

**Introduction.** Tardive dyskinesia (TD) is associated with antipsychotic (AP) use and management includes antipsychotic (AP) dose modification/discontinuation, often leaving underlying psychiatric conditions undertreated. Deutetrabenazine (DTBZ) is a vesicular monoamine transporter type 2 inhibitor (VMAT2i) approved to treat TD and Huntington disease-associated chorea. AP and VMAT2i treatment patterns post-TD diagnosis are unclear.

**Methods.** Patients aged  $\geq 18$  years, newly diagnosed with TD (July 2019– June 2022), with  $\geq 1$  AP and no VMAT2i claims pre-index were identified from the Symphony Health Solutions Integrated Dataverse (medical, hospital, and prescription claims across all US payer types). Patients were grouped into DTBZ ( $\geq 1$  DTBZ claim within  $\leq 6$  months post-diagnosis) and non-VMAT2i groups, and further by stable DTBZ dose (for  $\geq 60$  days). The index date was the first DTBZ claim (DTBZ group) or the difference between TD diagnosis and first DTBZ claim (of the matched patient) added to TD diagnosis (non-VMAT2i group).

**Results.** Among 18,375 patients meeting inclusion criteria, 587 (3%) received DTBZ (292 stable-dose DTBZ), 676 (4%) received a different VMAT2i, and 17,112 (93%) had no VMAT2i claims. Among propensity score-matched patients with  $\geq 1$  AP claim pre- and post-index (326 DTBZ, 627 non-VMAT2i), pre-index mean AP proportions of days covered (PDCs) were similar between DTBZ (86%), stable-dose DTBZ (86%), and non-VMAT2i (83%) groups. Mean PDCs decreased post-index for DTBZ (86% to 85%) and non-VMAT2i (83% to 81%) groups, but increased for the stable-dose DTBZ group (86% to 88%). While these changes were small, post-index mean PDCs were significantly greater (versus non-VMAT2i) in the DTBZ (5% difference;  $P=.030$ ) and stable-dose DTBZ (9%;  $P=.001$ ) groups. Similar proportions of patients in the DTBZ (20%) and non-VMAT2i (20%) groups discontinued APs (ie, no AP claims within  $\leq 6$  months post-index). Proportions of patients with AP restarts (7%–8%) and dose decreases (13%–17%) were also similar between DTBZ, stable-dose DTBZ, and non-VMAT2i groups. Proportions of patients (16%–18%) with AP dose increases were similar between DTBZ and non-VMAT2i groups, but significantly greater in the stable-dose DTBZ group (21%) vs non-VMAT2i ( $P=.02$ ).

**Conclusions.** AP adherence was significantly, though not substantially, greater for DTBZ versus non-VMAT2i groups. These results suggest that DTBZ, when titrated to a stable/optimal dose, allows flexibility in treating underlying psychiatric conditions.

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## Mental Health-Related Healthcare Resource Use and Costs of Medicaid Beneficiaries with Treatment Resistant Depression Receiving Interventional Therapy

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**Introduction.** Esketamine (ESK) nasal spray and interventional therapies including electroconvulsive therapy (ECT) and transcranial magnetic stimulation (TMS) are indicated for patients with treatment resistant depression (TRD). Little is known about healthcare resource use and associated costs of Medicaid beneficiaries, a population with a high burden of mental health disorders, initiating ESK, ECT or TMS. This study aimed to bridge this gap in knowledge.

**Methods.** Medicaid-insured adults with evidence of TRD ( $\geq 2$  unique antidepressants of adequate dose and duration) were selected from Merative™ MarketScan® Multi-State Medicaid Database (01/2016-06/2022). Based on therapy initiated on or after 03/05/2019 (ESK approval date for TRD), patients were classified into three cohorts: ESK, ECT, and TMS. Before treatment initiation (index date), patients had  $\geq 12$  months of continuous insurance eligibility (baseline period). Mental health (MH)-related resource use and payer costs (USD 2022) were reported per-patient-per-month (PPPM) during the follow-up period, which spanned the index date until the earliest continuous insurance eligibility or data end.

**Results.** ESK cohort included 151 patients (mean age: 40.6 years; female: 70.2%), ECT cohort included 198 patients (mean age: 43.0 years; female: 60.6%), and TMS cohort included 140 patients (mean age: 39.5 years; female: 65.0%).

During the follow-up period, the mean number of MH-related inpatient (IP) days trended lower in ESK cohort (0.09) relative to the ECT (3.72) and TMS (0.31) cohorts. Similarly, the mean number of MH-related emergency department (ED) visits trended lower in ESK cohort (0.07) relative to ECT (0.12) and TMS (0.26) cohorts. The mean number of MH-related outpatient (OP) visits in ESK cohort (4.83) trended higher than in ECT cohort (4.37) but lower than in TMS cohort (6.41). Mean MH-related acute care costs during the follow-up period trended lower in ESK cohort (IP: \$76; ED: \$29) relative to ECT (IP: \$1,547; ED: \$45) and TMS cohorts (IP: \$238; ED: \$123). Outpatient costs in ESK cohort (\$1,632) exceeded OP costs in ECT (\$1,023) and TMS (\$1,051) cohorts.

