
**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**
Washington, D.C. 20549

FORM 6-K

**REPORT OF FOREIGN PRIVATE ISSUER
PURSUANT TO RULE 13a-16 OR 15d-16
UNDER THE SECURITIES EXCHANGE ACT OF 1934**

For the month of June 2021

Commission File Number: 001-40212

Connect Biopharma Holdings Limited

(Translation of registrant's name into English)

Science and Technology Park
East R&D Building, 3rd Floor
6 Beijing West Road, Taicang
Jiangsu Province, China 215400
(Address of principal executive office)

Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F.

Form 20-F Form 40-F

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1):

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7):

On May 25, 2021, Connect Biopharma Holdings Limited (the “Company”) issued the press release attached hereto as Exhibit 99.1, which is incorporated herein by reference.

On June 2, 2021, spokespersons of the Company presented the information in the presentation slides attached hereto as Exhibit 99.2 in a previously announced webcast. The Company posted the updated corporate presentation to the Company’s website, www.connectbiopharm.com. The Company plans to use its website to disseminate future updates to its corporate presentation and does not intend to furnish a Form 6-K alerting investors each time the presentation is updated.

The furnishing of the attached presentation is not an admission as to the materiality of any information therein. The information contained in the presentation is summary information that is intended to be considered in the context of more complete information included in the Company’s filings with the Securities and Exchange Commission (the “SEC”) and other public announcements that the Company has made and may make from time to time. The Company undertakes no duty or obligation to update or revise the information contained in this report, although it may do so from time to time as its management believes is appropriate. Any such updating may be made through the filing or furnishing of other reports or documents with the SEC or through other public disclosures.

Exhibit Index

<u>Exhibit No.</u>	<u>Description</u>
Exhibit 99.1	Press release dated May 25, 2021: Connect Biopharma Announces First Subject Dosed in Phase I Trial Evaluating Safety, Tolerability and Pharmacokinetic Profile of CBP-174 in Healthy Adult Subjects
Exhibit 99.2	Company Presentation

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, thereunto duly authorized.

Dated: June 3, 2021

CONNECT BIOPHARMA HOLDINGS LIMITED

By /s/ Eric Hall
Name: Eric Hall
Title: Interim Chief Financial Officer



Connect Biopharma Announces First Subject Dosed in Phase I Trial Evaluating Safety, Tolerability and Pharmacokinetic Profile of CBP-174 in Healthy Adult Subjects

Development program exploring the potential of CBP-174 in the treatment of chronic inflammatory pruritus

SAN DIEGO and TAICANG, SUZHOU, China, May 25, 2021 (GLOBE NEWSWIRE) — Connect Biopharma Holdings Limited (Nasdaq: CNTB) (“Connect Biopharma” or the “Company”), a global clinical-stage biopharmaceutical company dedicated to improving the lives of patients with chronic inflammatory diseases through the development of therapies derived from T cell-driven research, today announced that the first subject has been dosed in a Phase I trial evaluating CBP-174 in healthy adult subjects.

This randomized, double-blind, placebo-controlled, single ascending dose trial in healthy subjects, aims to evaluate the safety, tolerability and pharmacokinetics of CBP-174 in different dose levels given orally, compared to placebo. Following the single dose, each subject will be followed for up to seven days (NCT04811469).

“The effective management of pruritus associated with atopic dermatitis and other inflammatory skin conditions remains a significant unmet medical need, and the advancement of this novel oral agent into Phase I trial is an important step forward in the development of potential therapies,” said Zheng Wei, PhD, Co-founder and CEO of Connect Biopharma. “We believe that CBP-174’s novel mechanism of action and rapid onset of action has the potential to complement the anti-pruritic effect of disease-modifying agents already approved for inflammatory skin diseases.”

About Chronic Inflammatory Pruritus

Chronic inflammatory pruritus is an unpleasant and often persistent itch that can last more than six weeks in duration and is often caused by inflamed skin lesions associated with diseases such as atopic dermatitis (AD). Due to the significant impact that pruritus has on quality of life, its severity is often measured by patients based on intensity of pruritus rather than skin lesions themselves. Common antihistamine drugs primarily target the histamine 1 receptor (H1R) and lead to alleviation of itch in part by blocking H1R on peripheral nerves. However, many types of chronic itch cannot be relieved by current antihistamine treatments that target H1R. Despite currently available treatments for AD, an estimated 40% to 50% of AD patients have inadequate relief of their pruritus and are in need of new, efficacious pruritus therapies.

About CBP-174

CBP-174 is a highly potent, orally active, peripherally restricted antagonist of histamine receptor 3 (H3R), designed not to penetrate the blood brain barrier. In preclinical studies, CBP-174 was both well-tolerated and demonstrated significant reductions in scratching bouts within the first 30 minutes of oral or topical dosing, which could potentially translate to rapid relief of itch in the clinic.

About Connect Biopharma Holdings Limited

Connect Biopharma Holdings Limited is a global clinical-stage biopharmaceutical company dedicated to improving the lives of patients living with chronic inflammatory diseases through the development of therapies derived from our T cell-driven research.

Our lead product candidate, CBP-201, is an antibody designed to target interleukin-4 receptor alpha (IL-4R α) and is currently being evaluated in clinical trials for the treatment of atopic dermatitis (AD) and asthma and in development for chronic rhinosinusitis with nasal polyps (CRSwNP). Our second lead product candidate is CBP-307, a modulator of a T cell receptor known as sphingosine 1-phosphate receptor 1 (S1P1) that is in development for the treatment of ulcerative colitis (UC) and Crohn's disease (CD). Furthermore, we are developing CBP-174, a peripherally restricted antagonist of histamine receptor 3, for the treatment of pruritus associated with skin inflammation.

With headquarters in China, additional operations in the United States and Australia, and clinical development activities in those geographies as well as Europe, Connect Biopharma is building a rich global pipeline of internally designed, wholly owned small molecules and antibodies targeting several aspects of T cell biology. For additional information about Connect Biopharma, please visit our website at www.connectbiopharm.com.

FORWARD-LOOKING STATEMENTS

Connect Biopharma cautions that statements included in this press release that are not a description of historical facts are forward-looking statements. Words such as "may," "could," "will," "would," "should," "expect," "plan," "anticipate," "believe," "estimate," "intend," "predict," "seek," "contemplate," "potential," "continue" or "project" or the negative of these terms or other comparable terminology are intended to identify forward-looking statements. These statements include the Company's statements regarding the potential of CBP-174 to address the unmet needs of patients with chronic inflammatory pruritus. The inclusion of forward-looking statements should not be regarded as a representation by Connect Biopharma that any of its plans will be achieved. Actual results may differ from those set forth in this release due to the risks and uncertainties inherent in the Connect Biopharma business and other risks described in the Company's filings with the Securities and Exchange Commission ("SEC"). Investors are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date hereof, and Connect Biopharma undertakes no obligation to revise or update this news release to reflect events or circumstances after the date hereof. Further information regarding these and other risks is included in Connect Biopharma's filings with the SEC which are available from the SEC's website (www.sec.gov) and on Connect Biopharma's website (www.connectbiopharm.com) under the heading "Investors." All forward-looking statements are qualified in their entirety by this cautionary statement. This caution is made under the safe harbor provisions of Section 21E of the Private Securities Litigation Reform Act of 1995.

