



BioXcel Therapeutics Announces FDA Approval of IGALMI™ (dexmedetomidine) Sublingual Film for Acute Treatment of Agitation Associated with Schizophrenia or Bipolar I or II Disorder in Adults

April 6, 2022

First and only FDA-approved orally dissolving sublingual film for mild, moderate or severe agitation in patients with schizophrenia or bipolar I or II disorder¹

IGALMI demonstrated onset of action as early as 20 minutes and high response rate with both 120 mcg and 180 mcg doses in pivotal studies¹

Up to 25 million agitation episodes for these two patient populations in the U.S. annually²⁻³

U.S. commercial launch planned for Q2 2022

Company to host investor conference call on April 6, 2022 at 8:30 a.m. ET

NEW HAVEN, Conn., April 06, 2022 (GLOBE NEWSWIRE) -- BioXcel Therapeutics, Inc. (Nasdaq: BTAI), a biopharmaceutical company utilizing artificial intelligence (AI) approaches to identify and develop transformative medicines in neuroscience and immuno-oncology, today announced that the U.S. Food and Drug Administration (FDA) has approved IGALMI™ (dexmedetomidine) sublingual film for the acute treatment of agitation associated with schizophrenia or bipolar I or II disorder in adults.¹ IGALMI can be self-administered by patients under the supervision of a healthcare provider.¹ The Company is prepared to launch IGALMI in the U.S. in the second quarter of 2022.

"There are large numbers of patients who experience agitation associated with schizophrenia and bipolar disorders, and this condition has been a long-standing challenge for healthcare professionals to treat," said Dr. John Krystal, M.D., the Robert L. McNeil, Jr. Professor of Translational Research and Chair of the Department of Psychiatry at Yale School of Medicine. "The approval of IGALMI, a self-administered film with a desirable onset of action, represents a milestone moment. It provides healthcare teams with an innovative tool to help control agitation. As clinicians, we welcome this much-needed new oral treatment option."

An estimated 7.3 million people in the U.S. are diagnosed with schizophrenia or bipolar disorders.²⁻³ Up to a quarter of these people experience agitation, with episodes that can occur 10 to 17 times annually, totaling up to 25 million agitation episodes for these two patient populations per year.²⁻⁴ Agitation episodes are associated with a significant burden for patients, caregivers, and the healthcare system.⁵

"IGALMI is the first new acute treatment for schizophrenia or bipolar disorder-associated agitation in nearly a decade and represents a differentiated approach to helping patients manage this difficult and debilitating symptom,"⁶⁻⁷ said Vimal Mehta, Ph.D., CEO of BioXcel Therapeutics. "With this landmark achievement of our first approved drug, we have taken a monumental step toward our mission of bringing transformative medicines in neuroscience to patients using our AI platform. We are deeply grateful to our clinical trial participants, healthcare providers, researchers, and employees for contributing to this important new therapy. We believe IGALMI has significant market-changing potential, and we are excited to execute on our commercial launch plans in the U.S. this quarter."

The FDA approval of IGALMI is based on data from two pivotal randomized, double-blinded, placebo-controlled, parallel group Phase 3 trials evaluating IGALMI for the acute treatment of agitation associated with schizophrenia (SERENITY I) or bipolar I or II disorder (SERENITY II).¹

The primary endpoint was the mean change from baseline in the Positive and Negative Syndrome Scale-Excited Component (PEC) total score assessed at 2 hours following dosing. The key secondary endpoint was the earliest time where efficacy, measured by the change from baseline in PEC score, was statistically separated from placebo.¹ PEC is an investigator-rated instrument for measuring agitation in patients that evaluates five elements associated with agitation: poor impulse control, tension, hostility, uncooperativeness, and excitement.¹

In both trials, IGALMI met the primary endpoint at two hours after the first dose in patients treated with the 120 mcg and 180 mcg doses, demonstrating statistically significant improvements from baseline. IGALMI also met the key secondary endpoint, demonstrating a rapid onset of action, with statistically significant separation from placebo observed at 20 minutes for both the 180 mcg and 120 mcg doses in SERENITY II and 20 minutes and 30 minutes in SERENITY I, respectively.¹

The most common adverse reactions (incidence $\geq 5\%$ and at least twice the rate of placebo) were somnolence (drowsiness and feeling sleepy), paresthesia or oral hypoesthesia, dizziness, dry mouth, hypotension (low blood pressure) and orthostatic hypotension. All adverse drug reactions were mild to moderate in severity. While IGALMI did not exhibit any treatment-related serious adverse effects (SAEs) in Phase 3 studies, it may cause notable side effects including hypotension, orthostatic hypotension and bradycardia, QT interval prolongation, and somnolence.¹

