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): October 11, 2022

THIRD HARMONIC BIO, INC.
(Exact name of registrant as specified in its charter)

Delaware	**001-41498**	**83-4553503**
(State or other jurisdiction of incorporation)	**(Commission File Number)**	**(IRS Employer Identification No.)**

300 Technology Square, 8th Floor **Cambridge, Massachusetts** **(Address of principal executive offices)**	**02139** **(Zip Code)**

(617) 915-6680
(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:

Title of each class	Trading symbol(s)	Name of each exchange on which registered
Common Stock, par value $0.0001 per share	**THRD**	**The Nasdaq Stock Market LLC**

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.

Third Harmonic Bio, Inc. (the "***Company***") is furnishing its corporate presentation, which it intends to use in conferences and meetings. The full copy of the Company's corporate presentation is filed as Exhibit 99.1 hereto. The corporate presentation will also be available on the Company's website in the Investors & Media section at https://ir.thirdharmonicbio.com.

The information furnished in 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 incorporated by reference into any other filing under the Securities Act of 1934, as amended, or the Exchange Act, except as expressly set forth by specific reference in such a filing.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits

Exhibit No.	Description
99.1	Corporate Presentation.

SIGNATURE

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.

THIRD HARMONIC BIO, INC.

Date: October 11, 2022

By: */s/ Robert Ho*
Robert Ho
Chief Financial Officer

Advancing the Next Wave

of Medicine for Allergy and Inflammation

Third Harmonic Bio

OCTOBER 2022

Forward Looking Statements

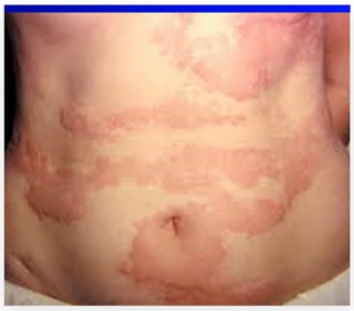
This presentation contains forward-looking statements within the meaning of, and made pursuant to the safe harbor provisions of, the Private Securities Litigation Reform Act of 1995. Any statements made in this presentation that are not statements of historical fact, including statements about our beliefs and expectations, are forward-looking statements and should be evaluated as such. Forward-looking statements include information concerning the expected timing of dose escalation studies in chronic inducible urticaria or our other planned preclinical studies and clinical trials, the market potential of our lead product candidate THB001, the potential period of market exclusivity of our patent portfolio, and possible or assumed future results of operations, including descriptions of our business plan and strategies. These statements often include words such as “anticipate,” “expect,” “suggests,” “plan,” “believe,” “intend,” “estimates,” “targets,” “projects,” “should,” “could,” “would,” “may,” “will,” “forecast” and other similar expressions. These forward-looking statements are contained throughout this presentation. We base these forward-looking statements on our current expectations, plans and assumptions that we have made in light of our experience in the industry, as well as our perceptions of historical trends, current conditions, expected future developments and other factors we believe are appropriate under the circumstances at such time. As you read and consider this presentation, you should understand that these statements are not guarantees of future performance or results. The forward-looking statements are subject to and involve risks, uncertainties and assumptions, and you should not place undue reliance on these forward-looking statements. Although we believe that these forward-looking statements are based on reasonable assumptions at the time they are made, you should be aware that many factors could affect our actual results or results of operations and could cause actual results to differ materially from those expressed in the forward-looking statements. Factors that may materially affect such forward-looking statements include: our limited operating history and that none of THB001, our lead product candidate, or any of our future product candidates have completed clinical trials beyond Phase 1 or been approved for commercial sale; our significant net losses incurred since inception and the likelihood of incurring additional losses for the foreseeable future; our need for substantial additional funding; the early stage of development of THB001 and any future product candidates and the possibility they may fail in development; our dependence on the success of THB001; legal and regulatory risks; and intellectual property-related risks, among others. Additional risks and uncertainties that could affect our financial results and business are more fully described in our registration statement on Form S-1, initially filed with the Securities and Exchange Commission on August 23, 2022, and our other SEC filings, which are available on the Investor & Media page of our website at https://ir.thirdharmonicbio.com/ and on the SEC’s website at www.sec.gov. These cautionary statements should not be construed by you to be exhaustive and are made only as of the date of this presentation. We undertake no obligation to update or revise any forward-looking statements, whether as a result of new information, future events, or otherwise, except as required by applicable law.