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**DEVELOPING
NEXT-GENERATION
THERAPEUTICS FOR T CELL
DRIVEN INFLAMMATORY
DISEASES**

**Corporate Presentation - June 2021
NASDAQ: CNTB**



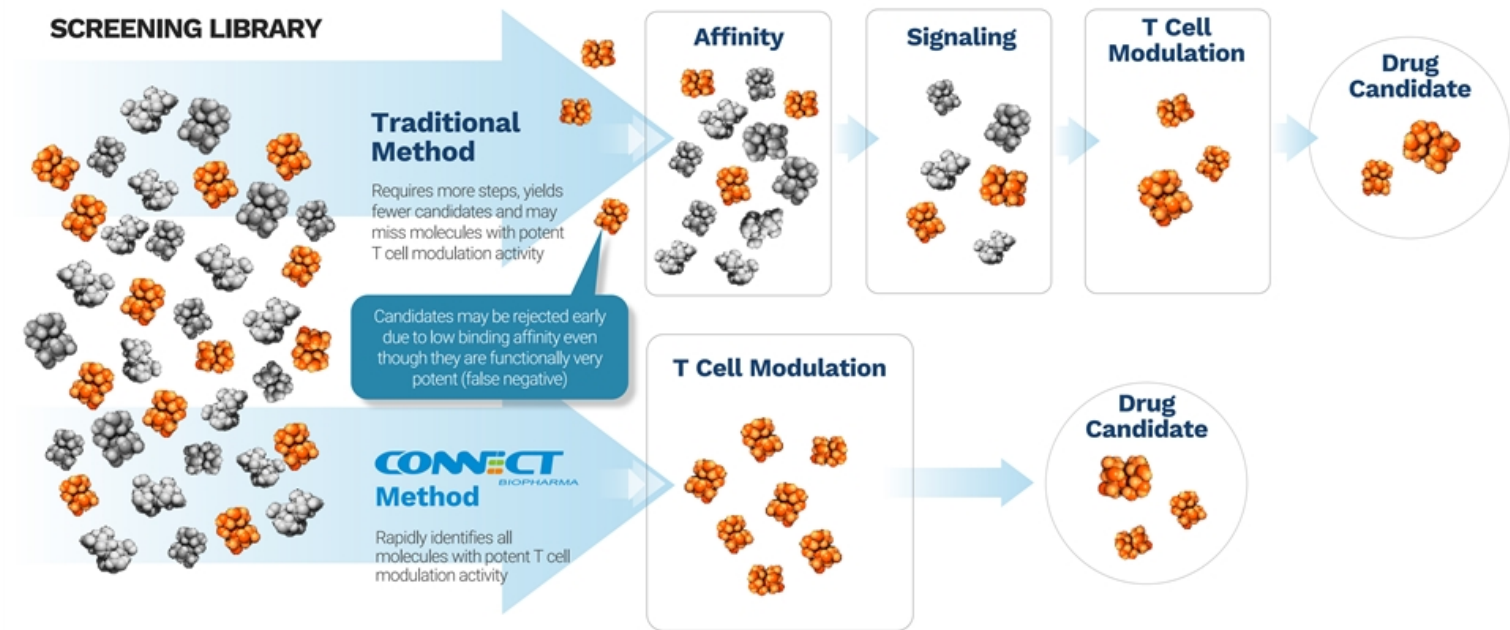
- Certain information contained in this presentation relates to, or is based on, studies, publications, surveys and other data obtained from third-party sources and Connect's own internal estimates and research. While we believe these third-party sources to be reliable as of the date of this presentation, 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, product approvals, research and development plans and costs, timing and likelihood of success, objectives of management for future operations and future results of anticipated product development efforts, 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; 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; 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.
- 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.

Connect is Well-Positioned for Value Creation

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Large Opportunity	Targeting inflammatory diseases (Dermatology, Gastroenterology, Respiratory) with high unmet need Ambition to develop molecules with " First-in-class " or " Best-in-class " potential
Clinical Stage with Deep Pipeline	CBP-201 :- Interleukin-4-receptor alpha (IL4R α) blocker CBP-307 :- Sphingosine 1-phosphate-1 (S1P1) CBP-174 :- Peripherally acting Histamine-3 Receptor (H3R) antagonist
Prolific Discovery Engine	Validated, T cell-modulating discovery designed to enhance and speed up the identification of potentially highly differentiated immune modulators
Global Outlook	Seasoned industry leaders with significant experience in immunology drug discovery and development; building an internal and external team to drive Greater China and USA development
Strong Investor Support	~\$440 million raised to date from top-tier investors, with IPO in March 2021 raising ~\$220M (NASDAQ: CNTB) and a Series C (\$135M) completed in December 2020
Multiple catalysts	Anticipated 3x clinical trial data read outs by end Q1 2022, and a total 6x clinical trial data read outs by end Q1 2023, across 4x diseases

Connect's discovery approach is designed to offer significant speed and mechanistic advantages ...



A pipeline of potentially highly differentiated therapies

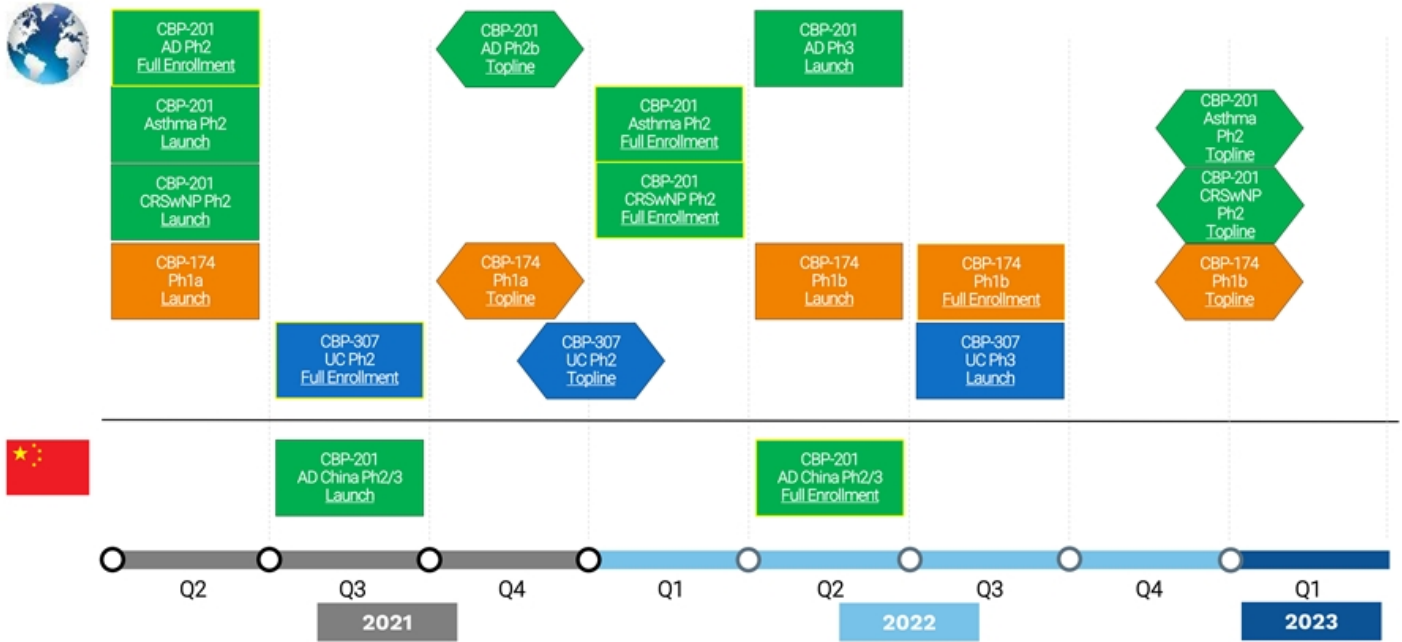
Connect Biopharma has Global Development & Commercialization Rights to all Product Candidates

	INDICATION	PRECLINICAL	PHASE 1	PHASE 2	PHASE 3
CBP-201 Antibody targeting IL-4Rα cytokine receptor (Th2 cell modulator)	Atopic Dermatitis (AD)	▶			
	Asthma	▶			
	Chronic Rhinosinusitis with Nasal Polyps (CRSwNP) *	▶			
CBP-307 Small molecule targeting S1P1 (Th1 cell modulator)	Ulcerative Colitis (UC)	▶			
	Crohn's Disease (CD) *	▶			
CBP-174 Peripherally restricted H3 receptor antagonist	Pruritus associated with AD	▶			
CBP-233 Antibody targeting IL-33	Allergic Inflammation	▶			

* Advancing into Phase 2. We plan to initiate a Phase 2 Clinical Trial in CRSwNP, based on PK results from our completed Phase 1a study in healthy volunteers
 * Phase 2 Study ended early due to COVID-19-related enrolment challenges. New trial planned

Multiple Clinical Trial Catalysts Anticipated In Next 24 Months

(Subject to ongoing Covid-19 restrictions)



