CONNECT BIOPHARMA

DEVELOPING NEXT-GENERATION THERAPEUTICS FOR T CELL DRIVEN INFLAMMATORY DISEASES

SVB Leerink Conference
February 15, 2023
NASDAQ: CNTB

Steve Chan, CFO and Chin Lee, CMO

Forward-Looking Statements

This presentation regarding Connect Biopharma Holdings Limited ("Connect," "we," "us" or "our") has been prepared solely for informational purposes.

Certain information contained in this presentation relates to, or is based on, studies, publications, surveys and other data obtained from third-party sources and Connect's own internal estimates and research. While we believe these third-party sources to be reliable as of the date of this presentation, we have not independently verified, and make no representation as to the adequacy, fairness, accuracy or completeness of, any information obtained from third-party sources. In addition, all of the market data included in this presentation involves a number of assumptions and limitations, and there can be no guarantee as to the accuracy or reliability of such assumptions. Finally, while we believe our own internal research is reliable, such research has not been verified by any independent source.

This presentation contains forward-looking statements that involve substantial risks and uncertainties. All statements other than statements of historical facts contained in this presentation, including statements regarding our future financial condition, results of operations, business strategy and plans, prospective products and their potential benefits, product approvals, anticipated milestones, expected data readouts and enrollments, research and development plans and costs, potential future partnerships, timing and likelihood of success, objectives of management for future operations, future results of anticipated product development efforts and adequacy of existing cash and potential partnership funding to fund operations and capital expenditure requirements, as well as statements regarding industry trends, are forward-looking statements. Forward-looking statements can be identified by words such as: "anticipate," "believe," "contemplate," "continue," "could," "estimate," "expect," "intend," "may," "plan," "potential," "predict," "project," "should," "target," "will," or "would" or the negative of these terms or other similar expressions. The forward-looking statements in this presentation are only predictions. We have based these forward-looking statements largely on our current expectations and projections about future events and trends that we believe may affect our financial condition, results of operations, business strategy and financial needs. These forward-looking statements are inherently subject to a number of risks, uncertainties and assumptions, some of which cannot be predicted or quantified and some of which are beyond our control, including, among other things: the ability of our clinical trials to demonstrate safety and efficacy of our product candidates, and other positive results; whether we will need expanded or additional trials in order to obtain regulatory approval for our product candidates; our ability to obtain and maintain regulatory approval of our product candidates; existing regulations and regulatory developments in the United States, the PRC, Europe and other jurisdictions; the ability of our current cash and investments position to support planned operations; uncertainties regarding the interpretation and enforcement of PRC laws, rules and regulations; risks associated with the COVID-19 outbreak, which has and may continue to materially and adversely impact our business, preclinical studies and clinical trials; our plans and ability to obtain, maintain, protect and enforce our intellectual property rights and our proprietary technologies, including extensions of existing patent terms where available; our continued reliance on third parties to conduct additional clinical trials of our product candidates, and for the manufacture of our product candidates for preclinical studies and clinical trials; and the degree of market acceptance of our product candidates by physicians, patients, healthcare payors and others in the medical community. These risks are not exhaustive.

The inclusion of forward-looking statements should not be regarded as a representation by Connect that any of its expectations, projections or plans will be achieved. Actual results may differ from those expectations, projections or plans due to the risks and uncertainties inherent in Connect's business and other risks described in Connect's filings with the SEC. Further information regarding these and other risks is included under the heading "Risk Factors" in Connect's periodic reports filed with the SEC, including Connect's Annual Report on Form 20-F filed with the SEC on March 31, 2022, and its other reports which are available from the SEC's website (www.sec.gov) and on Connect's website (www.connectbiopharm.com) under the heading "Investors."

New risk factors emerge from time to time and it is not possible for our management to predict all risk factors, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in, or implied by, any forward-looking statements. You should not rely upon forward-looking statements as predictions of future events. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, levels of activity, performance or achievements. Except as required by law, we undertake no obligation to update publicly any forward-looking statements for any reason after the date of this presentation.

