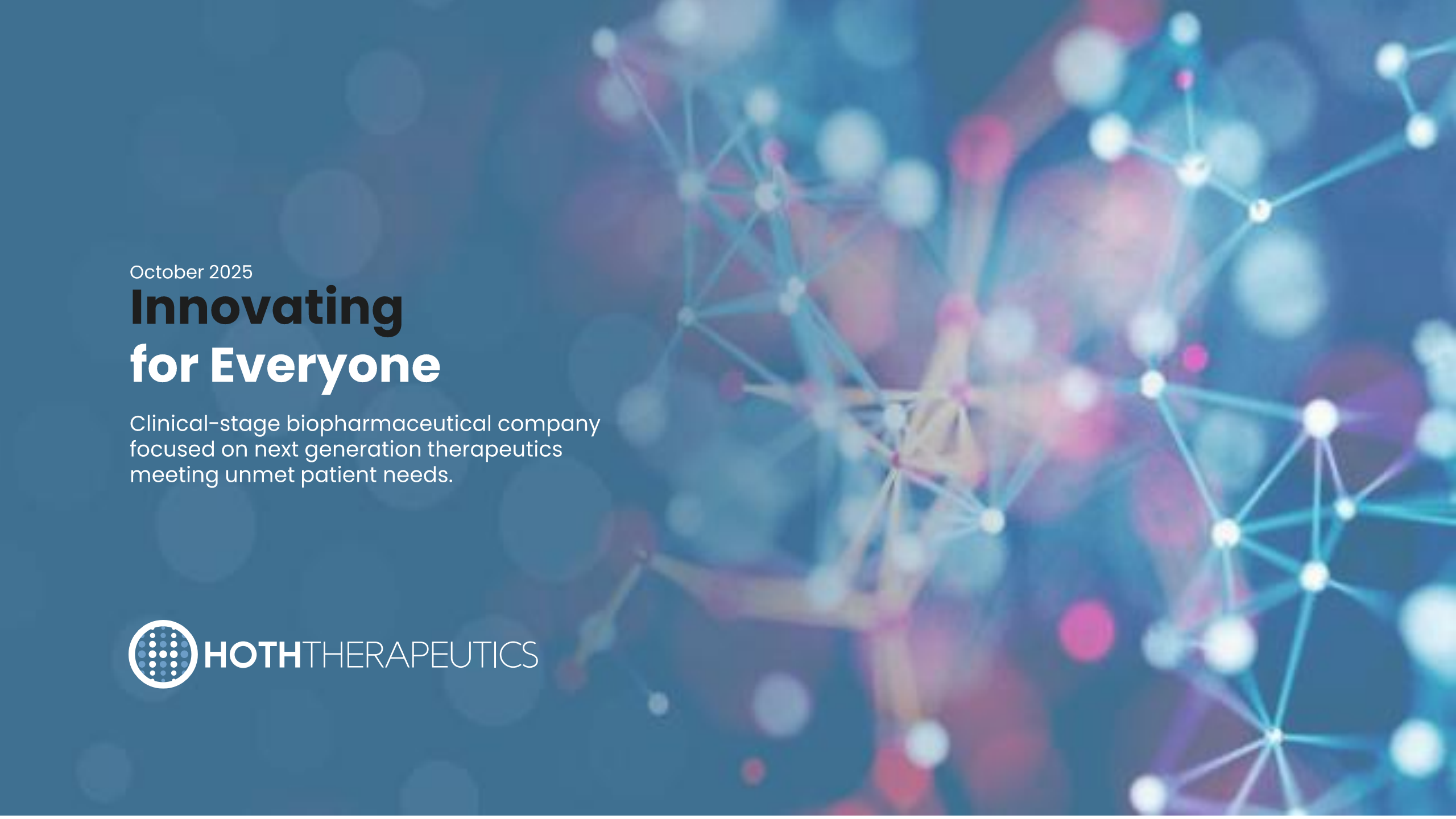
October 2025

Innovating for Everyone

Clinical-stage biopharmaceutical company focused on next generation therapeutics meeting unmet patient needs.