* A CBP-307 CD trial is currently planned

Funded through end of 2022

RACAPITAL

HBM Healthcare Investments

凯风创投
COWIN VENTURE

尚城投资
ADVAN · TECH

北极光创投
northern light
VENTURE CAPITAL

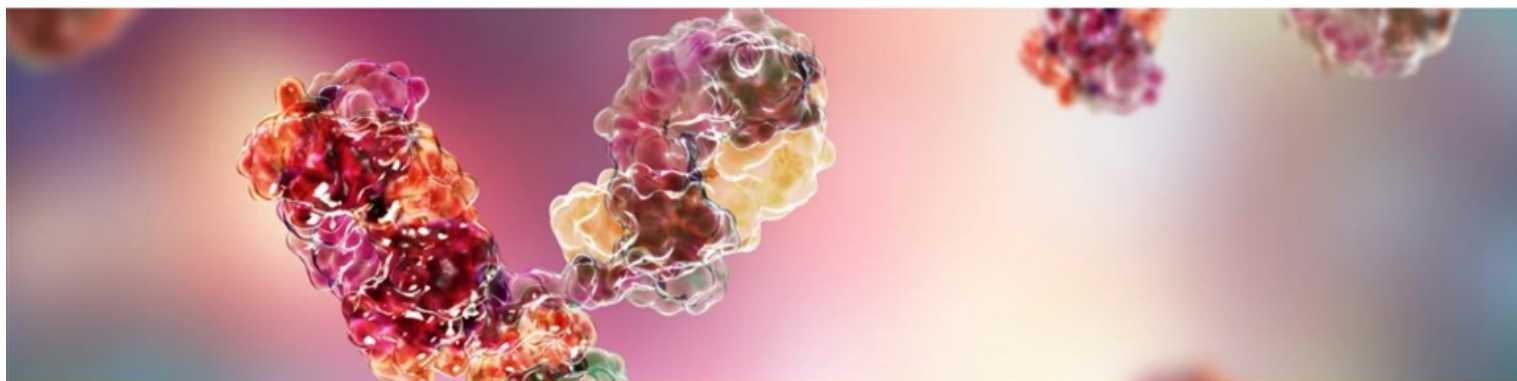
BOXER
CAPITAL
TAVISTOCK GROUP

BlackRock®

礼来亚洲基金
Lilly Asia Ventures

启明创投
QIMING VENTURE PARTNERS

- \$220 million raised pre-IPO
 - Completed \$135 million Series C led by RA Capital in December 2020
- ~\$220 million raised at IPO, closed March 2021 (**NASDAQ: CNTB**)
 - Underwriters' option to purchase exercised in full
 - Jefferies LLC, SVB Leerink LLC, Piper Sandler & Co. and China International Capital Corporation Hong Kong Securities Limited acted as joint book-running managers for the offering
 - Oversubscribed with strong institutional support from Fidelity, Wellington, Cormorant, Janus, and over 75 other institutional investors



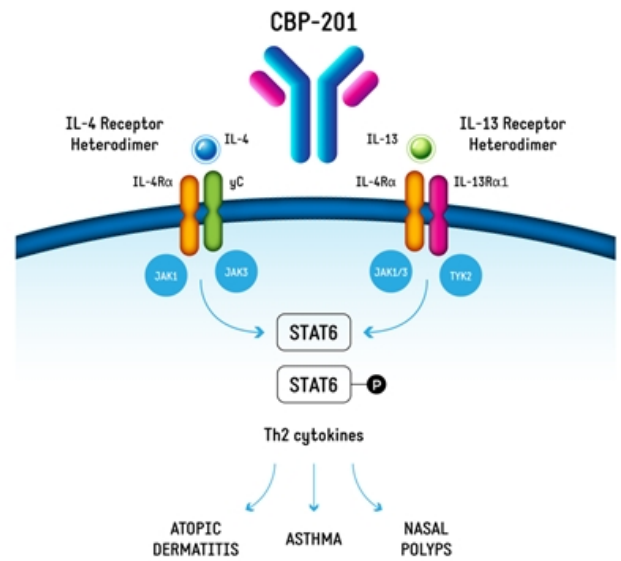
CBP-201: A next generation anti-interleukin-4-receptor alpha (IL-4R α) antibody in development for type 2 inflammatory diseases

CBP-201: A Next Generation IL-4R α Blocker

Mechanism of Action - Dual Inhibition of IL-4 and IL-13 – A validated target

IL-4/IL-13 Pathway Dual Inhibition is Effective Across Many Th2-mediated diseases

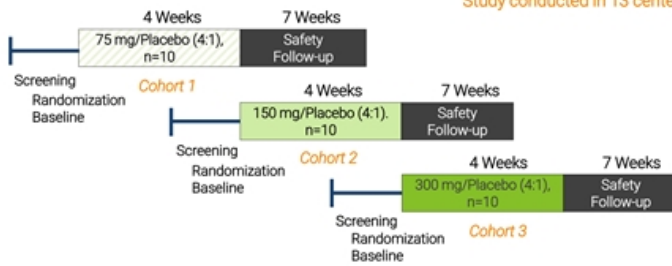
- CBP-201 is a novel, human monoclonal IgG4 antibody directed against IL-4R α , a common subunit for IL-4 and IL-13 receptors
- Blockade of IL-4 and IL-13 binding to IL4R α results in inhibition of both IL-4 and IL-13 signaling
- Potential for differentiation based on observations of
 1. Different IL-4R α binding epitope to dupilumab
 - Higher binding affinity and potency for IL-4R α
 2. CBP-201 detected longer in plasma than dupilumab
 - Slower receptor mediated clearance
- Potential for clinical results to show
 - Faster onset of action
 - Greater clinical response
 - Less frequent dosing (Q4W)



AE Profile Consistent with Data Reported in Studies of Existing IL-4R α Blockers

A Randomized, Double-Blind, Placebo-Controlled Multi-Centered, Dose-Escalation Trial of Safety, Pharmacokinetics and Pharmacodynamics of CBP-201 in Adult Subjects With Moderate-to-Severe Atopic Dermatitis

Study conducted in 13 centers in Australia and New Zealand



- No serious adverse events (SAEs) and no injection site reaction or conjunctivitis / keratitis AEs
- No dose proportional effect on TEAEs either by frequency or severity
- Most TEAEs were mild in severity, with the majority deemed unrelated to CBP-201
- A single TEAE (atopic dermatitis flare) leading to study treatment discontinuation in one subject in each of the CBP-201 75mg and placebo groups

Primary Endpoint: (At week 11)

- Safety and tolerability

Exploratory Efficacy Endpoints: (At week 4)

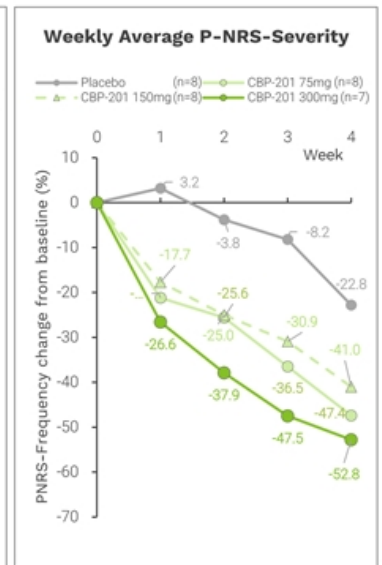
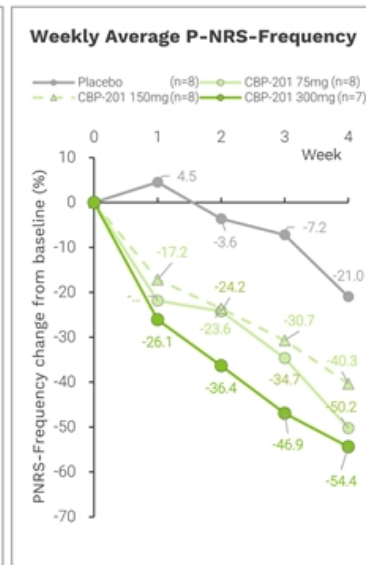
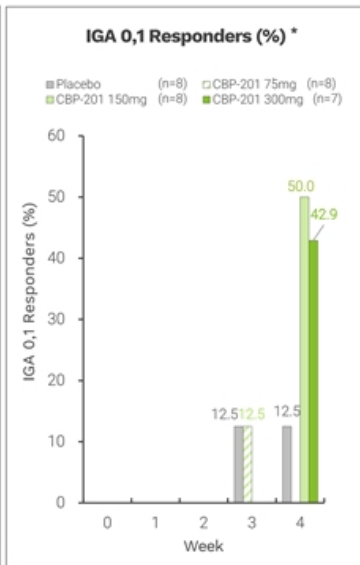
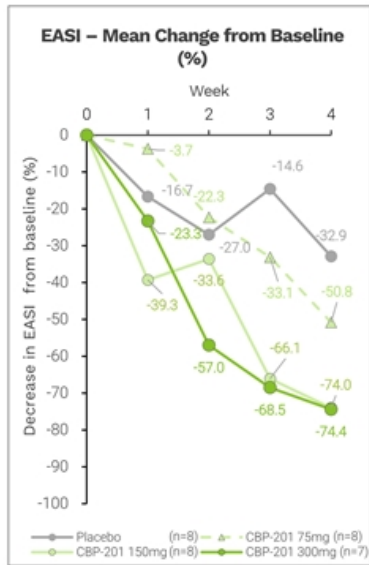
- Percent change in EASI from Baseline
- Proportion of patients achieving IGA of 0 or 1 (clear or almost clear) (IGA 0,1)
- Change in total affected BSA from baseline
- Change in P-NRS from baseline (pruritus intensity and frequency)

BSA: Body Surface Area
IGA: Investigator's Global Assessment
DLQI: Dermatology Life Quality Index

EASI: Eczema Area and Severity Index
P-NRS: Pruritus Numeric Rating Scale

• A randomized, double-blind, placebo-controlled, multiple ascending dose study of the safety, pharmacokinetics and preliminary efficacy of CBP-201 in adult patients with moderate to severe atopic dermatitis (CBP-201AU002).

