

**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

**FORM 8-K**

**CURRENT REPORT  
Pursuant to Section 13 or 15(d) of the  
Securities Exchange Act of 1934**

Date of Report (Date of earliest event reported) **July 22, 2019**

**BioXcel Therapeutics, Inc.**

(Exact name of registrant as specified in its charter)

**Delaware**  
(State or other jurisdiction of  
incorporation)

**001-38410**  
(Commission File Number)

**82-1386754**  
(IRS Employer  
Identification No.)

**555 Long Wharf Drive  
New Haven, CT 06511**  
(Address of principal executive offices, including Zip Code)

**(475) 238-6837**  
(Registrant's telephone number, including area code)

**N/A**  
(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

<u>Title of each class</u>	<u>Trading Symbol(s)</u>	<u>Name of each exchange on which registered</u>
Common Stock, par value \$0.001	BTAI	The Nasdaq Capital Market

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

**Item 7.01. Regulation FD Disclosure.**

On July 22, 2019, BioXcel Therapeutics, Inc. (the “Company”) issued a press release announcing data from its Phase 1b placebo-controlled trial evaluating multiple doses of the Company’s BXCL501 product candidate in schizophrenia patients with agitation and held a live webcast conference call to discuss these results. A copy of the press release is furnished as Exhibit 99.1 hereto and incorporated under this Item 7.01 by reference.

The information in this Item 7.01 of this Current Report on Form 8-K (including Exhibit 99.1) shall not be deemed “filed” for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), or otherwise subject to the liabilities of that Section, nor shall it be deemed to be incorporated by reference into any filing of the Company under the Securities Act of 1933, as amended, or the Exchange Act, except as expressly set forth by specific reference in such filing.

**Item 8.01. Other Events.**

A copy of the presentation materials discussed during the July 22, 2019 conference call, regarding the data from the Phase 1b trial of the Company’s BXCL501 product candidate is attached as Exhibit 99.2 to this current report on Form 8-K and incorporated under this Item 8.01 by reference.

**Item 9.01 Financial Statements and Exhibits.**

(d) Exhibits.

<u>Exhibit No.</u>	<u>Description</u>
99.1	<a href="#">BioXcel Therapeutics, Inc. Press Release, July 22, 2019.</a>
99.2	<a href="#">BioXcel Therapeutics, Inc. Presentation, July 2019.</a>

**SIGNATURES**

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Date: July 22, 2019

**BIOXCEL THERAPEUTICS, INC.**

/s/ Richard Steinhart  
Richard Steinhart  
Chief Financial Officer

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**BioXcel Therapeutics Announces BXCL501 Met Primary Endpoint in Phase 1b Placebo-Controlled Trial in the Treatment of Agitation in Patients with Schizophrenia**

*Statistically significant mean reduction in PEC score at two hours compared to placebo following a single dose of 180 mcg ( $p < 0.0001$ ), with rapid and durable reductions in PEC score maintained for 4 to 6 hours*

*Approximately 90% of patients met response criteria at 180 mcg with a reduction in PEC score ( $\geq 40\%$ )*

*Results from secondary analyses were consistent with results observed for the primary endpoint and statistically significant for calming as measured by ACES at two hours compared to placebo following a single dose of 180 mcg ( $p < 0.0001$ )*

*Well-tolerated with no serious or severe adverse events across the entire dose range*

*Data support progressing BXCL501 program potentially to Phase 3 pivotal trials, subject to ongoing discussions with FDA*

*Conference call scheduled today, July 22, 2019 at 8:30 EDT*

NEW HAVEN, Conn; July 22, 2019 — BioXcel Therapeutics, Inc. (“BTI”) (Nasdaq: BTAI), a clinical-stage biopharmaceutical development company utilizing novel artificial intelligence approaches to identify and advance the next wave of medicines in neuroscience and immuno-oncology, today announced positive top-line results from the adaptive Phase 1b, randomized, double-blind, placebo-controlled, multi-center, U.S trial, evaluating multiple doses of BXCL501 for acute treatment of agitation in 135 patients with schizophrenia. In the trial, a reduction in the PEC score (PANSS or the Positive and Negative Syndrome Scale, Excitatory Component) for agitation was observed with rapid calming without excessive sedation at two hours and at earlier time-points. The 80 mcg, 120 mcg and 180 mcg doses of BXCL501 showed reductions of PEC scores of -7.1, -9.2 and -10.8, respectively, compared to -4.5 for placebo at two hours. The results for these three doses were statistically significant in patients treated compared to placebo (80 mcg;  $p = 0.0152$ ), (120 mcg;  $p = 0.0003$ ), and (180 mcg;  $p < 0.0001$ ) with clinically meaningful, rapid and durable reductions in PEC score. BTI also observed clinically meaningful but not statistically significant reductions in PEC scores of -6.0 following 60 mcg at two hours ( $p = 0.1227$ ). The Company believes that these results suggest a predictable and dose-dependent response for BXCL501.