Data from the pivotal Phase 3 SERENITY II trial evaluating IGALMI in bipolar disorders were [published in the Journal of the American Medical Association](#) (JAMA) on February 22, 2022.⁸

Conference Call

BioXcel Therapeutics will host an investor conference call and webcast April 6 at 8:30 a.m. ET to discuss the FDA approval of IGALMI. To access the call, please dial 877-407-5795 (domestic) or 201-689-8722 (international). A live webcast and supplemental materials will be available on the Investors section of the company's website, www.bioxccltherapeutics.com, and a replay will be available through at least July 6, 2022.

BioXcel Therapeutics may use its website as a distribution channel of material information about the Company. Financial and other important information regarding the Company is routinely posted on and accessible through the Investors sections of its website at www.bioxceltherapeutics.com. In addition, you may automatically receive email alerts and other information about the Company when you enroll your email address by visiting the "Email Alerts" option under the News/Events menu of the Investors & Media section of its website.

About Agitation Associated with Schizophrenia and Bipolar Disorder

Agitation is a common and difficult-to-manage symptom associated with bipolar I or II or schizophrenia. Early identification and prompt intervention to relieve agitation are essential to avoid symptomatic escalation and the emergence of aggression. Expert consensus best-practice guidelines have recommended that agitation should be treated by a combination of behavioral calming techniques, verbal de-escalation, and medications that are voluntarily accepted by patients without coercion. The goal of using medication is to calm the patient so that he or she can be more accurately assessed by clinicians. Medication used in this manner is consistent with current guidelines, which state that the proper endpoint of medication administration is calming without inducing sleep. This approach may help avoid the costly and traumatic use of coercive techniques like physical restraint and seclusion, which may result in admission and prolonged hospitalization.⁵

IGALMI™ (dexmedetomidine) sublingual film

INDICATION

IGALMI is indicated for the acute treatment of agitation associated with schizophrenia or bipolar I or II disorder in adults. Limitations of Use: The safety and effectiveness of IGALMI have not been established beyond 24 hours from the first dose.

IMPORTANT SAFETY INFORMATION

WARNINGS AND PRECAUTIONS

Hypotension, Orthostatic Hypotension, and Bradycardia: IGALMI causes dose-dependent hypotension, orthostatic hypotension, and bradycardia. Because IGALMI decreases sympathetic nervous system activity, hypotension and/or bradycardia may be more pronounced in patients with hypovolemia, diabetes mellitus, or chronic hypertension, and in geriatric patients. Avoid use of IGALMI in patients with hypotension, orthostatic hypotension, advanced heart block, severe ventricular dysfunction, or history of syncope. After IGALMI administration, patients should be adequately hydrated and should sit or lie down until vital signs are within normal range. If a patient is unable to remain seated or lying down, precautions should be taken to reduce the risk of falls. Ensure that a patient is alert and not experiencing orthostatic hypotension or symptomatic hypotension prior to allowing them to resume ambulation.

QT Interval Prolongation: IGALMI prolongs the QT interval. Avoid use of IGALMI in patients at risk of torsades de pointes or sudden death, including those with known QT prolongation, a history of other arrhythmias, symptomatic bradycardia, hypokalemia, or hypomagnesemia, and in patients receiving other drugs known to prolong the QT interval.

Somnolence: IGALMI can cause somnolence. Patients should not perform activities requiring mental alertness, such as operating a motor vehicle or operating hazardous machinery, for at least eight hours after taking IGALMI.

Risk of Withdrawal Reactions, Tolerance, and Tachyphylaxis: IGALMI was not studied for longer than 24 hours after the first dose. There may be a risk of physical dependence, a withdrawal syndrome, tolerance, and/or tachyphylaxis if IGALMI is used in a manner other than indicated.

ADVERSE REACTIONS

The most common adverse reactions (incidence $\geq 5\%$ and at least twice the rate of placebo) were somnolence, paresthesia or oral hypoesthesia, dizziness, dry mouth, hypotension, and orthostatic hypotension.

DRUG INTERACTIONS

Drugs That Prolong the QT Interval: Avoid use.

Anesthetics, Sedatives, Hypnotics, and Opioids: Concomitant use may cause enhanced CNS-depressant effects. Reduction in dosage of IGALMI or the concomitant medication should be considered.

USE IN SPECIFIC POPULATIONS

Hepatic Impairment and Geriatric Patients (≥ 65 years old): A lower dose is recommended in patients with hepatic impairment and geriatric patients. See the full Prescribing Information for the recommended dosage depending on the agitation severity.

