THERA technologies

NASDAQ: **THTX**
TSX: **TH**

H.C. Wainwright 5th Annual NASH Investor Conference

Christian Marsolais, Ph.D.
SVP and Chief Medical Officer

October 12, 2021

Forward-Looking Information

The following presentation contains statements that are considered forward-looking information ("FLI") within the meaning of securities regulation.

The FLI in this presentation relates to future events or our future performance. The FLI are based on a number of assumptions and are associated with a number of risks, uncertainties and other unknown factors that may cause our actual results, levels of activity, performance or achievements to be materially different from those implied by the FLI.

Such FLI reflects our current views with respect to future events and is given as of October 12, 2021. We undertake no obligation and do not intend to update or revise the FLI contained in this presentation, except as required by law.

Certain assumptions made in preparing the FLI include, but are not limited to, the following:

- (1) the COVID-19 pandemic will have limited adverse effects on our activities and business plans;
- (2) sales of *EGRIFTA SV*® and Trogarzo® will continue to grow;
- (3) the known safety and efficacy profile of *EGRIFTA* SV® and Trogarzo® will not change as a result of their long-term use;
- (4) the FDA will approve the bioequivalence of the F8 formulation of tesamorelin;
- (5) we will succeed in developing a multi-dose injection pen using the F8 formulation and regulatory agencies will approve same;
- (6) no biosimilar versions of *EGRIFTA SV*® will be approved by the FDA;
- (7) results obtained from the use of tesamorelin in HIV-infected patients with liver fat will be replicated in the non-HIV NASH population;
- (8) the totality of evidence and data resulting from the conduct of the Phase 3 clinical trial evaluating tesamorelin for the treatment of NASH will demonstrate substantial evidence of efficacy and will be highly persuasive to regulatory agencies in order to gain approval;
- (9) we will be able to secure additional resources to initiate our Phase 3 clinical trial evaluating tesamorelin for the treatment of NASH, including finding a partner;
- (10) we will be able to continue the recruitment of patients to conduct the Phase 1 clinical trial in oncology;
- (11) we will obtain positive results from our Phase 1 clinical trial evaluating TH1902 for the treatment of various cancers;
- (12) we will meet all of the timelines set forth in this presentation; and
- (13) our 2021 business strategies will not change.

The FLI in our presentations may not materialize; accordingly, investors should not place undue reliance on it. We refer you to the "Forward-Looking Information" section of our Management's Discussion and Analysis dated July 13, 2021 and to the "Risk Factors" section of our Annual Information Form dated February 24, 2021. These documents are available at **www.sedar.com**, and on Edgar at **www.sec.gov** for a description of the risks related to the conduct of our business.

Theratechnologies (NASDAQ:THTX, TSX:TH)

A Biopharmaceutical Company Focused on the Development and Commercialization of Innovative Therapies

Corporate Profile

- **Founded in 1993 in Montreal, Canada**, Theratechnologies is a biopharmaceutical company focused on the development and commercialization of innovative therapies addressing unmet medical needs
- **Incorporated in Montreal** where its primary offices sit, satellite locations in Dublin, Ireland and the United States
- The company has approximately **~160 employees*** across Canada, U.S. and Europe
- Dual listed on the Nasdaq Stock Exchange under ticker **(NASDAQ:THTX)** since 2019 and the Toronto Stock Exchange under ticker **(TSX:TH)** since 1993

Stock Information

- Stock Price (as of 9/7/21) **$3.65**
- Shares Outstanding (as of 7/22/21) **~95M**
- Market Cap (as of 9/7/21) **~$350M**
- Cash, cash equivalents (as of 5/31/21) **~$57M**
- Convertible notes outstanding (5.75% coupon; due 6/30/23; $14.85 conversion price) **$57.5M**

Notes:
**Full-time employees and dedicated third parties*
$ values in USD

Promising R&D Pipeline and Commercial Portfolio

Promising R&D Pipeline

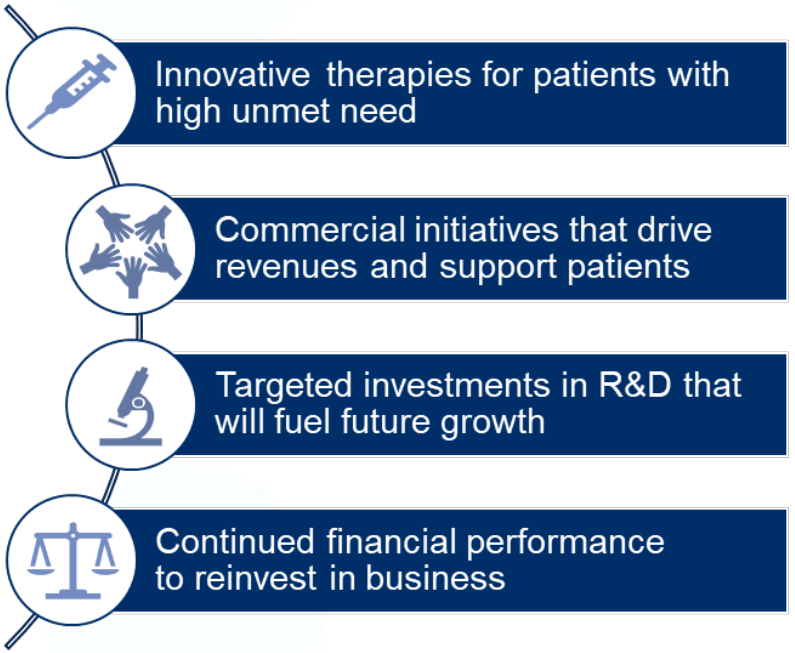
Novel therapies in Oncology, NASH, and HIV

- Phase 1 trial initiated in sortilin-expressing cancers
- Phase 3 ready NASH program
- Next-generation administration methods for Trogarzo® and *EGRIFTA SV*®

