

Open Label Safety Study Shows Improved Sleep for Children With ADHD After One Month of AZSTARYS® (serdexmethylphenidate and dexamethylphenidate)

Improvement in sleep domain scores was statistically significant and observed throughout the twelve-month study

BOSTON, September 21, 2022 /PRNewswire/ -- Corium, Inc., a fully integrated biopharmaceutical company leading the development and commercialization of novel central nervous system (CNS) therapies, announced publication of a poster, "Serdexmethylphenidate/Dexamethylphenidate Effects on Sleep in Children With Attention-Deficit Hyperactivity Disorder," at the Psych Congress 2022 in New Orleans. The poster presented an analysis of the twelve-month open label safety study in children ages 6-12 using AZSTARYS (serdexmethylphenidate [SDX] and dexamethylphenidate [d-MPH]), which is indicated for the treatment of attention-deficit hyperactivity disorder (ADHD) in patients six and older. The data showed that the children, after one month of taking AZSTARYS, had statistically significant improvement in their sleep as assessed by the Children's Sleep Habits Questionnaire (CSHQ). The improvement in sleep was sustained through 12 months of treatment with AZSTARYS.

AZSTARYS, a central nervous system (CNS) stimulant designated a Schedule II controlled substance, is the first and only medicine for ADHD symptoms containing SDX, the prodrug of d-MPH, along with immediate-release d-MPH. SDX is designed specifically to be pharmacologically inactive until reaching a patient's lower gastrointestinal (GI) tract, where, by design, the prodrug gradually converts to d-MPH throughout the day. This formulation provides control of ADHD symptoms rapidly with the immediate-release d-MPH and for an extended duration with SDX. Once-daily AZSTARYS is available in the U.S. in three SDX/d-MPH dose strengths of 26.1/5.2 mg, 39.2/7.8 mg, and 52.3/10.4 mg. The SDX component of AZSTARYS is designated a Schedule IV controlled substance.

"Sleep-related problems are common in children with ADHD, which some stimulant medications can negatively impact. The positive study data reported provide important and relevant information to healthcare professionals considering AZSTARYS," said Greg W. Mattingly, lead author of the poster, associate clinical professor of psychiatry at Washington University School of Medicine, and president elect of the American Professional Society for ADHD and Related Disorders.

"These data show how existing sleep problems in children with ADHD improved when treated with AZSTARYS during the study," said Charles Oh, MD, Chief Medical Officer of Corium. "Presenting these AZSTARYS findings at Psych Congress 2022 is another milestone in Corium's ongoing activities to lead in the CNS therapeutic space."

About the Open Label Safety Trial

This one-year dose-optimized open-label study (NCT03460652) enrolled 282 children aged 6 to 12 years at 19 locations in the U.S. The participants included 70 children who participated within the previous 45 days in a prior double-blind AZSTARYS classroom study (NCT03292952) and 212 new children. After a 30-day screening phase and a three-week dose-optimization phase for new participants, the children received treatment with AZSTARYS for one year. Optimized AZSTARYS doses included 26.1/5.2 milligrams (mg), 39.2/7.8 mg, or 52.3/10.4 mg of SDX/d-MPH daily, which delivered 20-, 30-, and 40-mg molar equivalent doses of total d-MPH HCl. The Children's Sleep Habits Questionnaire (CSHQ) was a pre-specified secondary endpoint that evaluated sleep parameters. The sleep assessment included data from 238 children.

After one month of AZSTARYS treatment in the open-label classroom study, the children's total average sleep disturbance score on the CSHQ significantly decreased, indicating overall improvements in their sleep behavior. Specifically, their scores decreased from 53.4 (± 5.9 standard deviation [SD]) at the study start to 50.5 (± 5.4) at one month, a least-squares mean change from baseline of -2.9 points (95% CI: -3.5 to -2.4 ; $P < .0001$). Moreover, their total mean CSHQ scores remained in a range of 48.9 to 50.1 points for up to 12 months, indicating sustained overall sleep improvement from baseline.

Poster #	Title	Authors
Poster 52	Serdexmethylphenidate/Dexmethylphenidate Effects on Sleep in Children With Attention-Deficit Hyperactivity Disorder.	Greg Mattingly, MD; Ann C. Childress, MD; Andrew J. Cutler, MD; Jose Estrada, PhD; and Meg Corliss, PhD

About ADHD

Attention-deficit hyperactivity disorder (ADHD) is a common neurodevelopment disorder marked by an ongoing pattern of inability to pay attention or hyperactivity with impulsive behaviors or both, which interferes with functioning or development. ADHD usually is diagnosed during childhood but often continues into adulthood. Children with ADHD may have trouble paying attention, controlling impulsive behaviors (may act without thinking about what the result will be), or be overly active. In the United States, an estimated 6.1 million children have received an ADHD diagnosis, including 2.4 million aged 6 to 11 years.

Indication and Important Safety Information for AZSTARYS (serdexmethylphenidate and dexmethylphenidate)

INDICATION

AZSTARYS is a central nervous system (CNS) stimulant indicated for the treatment of Attention Deficit Hyperactivity Disorder (ADHD) in patients aged 6 years and older.