This presentation also contains estimates and other statistical data made by independent parties and by us relating to market size and growth and other data about our industry. This data involves a number of assumptions and limitations, and you are cautioned not to give undue weight to such estimates. In addition, projections, assumptions, and estimates of our future performance and the future performance of the markets in which we operate are necessarily subject to a high degree of uncertainty and risk.

This presentation shall not constitute an offer to sell or the solicitation of an offer to buy these securities, nor shall there be any sale of these securities in any state or jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such state or jurisdiction.

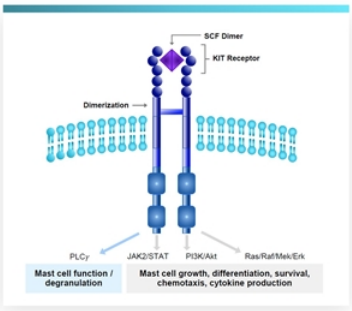
Third Harmonic Bio: clinical-stage company with oral wild-type KIT inhibitor to treat mast cell-mediated diseases

Large Established Markets With High Unmet Need



Millions of patients living with severe allergy and other mast cell-mediated diseases; high residual need despite multiple approved products

KIT: A Novel, Clinically Validated Target



Clinical validation of KIT as potentially transformative target for mast cell-mediated diseases

THB001: Selective Oral KIT Inhibitor

Highly selective oral small molecule with positive clinical responses in Phase 1a clinical trial, PK and PD profile

"Pipeline-in-a-Product" Potential

Potential to be an attractive oral treatment option for a range of dermal, airway and GI inflammatory diseases

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Mast Cells are a Fulcrum of Allergy and Inflammation

Current therapeutic approaches are mechanistically limited

Many Activators

Receptor-binding agonists

Omalizumab ~~***IgE***~~

Complement

Neuropeptides

Microbial products

Cytokines

Tezepelumab ~~***TSLP***~~

Chemokines

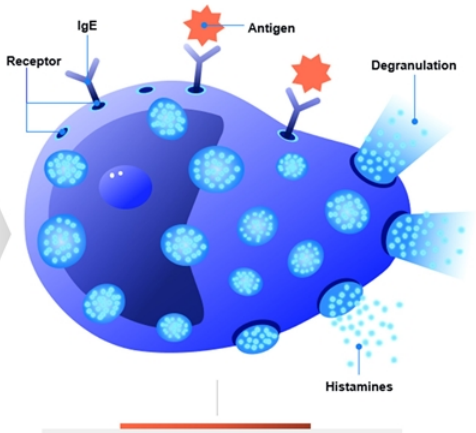
Physical activators

Temperature

Pressure

Cell-cell contact

Mast Cell



Optimal Intervention Point

The Mast Cell Itself

Many Mediators

Pre-formed Mediators

~~***Histamine***~~ *Anti-histamines*

~~***IL-4, IL-13***~~ *Dupilumab*

TNF, GM-CSF

Proteases

Serotonin

Heparin

Newly Synthesized Mediators

Prostaglandins

~~***Leukotrienes***~~ *Anti-leukotrienes*

Cytokines

Chemokines

Neuropeptides

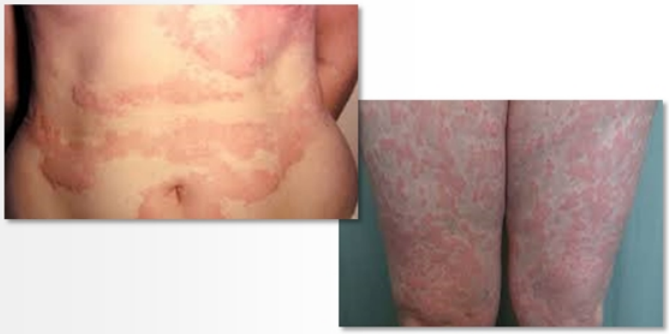
PAF, free radicals

Lymphocyte ligands

Chronic Urticaria Disease Overview

A severe, yet undertreated dermal inflammatory condition

"Out there, it's a horrible world for urticaria patients"[1]