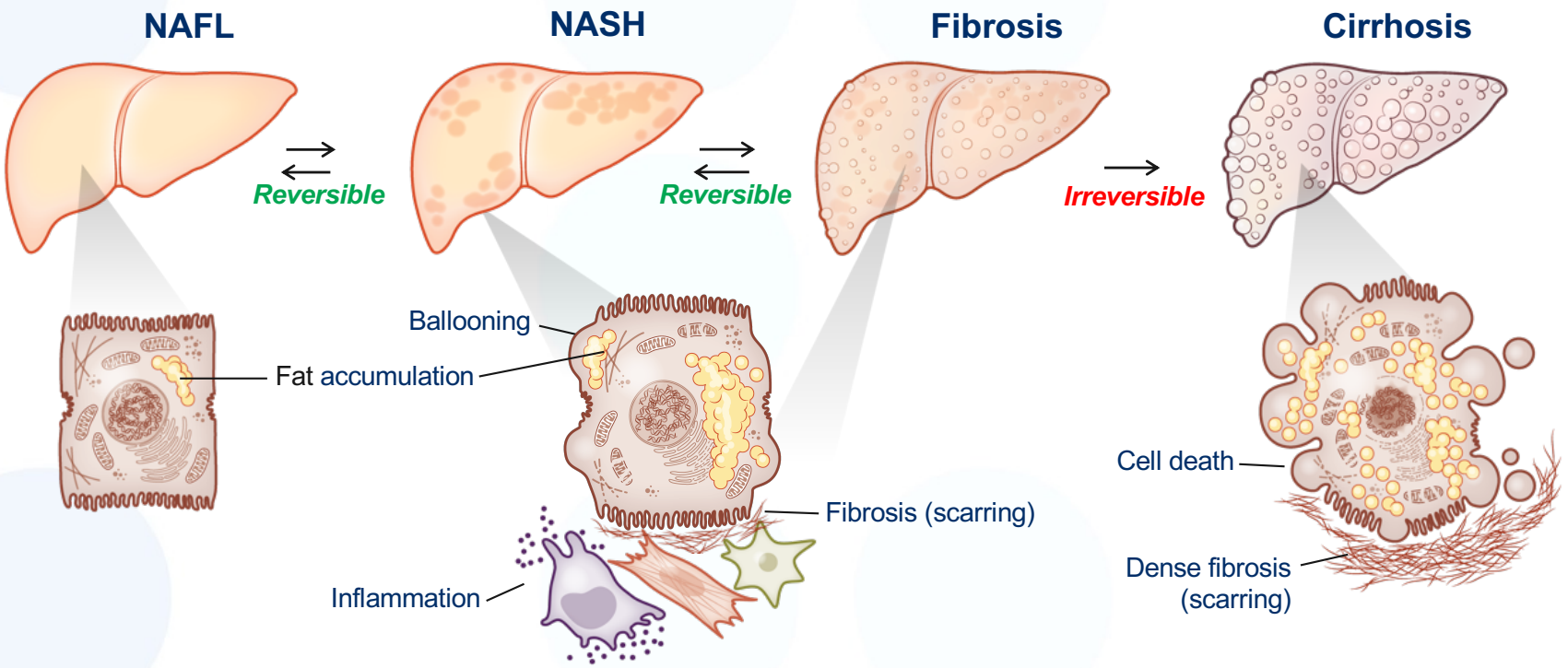
Two Commercially Approved Therapies

Improving standard of care for people living with HIV

- Trogarzo® for multidrug resistant (MDR) HIV-1 in adults
- *EGRIFTA SV*® for HIV-associated lipodystrophy



Fatty liver can lead to irreversible cirrhosis

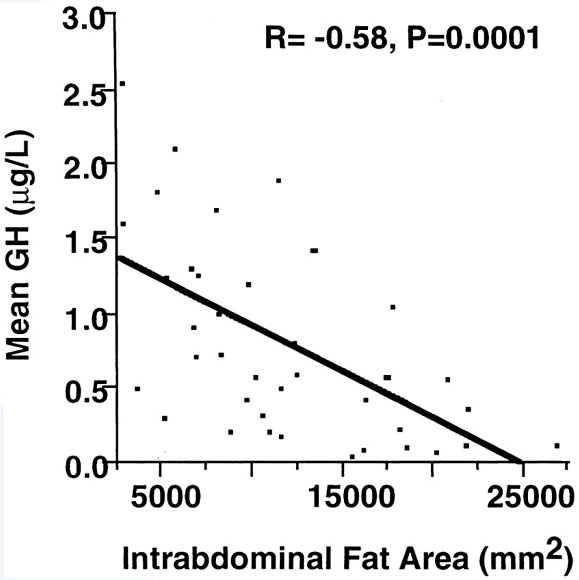


NAFL, nonalcoholic fatty liver; NASH, nonalcoholic steatohepatitis.

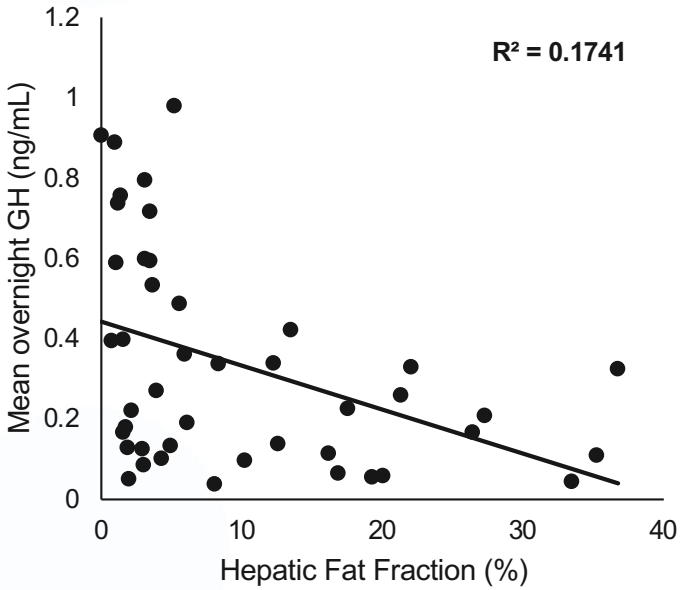
1. Definition & Facts of NAFLD & NASH. https://www.niddk.nih.gov/health-information/liver-disease/nafld-nash/definition-facts. Published November 1, 2016. Accessed August 7, 2020. 2. Nonalcoholic fatty liver disease. https://www.mayoclinic.org/diseases-conditions/nonalcoholic-fatty-liver-disease/symptoms-causes/syc-20354567. Published August 22, 2019. Accessed August 7, 2020. 3. Takahashi Y. *Int J Mol Sci.* 2017 Jul 5;18(7):1447.

Higher Visceral Adiposity and Hepatic Steatosis are Associated with Lower GH levels

Relationship of intra-abdominal fat and mean overnight GH concentration[1]