In addition, statements that "we believe" and similar statements reflect our beliefs and opinions on the relevant subject. These statements are based upon information available to us as of the date of this presentation, and while we believe such information forms a reasonable basis for such statements, such information may be limited or incomplete, and our statements should not be read to indicate that we have conducted an exhaustive inquiry into, or review of, all potentially available relevant information. These statements are inherently uncertain and investors are cautioned not to unduly rely upon these statements.

We have not conducted a head-to-head study of CBP-201 versus dupilumab and have not conducted a head-to-head study of CBP-307 versus Etrasimod or Ozanimod. Comparisons of CBP-201 to dupilumab and comparisons of CBP3-7 to Etrasimod and Ozanimod contained herein are based on analysis of data from separate studies. Such data may not be directly comparable due to differences in study protocols, conditions and patient populations. Accordingly, cross-trial comparisons may not be reliable predictors of the relative efficacy or safety of CBP-201 compared to dupilumab or of the relative efficacy or safety of CBP-307 compared to Etrasimod or Ozanimod. The potential benefits of CBP-201 or CBP-307 do not imply an expectation of regulatory approval which is solely within the authority of the FDA (or applicable foreign regulator).

Company Highlights

Large Opportunity	Targeting inflammatory diseases (dermatology, gastroenterology, respiratory) with high unmet need representing multi-billion-dollar global market opportunities
Late-Stage Pipeline	**CBP-201**: Interleukin-4-receptor alpha (IL-4Rα) blocker (ongoing China Pivotal trial) **CBP-307**: Sphingosine 1-phosphate-1 (S1P) modulator (Phase 3-ready asset) **CBP-174**: Peripherally acting histamine-3 receptor (H3R) antagonist
Potential Regulatory Approval	**CBP-201**: Potential first product approval for AD in China as early as 2025*; Asthma trial opens door to additional Type II disease indications
Strong Cash Position	$181.5 million in Cash and Investments** at September 30, 2022, expected to fund operations into at least 2025
Multiple Catalysts	Three key readouts anticipated by end of 2023 for three disease indications (CBP-307 UC Ph2 maintenance data; CBP-201 AD China Pivotal 52-week data; CBP-201 Asthma Ph2 topline data)

.*Based on the Company's understanding of standard CDE approval timelines
**Unaudited cash and investments amount

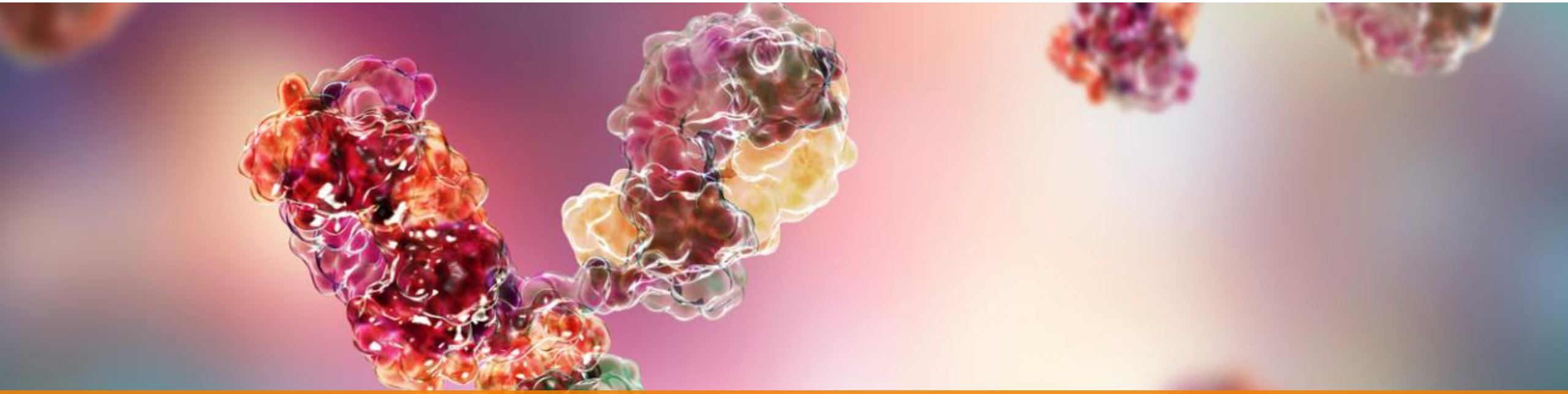
A robust pipeline of potentially differentiated therapies