HOTHTHERAPEUTICS

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Safe Harbor Statement

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This presentation contains "forward-looking statements" within the meaning of the "safe-harbor" provisions of the Private Securities Litigation Reform Act of 1995. These statements are identified by the use of words "could," "believe," "anticipate," "intend," "estimate," "expect," "may," "continue," "predict," "potential" and similar expressions that are intended to identify forward-looking statements. Such statements involve known and unknown risks, uncertainties and other factors that could cause the actual results of Hoth Therapeutics, Inc. ("Hoth" or the "Company") to differ materially from the results expressed or implied by such statements. These forward-looking statements are made on the basis of the current beliefs, expectations and assumptions of management, are not guarantees of performance and are subject to significant risks and uncertainty. These forward-looking statements should, therefore, be considered in light of various important factors, including those set forth in Hoth's reports that it files from time to time with the Securities and Exchange Commission (the "Commission") and which you should review, including those statements under "Item 1A – Risk Factors" in Hoth's Annual Report on Form 10-K, as amended by its Quarterly Reports on Form 10-Q and other reports that Hoth files with the Commission. Important factors that could cause actual results to differ materially from those described in forward-looking statements contained in this presentation include, but are not limited to: the adverse impact on economies around the world of the ongoing COVID-19 pandemic; changes to our anticipated sources of revenues; competitive conditions; difficulties in obtaining regulatory approvals for the Company's product candidates; changes in economic and political conditions; the success of our research and development initiates; and other factors. These forward-looking statements should not be relied upon as predictions of future events and Hoth cannot assure you that the events or circumstances discussed or reflected in these statements will be achieved or will occur. If such forward-looking statements prove to be inaccurate, the inaccuracy may be material. You should not regard these statements as representation or warranty by Hoth or any other person that we will achieve our objectives and plans in any specified timeframe, or at all. You are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date of this presentation. The Company disclaims any obligations to publicly update or release any revisions to the forward-looking information contained in this presentation, whether as a result of new information, future events or otherwise, after the date of this presentation or to reflect the occurrence of unanticipated events, except as required by law.

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Our Mission

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At Hoth Therapeutics, we strive to develop innovative, impactful, and ground-breaking treatments with a goal to improve patient quality of life. We are a catalyst in early-stage pharmaceutical research and development, elevating promising drugs from the bench to pre-clinical and clinical testing. Utilizing a patient-centric approach, we collaborate and partner with a team of scientists, clinicians, and key opinion leaders to seek out and investigate medications that hold immense potential to create breakthroughs and diversify treatment options. Our mission is to bring value to both our shareholders and our patient populations.

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Key Investment Highlights

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Clinical Programs

Robust Pre-Clinical Development Programs

Targeting Unmet Medical Needs to Address Broad Market

Experienced Management and Advisory Board

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Pipeline:
Multiple Shots on Goal

	PRODUCT	DISEASE	PROOF OF CONCEPT	PRECLINICAL	IND-ENABLING	PHASE 1	PHASE 2	PHASE 3	LAUNCH
Oncology	HT-KIT	Mast-Cell Derived Cancers							
	HT-001	Skin Toxicity Associated with EGFR Inhibitors							
Neurology	HT-ALZ	Alzheimer's Disease							
Dermatology	BioLexa	Atopic Dermatitis							
Inflammatory	HT-004	Asthma							
	HT-VA	Obesity							

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Primary Development

HT-001 Topical Gel

HT-KIT Injection

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HT-001:
Value Proposition

Market Growth: EGFR Inhibitor Skin Toxicity market predicted to grow from $52M in 2018 to $391M by end of 2030*

Mechanism of Action: HT-001's active ingredient is a neurokinin 1 receptor agonist (NK1RA) that has been shown to have anti-inflammatory properties. The NK1RA mitigates the dermatological side effects by reducing the inflammation caused by inhibition of EGFR from oncology treatments.

Addresses Unmet Need: No current approved product on the market that specifically treats EGFR inhibitor cutaneous toxicities, which occur in up to 90% of patients undergoing EFGR inhibitor therapy.**

*EGFR Inhibitors-Induced Skin Disorders-Market Insights, Epidemiology, and Market Forecast-2030

**https://jamanetwork.com/journals/jamadermatology/article-abstract/2767656

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Recent & Upcoming Milestones:

HT-001 Topical Gel

Q3 2024

Positive Case Study Results

Q1 2025

Positive Initial Interim Open Label PK Cohort Data Results

Q3 2025

Submission to European Medical Agency for Clinical Trial Expansion in EU

Q1 2026

Full Data Set for Open Label PK Cohort

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First in Human Clinical Trial:

CLEER-001 Phase 2a Dose Ranging Study

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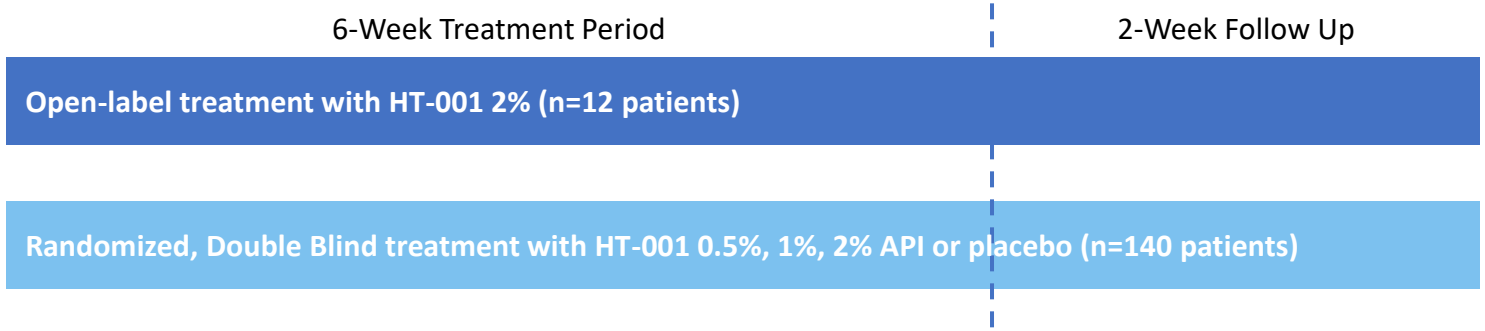