- **Prevalence:** More than 1.5 million patients or 0.5-1% point prevalence; ~70-80% female, mean age ~46 years
- **Symptoms:** severely itchy, painful wheals and angioedema which confer significant mental health and quality of life burdens
- **Etiology:** both inducible (caused by specific stimuli/triggers) and spontaneous (no identified stimuli, potentially auto-immune) forms
- **Current treatment options are limited:** oral anti-histamines only effective in about half of patients; single biologic therapy approved for second-line use
- **New treatment options** with the potential to achieve robust disease control are imperative to driving awareness, diagnosis and treatment

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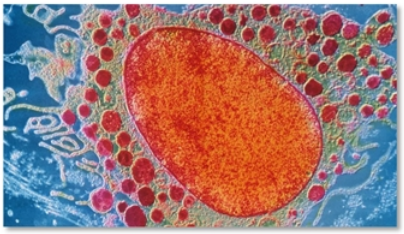
[1]Marcus Mauer MD, LifeSci Immunology and Inflammation Day, May 10, 2022

Severe Asthma Disease Overview

Limited oral treatment options for patients beyond corticosteroids and anti-leukotrienes



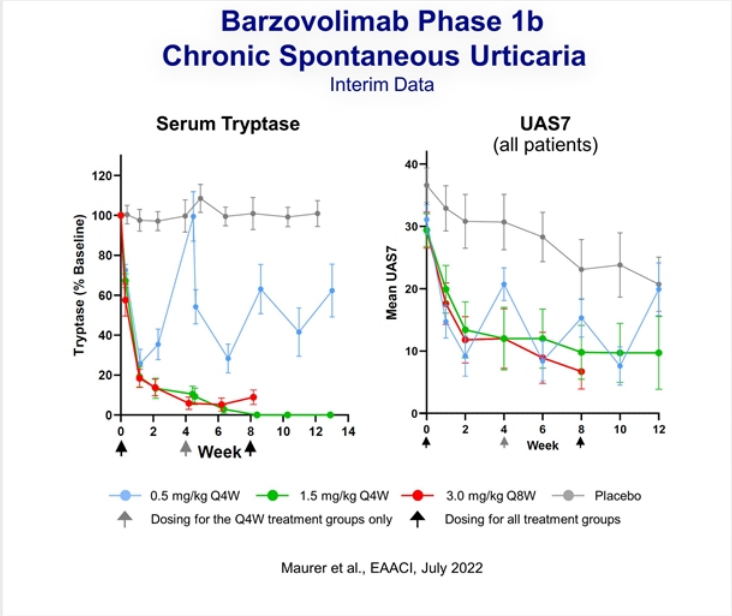
- **Prevalence: ~**5-10% of all asthma patients; estimated 750K – 1 million patients in US; adult population ~60% female, mean age ~50 years
- **Definition:** disease not sufficiently controlled with standard nonbiologic treatments; reduced lung function, higher incidence of exacerbations
- **Mast cells shown to play a central role:** in both regulation of both lower airway inflammation and airway hyperresponsiveness
- **Current oral treatment options are limited:** multiple approved biologics, but no new oral therapy approved for asthma since anti-leukotrienes in late 1990s
- **New oral treatment options** with the potential to treat across all severe asthma endotypes are needed

Targeting KIT Has Been Shown To Broadly Inhibit Mast Cell Activity

Demonstrated clinical efficacy in chronic spontaneous urticaria

KIT
(CD117)

- Master regulator of mast cell proliferation, migration, activation and survival
- Inhibition of KIT drives both mast cell inactivation **and** depletion



Maurer et al., EAACI, July 2022

THB001: Highly Selective Oral Wild-Type KIT Inhibitor

Emerging Product Profile

- Potent KIT inhibitor
- High kinome selectivity
- Depleted mast cells in relevant GI, skin and lung tissues of rats and dogs
- Demonstrated efficacy in rat models of dermal anaphylaxis and asthma
- Favorable pharmacokinetic profile including high oral bioavailability and metabolic stability
- No evidence of structural or off-target liabilities; all tox findings on-target and believed to be reversible
- Avoids mAb-related risks of infusion events and anaphylaxis