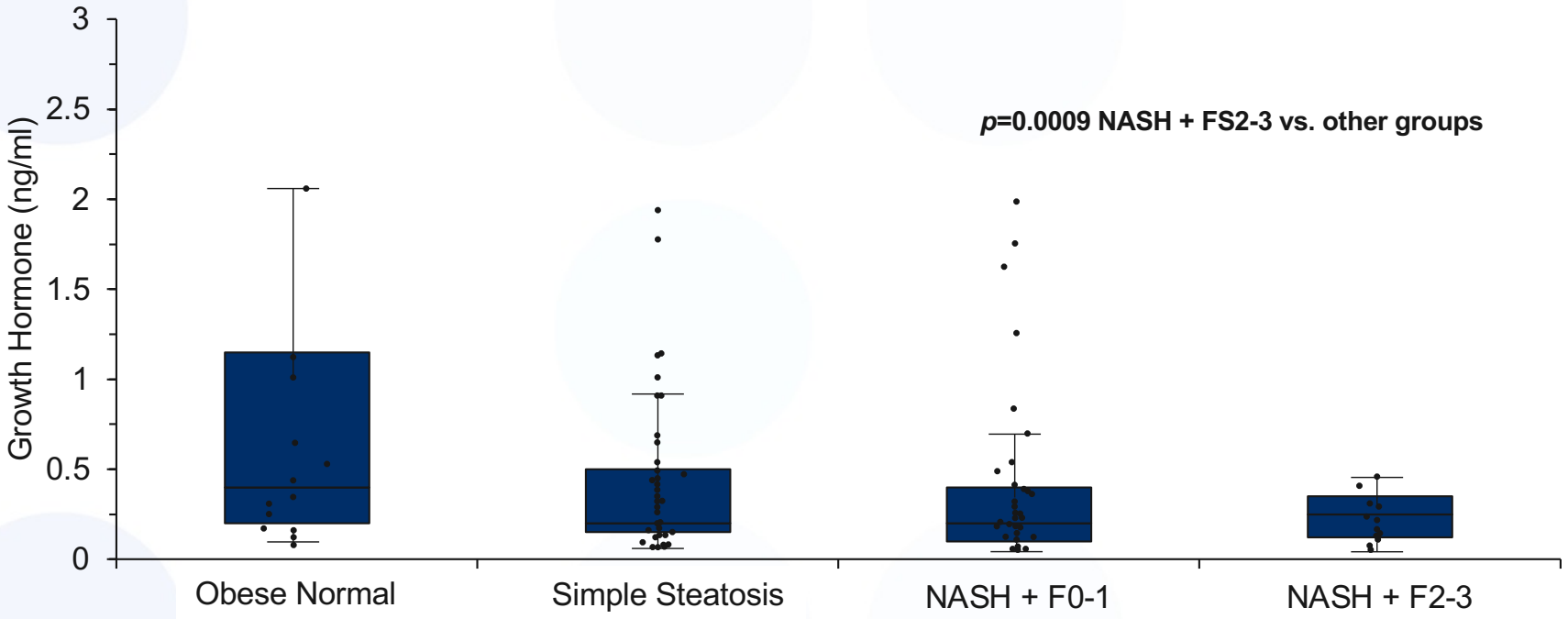
Relationship of mean overnight GH and hepatic steatosis[2,3]



(*) in HIV-infected individuals.

1. Rietschel P et al, JCEM. 2001 Feb;86(2):504-10. 2. Stanley TL et al. JAMA. 2014;312(4):380-9. 3. Theratechnologies, Data on File.

Association between GH and liver fibrosis



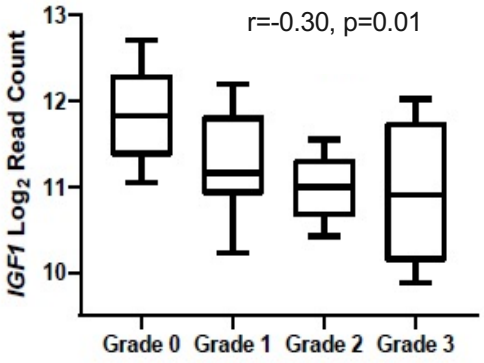
All patients with stage 2-3 NASH fibrosis had circulating levels of GH, which is within criteria for adult GH deficiency (<0.45 ng/mL). P-value was calculated using Kruskal-Wallis test: 0.0009

GH, growth hormone; NASH, nonalcoholic steatohepatis
Koehler E et al. *Liver Int.* 2012 Feb;32(2):279-86.

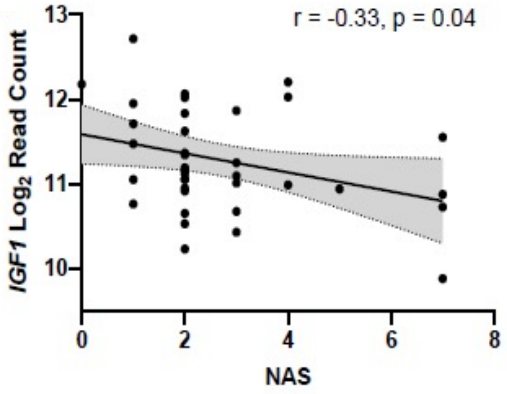
IGF-1 Expression is Associated with Measures of NAFLD Severity

- Hepatic IGF-1 expression was significantly lower in individuals with higher grades of steatosis and higher NAS scores.
- There was a quadratic relationship between IGF1 expression and fibrosis stage, (rising expression at stages 1 and 2 and decreased expression at stage 3)

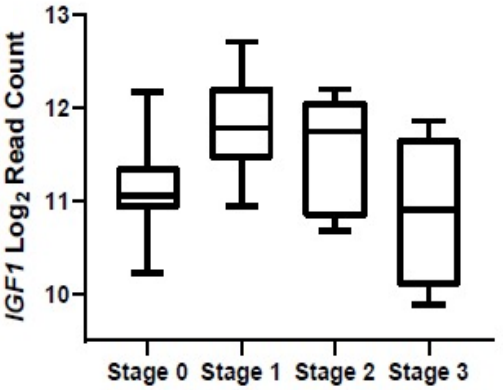
Steatosis grade



NAFLD Activity Score

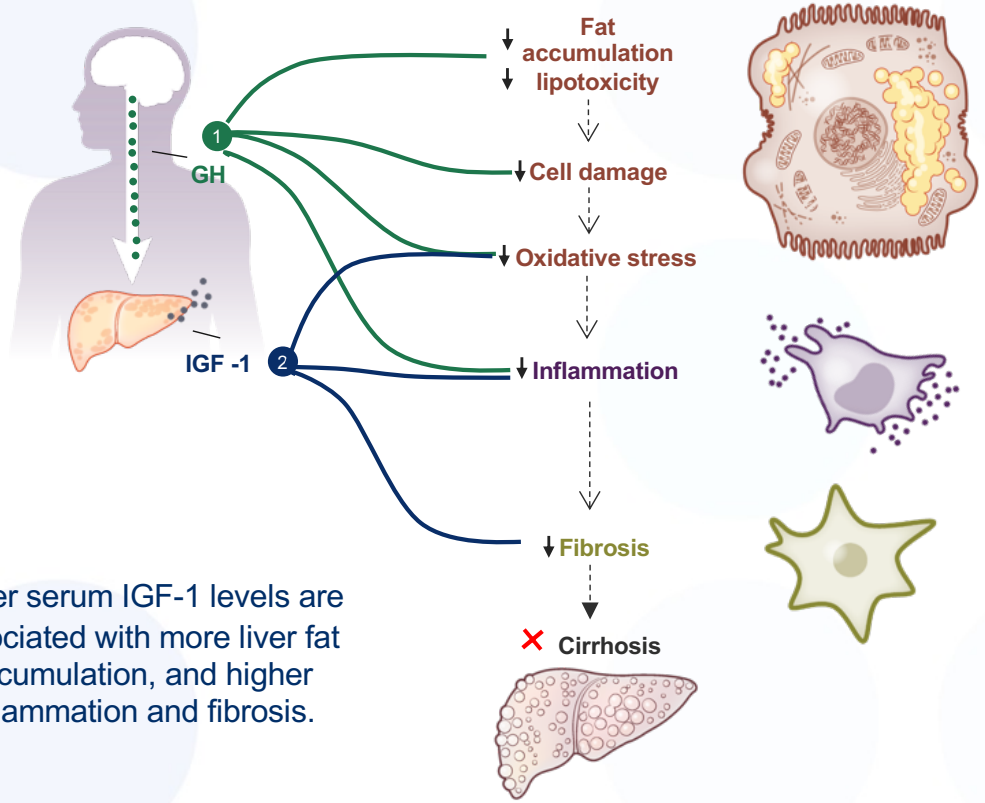


Fibrosis Stage



IGF-1: insulin-like growth factor-1; NAS: NAFLD activity score.
Stanley TL et al. J Clin Endocrinol Metab. 2021 Jan 23;106(2):e520-e533.