Improvements in Key Physician & Patient Assessed Endpoints

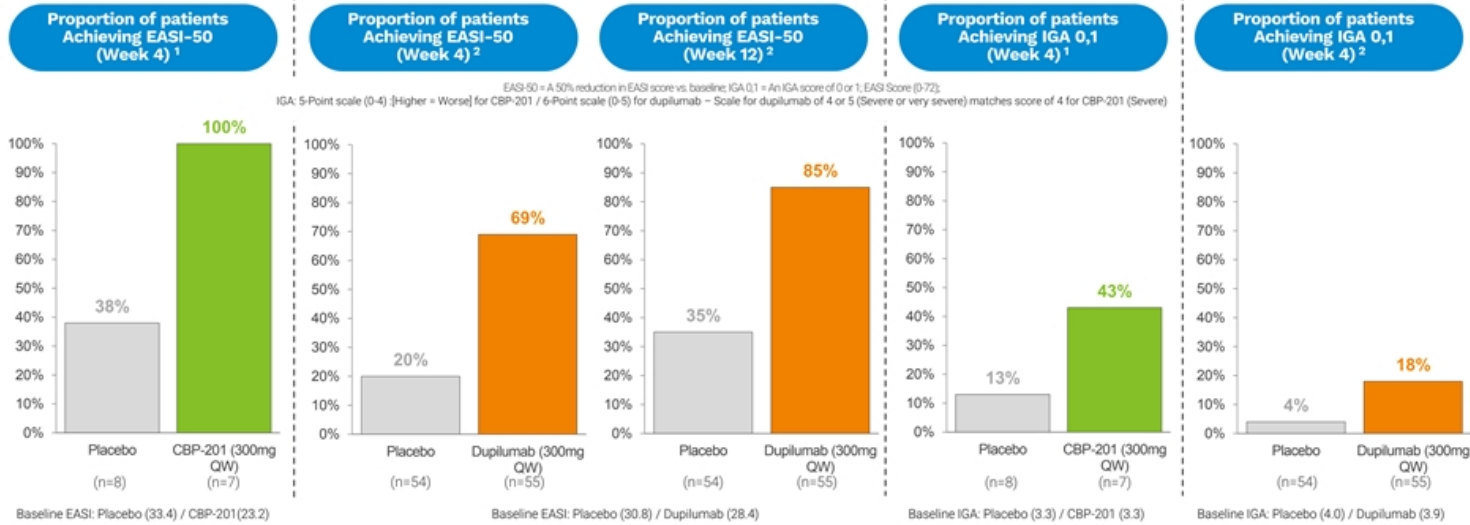


IGA 0,1 = An IGA score of 0 or 1 / P-NRS = Pruritus Numerical Rating Scale / EASI = Eczema Area and Severity Index

* A randomized, double-blind, placebo-controlled, multiple ascending dose study of the safety, pharmacokinetics and preliminary efficacy of CBP-201 in adult patients with moderate to severe atopic dermatitis (CBP-201AU002).

Week 4 EASI-50 and IGA 0,1 (% Responders) in AD patients in Early Phase Clinical Trials

For Illustrative Purposes Only:- Not a head-to-head comparison.
Differences exist between trial designs and subject characteristics and caution should be exercised when comparing data across trials



1. A randomized, double-blind, placebo-controlled, multiple ascending dose study of the safety, pharmacokinetics and preliminary efficacy of CBP-201 in adult patients with moderate to severe atopic dermatitis (CBP-201AU002)
2. Beck LA, Thaci T, et al. N Engl J Med 2014; 371:130-139

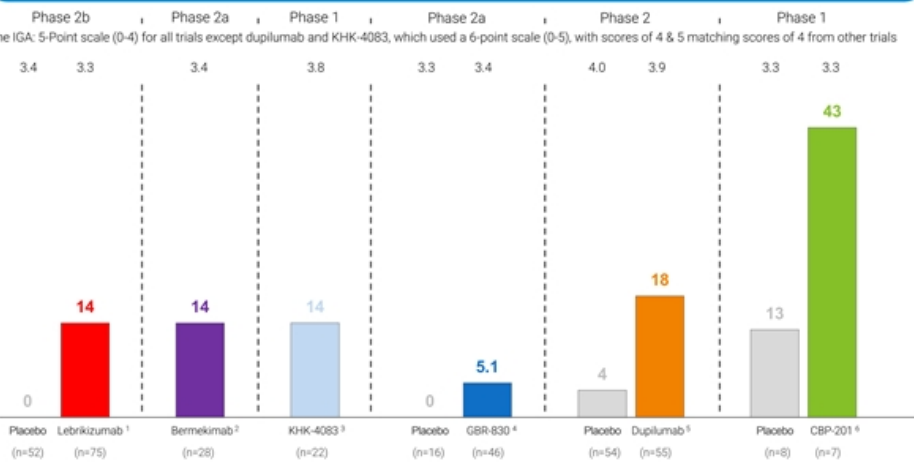


Reported IGA 0,1 % Responders Data of Select Biologics in Development with AD patients

For illustrative Purposes Only:- Not a head-to-head comparison.
Differences exist between trial designs and subject characteristics and caution should be exercised when comparing data across trials

Proportion (%) of patients Achieving IGA 0,1 (Week 4)

Baseline IGA: 5-Point scale (0-4) for all trials except dupilumab and KHK-4083, which used a 6-point scale (0-5), with scores of 4 & 5 matching scores of 4 from other trials



Dosing Regimens:

- Lebrikizumab (250mg Q2W)
- Bermekimab (400mg QW)
- KHK-4083 (10mg/kg IV, Q2W)
- GBR-830 (10mg/kg IV, Q4W)
- Dupilumab (300mg QW)
- CBP-201 (300mg QW)

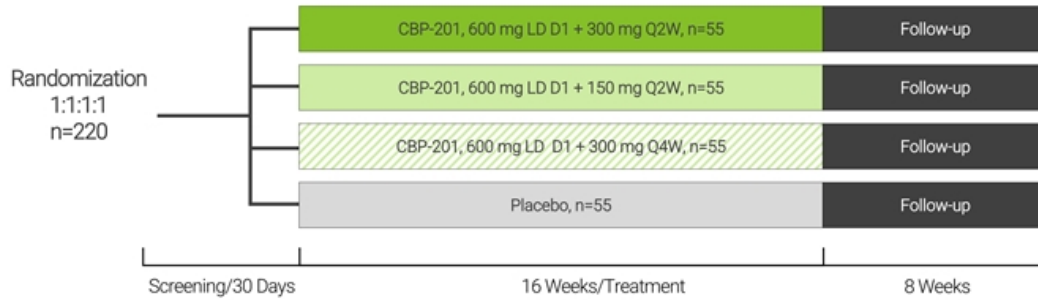
- Lebrikizumab: An IL-13 antibody developed by Roche and Dermira, acquired by Eli Lilly in 2020
- Bermekimab: an IL-1a antibody developed by XBiotech, acquired by Janssen at end of 2019
- KHK-4083: Fully humanized anti-OX40 monoclonal antibody developed by Kyowa Kirin
- GBR-830: Humanized anti-OX40 monoclonal antibody developed by Glenmark / Ichnos

1. Guttmann-Yassky, E. et al. JAMA Dermatol. doi:10.1001/jamadermatol.2020.0079
 2. Simpson E. AAD, 2019. Oral Presentation
 3. Nagakawa, H. et al., M. A. Safety, tolerability and efficacy of repeated intravenous infusions of KHK4083, a fully human anti-OX40 monoclonal antibody, in Japanese patients with moderate to severe atopic dermatitis. Journal of Dermatological Science 99 (2020) 82–89