Preliminary data from Open-label cohort show promising results:

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Exceptional Patient Outcomes:

Data from the open-label portion of the CLEER-001 trial demonstrated remarkable success:

- **100% of patients** achieved the primary efficacy endpoint of an ARIGA score ≤1, showing significant skin toxicity improvement by the six-week mark.
- **66% of patients** reported reduced pain and itching scores, further enhancing quality of life.

Crucially, **all patients maintained their full EGFRi dosage** , preserving the cancer treatment's full therapeutic effect—a notable improvement compared to past reports showing widespread dose reductions or treatment halts due to skin-related side effects.

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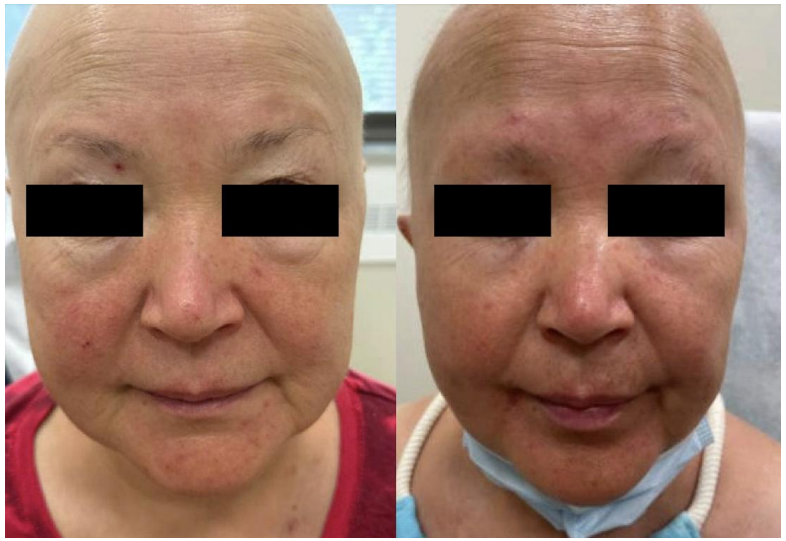
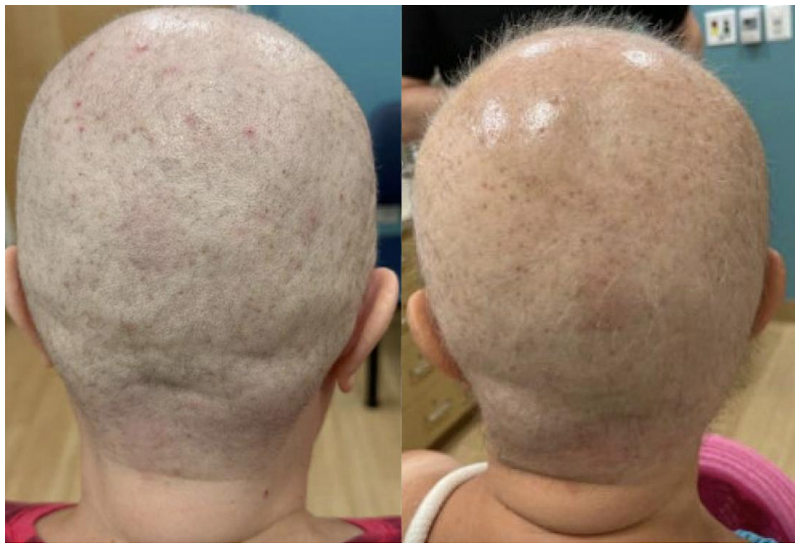
Case Study* at GW Published Sept 2024:
HT-001

59 y/o F with history of metastatic breast cancer with bilateral lung nodules presented with pruritic, burning red papules on the face, scalp, and upper back.

Began paclitaxel, trastuzumab, and pertuzumab two weeks prior to onset.