The secondary evaluations included assessment using ACES (Agitation-Calmness Evaluation Scale) which evaluated the potential calming effects of BXCL501. The ACES assessment was consistent with the analysis of the primary endpoint, and met statistically significance for calming as measured by ACES at two hours compared to placebo in the three highest doses evaluated (80mcg;  $p = 0.0156$ ), (120 mcg;  $p = 0.0005$ ) and (180 mcg;  $p < 0.0001$ ). BXCL501 was well-tolerated with no serious or severe adverse events across the entire dose range; the most common treatment-related adverse events were mild somnolence and dry mouth. BXCL501 was granted Fast-Track Designation by the U.S Food and Drug Administration (FDA) in December 2018.

“We need better treatments for agitation episodes in medical settings. It would be best if novel treatments could be administered non-invasively and demonstrate a rapid onset of action,” said Professor John Krystal, MD, Chairman, Department of Psychiatry, Yale University School of Medicine. “The BTI Phase 1b data suggest that BXCL501, rapidly and non-invasively calmed agitated schizophrenia patients without requiring intramuscular administration and without producing excessive sedation. If successfully developed and approved, BXCL501 could offer psychiatrists and Emergency Medicine physicians a new tool for treating agitation in their patients.”

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As previously announced, BTI anticipates enrolling approximately 600 to 700 patients (300-350 each in schizophrenia and bipolar disorder) for BTI's first pivotal trial, designed to measure reduction in PEC at two hours as the primary endpoint, as discussed with the FDA and used in clinical trials of other approved agents. With the statistically significant results observed in multiple doses in this trial, BTI plans to meet with the FDA to obtain additional feedback on progressing to a Phase 3 pivotal trial.

"These very encouraging data provide supportive evidence regarding BXCL501's potential to treat agitation in patients with schizophrenia and additionally, provides support for the drug's broad potential across multiple neuropsychiatric disorders," said Vimal Mehta, Ph.D., Chief Executive Officer of BioXcel Therapeutics. "There has been little advancement in the discovery and development of acute treatment for agitation associated with neuropsychiatric disorders in the last several decades. The positive results observed in this study support advancing the program into late stage clinical development."

Norepinephrine is a brain hormone that regulates the fight or flight response. It is released during stress and is the core causal mechanism for producing agitation. BXCL501 is an investigational, highly selective alpha 2A adrenergic receptor agonist that is being developed as a non-invasive rapid treatment for agitation in a variety of neuropsychiatric disorders. BXCL501 is designed to treat agitation by reducing the activity of brain norepinephrine to drive the agitation response independent of the underlying disease conditions.

"Currently there are significant gaps in the management of agitation in multiple disease settings and our development goal at BioXcel Therapeutics is to potentially transform the treatment landscape with BXCL501, if approved, by offering a non-invasive treatment with a non-antipsychotic or non-benzodiazepine mechanism," said Robert Risinger, M.D., Vice President, Clinical Development of BTI. "We believe our data meets those expectations with the positive results observed with multiple doses in this trial. We expect to select two doses that showed clinically meaningful reductions in PEC scores and were well tolerated during the trial. The planned Phase 3 pivotal trial will be powered using these results."

#### **About Conference Call:**

BTI will host a conference call today, July 22, 2019, at 8:30 a.m. Eastern Time to discuss the results of this study and BXCL501 Program. Interested investors can access the call by dialing 866-575-6539 in the U.S. and Canada, or 323-794-2423 internationally. The call, along with a slide presentation to accompany the call, will be available via a live, listen-only webcast at <http://public.viavid.com/index.php?id=135530> and archived for 30 days. For those unable to participate, a replay of the call will be available until August 22, 2019. To access the replay, please dial 844-512-2921 in the U.S. and Canada, or 412-317-6671 internationally and enter passcode 5862088.

#### **About the Placebo-controlled Phase 1b trial of BXCL501 in Agitated Schizophrenia:**

In the randomized, double-blind, placebo-controlled trial, 135 eligible patients (with a minimum score of 14 on the PANSS-Excitatory Component scale for Agitation) were sequentially randomized to receive BXCL501 (five dose strengths of film ranging from 20 mcg to 180mcg) or matching placebo (in a 2:1 ratio with 27 subjects per dose group; 18 BXCL501: 9 placebo). All doses were self-administered by the agitated patient. The study consisted of a screening period followed by a treatment day, and a 7-day follow-up period. After screening subjects were admitted to a trial site where they self-administered a single dose. Agitation was measured using the PEC score immediately pre-dose and repeatedly over a 6-hour period. Secondary analyses included the ACES and CGI-I (Clinical Global Impression of Improvement) scales. Subjects were monitored for an additional 1-2 days and returned a week later to complete the study. The mean total PEC scores at baseline were 17.8 for the BXCL501 dose groups (overall range 14-26), and 18.1 for the placebo group (overall range 14-25), representing patients with

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moderate to severe agitation. All subjects (100%) were able to self-administer dose and completed the study.