Inhibition of Kinases by THB001 in Ba/F3 Assays

Target Kinase	IC_{50} (μM)	Fold Potency vs. KIT
KIT	0.02	-
CSF1R (FMS)	0.95	48
PDGFR-β	2.11	106
PDGFR-α	3.95	198
FLT3	>10.7	>535

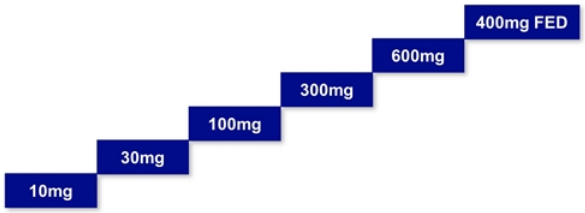
KIT, CSF1R, PDGFR-β and PDGFR-α most potently inhibited in 231 and 40 kinase panels in biochemical assays and cell based assays, respectively. GI=gastrointestinal; CSF1R=colony stimulating factor 1 receptor; FMS=Feline McDonough sarcoma tyrosine kinase receptor; PDGFR=platelet derived growth factor; FLT3=FMS-related receptor tyrosine kinase 3; mAb=monoclonal antibody

THB001: Phase 1 SAD/MAD/Food Effect in Healthy Volunteers

Phase 1a Trial Design

Single Ascending Dose (n=42)

Healthy Male/Female, 18-65 yrs
Plasma PK



Food Effect
(n=10)

200mg

fed/fasted

Multiple Ascending Dose x 14 Days (n=32)

Healthy Vasectomized Male/Female 18-65 yrs
Plasma/Urine PK
Pharmacodynamics

Key Objectives

- Assess safety and tolerability
- Characterize pharmacokinetics, including in presence/absence of food to inform further clinical and drug product formulation development
- Measure pharmacodynamic effect by serum tryptase

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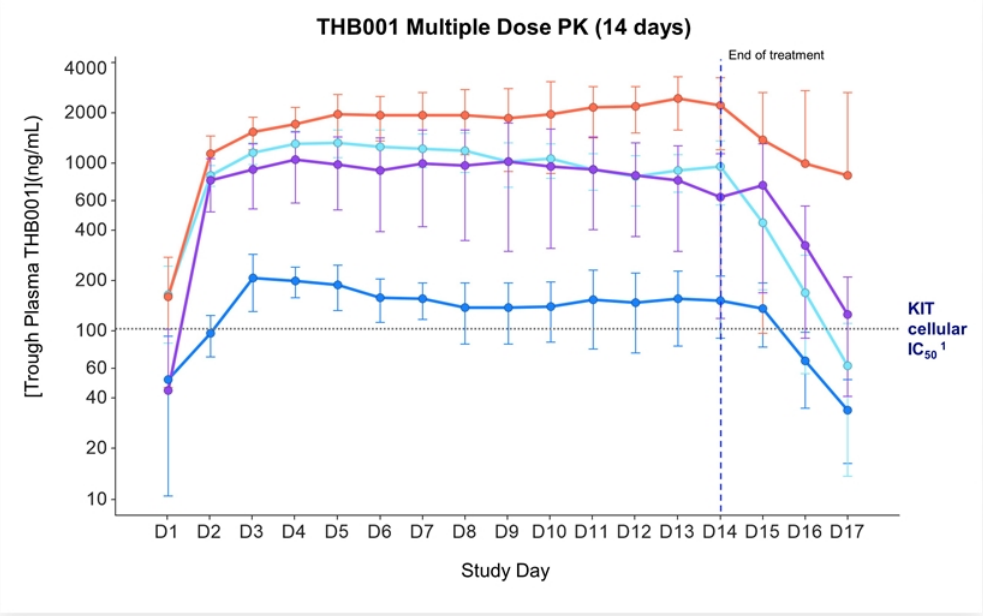
THB001 PK Summary



Unbound THB001 Trough Values vs KIT Cellular IC_{50}

- **200mg QD**: ~1.5-2-fold
- **200mg BID**: ~10-fold
- **500mg QD FED**: ~10-fold
- **400mg BID:** ~20-fold