Baseline 1 Month



Baseline 1 Month

Topical HT-001 2% Gel

- Patient only used HT-001 for <u>one week</u> due to symptom and lesion resolution
- No new lesions developed in the three weeks following discontinuation

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* https://pubmed.ncbi.nlm.nih.gov/39231088/

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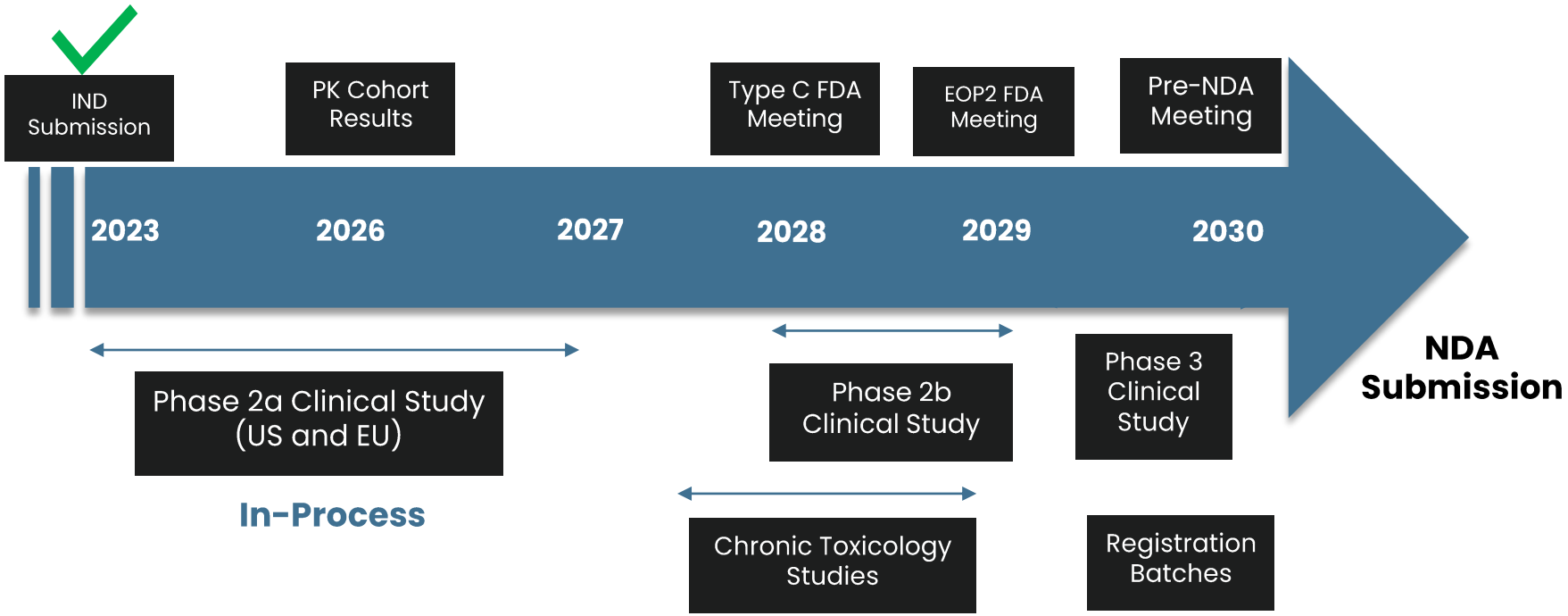
HT-001
505(b)(2) Development Pathway



Current estimated dates; pending FDA meetings for phase 2b/phase 3 clinical studies

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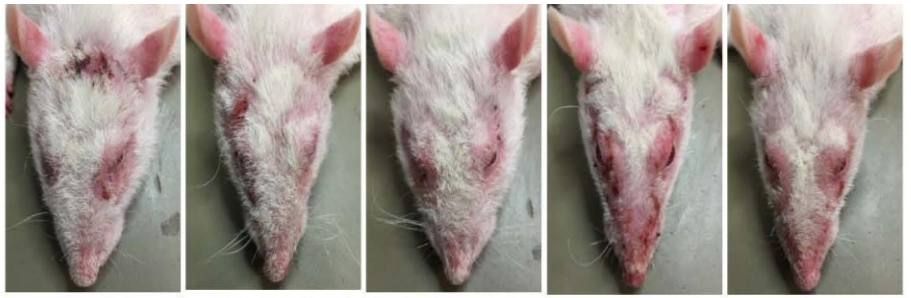
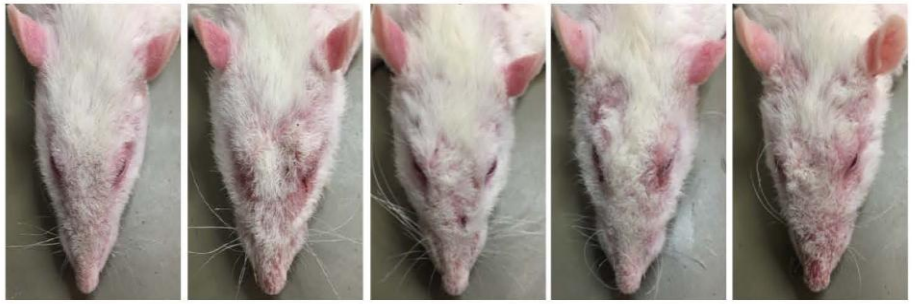
Proactive Topical HT-001 Significantly Reduces EGFR Inhibitor-Induced Cutaneous Toxicity