### **About Agitation**

Agitation is a common and costly (approximately \$40 Billion per year Health Care Burden) phenomenon associated with a number of psychiatric conditions including schizophrenia and bipolar disorder. Early identification and prompt intervention to relieve the symptoms of agitation are essential to avoid symptomatic escalation and emergence of aggression. Recent consensus guidelines emphasize the need for non-coercive management strategies to protect the therapeutic alliance between patients and their healthcare providers—an alliance that is critical for the effective management of chronic psychiatric conditions. Rapid symptom relief with a non-invasive approach to de-escalate agitation are necessary to avoid the costly and traumatic use of coercive techniques of physical restraint and seclusion, which require admission and prolonged hospitalization. It is estimated that approximately 19 million people are at risk and 8.3 million in the U.S. suffer from agitation each year.

### **About the PEC (PANSS or the Positive and Negative Syndrome Scale Excitatory Component) Score for Agitation**

The PEC score is a validated regulatory endpoint for measuring acute agitation in schizophrenia and bipolar patients. The PEC scale is used in clinical research to rate the severity of a patient's acute agitation. The PEC score comprises 5 items associated with agitation: poor impulse control, tension, hostility, uncooperativeness, and excitement; each scored 1 (minimum) to 7 (maximum). The PEC, the sum of these 5 subscales, thus ranges from 5 to 35.

### **About the ACES (Agitation Calmness Evaluation Scale)**

ACES consists of a single item that rates overall agitation and sedation at the time of evaluation, where 1 indicates marked agitation; 2, moderate agitation; 3, mild agitation; 4, normal behavior; 5, mild calmness; 6, moderate calmness; 7, marked calmness; 8, deep sleep; and 9, unarousable.

### **About BXCL501:**

BXCL501 is a potential first-in-class, proprietary sublingual thin film of dexmedetomidine, a selective alpha-2a receptor agonist for the treatment of acute agitation. BTI believes that BXCL501 directly targets a causal agitation mechanism and the Company has observed anti-agitation effects in multiple clinical studies across multiple neuropsychiatric indications. A Phase 1 pharmacokinetic (bioavailability) and safety study of BXCL501 yielded positive top-line data. It is now being evaluated for the acute treatment of agitation resulting from schizophrenia in a Phase 1b trial. The Company plans to unveil future development plans for BXCL501 in agitated dementia, opioid withdrawal symptoms and hyperactive delirium through 2019.

### **About BioXcel Therapeutics, Inc.:**

BioXcel Therapeutics, Inc. is a clinical stage biopharmaceutical company focused on drug development that utilizes novel artificial intelligence approaches to identify and advance the next wave of medicines in neuroscience and immuno-oncology. BTI'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. BTI's two most advanced clinical development programs are BXCL501, a sublingual thin film formulation designed for acute treatment of agitation resulting from neuropsychiatric disorders, and BXCL701, an orally administered systemic innate immunity activator designed for treatment of a rare form of prostate cancer and for treatment of pancreatic cancer in combination with other immuno-oncology agents. For more information, please visit [www.bioxceltherapeutics.com](http://www.bioxceltherapeutics.com).

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## References

1. The Society of Critical Care Medicine – Critical Care Statistics. Retrieved from <https://www.sccm.org/Communications/Critical-Care-Statistics>
2. American Psychiatric Association – Practice Guidelines. Retrieved from <https://psychiatryonline.org/guidelines>
3. Substance Abuse and Mental Health Services Administration – Data and Dissemination. Retrieved from <https://www.samhsa.gov/data/>
4. National Institutes of Mental Health – Statistics. Retrieved from <https://www.nimh.nih.gov/health/statistics/index.shtml>

## 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 Company’s visibility in the financial community and the impact of inclusion in the Russell 3000® Index and related indices on the Company’s clinical development initiatives for BXCL501 and BXCL701. When used herein, words including “anticipate”, “being”, “will”, “plan”, “may”, “continue”, 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 BTI’s current expectations and various assumptions. BTI believes there is a reasonable basis for its expectations and beliefs, but they are inherently uncertain.

BTI 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 BXCL501 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; its approach to the discovery and development of product candidates based on EvolverAI is novel and unproven; its exposure to patent infringement lawsuits; its ability to comply with the extensive regulations applicable to it; its ability to commercialize its product candidates; and the other important factors discussed under the caption “Risk Factors” in its Quarterly Report on Form 10-Q for the period ended March 31, 2019 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](http://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 BTI 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 BTI’s views as of any date subsequent to the date of this press release.