Mean $t_{1/2}$ ~24 hours

1. Protein binding adjusted KIT IC_{50}

Mean ± SD

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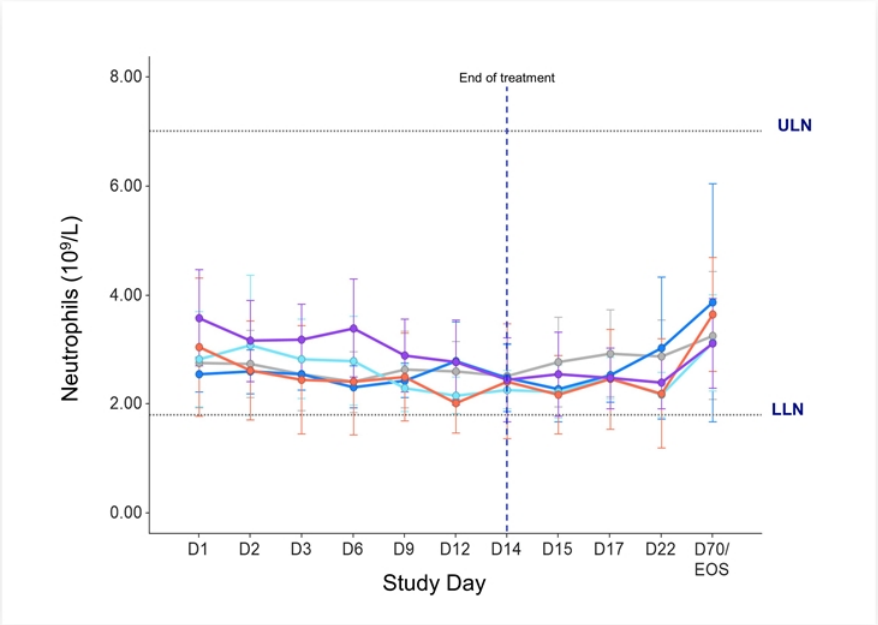
THB001 MAD Safety Summary

- No dose escalation or study stopping criteria met
- No clinically significant trends in chemistries, vital signs or ECGs observed
- No SAEs reported
- 3 moderate AEs reported, 1 that led to discontinuation:
  - 1 subject (400mg BID) with a low ANC at baseline, discontinued on Day 6, values recovered by Day 11
- 1 mild AE reported that led to discontinuation
  - 1 subject discontinued on day 12 due to anxiety

MAD Treatment Emergent Adverse Events
Adverse Events Reported by Treatment Assignment in >2 Subjects

	THB001								PBO	
	200mg QD		200mg BID		500mg QD FED		400mg BID			
Preferred Term, n %	6	% of (n)	6	% of (n)	6	% of (n)	6	% of (n)	8	% of (n)
Hair Color Changes	2	33.3%	6	100.0%	4	66.7%	5	83.3%	—	—
Headache	2	33.3%	2	33.3%	4	66.7%	2	33.3%	3	37.5%
Nausea	1	16.7%	2	33.3%	2	33.3%	—	—	2	25.0%
Diarrhea	1	16.7%	1	16.7%	1	16.7%	—	—	2	25.0%
Dizziness	—	—	1	16.7%	4	66.7%	—	—	1	12.5%
COVID-19	1	16.7%	—	—	2	33.3%	—	—	—	—
Gastric reflux	—	—	1	16.7%	—	—	1	16.7%	1	12.5%
Nasopharyngitis	1	16.7%	—	—	—	—	2	33.3%	—	—
Skin Irritation	—	—	—	—	1	16.7%	1	16.7%	1	12.5%

THB001 Hematology – Mean Neutrophil Count (+/- SD)