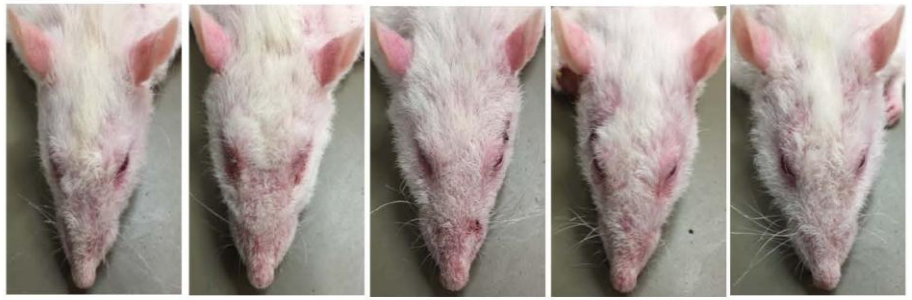
Erlotinib – Week 12



Erlotinib + Topical HT-001 Initiated Week 1 – Week 12



Erlotinib + Topical HT-001 Initiated Week 6 – Week 12



Group	Change Compared to Erlotinib Only Group: Facial Skin Lesions at 12 weeks	Change Compared to Erlotinib Only Group: Hair Loss at 12 weeks
Preventative Topical HT-001 + Erlotinib	58.5% Reduction ($p<001$ vs Erl and $p<0.01$ vs control)	56.2% reduction in hair loss ($p<0.001$ vs Erl and $p<0.001$ vs control)
Proactive (week 6) Topical HT-001 + Erlotinib	47.8% reduction ($p<0.001$ vs Erl and $p<0.001$ vs control)	44.4% reduction in hair loss ($p<0.001$ vs Erl and $p<0.001$ vs control)

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HT-KIT:
Value Proposition

Market Growth: Global systemic mastocytosis treatment revenue is $128M and projected to grow at 5.8% CAGR through 2031*

Mechanism of Action: HT-KIT is an antisense oligonucleotide that results in non-functional cKIT via mRNA frameshift.**

Addresses Unmet Need: KIT D816V mutation found in >80% of adult systemic mastocytosis cases results in confirmational changes that make some tyrosine kinase inhibitor drugs ineffective.**

cKIT is also implicated in gastrointestinal stromal tumors, acute myeloid leukemia, and other rare cancers

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*Global Systemic Mastocytosis Treatment Market Research Report, January 2022, Market.US

**Snider et al., Targeting KIT by frameshifting mRNA transcripts as a therapeutic strategy for aggressive mast cell neoplasms, Molecular Therapy (2021), https://doi.org/10.1016/j.ymthe.2021.08.009

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Recent & Upcoming Milestones: HT-KIT Injection