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**Contact Information:**

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**BXCL501 Phase 1b Results Conference Call**  
July 22, 2019

BioXcel Therapeutics, 555 Long Wharf Drive, New Haven, CT 06511 | [www.bioxceltherapeutics.com](http://www.bioxceltherapeutics.com)

## Forward-Looking Statements

This presentation includes “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements in this presentation include, but are not limited to, statements that relate to the advancement and development of BXCL501 and BXCL701, the commencement of clinical trials, the availability and results of data from clinical trials, BioXcel Therapeutic, Inc.'s (“BTI”) submission of its first New Drug Application with the FDA and other information that is not historical information. When used herein, words including “anticipate”, “being”, “will”, “plan”, “may”, “continue”, 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 BTI's current expectations and various assumptions. BTI believes there is a reasonable basis for its expectations and beliefs, but they are inherently uncertain.

BTI 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 BXCL501 and BXCL701 and other product candidates; its ability to receive regulatory approval for its product candidates; its ability to enroll patients in its clinical trials; its approach to the discovery and development of product candidates based on EvolverAI is novel and unproven; its exposure to patent infringement lawsuits; its ability to comply with the extensive regulations applicable to it; its ability to commercialize its product candidates; and the other important factors discussed under the caption “Risk Factors” in its Quarterly Report on Form 10-Q for the period ended March 31, 2019 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](http://www.sec.gov).

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# Agenda

## BXCL501 Phase 1b Trial Results

Overview and Summary	Vimal Mehta, Ph.D., CEO & Founder
BXCL501 Phase 1b Trial Design and Results	Rob Risinger, M.D., VP, Clinical Development
Q&A	BioXcel Therapeutics Team
Corporate Outlook & Closing Remarks	Vimal Mehta, Ph.D., CEO & Founder

### BioXcel Therapeutics Team

- ✓ Vincent O'Neill, M.D., *Chief Medical Officer*
- ✓ Frank Yocca, Ph.D., *Chief Scientific Officer*
- ✓ Chetan Lathia, Ph.D., *SVP and Head, Translational Medicine, Clinical Pharmacology and Regulatory Affairs*
- ✓ Richard Steinhart, *Chief Financial Officer*

# Overview and Summary

## Vimal Mehta, Ph.D., CEO & Founder

# BXCL501 Phase 1b Trial

## Summary of Results

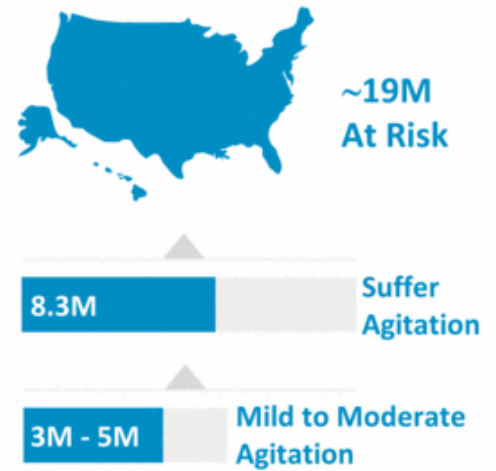
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- BXCL501: a potential first-in-class, proprietary sublingual thin film of dexmedetomidine, a selective alpha-2a receptor agonist (a novel mechanism of action).
- Clinically meaningful, rapid and durable reductions in PEC score in acute treatment of agitation in schizophrenia patients.
- Statistically significant mean reduction in PEC score at two hours compared to placebo following a single dose of 180 mcg ( $p < 0.0001$ ), with rapid and durable effects maintained for 4 to 6 hours across multiple dose strengths.
- Approximately 90% of patients met response criteria at 180 mcg with a reduction in PEC score ( $\geq 40\%$ ).
- Well-tolerated with no serious or severe adverse events across the entire dose range.
- Data support progressing BXCL501 program potentially to Phase 3 pivotal trials, subject to discussions with