Connect Biopharma has global development & commercialization rights to all product candidates

	INDICATION	PRECLINICAL	PHASE 1	PHASE 2	PIVOTAL OR PHASE 3*	NEXT ANTICIPATED MILESTONE
CBP-201 Antibody targeting IL-4Rα cytokine receptor (Th2 cell modulator)	Atopic Dermatitis (AD) in China					Conduct pre-NDA discussions in Q1'23 on Pivotal Trial Stage 1 results***
	Atopic Dermatitis (AD) - Global					Secure partnership to advance Global Ph3 in 2023
	Asthma					Topline readout in 2H2023
CBP-307 Small molecule targeting S1P1 (Th1 cell modulator)	Ulcerative Colitis (UC)					Secure partnership to advance into future trials for UC and CD
	Crohn's Disease (CD)**					
CBP-174 Peripherally restricted H3 receptor antagonist	Pruritus associated with AD					

*The Company's clinical trial in China of CBP-201 in patients with AD is included as the Company intends to submit a New Drug Application (NDA) in China based on the results of this trial, pending pre-NDA discussions with the Center for Drug Evaluation (CDE) of China's National Medical Products Administration.
**Phase 2 CD trial ended early due to COVID-19-related enrolment challenges.
*** Represent the primary analysis population of 255 adult patients

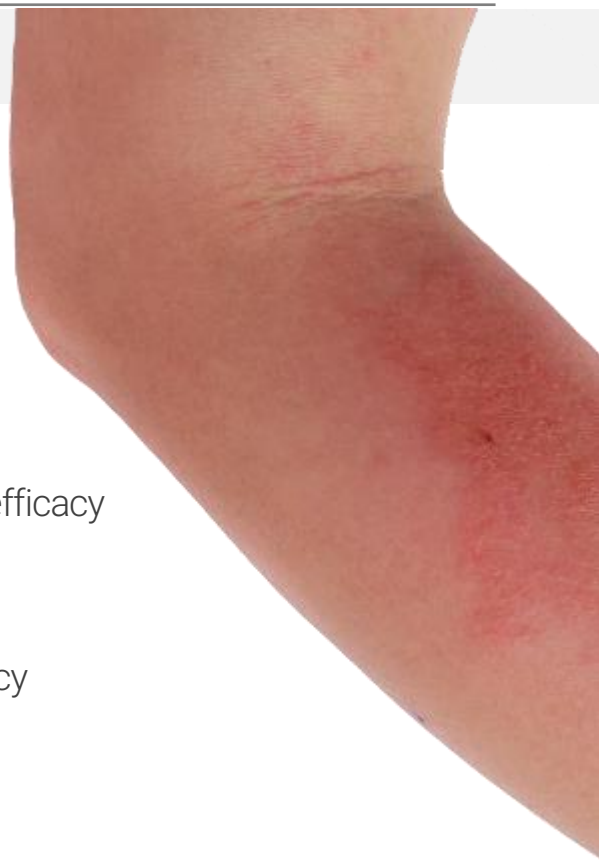
CONECT BIOPHARMA



CBP-201 : A next generation anti-interleukin-4-receptor alpha (IL-4Rα) antibody in development for type 2 inflammatory diseases

Atopic Dermatitis (AD)

Large Opportunity with High Unmet Need Despite Advent of Biologics



A chronic inflammatory disorder characterized by eczematous skin lesions, itch, localized pain, and sleep disturbances

Current treatment limitations

- Limited efficacy with topical corticosteroids and immunosuppressants
- Safety concerns with systemic corticosteroids
- Dupilumab is the only approved biologic agent
  - Sales of $6.2 billion in 2021[1] and expected to grow to ~$15 billion [2]
  - Unmet efficacy needs remain
  - Q2W administration regimen can be inconvenient for patients

Key opportunities for a new novel treatment

1. Improved efficacy and sustained efficacy
2. Faster onset of efficacy
3. Reduced adverse events
4. Reduced injection burden frequency with biologic agents