Q4 2023

Pre-IND Meeting with FDA and Strategy Confirmed

Q1 2024

IND-Enabling Animal Toxicology Studies Initiated

Q1 2026

Initiate Final Animal Toxicology studies and Manufacture Clinical Batches

Q4 2026

IND Submission Target

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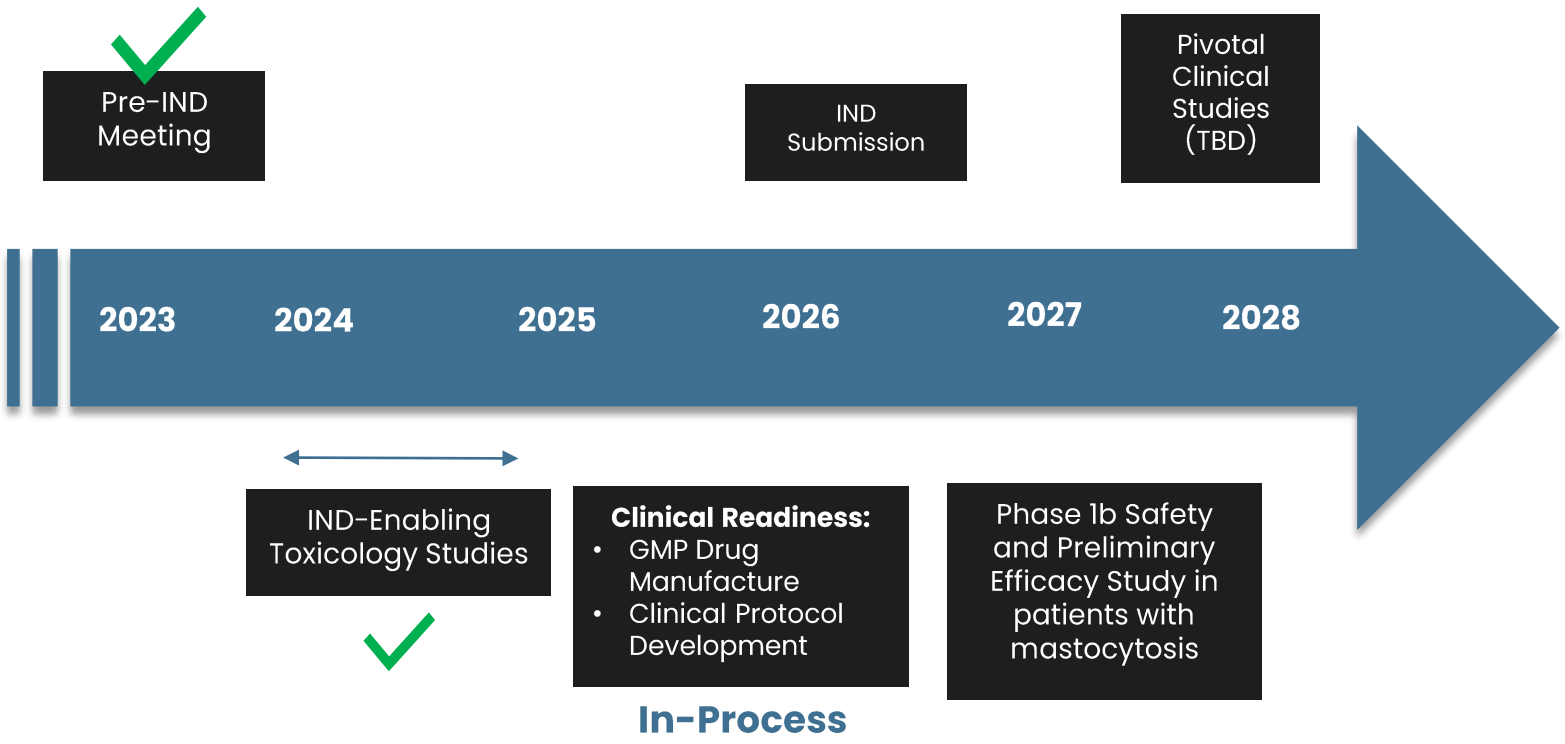
HT-KIT Orphan Drug Development Pathway



Current estimated dates; pending FDA meetings for clinical studies.

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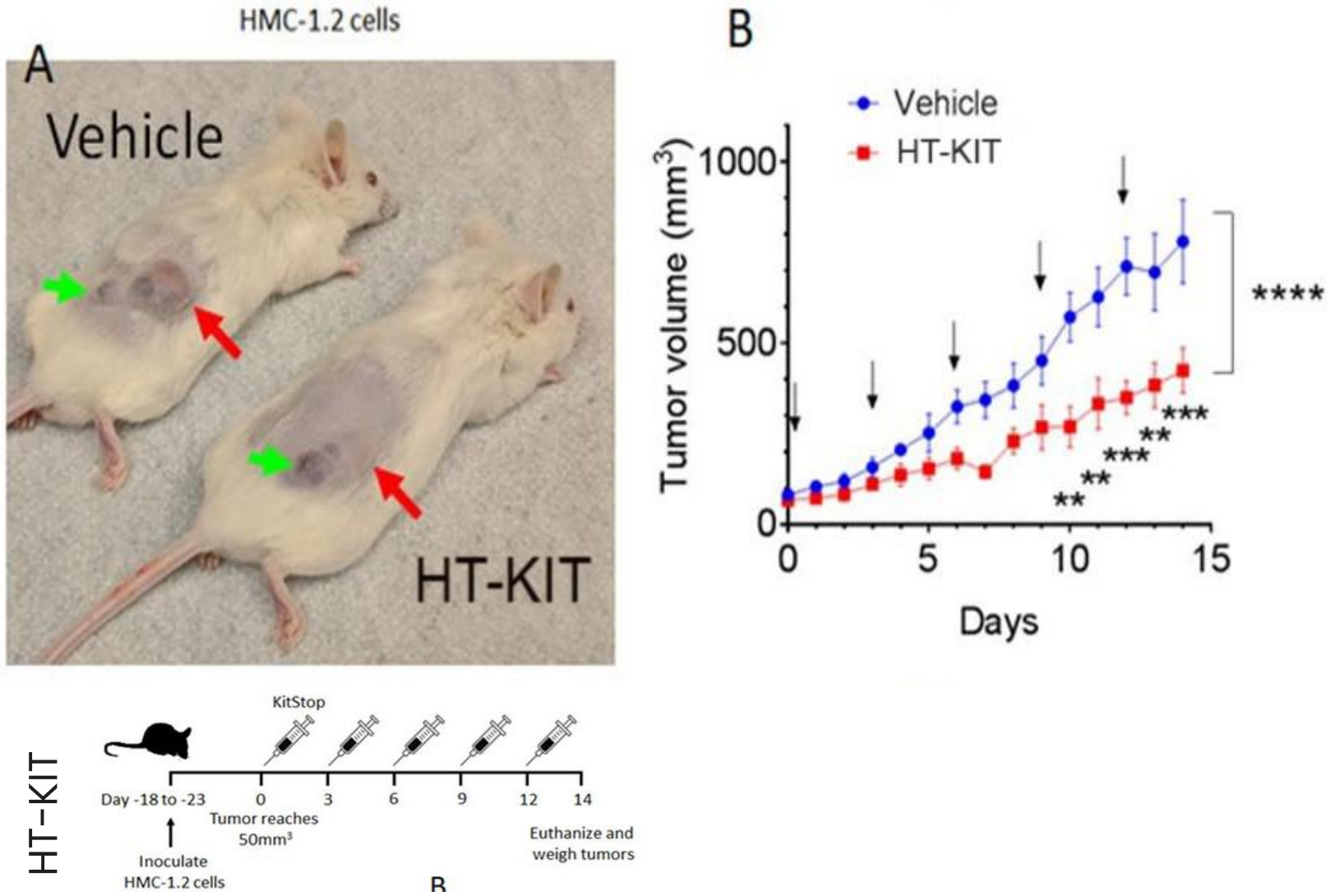
Systemic delivery of human HT-KIT inhibits tumor growth in a humanized xenograft mast cell neoplasia model