ULN=upper limit of normal; LLN=lower limit of normal

Mean ± SD

Hematology Parameter Comparison –THB001 and Barzovolimab in NHVs

Change from Baseline to Post-Baseline Minimum

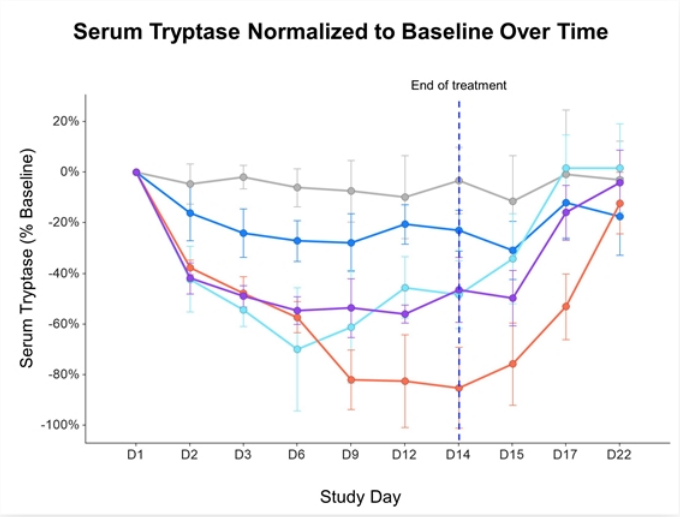
	THB001				
	200mg QD	200mg BID	400mg BID	500mg QD FED	PBO
Leukocytes (10^9/L) - WBC	-0.6 (1.2)	-0.7 (1.3)	-1.9 (1.0)	-1.3 (1.4)	-0.5 (0.6)
Erythrocytes (10^{12}/L) - RBC	-0.3 (0.3)	-0.3 (0.2)	-0.5 (0.1)	-0.4 (0.3)	-0.04 (0.2)
Hematocrit (%)	-0.03 (0.03)	-0.03 (0.02)	-0.04 (0.01)	-0.03 (0.03)	NA
Platelets (10^9/L)	-38.8 (36.9)	-14.2 (47.4)	-47.2 (52.2)	-16.3 (38.1)	-7.4 (18.4)
Neutrophils (10^9/L)	-0.3 (0.8)	-0.7 (1.0)	-1.3 (0.9)	-1.1 (1.2)	-0.35 (0.47)

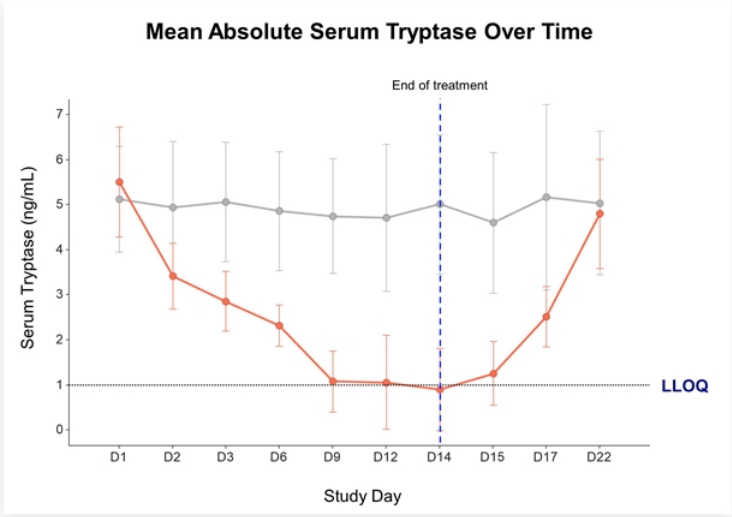
	Barzovolimab					
	0.3 mg/kg (n=6)	1 mg/kg (n=6)	3 mg/kg (n=6)	9 mg/kg (n=6)	Total (n=24)	Placebo (n=8)
Leukocytes (10^9/L)	-1.7 (1.2)	-2.3 (.8)	-3.0 (0.9)	-2.5 (0.7)	-2.4 (1.0)	-1.4 (1.3)
Erythrocytes (10^{12}/L)	-0.4 (0.3)	-0.5 (0.3)	-0.6 (0.2)	-0.8 (0.3)	-0.6 (0.3)	-0.4 (0.2)
Hematocrit (%)	-3.0 (2.0)	-3.9 (2.1)	-4.0 (1.9)	-6.4 (2.8)	-4.3 (2.5)	-3.3 (2.0)
Platelets (10^9/L)	-40.2 (24.7)	-67.2 (40.1)	-67.3 (40.7)	-54.5 (30.4)	-57.3 (34.2)	-45.2 (38.9)
Neutrophils (10^9/L)	-1.3 (1.1)	-1.8 (1.0)	-2.7 (0.8)	-1.9 (0.7)	-1.9 (1.0)	-1.0 (1.1)

1.Alvarado, D. et al. *Allergy* (2022) doi:10.1111/all.15262.