13%
AD prevalence in Chinese children aged 1-7 (Clinically diagnosed) [3]

26.1 M
People in the United States have AD [4]

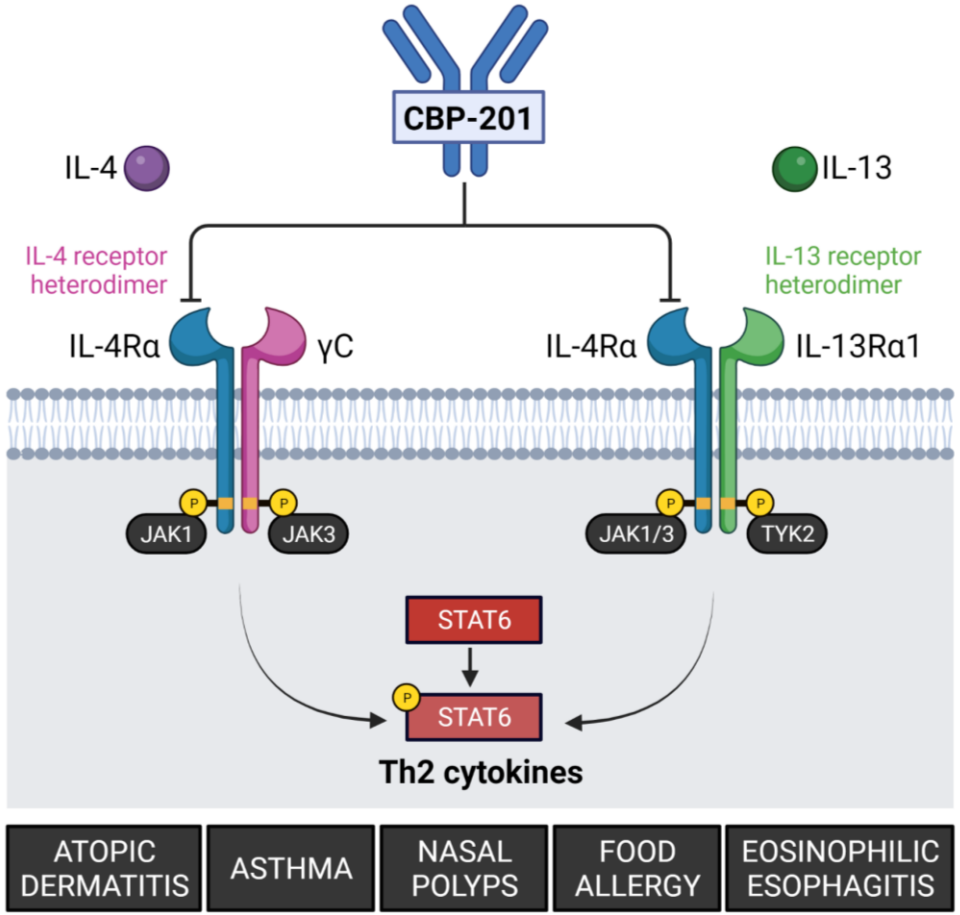
6.6 M
Adults have moderate-to-severe disease [4]

1. Regeneron Investor Presentation, February 2022 https://investor.regeneron.com/static-files/2312afdd-0a3e-47cd-a8ed-d0ad3d9a83ad
2. Gould, Carter, Barclays Equity Research Report, "4Q21 Post-Call Thoughts" on Regeneron, February 6, 2022
3. Guo, Y., et al. Prevalence of Atopic Dermatitis in Chinese Children aged 1–7 years. Scientific Reports | 6:29751 | DOI: 10.1038/srep29751
4. Atopic Dermatitis. National Eczema Association. https://nationaleczema.org/eczema/types-of-eczema/atopic-dermatitis/

CBP-201: A Next Generation IL-4Rα Blocker

Dual inhibition of IL-4 and IL-13 is a validated therapeutic strategy across many Th2-mediated diseases