GH/IGF-1 axis and the liver



Lower serum IGF-1 levels are associated with more liver fat accumulation, and higher inflammation and fibrosis.

Hepatocytes

Express **GHR**

Expression of **IGF-1R** increases in pathological conditions (i.e., after chronic injury)

Kupffer Cells

Although **GHR** knockout affects inflammation, it's unclear whether these cells directly express the receptor.

Express **IGF-1R**
IGF-1 helps regulate inflammation

Hepatic Stellate Cells

Express **IGF-1R** at high levels
IGF-1 signaling prevents HSCs from activating and becoming fibrosis-causing myofibroblasts

GH, growth hormone; GHR, growth hormone receptor; IGF-1, Insulin-like growth factor 1; IGF-1R, IGF-1 receptor; NASH, nonalcoholic steatohepatitis

1. Xu L and al. *PLOS one.* 2012:7(8): e44136. 2. Takahashi Y. *Int J Mol Sci.* 2017 Jul 5;18(7):1447. 3. Fourman L et al. *JCI Insight.* 2020; 5(16):e140134. 4. Connolly JJ et al. *J Clin Transl Hepatol.* 2018 Sep 28;6(3):264-275. 5. Liu Z et al. *Diabetes.* 2016 Dec;65(12):3598-3609.5. 6. Sanz S et al. *Gut.* 2005; 54:134-141. 7. Stefano JT et al. *World J Gastroenterol.* 2006 Jun 28; 12(24):3821–3828. 8. Dichtel LE et al. *Clin Transl Gastroentrol.* 2017; 8:e217.

Tesamorelin is Safely Targeting GH/IGF-1

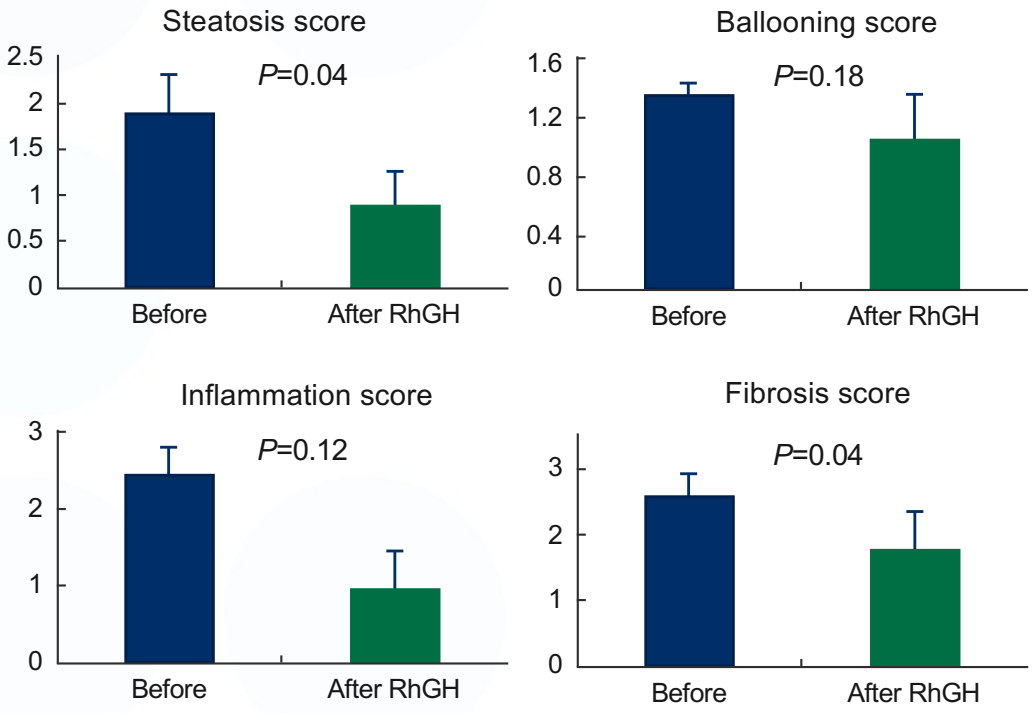
Low GH secretion is associated with development and progression of NASH

- **GH replacement therapy in AGHD patients is associated with observed:**
  - Steatosis improvement
  - Fibrosis improvement
  - Significant AEs – specifically glucose AEs
- **GHRH (tesamorelin) is differentiated from GH replacement therapy:**
  - Induces a natural physiological secretion of GH in a pulsatile manner
  - Differentiated safety profile
  - Long-established product with 10+ years on the market

AGHD: adult growth hormone deficiency; GH: growth hormone; GHRH: growth hormone-releasing hormone

Exogenous GH Treatment Reduces Hepatic Steatosis and Fibrosis

- N=69 adult GHD patients (hypopituitary) were treated with RhGH
- Liver biopsies were performed in five patients[1]
- **Observation:**
  GH replacement treatment significantly improved histologic parameters (steatosis and fibrosis)



GHD: growth hormone deficiency; GH: growth hormone; NASH, nonalcoholic steatohepatitis; rh: recombinant human.
(1) Data from independent study conducted in 2012: Nishizawa H, et al. Eur J Endocrinol. 2012;167(1):67-74.