# About Agitation

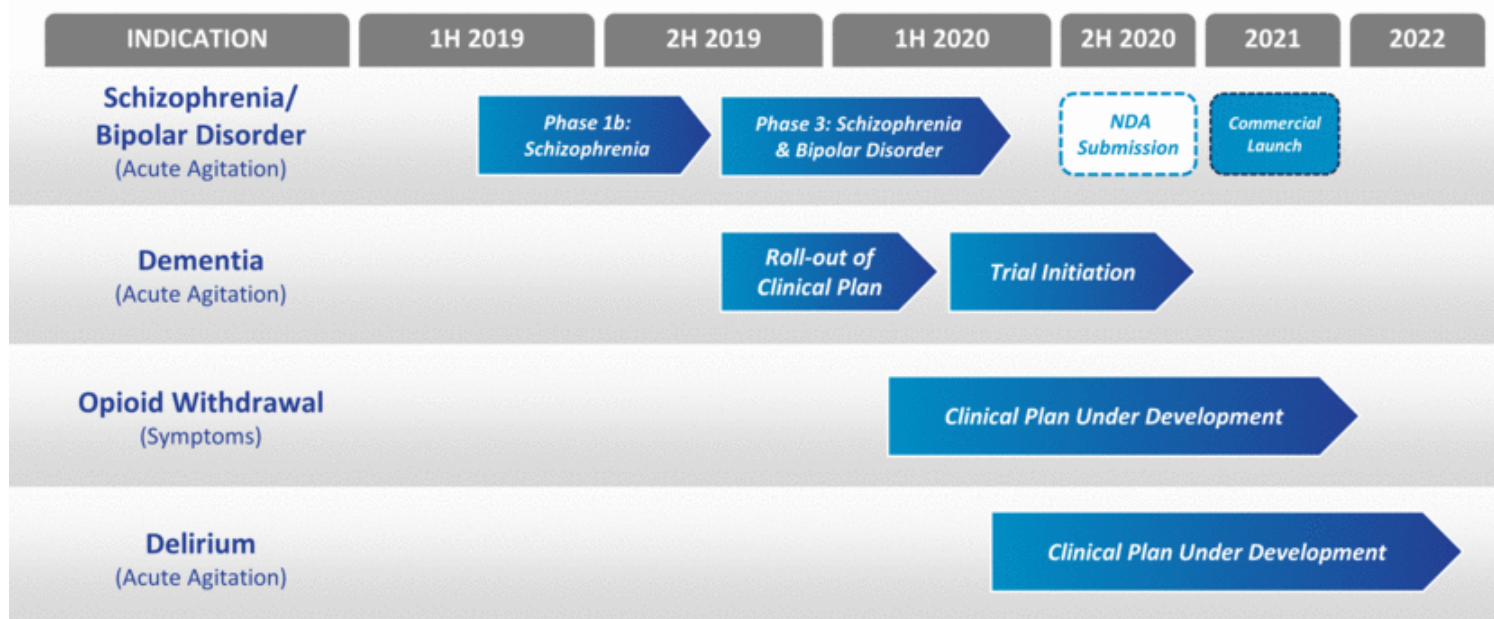
## Overview

- Common and costly phenomenon associated with number of psychiatric conditions
  - 8.3 million suffer from agitation each year in the US
  - \$40 billion per year health care burden
- Consensus guidelines recommend non-coercive management strategies to protect therapeutic alliance between patients and healthcare providers
- Unmet medical need: rapid symptom relief with non-invasive approach



# BXCL501: Large Market Potential

Anticipated Timeline: First NDA Submission in 2H 2020



# **BXCL501 Phase 1b Trial Design and Results**

## **Rob Risinger, M.D., VP, Clinical Development**



# BXCL501

## Sublingual Thin Film Dexmedetomidine (Dex) for Acute Treatment of Agitation

Unmet  
Need

### Current Treatments are Suboptimal:

- **Dementia:** Antipsychotic drugs (black-box warning) for elderly
- **Psychiatric:** Invasive with severe side effects

Consensus  
Opinion\*

- **Non-invasive**
- **Non-traumatic / non-coercive**
- **Calmness without sedation**
- **Good safety profile**
- **Easy to administer**
- **Favorable tolerability**
- **Rapid onset**
- **Patient preference**

FDA  
Fast Track  
Designation

bt

### BXCL501: Novel Mechanism of Action (MoA)

- ✓ Non-Invasive, easy to administer **sublingual thin film** designed for **rapid onset of action**