- CBP-201 is a novel, human monoclonal IgG4 antibody directed against IL-4Rα, a common subunit for IL-4 and IL-13 receptors
- Blockade of IL-4 and IL-13 binding to IL-4Rα results in inhibition of both IL-4 and IL-13 signaling
- Potential for differentiation based on observations of
  1. CBP-201 engages with distinct epitopes and binds with higher affinity to the IL-4Rα target than dupilumab[1]
  2. CBP-201 inhibits IL-4/IL-13-dependent activation of the JAK-STAT pathway and cell proliferation in a concentration-dependent manner[1]
  3. Cytokine-mediated release of TARC, and inflammatory Th2 chemokine, is downregulated in the presence of CBP-201[1]
  4. CBP-201 detected longer in plasma than dupilumab[2]
- Potential for clinical results to show
  - Faster onset of action
  - Greater clinical response
  - Less frequent dosing (Q4W)



1. Yang et al., Society for Investigative Dermatology, Portland, 2022, poster LB945. Observations were made from our in-house preclinical experiments, including all comparisons to dupilumab
2. Not head-to-head trial results. Differences exist between trial designs and subject characteristics and caution should be exercised when comparing data across trials. Results are from CBP-201 Phase 1 study (AU001) and dupilumab Phase 1 study (Li, Z et al 2020):
   - A Randomized, Double-blind, Placebo-controlled, Single Ascending Dose Study to Evaluate the Safety, Tolerability, Pharmacokinetics and Pharmacodynamics of CBP-201 Administered to Healthy Adult Subjects (CBP-201AU001)
   - Li, Z, et al. Pharmacokinetics, Pharmacodynamics, Safety, and Tolerability of Dupilumab in Healthy Adult Subjects. Clinical Pharmacology in Drug Development 2020, 9(6) 742–755

CONNECT BIOPHARMA

Key Takeaways from CBP-201 Global Phase 2b AD Trial

Met Primary Endpoint & Key Secondary Endpoints; Planning Underway for Phase 3-ready asset

- Global clinical trial conducted on 226 adult patients with moderate-to-severe AD. CBP-201 met primary (EASI % change from baseline) and key secondary (IGA 0/1, EASI-50, -75, -90, and PP-NRS) endpoints at Week 16
- Both Q2W and Q4W 300mg doses showed significant improvements in skin clearance, disease severity, and itch compared to placebo in adult patients with moderate-to-severe AD1,2
- Overall safety results showed CBP-201 was generally well tolerated, with low rates of conjunctivitis, injection site reaction, and herpes virus infections
- Completed EoP2 interaction with FDA and received Scientific Advice from EMA to inform advancement of the Global Phase 3 AD program

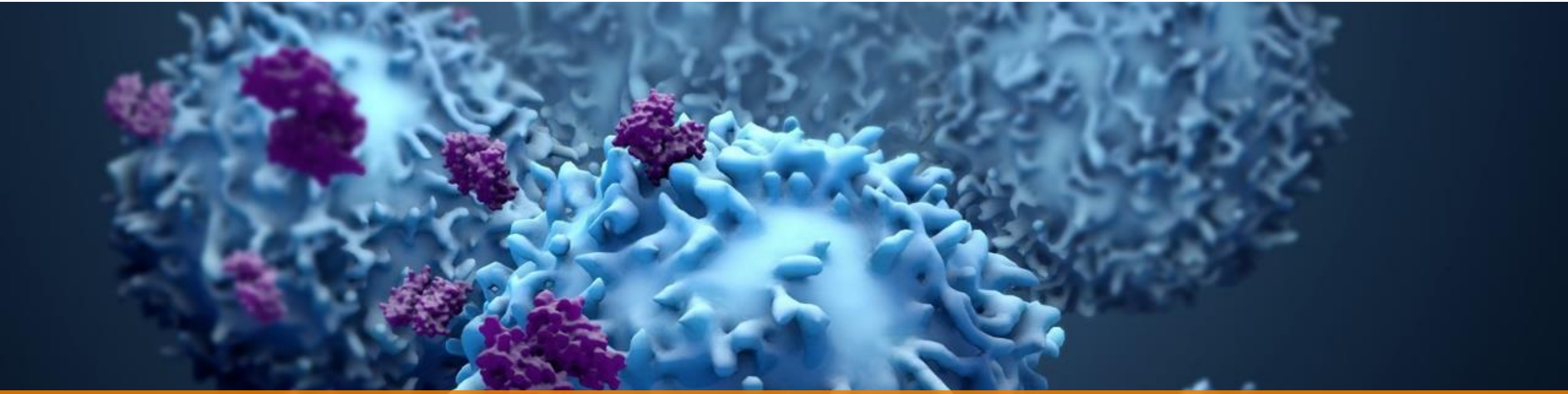
1. Strober, B et al. Maui Derm 2022 Abstract and Poster (and reflects additional data analyses conducted by the Company subsequently)
2. Silverberg, J et al. Maui Derm 2022 Abstract and Poster (and reflects additional data analyses conducted by the Company subsequently)