Tesamorelin (GHRH) Overview

Tesamorelin is the natural sequence of GHRH1-44 with trans 3-hexanoyl adduct on Tyr – this modification makes the analogue resistant to DPP-IV mediated degradation

- GHRH is differentiated from GH replacement therapy:
  - Induces biological secretion of GH
  - Stimulates GH in a pulsatile manner
- **Unlike direct GH replacement therapy, GHRH increases GH in a *physiologic*, pulsatile manner**

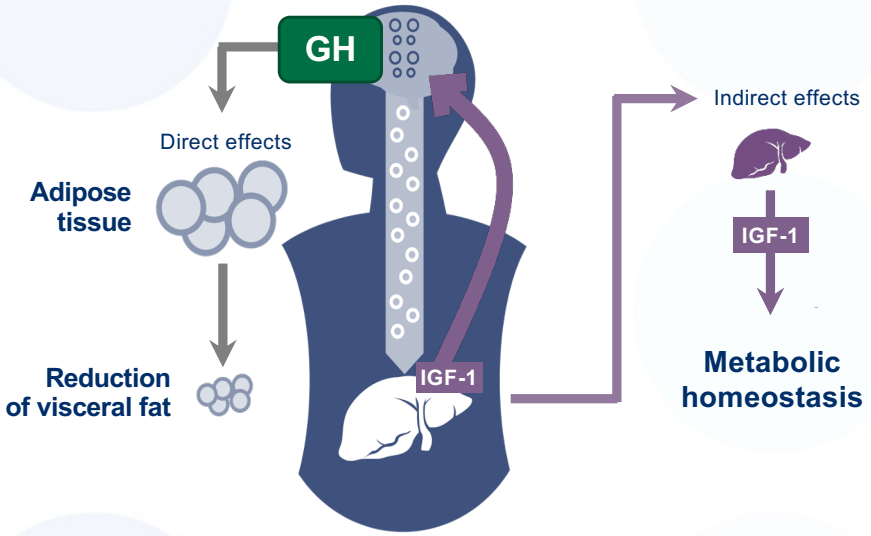
Tesamorelin is *not* GH

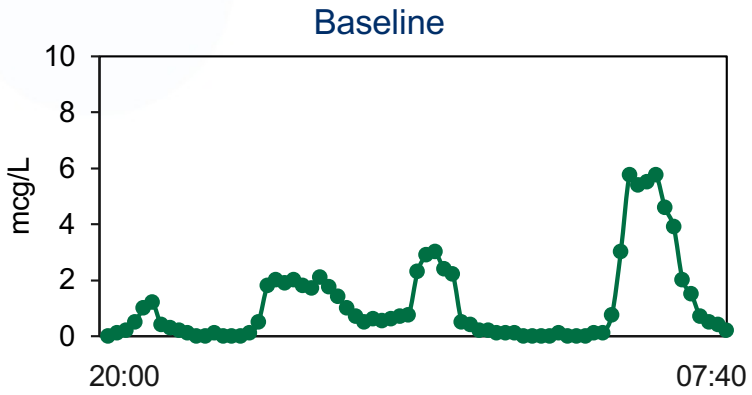
The resetting of natural feedback inhibition is key for the activity and safety profile of tesamorelin

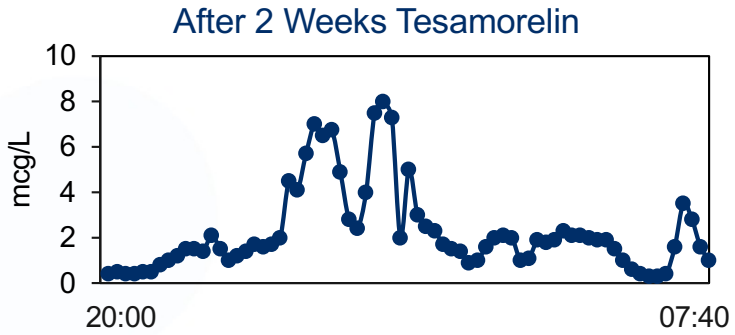
DPP-IV: dipeptidyl peptidase-4; GH: growth hormone; GHRH: growth hormone–releasing hormone.

GHRH's Release Profile (1/2)

Selecting the Optimal Strategy to Restore GH/IGF-1







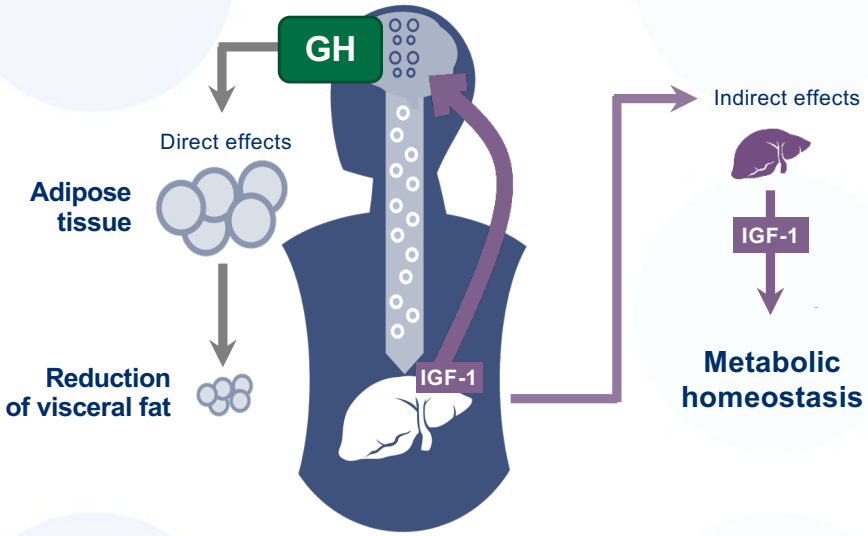
Stimulation of endogenous GH production maintains pulsatile secretion and preserves negative feedback, which improves safety profile

GH: growth hormone; IGF-1: insulin-like growth factor-1.

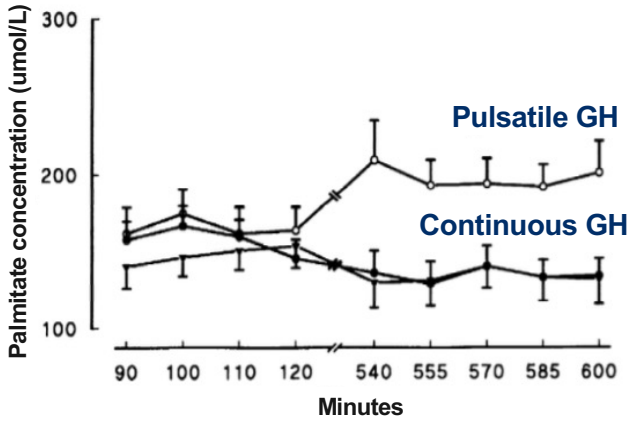
1. Stanley TL et al. J Clin Endocrinol Metab. 2011;96(1):150-8. 2. Gebert CA et al. Mol Endocrinol. 1999;13(1):38-56.