# BXCL501 Phase 1b Trial

## *Clinical Trial Design*

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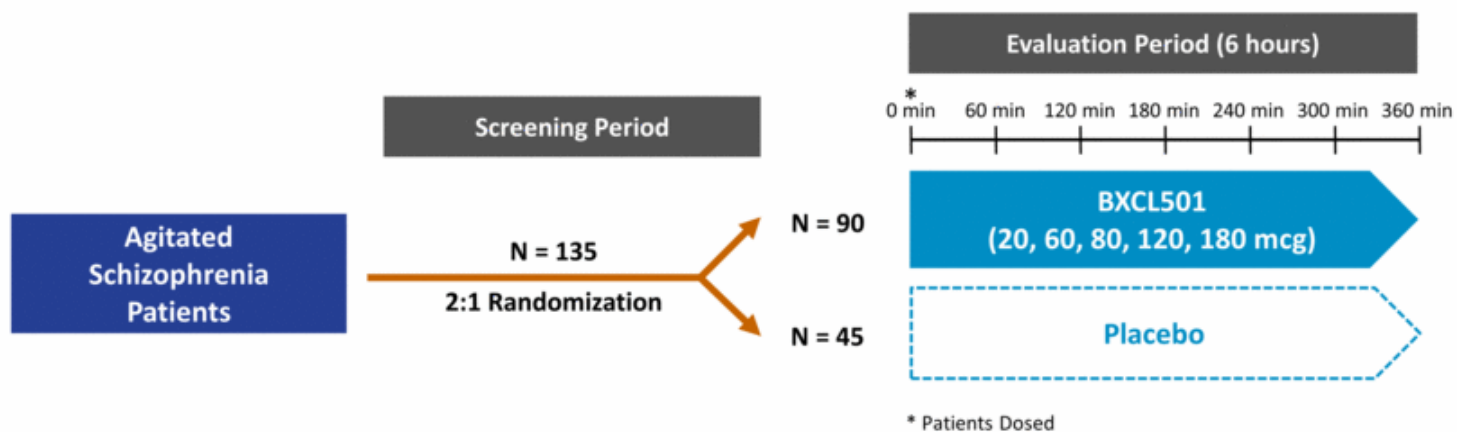
- Phase 1b, randomized, double-blind, placebo-controlled, multi-center, U.S. trial
- N=135 adult patients with confirmed diagnosis of schizophrenia
- 6 hour treatment period
  - Single dose\*
- Dose groups (2:1 randomization)
  - BXCL501 (20, 60, 80, 120, and 180 mcg)
  - Placebo

\*The lowest dose tested, 20 mcg was repeated in subjects who did not achieve response criterion.

# BXCL501 Phase 1b Trial

## Clinical Trial Design

### Assessing Agitation Episodes in Schizophrenia



**Primary Endpoint:**  
Change from baseline in PEC score (PANSS-Excitatory Component)

✓ Initiated May 2019 →  
✓ Completed July 2019

# BXCL501 Phase 1b Trial

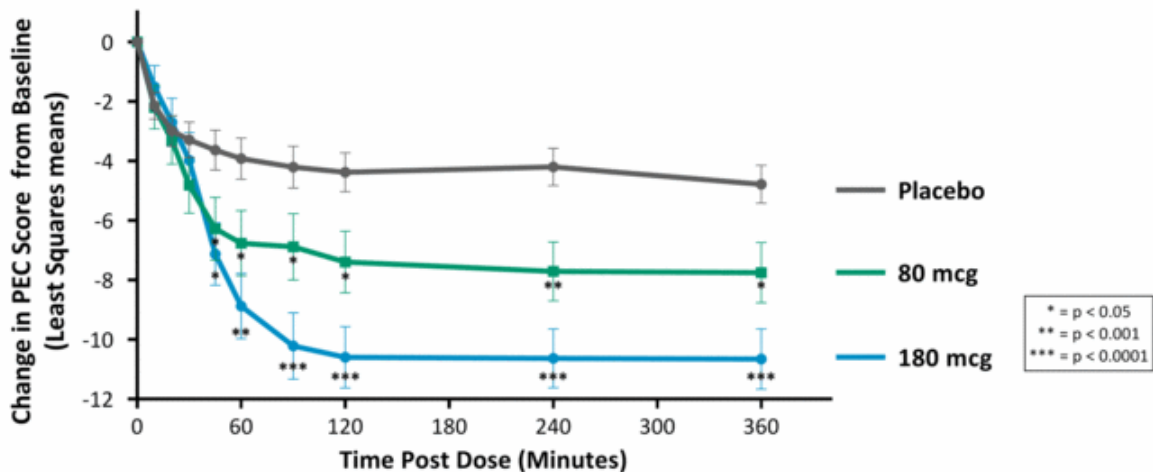
## *Demographics and Baseline Characteristics*

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- Mean age (years): 48.4 for placebo group, 47.2 for BXCL501 group
  - 89 males:46 females
- Mean PEC score at baseline: 18.1 (range 14 – 25) for placebo group, 17.8 (range 14 – 26) for BXCL501 group
- Subjects were on a range of typically prescribed antipsychotics.

# BXCL501 Phase 1b

## Primary Endpoint: Change in PEC Score from Baseline



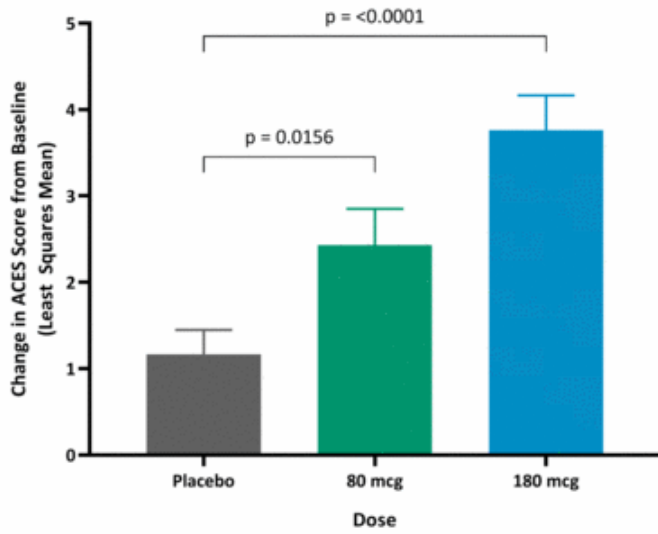
At Time = 120 Min  
(Primary Endpoint)