Key Takeaways from Stage 1 CBP-201 Pivotal AD Trial in China

- Successfully achieved all primary and key secondary endpoints at Week 16 for the primary analysis population* of this large China-specific pivotal trial in patients with moderate-to-severe AD with highly statistically significant results at Week 16
- In the first 16 weeks of treatment:
  - More than 8 out of 10 (83%) patients achieved 50% improvement (EASI-50)
  - More than 6 out of 10 (63%) patients achieved 75% improvement (EASI-75)
- Data were consistent with our global Phase 2b trial observations of a greater clinical response rate among patients with more active AD
- Overall safety results showed CBP-201 was generally well tolerated
  - Results remained consistent with targeting the IL-4Rα pathway
  - Most TEAEs were mild to moderate in severity and did not lead to study drug discontinuation
- Stage 2 maintenance period is ongoing and could potentially demonstrate sustained efficacy with continued dosing at every two weeks as well as at a more convenient every four-week dose
- Pre-NDA package submitted to CDE and expecting feedback in Q1’23 on NDA timeline in China

*Consists of 255 adult patients.
CDE, Center for Drug Evaluation.

CONECT BIOPHARMA

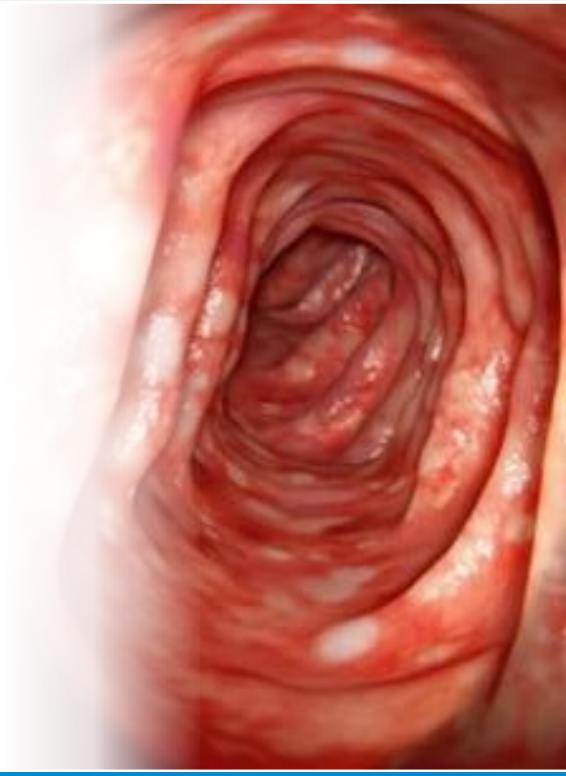


CBP-307: A next generation selective sphingosine 1-phosphate receptor 1 modulator (S1P) in development for Irritable Bowel Disease (IBD)

Ulcerative Colitis (UC)

Large Opportunity where High Unmet Need Remains Despite Treatment Advances

An autoimmune disease that causes inflammation and ulceration of the inner lining of the colon and rectum (the large bowel)



Current Treatment Limitations

- Efficacy
  - Less than half of patients achieve long-term remission, and many drugs lose the initial efficacy response [1]
  - Maximal clinical remission may require up to one year of treatment
- Safety concerns with many treatment options
- Biologics can have complicated administration regimens

Key Unmet Needs

- Improved efficacy
- Faster onset of efficacy
- Reduced adverse events
- Oral therapies