IMPORTANT SAFETY INFORMATION

WARNING: ABUSE AND DEPENDENCE

• **CNS stimulants, including AZSTARYS, other methylphenidate-containing products, and amphetamines, have a high potential for abuse and dependence. Assess the risk of abuse prior to prescribing, and monitor for signs of abuse and dependence while on therapy**

CONTRAINDICATIONS

- Known hypersensitivity to serdexmethylphenidate, methylphenidate, or other product components. Bronchospasm, rash, and pruritus have occurred with AZSTARYS. Hypersensitivity reactions such as angioedema and anaphylactic reactions have occurred with other methylphenidate products.
- Concomitant treatment with a monoamine oxidase inhibitor (MAOI) or use of an MAOI within the preceding 14 days, because of the risk of hypertensive crisis.

WARNINGS AND PRECAUTIONS

- Sudden death has been reported in association with CNS stimulant treatment at recommended doses in pediatric patients with structural cardiac abnormalities or other serious heart problems. In adults, sudden death, stroke, and myocardial infarction have been reported at recommended doses. Avoid use in patients with known structural cardiac abnormalities, cardiomyopathy, serious heart arrhythmias, coronary artery disease, or other serious heart problems.
- CNS stimulants cause an increase in blood pressure and heart rate. Monitor all patients for hypertension and tachycardia.
- *Exacerbation of Pre-existing Psychosis:* May exacerbate symptoms of behavior disturbance and thought disorder in patients with a pre-existing psychotic disorder. *Induction of a Manic Episode in Patients with Bipolar Disorder:* May induce a mixed/manic episode in patients with bipolar disorder. Prior to initiating treatment, screen for risk factors for developing a manic episode (e.g., comorbid or history of depressive symptoms, or a family history of suicide, bipolar disorder, or depression). *New Psychotic or Manic Symptoms:* At recommended doses, may cause psychotic or manic symptoms (e.g., hallucinations, delusional thinking, or mania) in patients without a history of psychotic illness or mania. Discontinue if symptoms occur.
- Cases of painful and prolonged penile erections and priapism have been reported with methylphenidate products. Immediate medical attention should be sought if signs or symptoms of prolonged penile erections or priapism are observed.
- CNS stimulants, including AZSTARYS, are associated with peripheral vasculopathy, including Raynaud's phenomenon. Signs and symptoms are usually intermittent and mild; very rare sequelae include digital ulceration and/or soft tissue breakdown. Carefully observe patients during treatment for digital changes. Further evaluation may be required, including referral.
- CNS stimulants have been associated with weight loss and slowing of growth rate in pediatric patients. Monitor height and weight at appropriate intervals in pediatric patients. Treatment may need to be interrupted in children not growing or gaining weight as expected.

ADVERSE REACTIONS

• Based on accumulated data from other methylphenidate products, the most common (>5% and twice the rate of placebo) adverse reactions are appetite decreased, insomnia, nausea, vomiting, dyspepsia, abdominal pain, weight decreased, anxiety, dizziness, irritability, affect lability, tachycardia, and blood pressure increased.

DRUG INTERACTIONS

• Adjust dosage of antihypertensive drug as needed. Monitor blood pressure.
• Avoid use of AZSTARYS on the day of surgery if halogenated anesthetics will be used.

For additional safety information, click here for [Prescribing Information](#) and [Medication Guide](#), including **BOXED WARNING**.

You are encouraged to report negative side effects of prescription drugs to the FDA. Visit www.fda.gov/medwatch, or call 1-800-FDA-1088.

About Corium

Corium, Inc., is a fully integrated biopharmaceutical company that is leading the development and commercialization of CNS therapies that provide physicians with innovative treatment options for patients, their families, and their caregivers. Corium is commercializing two FDA approved products, ADLARITY and AZSTARYS. For further information, please visit <http://www.corium.com>.

About Gurnet Point Capital

Gurnet Point Capital is a unique healthcare investment platform within the B-Flexion group and led by a team with deep expertise in an industry for which they share a passion, both as investors and senior executives. GPC invests long-term capital and supports entrepreneurs in building a new generation of companies that deliver outsized returns through active ownership. Based in Cambridge, MA, its remit encompasses life sciences and health care focused businesses, with a particular emphasis on businesses that have high growth potential in the product development and commercialization stages of their evolution. With its strategy of driving best in class operational transformation for these businesses, to create social impact while generating significant economic value, GPC is able to deliver differentiated results for its investors and partners. For more, go to <http://www.gurnetpointcapital.com>.

Reference

1. Kollins SH, Braeckman R, Guenther S, et al. A Randomized, Controlled Laboratory Classroom Study of Serdexmethylphenidate and d-Methylphenidate Capsules in Children with Attention-Deficit/Hyperactivity Disorder. *J Child Adolesc Psychopharmacol.* 2021;31(9):597-609. doi:10.1089/cap.2021.0077

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