GHRH's Release Profile (2/2)

Impact on Lipolysis



Effects in lipolysis



Stimulation of endogenous GH production maintains pulsatile secretion and preserves negative feedback, which improves safety profile

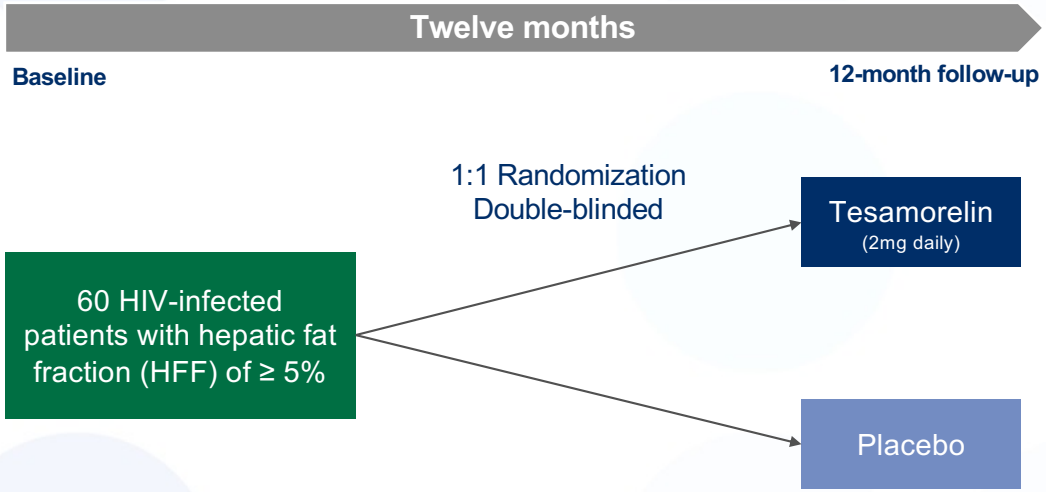
Pulsatile secretion of GH is key to inducing lipolysis

GH: growth hormone; IGF-1: insulin-like growth factor-1.

1. Stanley TL et al. J Clin Endocrinol Metab. 2011;96(1):150-8. 2. Gebert CA et al. Mol Endocrinol. 1999;13(1):38-56.
3. Cersosimo E et al. Am J Physiol. 1996;271(1 Pt 1):E123-6.

Phase 2: Effect of Tesamorelin on NAFLD

Multicenter, Double-Blind, Placebo-Controlled Trial



- Liver biopsy and MRS were included at Baseline and Month 12 assessments to diagnose liver steatosis

Main inclusion criteria

- HIV-positive M/F,18-70 years
- Stable ART and lipid-lowering medication for ≥ 3 months prior to baseline
- Hepatic fat fraction (HFF) of ≥ 5%

Main exclusion criteria

- Heavy alcohol use
- Other chronic liver diseases
- Known cirrhosis, stage 4 fibrosis, other severe chronic illness
- Active malignancy, history of prostate cancer, history of hypopituitarism

ART: antiretroviral therapy; MRS: magnetic resonance spectroscopy.

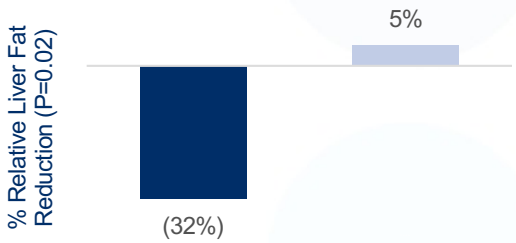
Stanley TL et al. Lancet HIV. 2019 Dec;6(12):e821-e830.

Effects of Tesamorelin in HIV NASH Patients

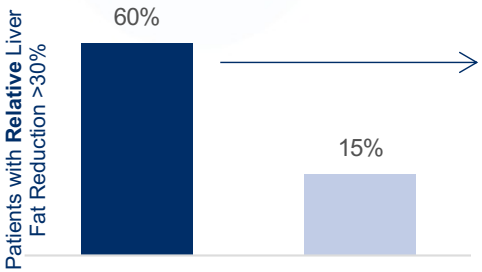
Baseline Characteristics

- 61 men and women with HIV infection
- Hepatic fat levels of 13.8%
- 43% of patients had fibrosis
- 33% of patients had NASH (score 2.7)
- Study discontinuation: 14 patients
- Without biopsies
  - 3 patients at baseline
  - 18 patients at year 1

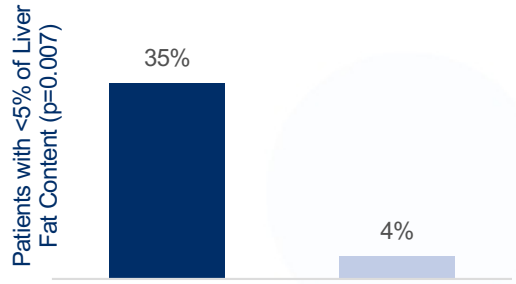
Treatment Effect vs. Placebo



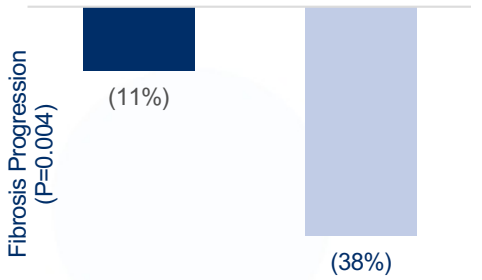
>30% Liver Fat Reduction in Significant Proportion of Patients



Liver Fat Normalization



Delayed Progression of Fibrosis



30% relative reduction in liver fat is associated with histological NAS score improvement and fibrosis and believed to translate into ~5x higher probability of NASH resolution