4. Guttmann-Yassky, E. et al. GBR 830, an anti-OX40, improves skin gene signatures and clinical scores in patients with atopic dermatitis. J Allergy Clin Immunol 2019;144:482-93. <https://doi.org/10.1016/j.jaci.2018.11.053>
 5. Beck LA, Thaci T, et al. N Engl J Med 2014; 371:130-139

Trial designed for dose-ranging, maximal efficacy and possible longer dosing interval (NCT04444752)

A Randomized, Double-Blind, Placebo-Controlled Multi-Centered Trial of the Efficacy, Safety, Pharmacokinetics and Pharmacodynamics of CBP-201 in Adult Subjects With Moderate-to-Severe Atopic Dermatitis



Key Inclusion Criteria:

- Adults with moderate-to-severe AD inadequately controlled with topical corticosteroids and calcineurin inhibitors
- Having atopic dermatitis for ≥ 1 y
- EASI ≥ 16
- IGA score ≥ 3 (5-point scale [0-4])
- $\geq 10\%$ BSA involvement

Primary Endpoints

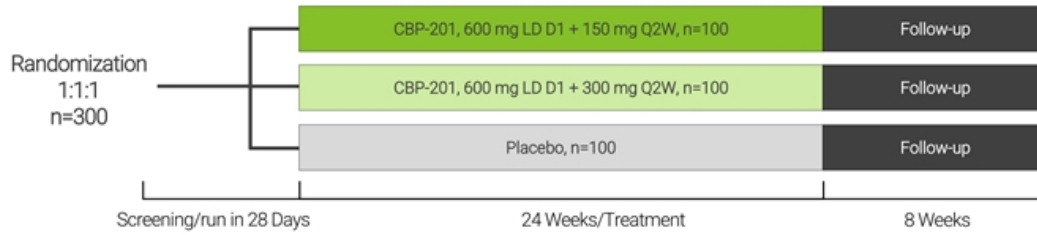
- Percent change in EASI from Baseline to W16

Exploratory Efficacy Endpoints:

- Proportion of patients achieving IGA 0,1 at Week 16
- Proportion of patients achieving EASI-75 at Week 16
- Proportion of patients achieving EASI-90 at Week 16
- Change in P-NRS from Baseline to Week 16

Trial designed for dose-ranging (NCT04773678)

A Multi-center, Randomized, Double-blind, Parallel Group, Placebo-controlled, Efficacy and Safety Study of CBP-201 in Patients With Moderate to Severe Persistent Asthma With Type 2 Inflammation



Key Inclusion Criteria

- Moderate to severe uncontrolled asthma
 - Existing treatment with medium to high dose in combination with a second reliever/controller (eg, LABA, LTRA, LAMA, or theophylline) for at least 3 months with a stable dose ≥ 1 month prior to the screening visit
 - Pre-bronchodilator FEV1 40 to 85% of predicted normal at Visits 1 and 2, prior to randomization
 - Screening blood eosinophil count ≥ 150 cells/ μ L
 - ACQ-6 score ≥ 1.5 at Visits 1 and 2, prior to randomization
- At least 1 documented asthma exacerbations in the 12 months prior to the date informed consent that required use of a systemic corticosteroid

Primary Endpoints

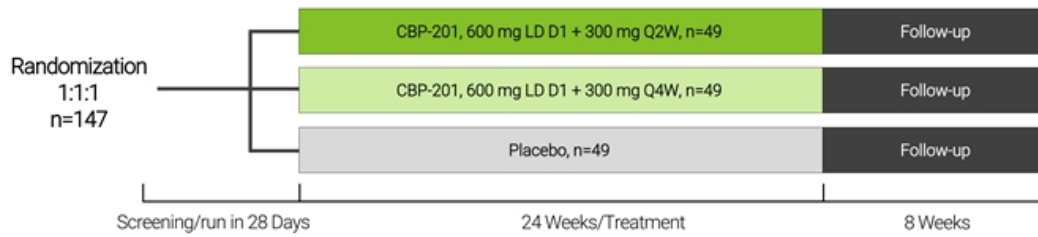
- Change from Baseline in FEV1 at Week 12

Secondary Efficacy Endpoints

- Change from Baseline in lung function at other timepoints
- Exacerbation of asthma
- PROs (ACQ-6, symptom diary)
- PD markers (FENO, eosinophils, ECP, periostin, TARC)
- Rescue medication use

Trial designed for dose-ranging, maximal efficacy and possible longer dosing interval (NCT04783389)

A multi-center, randomized, double-blind, placebo-controlled study to evaluate the effect of CBP-201 on a background of mometasone furoate nasal spray (MFNS) in reducing endoscopic nasal polyp score (NPS) and nasal congestion/obstruction score (NCS) severity in eligible patients with CRSwNP whose disease remains inadequately controlled despite daily treatment with intranasal corticosteroid (INCS) therapy in comparison to placebo



Key Inclusion Criteria

- Chronic rhinosinusitis patients with large bilateral nasal polyps that remain uncontrolled despite daily treatment with intranasal CS

Other Population Details

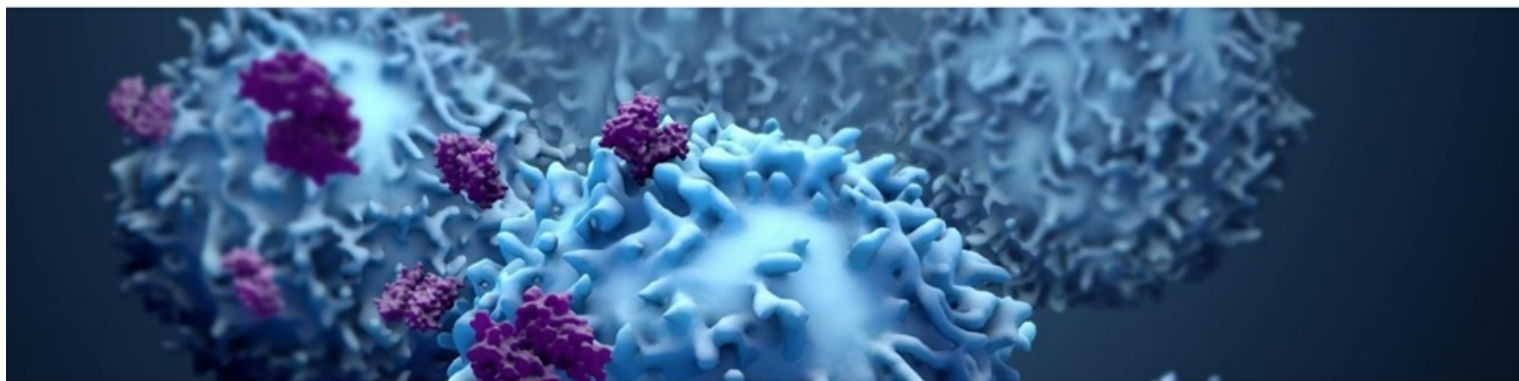
- 50% Co-morbid asthma
- Allowing patients who have had prior surgery and those who have not had prior surgery for NP

Co-Primary Efficacy Endpoints

- Change from baseline at week 24 in endoscopic Nasal Polyp Score
- Change from baseline at week 24 in Nasal Congestion Score

Secondary Efficacy Endpoints

- PRO (SNOT-22, Total Nasal Sinus Score, Patient Symptom Diary, Smell Testing/UPSIT, Visual Analog Scale for Rhinosinusitis)
- CT Assessments (Lund-MacKay score and sinus volume measures)
- Respiratory Physiology (Nasal Peak Inspiratory Flow)
- Rescue Tx use and time to Rescue Tx

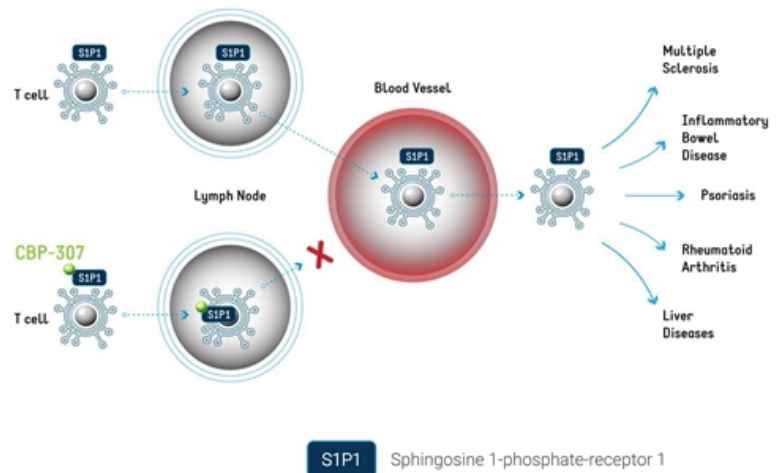


CBP-307: A next generation selective sphingosine 1-phosphate receptor 1 modulator (S1P1) in development for IBD

