Mean baseline AIMS scores ranged from 7.9–14.9 (AP+) and 10.9–14.5 (AP-). Mean changes from baseline in AIMS scores indicated substantial TD improvements with valbenazine at Wk48 (AP+, 6.1; AP-, -6.5) and return towards baseline severity at Wk52 (AP+, -2.1; AP-, -1.4).

**Conclusions.** Once-daily valbenazine treatment resulted in substantial and sustained TD improvement through Wk48, with no meaningful differences between AP+ and AP- subgroups. The return towards baseline severity after valbenazine withdrawal shows TD is chronic and often irreversible, even in patients no longer taking antipsychotics. Continuous treatment with valbenazine may be warranted irrespective of antipsychotic therapy.

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## Valbenazine Improves Tardive Dyskinesia with or Without Concomitant Antipsychotic Therapy: A Meta-Analysis of Three Long-Term Valbenazine Trials

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**Introduction.** Valbenazine is a highly selective vesicular monoamine transporter 2 inhibitor indicated for tardive dyskinesia (TD), a persistent and potentially debilitating movement disorder associated with prolonged antipsychotic exposure. Given the

## Correlates of Psychiatric Polypharmacy Among Child and Adolescent Psychiatric Inpatients

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**Background.** Rates of psychiatric illness among the child and adolescent population have increased over the past several decades. As social and government agencies work to expand access to mental health treatment, more and more children and adolescents are receiving medications for their symptoms. However, many drugs used in this population are not approved for people under the age of 18, and have not been studied in terms of long-term impact on the developing brain. A significant proportion of these patients receive psychiatric polypharmacy, or the prescription of 2 or more psychotropic agents. This rate has increased from about 8% in 1996 to over 40% in 2005. Factors correlated with polypharmacy include older age, male gender, White race, and low socioeconomic status. Polypharmacy can increase the risk of drug-drug interactions, increase morbidity/mortality through cumulative toxicity, and cause decreased medication adherence.

**Study Aims:** This study aimed to examine psychiatric polypharmacy specifically among psychiatrically hospitalized patients