60% of treated patients met or exceeded this threshold in the Phase 2 study

Tesamorelin

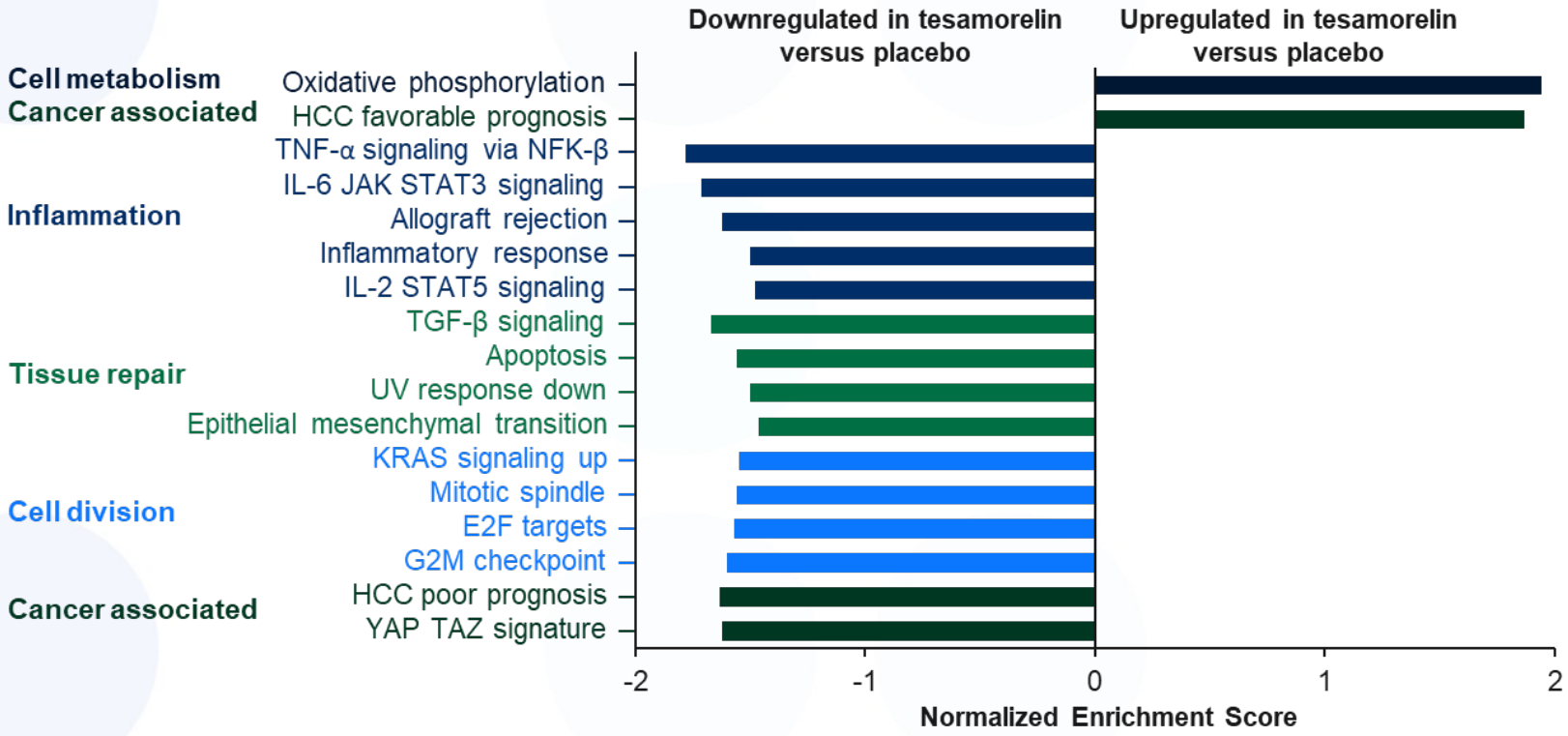
Placebo

Note: Measurement based on MRI/MRS. Final analysis included 26 patients allocated to treatment arm and 28 patients allocated to placebo.

Sources:
Investigator-Initiated Study (Stanley et al., Effects of Tesamorelin on Non-Alcoholic Fatty Liver Disease in HIV; A Randomised, Double-Blind, Multicentre Trial. The Lancet HIV. 2019;6(12): E821-E830.
Patel J, Bettencourt R, Cui J, et al. Association of noninvasive quantitative decline in liver fat content on MRI with histologic response in nonalcoholic steatohepatitis. Therap Adv Gastroenterol. 2016;9(5):692-701.

Effect of tesamorelin on hepatic gene expression

Gene set enrichment analysis



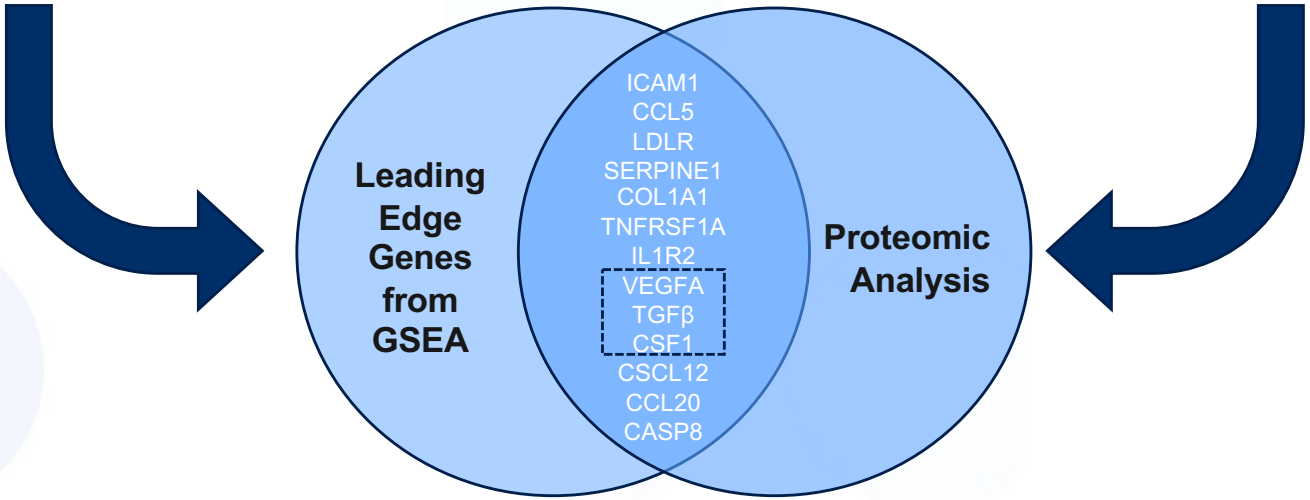
E2F, E2 factor; G, growth; HCC, hepatocellular carcinoma; IL, interleukin; JAK, janus kinase; M, mitosis; NFκB, Nuclear factor-κB; STAT, signal transducer and activator of transcription; TAZ, refers to WW-domain-containing transcription regulator 1 (WWTR1); TGF, transforming growth factor; TNF, tumor necrosis factor; UV, ultraviolet; YAP, Yes-associated protein 1 Fourman LT et al. JCI Insight. 2020;5(16):e140134.

Targeted Proteomic Analysis

Study aim: to identify circulating proteins that are modulated by tesamorelin in association with a clinical response in NAFLD in PWH (NAS and gene-level fibrosis score)

Hepatic Transcription Approach
Delineation of 17 gene pathways differentially modulated by tesamorelin

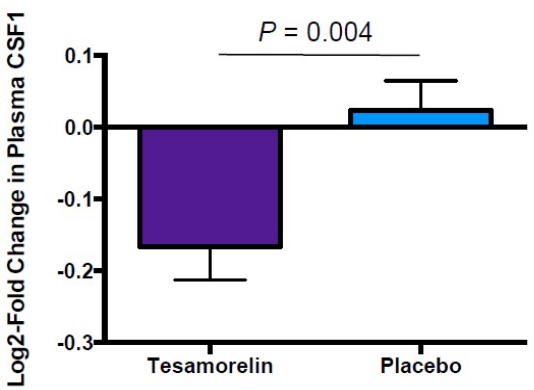
Plasma Proteomic Approach
Assessment of immunologic and cardiometabolic high-multiplex panels



Fourman LT et al. AASLD 2020 Nov 11-16 virtual, abstract #0142.