Mechanism of Action – S1P1 Modulator – A validated target

- **Blocking T Cell Egress from Lymph Nodes Reduces Inflammation Implicated in Many T cell-mediated diseases¹**

- S1P1 mediates T cell movement from lymph nodes into circulation, and hence migration to tissues to release inflammatory mediators
- CBP-307 internalizes S1P1, trapping T cells inside lymph nodes
- Potential for differentiation based on observations of
 - High Potency & Selectivity
 - Designed to be the most potent modulator of S1P1 drug class, if approved
 - No significant activity for S1P3, a receptor subtype associated with known safety concerns
 - Significantly lower potency for S1P4 and S1P5, than S1P1
 - Remain able to select phase 3 dose in both UC & CD for optimal effects
- Potential for clinical results to show
 - Once daily dosing, with fast onset and offset of action
 - Greater clinical response
 - Safety profile consistent with second generation S1P1



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

Highly selective for S1P1, with up to 80,000-fold selectivity for S1P1 vs. S1P3

High selectivity for S1P1

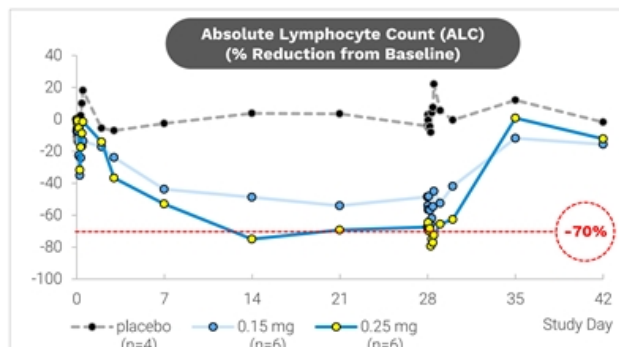
Name	EC ₅₀ (nM)				
	S1P1	S1P2	S1P3	S1P4	S1P5
CBP-307 ¹	0.09 ¹	>10,000 ²	7,900 ²	19 ²	3.97 ²
Ozanimod ³ (CC-1122273)	2.99	>10,000	>10,000	>10,000	29.32
Etrasimod (APD334) ⁴	6.10	>10,000	>10,000	147	24.4

1. cAMP Assay
2. β -Arrestin Assay
3. NDA 2-9-899 (Ozanimod, RPC1063) Non-Clinical Review - Table 2, Center for Drug Evaluation and Research, [209899Orig1s000PharmR.pdf](https://www.accessdata.fda.gov/drugsatfda_docs/nda/2020/209899Orig1s000PharmR.pdf) (fda.gov/https://www.accessdata.fda.gov/drugsatfda_docs/nda/2020/209899Orig1s000PharmR.pdf)
4. Buzard, D.J., Kim, S.H. et al. Discovery of APD334, Design of a Clinical Stage Functional Antagonist of the Sphingosine-1-phosphate-1 Receptor. ACS Medicinal Chemistry Letters, 2014, 5(12); 1313-1317 - β -Arrestin Assay

Supports QD Dosing, Rapid Onset of Action, Strong PD effect and Rapid Offset on Drug Discontinuation

- Oral, 25-hour half-life supports QD dosing
- Rapid washout after discontinuation correlates with a more rapid recovery of lymphocyte levels
- Not a pro-drug and does not require in vivo conversion to produce its effects
- Rapid 50% ALC reduction by day 7, with steady-state by day 14
- Steady-state ALC reduction of 65-75% correlates with strong efficacy potential
- Rapid ALC recovery to baseline within 7 days post-discontinuation
- Well tolerated, with observed AE consistent with those reported in trials of other S1P1 modulators

Drug Name	T½ h (days)	Lymphocyte Recovery Time
Fingolimod (0.5 mg, QD)	~216h (6-9d)	30-60d
MT-1303 (0.4 mg, QD) ^{1,2}	451h (19d)	>48d
Ozanimod (1 mg, QD) (CC1122373)	~264h (11d)	>7d (no report beyond this time)
Etrasimod (2 mg, QD) ³	35h (1.5d)	<7d
CBP-307 (0.25 mg, QD)	25h (1d)	<7d

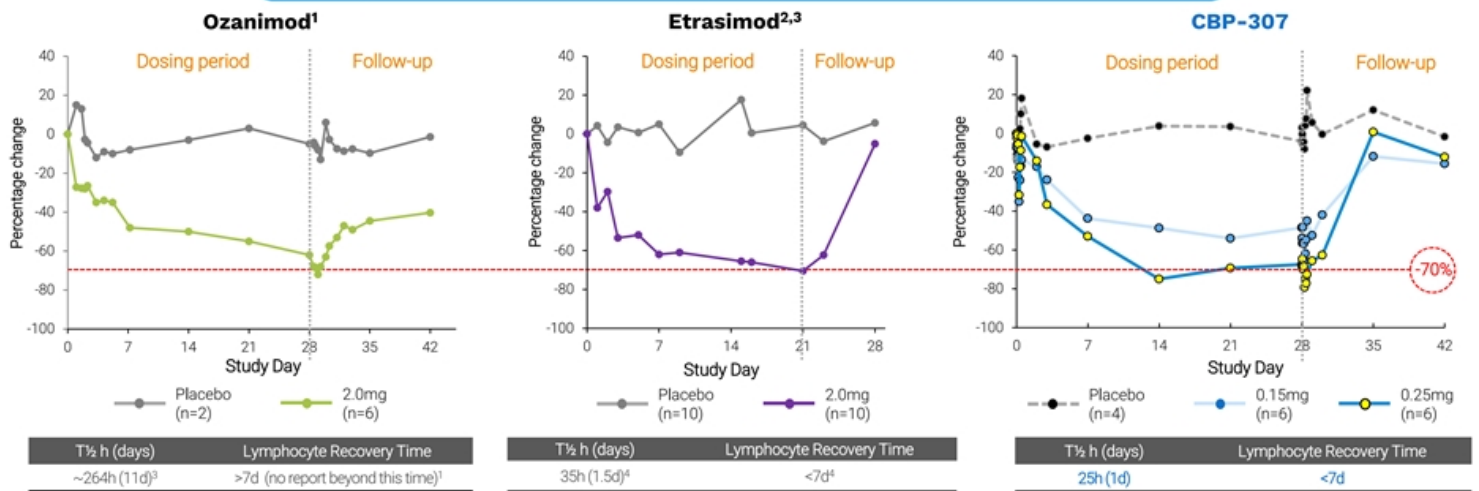


1. Kifuji, T et al. <https://www.tandfonline.com/doi/abs/10.1080/00498254.2018.1525508?journalCode=icvz00> [Accessed August 1st, 2020]
 2. Sugahara, K et al. <https://pubs.rsc.org/doi/10.1111/bcp.13641>. British Journal of Pharmacology (2017) 174 15–27. [Accessed December 16th, 2020]
 3. DOP078 Pharmacology and safety of etrasimod (APD334), an oral, potent, next-generation, selective S1P receptor modulator. T. Kuhbacher, R. et al. Journal of Crohn's and Colitis, Volume 11, Issue suppl_1, February 2017, Page S72. https://academic.oup.com/ecco-jcc/article/11/suppl_1/572/2960933. <https://doi.org/10.1093/ecco-jcc/jkx002.115>

Oral, QD Dosing, similar onset and offset of action to etrasimod and faster offset vs. ozanimod, in HV

For Illustrative Purposes Only:- Not a head-to-head comparison.
Differences exist between trial designs and subject characteristics and caution should be exercised when comparing data across trials

Mean percent change in absolute lymphocyte count (% reduction from baseline)



1. Tran et al. The Journal of Clinical Pharmacology 2017, 57(8) 988–996.
2. Peyrin-Biroulet et al. ECCO 2018 Vienna P573.
3. Ozanimod Active Metabolite. Arena corporate presentation 2018.
<https://sec.report/Document/0001564590-18-020796/>