Please see full [Prescribing Information](#).

To report SUSPECTED ADVERSE REACTIONS, contact BioXcel Therapeutics, Inc. at 1-833-201-1088 or FDA at 1-800-FDA-1088 or www.fda.gov/medwatch.

About BioXcel Therapeutics, Inc.

BioXcel Therapeutics, Inc. is a biopharmaceutical company utilizing artificial intelligence approaches to develop transformative medicines in neuroscience and immuno-oncology. The Company's drug re-innovation approach leverages existing approved drugs and/or clinically validated product candidates together with big data and proprietary machine learning algorithms to identify new therapeutic indices. The Company's commercial product, IGALMI (developed as BXCL501) is a proprietary, sublingual film formulation of dexmedetomidine approved by the FDA for the acute treatment of agitation associated with schizophrenia or bipolar I or II disorder in adults. BXCL501 is also being evaluated for the acute treatment of Alzheimer's disease, and as an adjunctive treatment for major depressive disorder. The company is also developing BXCL701, an investigational, orally administered, systemic innate immunity activator for the treatment of aggressive forms of prostate cancer and advanced solid tumors that are refractory or treatment naïve to checkpoint inhibitors. For more information, please visit www.bioxceltherapeutics.com.

Forward-Looking Statements

This press release includes “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements in this press release include but are not limited to the timing of commercial launch of IGALMI and the market for and the benefits of treatment with IGALMI. When used herein, words including “anticipate,” “will,” “plan,” “may,” “continue,” “intend,” “designed,” “goal” and similar expressions are intended to identify forward-looking statements. In addition, any statements or information that refer to expectations, beliefs, plans, projections, objectives, performance or other characterizations of future events or circumstances, including any underlying assumptions, are forward-looking. All forward-looking statements are based upon the Company’s current expectations and various assumptions. The Company believes there is a reasonable basis for its expectations and beliefs, but they are inherently uncertain. The Company may not realize its expectations, and its beliefs may not prove correct. Actual results could differ materially from those described or implied by such forward-looking statements as a result of various important factors, including, without limitation, its limited operating history; its incurrence of significant losses; its need for substantial additional funding and ability to raise capital when needed; its limited experience in drug discovery and drug development; its dependence on the success and commercialization of IGALMI™, BXCL501, BXCL502 and BXCL701 and other product candidates; the failure of preliminary data from its clinical studies to predict final study results; failure of its early clinical studies or preclinical studies to predict future clinical studies; its ability to receive regulatory approval for its product candidates; its ability to enroll patients in its clinical trials; undesirable side effects caused by the Company’s products and product candidates; its novel approach to the discovery and development of product candidates based on EvolverAI; regulatory agencies may not accept or agree with the Company’s assumptions, estimates, calculations, conclusions, or analyses or may interpret or weigh the importance of data differently, which could impact the value of the particular program, the approvability or commercialization of the particular product candidate or product and the company in general; the Company has no experience in marketing and selling drug products and has not entered into arrangements for the sale and marketing of IGALMI; IGALMI or the Company’s product candidates may not be accepted by physicians or the medical community in general; the Company’s exposure to patent infringement lawsuits; the Company’s ability to comply with the extensive regulations applicable to it; impacts from the COVID-19 pandemic; the Company’s ability to commercialize its products and product candidates; and the other important factors discussed under the caption “Risk Factors” in its Annual Report on Form 10-K for the year ended December 31, 2021, as such factors may be updated from time to time in its other filings with the SEC, which are accessible on the SEC’s website at www.sec.gov. These and other important factors could cause actual results to differ materially from those indicated by the forward-looking statements made in this press release. Any such forward-looking statements represent management’s estimates as of the date of this press release. While the Company may elect to update such forward-looking statements at some point in the future, except as required by law, it disclaims any obligation to do so, even if subsequent events cause our views to change. These forward-looking statements should not be relied upon as representing the Company’s views as of any date subsequent to the date of this press release.

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Based on Symphony patient level claims analysis. Annual prevalence of diagnosed schizophrenia in the United States was estimated from calculations of an administrative claims database of 3 million privately ensured beneficiaries from 1999 to 2003, California Medicaid claims covering the period 2000-2002, and published statistics in uninsured and veteran populations.² Based on diagnostic interview data from National Comorbidity Survey Replication (NCS-R) conducted between February 2001 and April 2003. N=9282 for the main interview, n=5692 for the bipolar disorder subset.³
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