Each of the candidates were tested in a different clinical trial and comparing results from different studies may be unreliable due to differences between the studies with respect to study design, objectives, and other parameters, and there can be no assurances regarding the performance of THB001 relative to Barzovolimab or any other drug in a head-to-head trial. Mean(SD).

THB001 PD Summary: Serum Tryptase





LLOQ=lower limit of quantitation; Mean ± SD
PBO = placebo

Phase 1b Chronic Inducible Urticaria (CIndU) Study Design

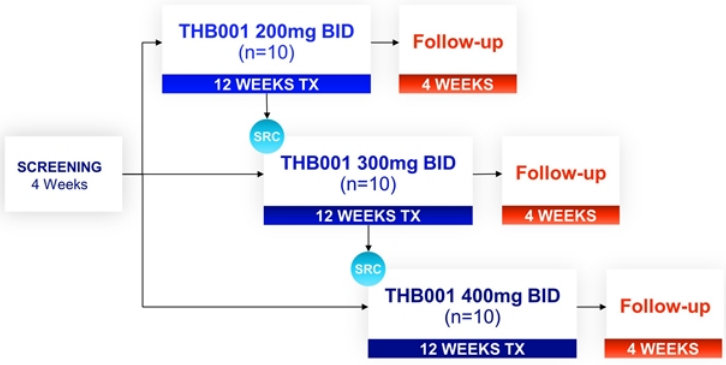
Design

- Open label, dose escalation design
- 3 doses (1:1:1) of THB001 (total N=30) for 12 weeks on treatment
- Generally healthy male and female patients aged 18-75 with Dx'd Cold Induced Urticaria

Objectives

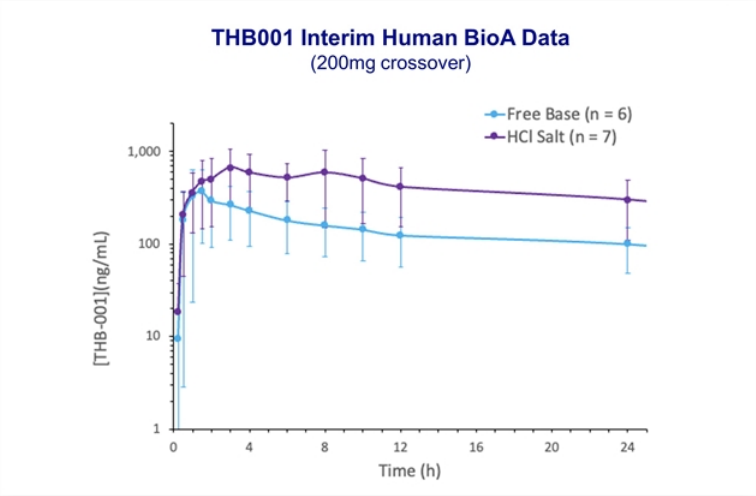
- Safety and Tolerability
- Mean reduction in critical temperature threshold (CTT) using the TempTest® system
- PK, serum tryptase
- Clinical outcome measures (e.g., ColdUAS, ColdU-QoL)

Study Schematic



SRC=safety review committee

THB001·HCl salt outperforms free base in NHV bio-comparison study



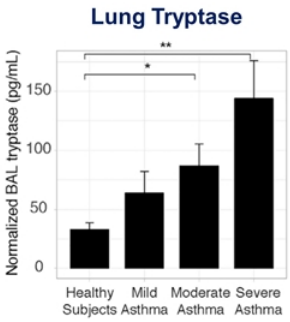
Mean ± SD

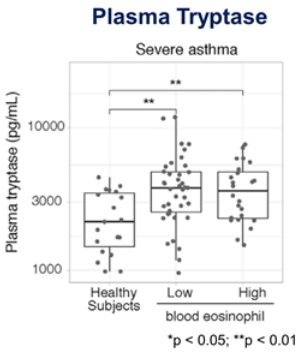
- Significant increase in exposure with THB001 salt
- Favorable PK profile
- Supports potential for QD dosing
- Manufacturing underway to introduce into upcoming clinical studies – no additional tox/clinical requirements to support transition to new formulation
- Planning deployment for patient studies in 2023