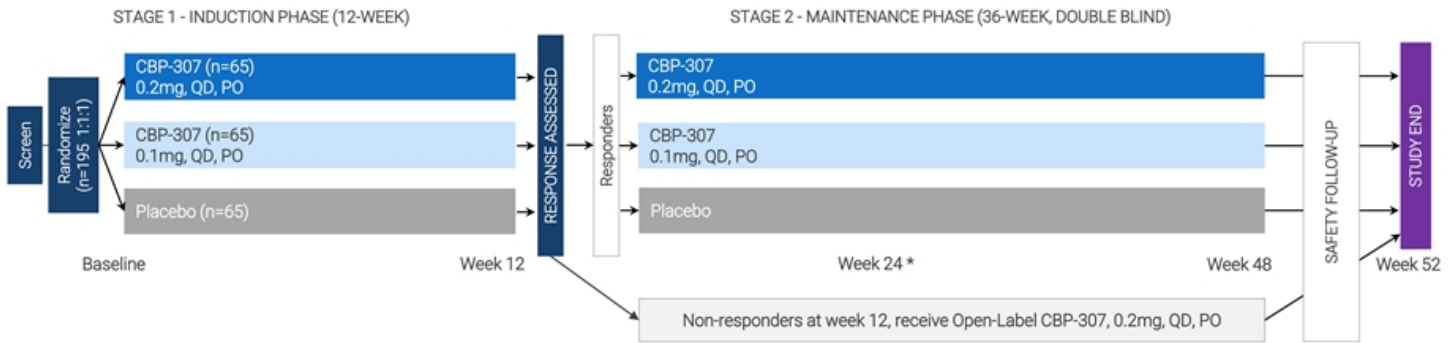
4. Tran et al. Advances in Therapy 2020, 37:4381–4395.
5. T. Kühbacher, R. et al. Journal of Crohn's and Colitis, Volume 11, Issue suppl_1, February 2017, Page S72.
https://academic.oup.com/ecco-jcc/article/11/suppl_1/S72/2960933, <https://doi.org/10.1093/ecco-jcc/jkx002.115>

No Unexpected Adverse Events

- Once daily doses of up to 0.3 mg of CBP-307 were generally well-tolerated.
- Most frequent AEs across all dose regimens included
 - Low white blood cells
 - Headache
- Most AEs were mild or moderate
- No clinically significant changes in lung function, a range of ophthalmological tests, or blood pressure
- Consistent with clinical trials of other S1P1 modulators, a dose-dependent decrease in heart rate was observed early in all dose regimens.

CBP-307CN002 - Trial Design – 52-Week Study (Induction / Maintenance / Follow-Up) (NCT04700449)

A Randomized, Double-blind, Placebo Controlled Trial to Evaluate the Efficacy and Safety of CBP-307 in Patients With Moderate to Severe Ulcerative Colitis (UC)

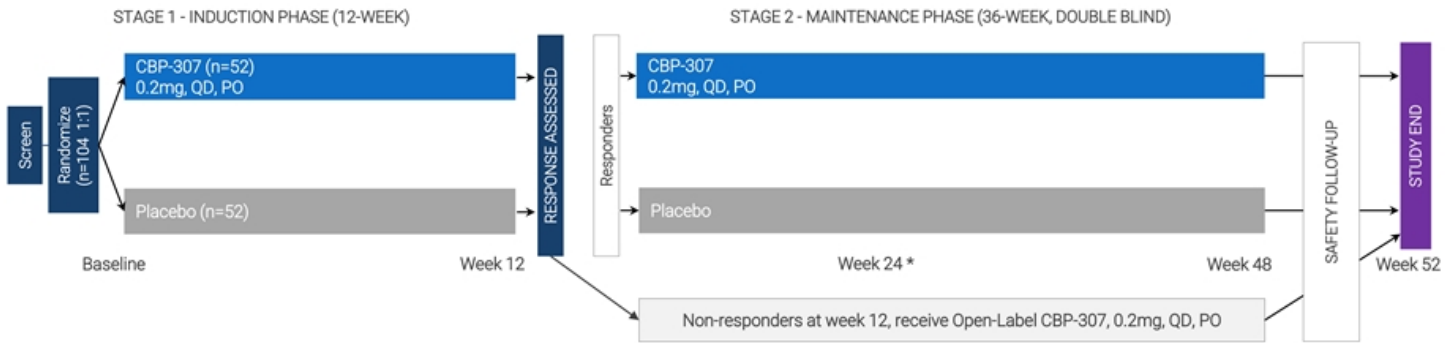


* Patients who did not achieve clinical response at week 24 in Sub-Study 1, were withdrawn from treatment

* Key efficacy measure: Clinical response rate at week 12 in 0.2 mg CBP-307 group versus PBO (clinical response is defined as a decrease of ≥ 3 points and $\geq 30\%$ from baseline in the complete Mayo score, accompanied by a decrease of ≥ 1 point from baseline in the rectal bleeding sub-score or an absolute rectal bleeding sub-score of ≤ 1 point)

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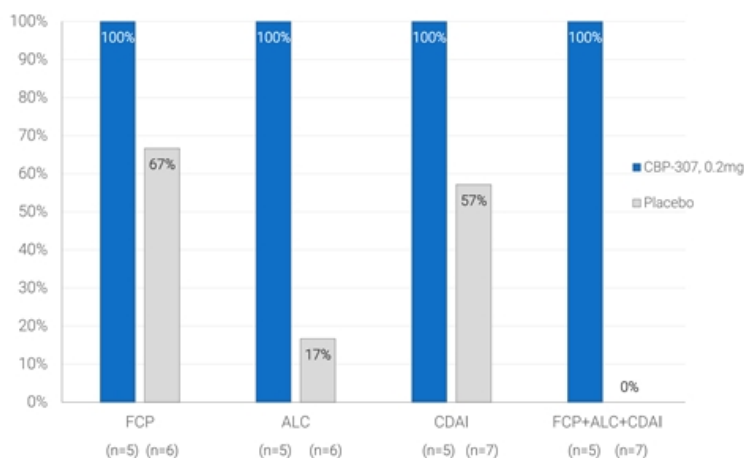
* Patients who did not achieve clinical response at week 24 in Sub-Study 1, were withdrawn from treatment

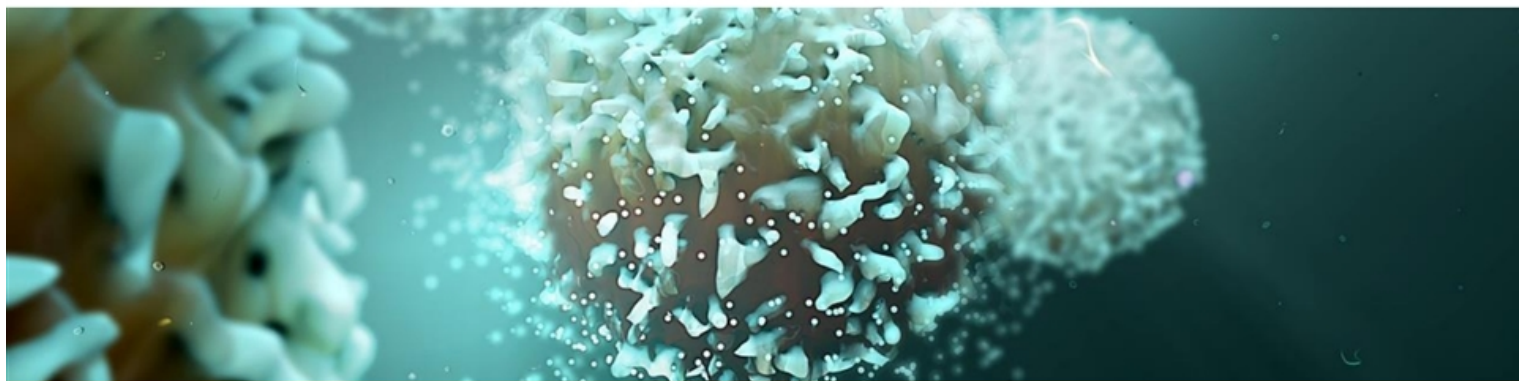
• Key efficacy measure: Change from baseline in **modified Mayo Score** at Week 12 in 0.2 mg CBP-307 group versus placebo

CBP-307CN003 – Results - Generally well-tolerated with clear evidence of clinical response