**Conclusion.** In this descriptive analysis, a trend towards lower use and costs of acute MH-related care was observed after the initiation of ESK relative to the initiation of ECT and TMS. This finding should be interpreted with caution, given potential differences in patient profiles, clinical history and setting of administration.

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## d-Amphetamine Transdermal System (d-ATS) in Treatment of Children and Adolescents With ADHD: SKAMP Score Analysis From a Pivotal Trial

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**Background.** The dextroamphetamine transdermal system (d-ATS) was developed as an alternative to current oral formulations of amphetamine, which is a first-line treatment for ADHD. In a randomized controlled trial of d-ATS in children and adolescents with ADHD, the primary endpoint (SKAMP total score) and secondary endpoints were met. This analysis evaluated the efficacy of d-ATS using SKAMP total score by optimized dose, gender, age group, ADHD type, and baseline ADHD severity.

**Methods.** This study comprised a 5-week, open-label dose-optimization period (DOP) followed by a 2-week, randomized, cross-over double-blind treatment period (DBP). All eligible patients received d-ATS 5 mg/9hr, with weekly evaluation for dose increase to 10 mg/9hr, 15 mg/9hr, and 20 mg/9hr. Once reached, the optimal dose was maintained for the DOP and used during the DBP. Preplanned subgroup analyses of mean SKAMP total score by optimized dose, gender, age group, ADHD type, and baseline ADHD severity were conducted. Efficacy was assessed by difference (d-ATS vs placebo) in least-squares (LS) mean SKAMP total score from a mixed-model repeated-measures (MMRM) analysis and is reported throughout as LS mean (95% confidence interval [CI]).

**Results.** In total, 110 patients were enrolled in the DOP, and 106 patients were randomized in the DBP. During the DOP, three patients reported 3 TEAEs that led to study discontinuation (irritability, appetite loss, abdominal pain). The difference (d-ATS vs placebo) in LS mean SKAMP total score was -5.9 (-6.8, -5.0), with differences in attention, department, and quality of

work sub-scores of -1.4 (-1.7, -1.1), -1.9 (-2.2, -1.5), and -1.3 (-1.5, -1.0), respectively. Patients receiving d-ATS at each optimized dose demonstrated improvements vs placebo in LS mean SKAMP total score (-7.3 [-10.8, -3.7], -4.5 [-6.0, -3.0], -5.9 [-7.4, -4.5], -7.6 [-9.6, -5.6] at 5, 10, 15, and 20 mg/9hr, respectively). Both male and female patients experienced improvements vs placebo in SKAMP total score. The observed difference was greater in males (-6.3 [-7.3, -5.2]) vs females (-5.0 [-6.6, -3.4]). Similarly, improvements vs placebo were seen in patients with combined type ADHD and in those with predominantly inattentive type ADHD, with an observed LS mean difference of -8.0 (-9.2, -6.8) for the combined type and -3.3 (-4.6, -2.1) for the inattentive type. In addition, patients demonstrated improvement during the DBP regardless of baseline ADHD severity. The difference in LS mean SKAMP total score was -4.5 (-5.9, -3.1) for patients with a baseline SKAMP total score of 0-36 and -6.7 (-7.9, -5.6) for those with a baseline SKAMP score of 37-54.

**Conclusions.** d-ATS was effective and generally well-tolerated in treating ADHD in children and adolescents regardless of optimized dose, gender, age group, ADHD type, or baseline ADHD severity.

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## Diagnosis and Symptoms of Narcolepsy from the Patient Perspective: Results from In-Depth Qualitative Interviews

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**Introduction.** Narcolepsy is a chronic neurological disorder characterized by excessive daytime sleepiness (EDS), among other symptoms. Previous studies of narcolepsy have largely relied on quantitative methods, providing limited insight into the patient experience. This study used qualitative interviews to better understand this rare condition.

**Methods.** Patients with narcolepsy (types 1 [NT1] and 2 [NT2]) were recruited using convenience and snowball sampling. Trained qualitative researchers conducted hour-long, individual interviews. Interview transcripts were coded and thematically analyzed using inductive and deductive approaches.

**Results.** Twenty-two adults with narcolepsy (NT1=12; NT2=10) participated (average age: NT1=35; NT2=44). Most were female (NT1=83%; NT2=70%) and white (NT1=75%; NT2=60%). Average times since diagnosis were 7 years (NT1) and 11 years (NT2).

At disease onset, symptoms experienced included EDS (NT1=83%; NT2=80%)—sometimes involving sleep attacks (NT1=35%; NT2=50%)—fatigue (NT1=42%; NT2=30%), oversleeping (NT1=33%; NT2=20%), and cataplexy (NT1=42%). Participants sought a diagnosis from healthcare professionals including sleep specialists, neurologists, pulmonologists,