Figures from Douglas B. Snider1, Greer K. Arthur1, Guido H. Falduto2, Ana Olivera2, Lauren C. Ehrhardt-Humbert1, Emmaline Smith1, Cierra Smith1, Dean D. Metcalfe2 and Glenn Cruse1 (1Department of Molecular Biomedical Sciences, CVM, NC State University 2Laboratory of Allergic Diseases, NIAID, NIH). Targeting KIT by frameshifting mRNA transcripts as a therapeutic strategy for aggressive mast cell neoplasms. Poster presentation at ASCO June 2021.

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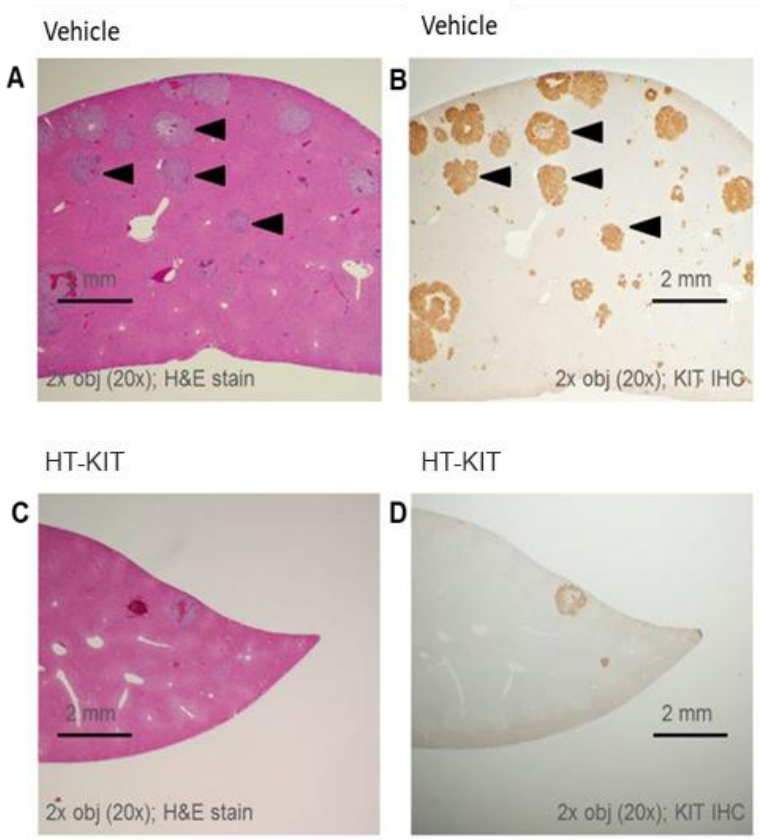
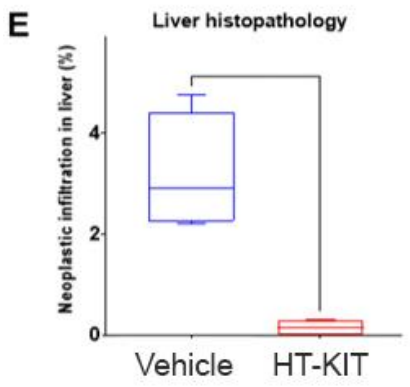
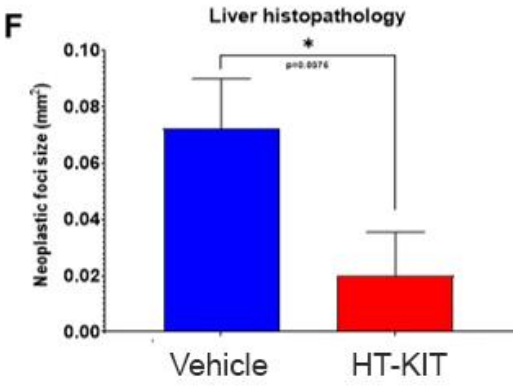
HT-KIT Reduces Liver Infiltration of Neoplastic Mast Cells in a Humanized Xenograft Model of Mast Cell Neoplasia