- Due to the COVID-19 pandemic, this trial was ended early with only 22 patients completing 12 weeks of dosing
- **Preliminary Safety Results (Safety Analysis Dataset, n=22)**
 - CBP-307 was generally well-tolerated
 - Safety profile consistent with phase 1 studies and data reported in trials of other S1P1 modulators in development for IBD
- **Preliminary Efficacy Results (Per Protocol Dataset, n=18)**
 - Evidence observed of clinical response with CBP-307 0.2 mg
- Based on this data, we are advancing CBP-307 in IBD with the ongoing UC clinical trial and are planning a further clinical trial of CBP-307 in CD

% of patients with any reduction in the specified endpoint at week 12 vs. baseline





CBP-174: A novel, peripherally-restricted, Histamine Receptor-3 (H3R) antagonist in development for pruritus associated with inflammatory skin disease

Remains underserved with no approved treatments for chronic pruritis associated with inflammation



Chronic pruritis associated with AD can significantly impact quality of life with patients often suffering from generalized anxiety, depression, agitation, and difficulty in concentrating and sleeping

Up to 91%
of AD sufferers have
Chronic Pruritis

40-50%
of AD patients have inadequate relief of
their pruritis despite current therapies



Current Treatment Options

- Topical and oral anti-histamines for acute pruritis
- Topical AD treatments; corticosteroids (First line), calcineurin inhibitors, crisaborole
- Oral AD treatments include corticosteroids and baricitinib (JAK1,2 inhibitor)
- Dupilumab is the only approved biologic agent

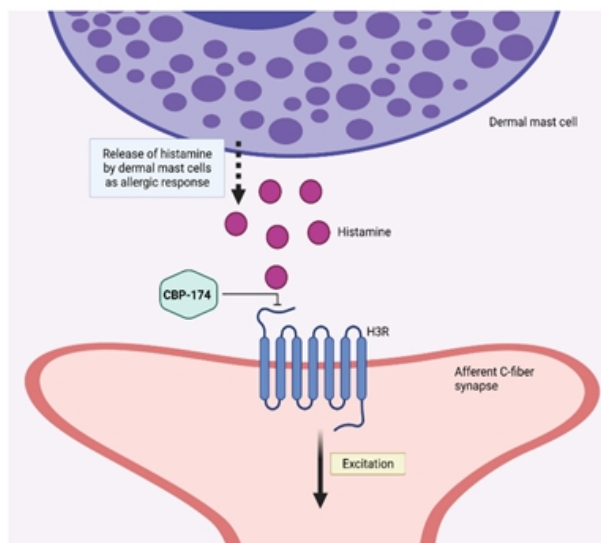
Current Treatment Limitations

- No approved therapies addressing chronic pruritis of inflammatory origin
- Limited, short-term efficacy with anti-histamines (H1R)
- H1R histamine blockers have CNS penetration, leading to drowsiness
- Unmet efficacy needs remain with biologics for AD

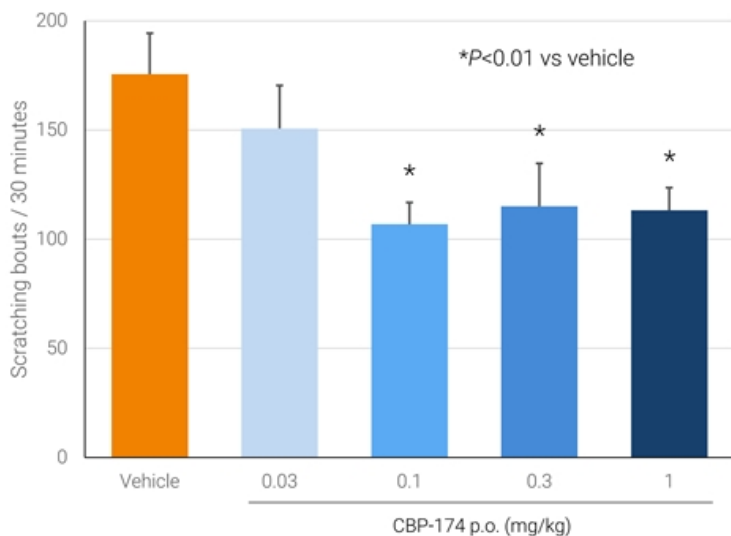
Mechanism of Action – Antagonism of H3R, predominantly at peripheral sites

Pruritus in AD is mediated by a variety of pruritogens

- CBP-174 is a novel small molecular entity that is a potent antagonist of the histamine 3 receptor (H3R)
- Highly selective for H3R relative to H1R, H2R and H4R
- Uniquely amongst investigational H3R antagonists, has minimal blood–brain barrier penetration
 - H3R CNS activity associated with adverse effects such as insomnia
- Pre-clinical animal models suggest multiple pruritogenic mediators of pruritis are reduced by peripherally restricted H3R antagonists



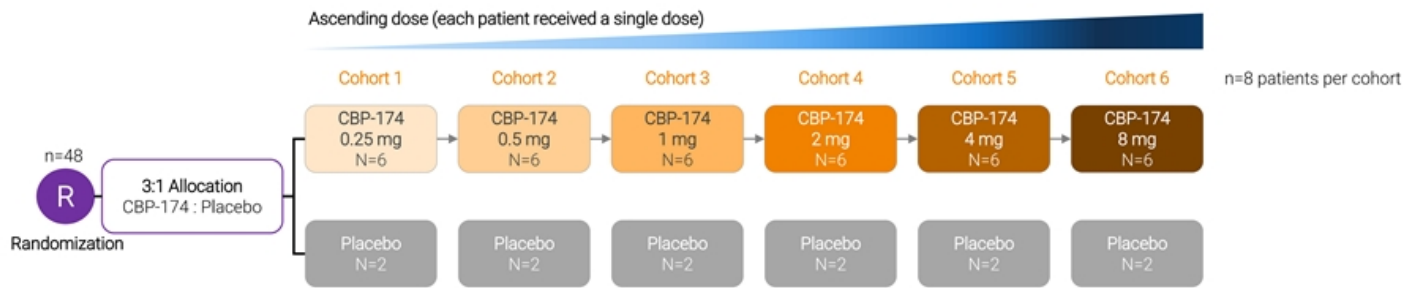
Rapidly reduces scratching bouts in a mouse model of pruritus



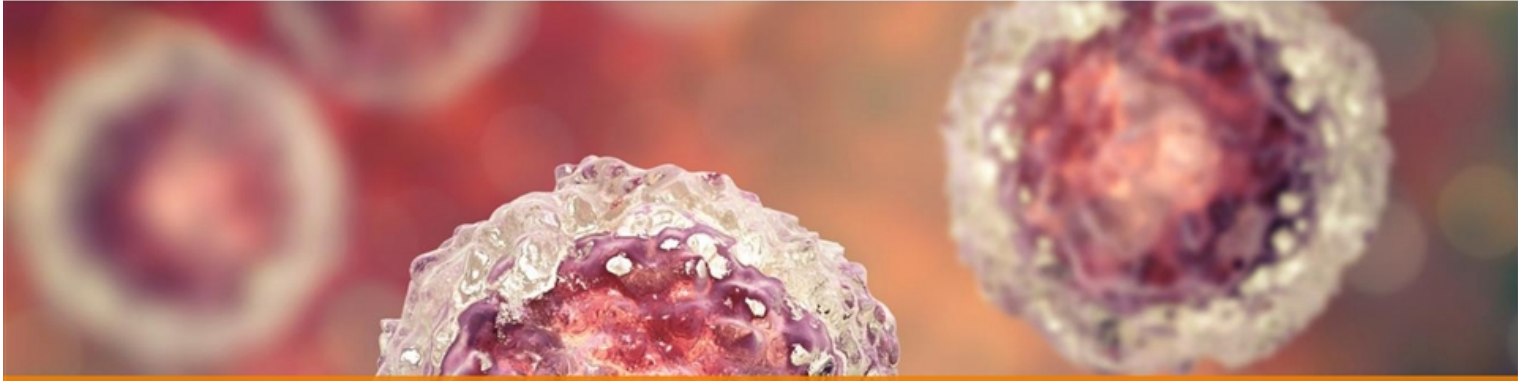
- CBP-174 had a strong anti-itch effect in mice with a rapid onset of action, within the first 30 minutes of dosing

First-in-human, single-center, double-blind, randomized, SAD in healthy volunteers (NCT04811469)

A Randomized, Double-Blind, Placebo-Controlled, Single Ascending Dose Study in Healthy Subjects to Evaluate the Safety, Tolerability, and Pharmacokinetics of CBP-174 After Oral Administration



- CBP-174 be administered orally
- Prespecified outcome measures for 7 days post-dosing
- Study conducted in a single center in Australia



NASDAQ: CNTB