		% Responders (Reduction in PEC of $\geq$ 40%)	Mean Change in PEC Score from Baseline	P-Value
Placebo	N=36	28%	-4.5	
BXCL501 (180 mcg)	N=18	89%	-10.8	< 0.0001
BXCL501 (120 mcg)	N=18	67%	-9.2	0.0003
BXCL501 (80 mcg)	N=18	56%	-7.1	0.0152
BXCL501 (60 mcg)	N=18	39%	-6.0	0.1227

\*The lowest dose tested, 20 mcg (not shown) was repeated in subjects who did not achieve response criterion

# BXCL501 Phase 1b

## Secondary Evaluation: Change in ACES from Baseline



		Mean Change in ACES Score From Baseline	P-Value
Placebo	N=36	1.20	
BXCL501 (180 mcg)	N=18	3.94	< 0.0001
BXCL501 (120 mcg)	N=18	3.11	0.0005
BXCL501 (80 mcg)	N=18	2.33	0.0156
BXCL501 (60 mcg)	N=18	2.11	0.0750

\*The lowest dose tested, 20 mcg (not shown) was repeated in subjects who did not achieve response criterion

# BXCL501 Phase 1b Trial

## Safety

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- BXCL501 was well-tolerated with no serious or severe adverse events across the entire dose range.
- The most common treatment-related adverse events were mild somnolence and dry mouth.
- A maximum tolerated dose was not reached.
- All subjects (100%) were able to self-administer the film and complete the study.

# BXCL501 Phase 1b Trial

## Summary

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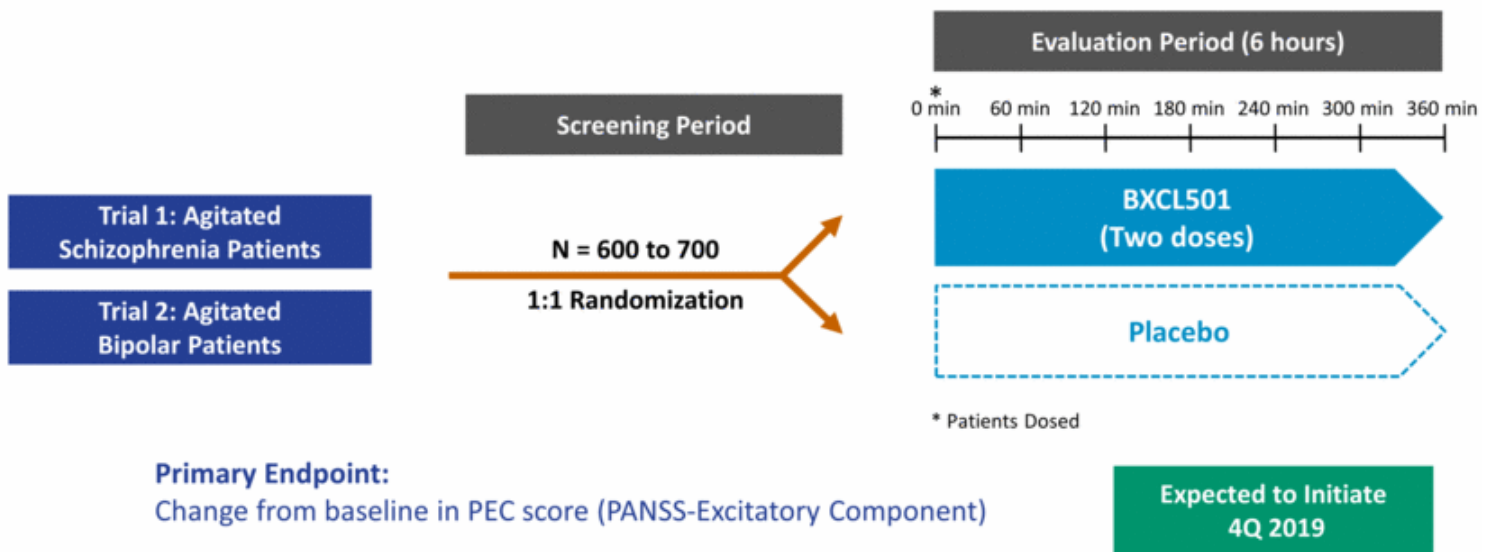
- Statistically significant improvement in PEC score in the 80, 120, and 180 mcg dose groups for BXCL501 in patients with schizophrenia.
- Calming effect was durable lasting at least 6 hours as evidenced by separation from placebo for 80, 120 and 180 mcg dose groups.
- Well-tolerated across all doses tested.
- A maximum tolerated dose was not observed.
- We believe data support progressing the BXCL501 program to pivotal trials, subject to further discussions with the FDA.