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Preclinical Development

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HT-ALZ Oral Film

HT-VA

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HT-ALZ:
Value Proposition

Market Growth: The Global Alzheimer's Disease Treatment Market is expected to grow at a CAGR of around 12.8% from 2020 to 2027 and reach the market value of over $5.2B by 2027.*

Mechanism of Action: HT-ALZ targets the Substance P/Neurokinin-1 Receptor pathway** in the brain, which has both negative (inflammatory) and positive (anti-amyloidogenic, memory, neuroprotective) roles in Alzheimer's disease.

Addresses Unmet Need: : There are currently no drugs approved that are considered disease modifying and demonstrate cognitive improvement. Preclinical data with HT-ALZ indicates HT-ALZ may provide reduced neuroinflammation and significant improvements in cognitive functions such as memory and learning.

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*https://www.acumenresearchandconsulting.com/alzheimers-disease-treatment-market

**Martinez AN, Philipp MT. Substance P and Antagonists of the Neurokinin-1 Receptor in Neuroinflammation Associated with Infectious and Neurodegenerative Diseases of the Central Nervous System. J Neurol Neuromedicine. 2016;1(2):29-36. doi:10.29245/2572.942x/2016/2.1020

**Severini C, Petrella C, Calissano P. Substance P and Alzheimer's Disease: Emerging Novel Roles. Curr Alzheimer Res. 2016;13(9):964-72. doi: 10.2174/1567205013666160401114039. PMID: 27033058.

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Recent & Upcoming Milestones: HT-ALZ Oral Soluble Film

Q2 2024

HT-ALZ Formulation Work initiated

Q3 2024

US Patent Office Awarded HT-ALZ Patent

Q3 2024

Preclinical Studies completed at WashU

2025

Pre-IND Meeting Submission

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HT-VA:
Value Proposition

Market Growth: The global obesity treatment market size was valued at USD 15.92 billion in 2024 and is projected to reach USD 60.53 billion by 2030, growing at a CAGR of 22.31% from 2025 to 2030.*

Mechanism of Action: A GDNF family receptor alpha-1 (GFRα-1) agonist, important for the differentiation and survival of neurons, GDNF signals through its receptors, including Ret and GFR-1α, by activation of the PI3K and MAPK pathways.

HT-VA is being formulated to treat or prevent obesity, metabolic syndrome, or insulin resistance by administering an effective amount of a pharmaceutical composition comprising of one or more GDNF receptor agonists.

*Obesity Global Market Reference

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Recent & Upcoming Milestones: HT-VA

Q1 2025

Obtained License Agreement from Veteran's Affairs for HT-VA

Q2 2025

Completed CRADA Development and Executed

Q3 2025

Initiate Preclinical Studies under CRADA

Q1 2026

Initial Results from Preclinical Studies

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Investment Highlights

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Programs in Clinical Stage of Development

- Addressing multi-billion-dollar unmet market opportunities across indications
- HT-001 – no approved product/competitor currently on the market, clinical trial currently enrolling
- HT-KIT – Pre-IND Meeting with FDA successful and IND-enabling tox studies and development underway in 2025

Diverse and Robust Pipeline of Pre-Clinical Candidates

- Offers strong intellectual property portfolio, including exclusive licenses to patents and trademarks
- Multiple shots on goal with diversified portfolio and market
- Multiple assets have platform technology possibilities

Clean Financials

- 15.4 million shares outstanding (as of October 14, 2025)
- Cash on hand is sufficient to take company through the clinical and pre-clinical programs currently in development

Experienced Management, Board and Scientific Advisors

- Experienced management team, board of directors and scientific advisors with proven financial, capital markets and drug development experience

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Thank You.

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