Indication Expansion: Severe Asthma

Mast cells are central to asthma pathophysiology

- Asthma severity correlates with lung mast cell number, localization and phenotype
- Mast cell changes are independent of biomarker status (i.e., blood eosinophils)
- Mast cells required for IgE-dependent and -independent TSLP production in rodents





*p < 0.05; **p < 0.01

Maun, et al., Cell, October 2019

Gleevec (Imatinib)

In Severe Refractory Asthma

- Moderately potent KIT inhibitor
- 43% reduction in serum tryptase --> significant improvements in FEV_1 and airway hyperreactivity
- Non-endotype restricted study population
- Provides human PoC, even with suboptimal KIT inhibition

Cahill, et al., NEJM, May 2017

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Phase 1b Inducible Allergic Asthma POC Trial Concept Design

Week	-6	-4		2	4	6	8	12
Day	-42	-28	0	14	28	42	56	84
Allergen Challenge	▲	▲			▲		▲	
SPT	✚	✚			✚		✚	✚
AHR		●			●		●	

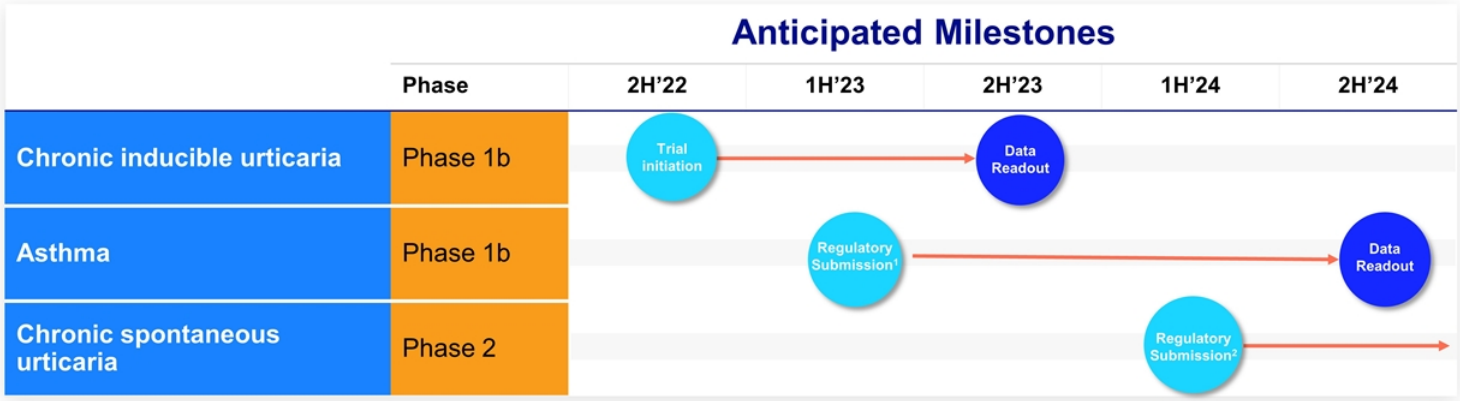
Design Summary

- **Study Design:** Parallel, Blinded, PBO controlled, 2-3 THB001 doses + PBO (1:1:1): N=~10-15/arm
- **Patient Population:** mild, stable allergic asthmatic subjects, not on regular anti-inflammatory treatment
- **Primary Endpoint:** change from baseline in FEV during LAR
- **Measurements/Biomarkers:** FEV1, Airway Hyper Responsiveness (AHR), serum tryptase, sputum used as matrix for biomarkers of immune function (cytokines, eos, etc), Skin Prick Test (SPT)

- Established clinical POC model for asthma
- Elevated mast cell gene signature in this model consistent with severe asthma[1]
- Dose ranging design to provide early assessment of therapeutic index
- Planned study initiation in 1H:23

[1]*Murphy et al. ACS 2022*

THB001: Multiple Upcoming Clinical Catalysts



Financials & Cash Runway

Cash and cash equivalents: $113M as of June 30, 2022 (unaudited)

Cash and cash equivalents with IPO proceeds expected to fund operations through 2025

1. Regulatory submission = Clinical Trial Application (CTA) in Canada
2. Regulatory submission = Clinical Trial Application (CTA) in Europe and Investigational New Drug application in U.S.

Advancing
the Next Wave

of Medicine for Allergy and Inflammation

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