3 M

IBD patients in the US in 2015 [2]

6.8 M

IBD patients worldwide in 2017 [3]

Majority

of IBD patients in the US had UC [4]

1. Ulcerative Colitis. Nature Reviews. Disease Primers. 2020. 6:74. https://doi.org/10.1038/s41572-020-0205-x
2. Inflammatory Bowel Disease Prevalence (IBD) in the United States. Centre for Disease Control (CDC). August 2020. https://www.cdc.gov/ibd/data-statistics.htm
3. GBD 2017 Inflammatory Bowel Disease Collaborators. Lancet Gastroenterol Hepatol 2020; 5: 17–30. DOI: https://doi.org/10.1016/S2468-1253(19)30333-4
4. Betteridge, J. et al. Inflamm Bowel Dis 2013;19:1421–1427. https://academic.oup.com/ibdjournal/article/19/7/1421/4604306

CONNECT BIOPHARMA

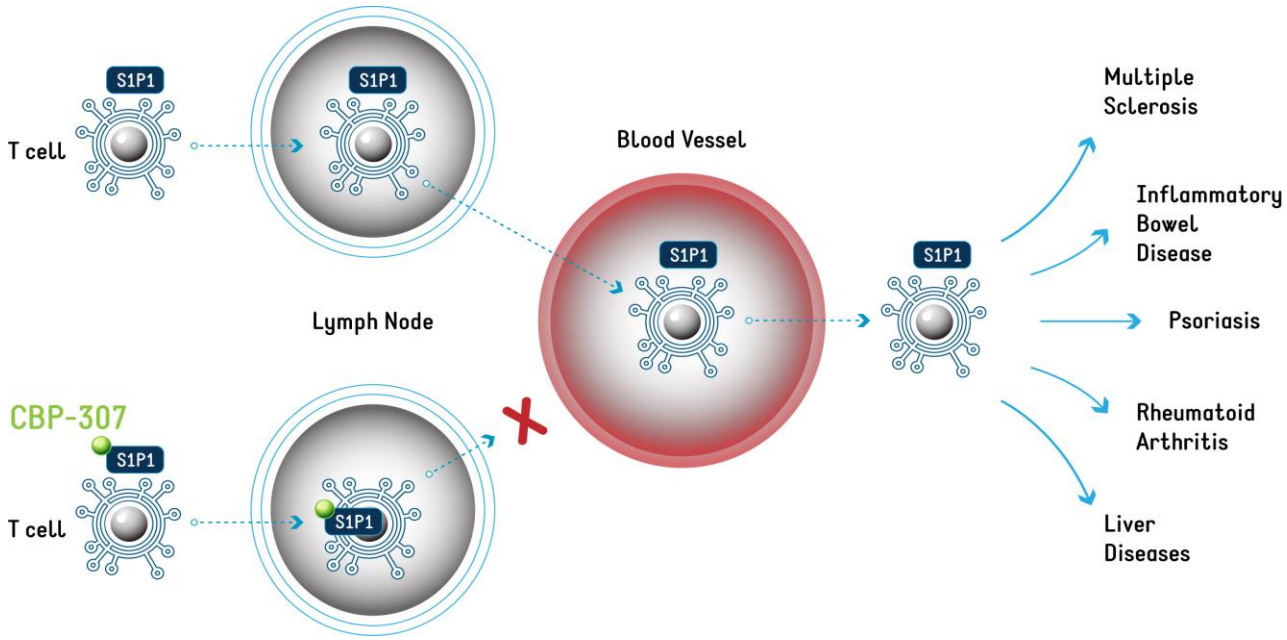
CBP-307: A Next Generation S1P Modulator

In clinical development to treat patients with IBD

Mechanism of Action – S1P Modulator – A validated target

- **Blocking T Cell Egress from Lymph Nodes Reduces Inflammation Implicated in Many T cell-mediated diseases** [1]

- S1P mediates T cell movement from lymph nodes into circulation, and hence migration to tissues to release inflammatory mediators
- Internalizes S1P receptors, trapping T cells inside lymph nodes
- Has molecular design features that offer potential for differentiation
  - High Potency & Selectivity
    - Designed to be the most potent modulator of S1P1
    - No notable activity observed for S1P3, a receptor subtype associated with known safety concerns
    - Substantially lower potency for S1P4 and S1P5 than S1P1 observed