# BXCL501 Phase 3 Pivotal Trial

## Expected Clinical Trial Design

### Assessing Agitation Episodes in Schizophrenia and Bipolar Disorder



# Key Targeted Milestones for Value Creation

On Track For First NDA Submission In 2H 2020



## BXCL501

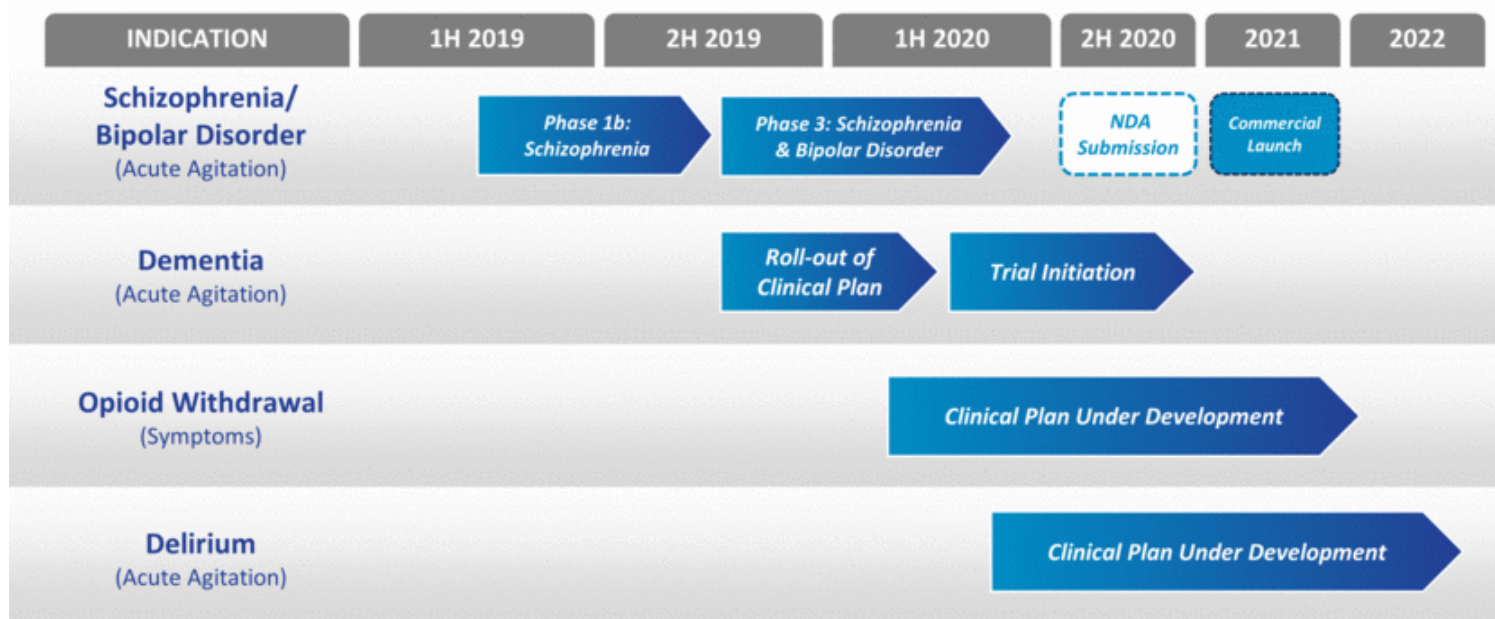
Anticipated Timeline

Schizophrenia / Bipolar Disorder	✓ Phase 1b Trial Initiated (May 2019)	★ ✓ Phase 1b Data Readout (July 22, 2019)	Phase 3 Pivotal Trial Initiation	★ Phase 3 Data Readout	★ <b>First NDA Submission</b>
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Development Plans for Agitated Dementia, Opioid Withdrawal Symptoms And  
Hyperactive Delirium will be Presented Through 2019

# BXCL501: Large Market Potential

Anticipated Timeline: First NDA Submission in 2H 2020



# Q&A

# Corporate Outlook And Closing Remarks

## Dr. Vimal Mehta, CEO & Founder



**Dr. Vimal Mehta, CEO**

BioXcel Therapeutics, New Haven, CT 06511

[vmehta@bioxccltherapeutics.com](mailto:vmehta@bioxccltherapeutics.com)