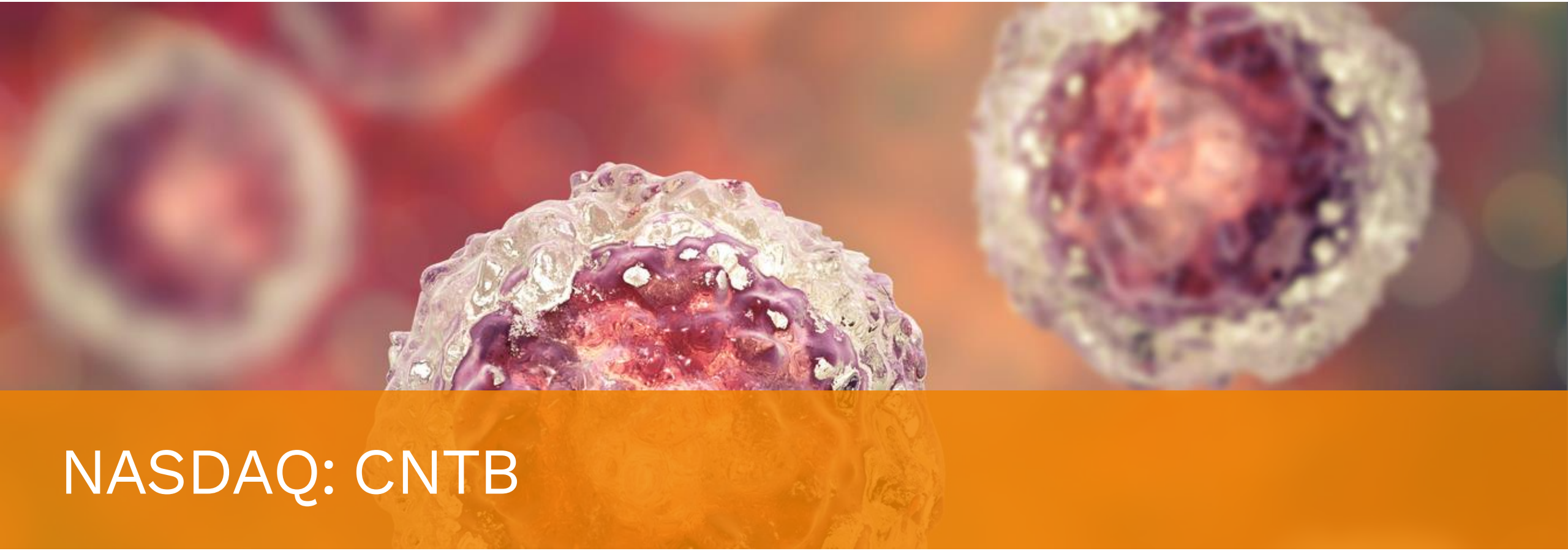
S1P1 Sphingosine 1-phosphate-receptor 1

1. Krause, A. et al. Modeling clinical efficacy of the S1P receptor modulator ponesimod in Psoriasis. Journal of Dermatological Science 89 (2018) 136–145

Key Takeaways
CBP-307 Phase 2 UC Trial 12-Week Induction Period

Patients dosed at 0.2 mg once daily, orally (PO QD)

- Data showed decreased disease severity based on adapted Mayo Score after 12 weeks of treatment, although the change did not reach statistical significance
- Support for potential as a Phase 3-ready asset include:
  - Achieved statistical significance on Clinical Remission, which was an FDA-recommended primary endpoint and was used for approval of a previously approved drug to treat UC
  - Achieved several other key secondary endpoints
  - Confirmed mechanism of action with clear dose-dependent and rapid pharmacodynamic changes observed
  - Overall safety results showed drug to be generally well tolerated
- Next steps include securing a partnership to advance into future trials for UC and Crohn's disease (CD) in order to capitalize on potential to be a competitive asset and welcome addition to the gastroenterologist's treatment armamentarium



NASDAQ: CNTB

Thank you!