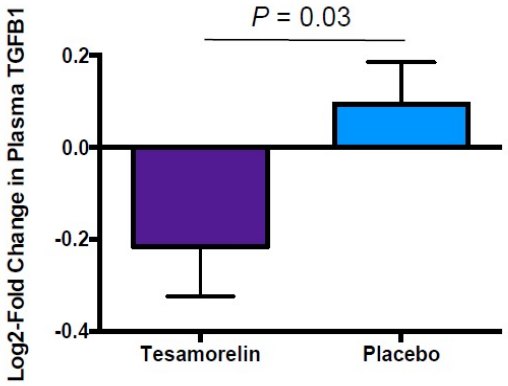
Key Proteins

CSF1



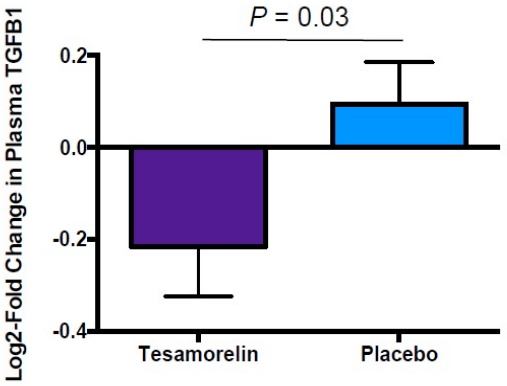
- Promotes the infiltration of monocytes into the liver
- Proliferation of Kupffer cells and monocyte-derived macrophages
- Differentiation of monocyte-derived macrophages
- Central role in liver fibrosis

VEGFA



- Angiogenesis
- Promotes proliferative activity of hepatocytes
- Important role in liver steatosis development and progression

TGFβ1



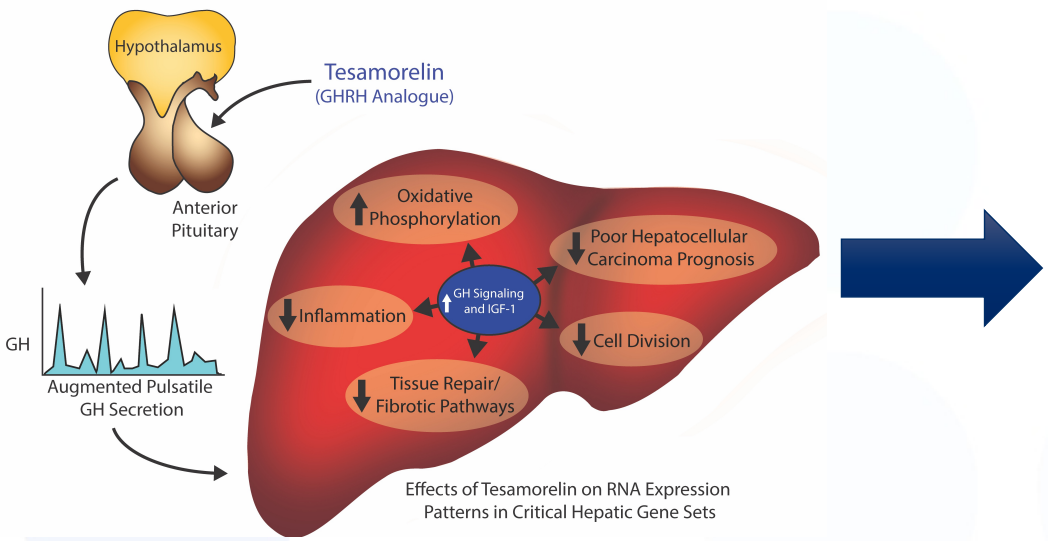
- Promotes fibrogenesis

MCSF-1: colony-stimulating factor-1.

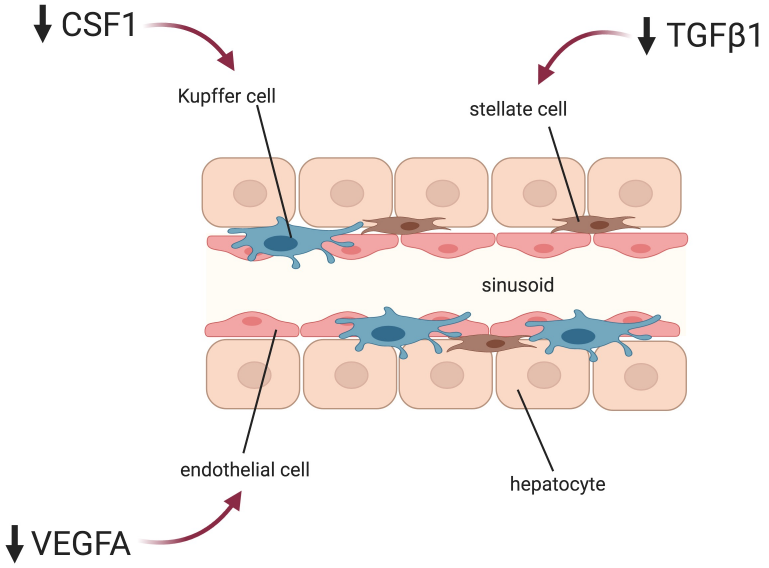
Fourman LT et al. AASLD 2020 Nov 11-16 virtual, abstract #0142. 2. Fourman LT et al. JCI Insight. 2020;5(16):e140134
Tacke F et al. Gastroenterology 2015 Dec;149(7):1675-8. Taniguchi E et al. *J Histochem Cytochem*. 2001 Jan;49(1):121-30. Dooley et al. Cell Tissue Res. 2012 Jan; 347(1): 245–256.

Key Takeaways

Hepatic Transcriptomic Analysis



Focused Plasma Proteomic Analysis



Fourman LT et al. JCI Insight. 2020;5(16):e140134.

Tesamorelin (GHRH): An Approved, Safe, First-in-Class Metabolic-Restorative Drug with Potential to Target All Key NASH Domains

First drug candidate to safely target GH/IGF-1 axis for NASH	• One-of-a-kind mechanism targets the underlying physiology in all relevant NASH patient populations
	  ○ **Selectively reduces visceral (liver) fat without impacting subcutaneous ("good") fat** by inhibiting lipogenesis, increasing oxidative phosphorylation and decreasing liver inflammation while increasing lean muscle mass
	  ○ **Stimulates endogenous release of GH** in a pulsatile fashion, inducing biological release which, when perturbed, contribute to liver pathology
	• No current therapies for *safely* targeting GH/IGF-1 despite well-known association of GH/IGF-1 and NASH

Approved asset with long-established safety	• **De-risked as a marketed drug** for HIV-lipodystrophy
	• Extensive Post-Approval/ Ph. 4 Safety Studies establish:
	  ○ Clean safety profile addressing concerns associated with GH as a target for NASH
	  ○ No impact on glucose homeostasis (in ~1,000+ subjects)

Strong and translatable data in HIV+NAFLD	• **Significant improvement in NASH biomarkers** demonstrated in Ph. 2 Trial in HIV+NAFLD/NASH patients
	  ○ **37%** ↓ liver fat, significant ↓ in fibrosis progression, ↓ in ballooning/inflammation
	  ○ **60%** of treated patients had ≥30% reduction in liver fat (vs. 16% for placebo)
	• Statistically significant results in hard-to-treat patients support efficacy in broader population

Ph. 3 NASH development underway with KOL support	• **Ph. 3 Trial on track to begin 1H'22**: "Study May Proceed" letter received Jan '21, global CRO retained • **Study design**: Pbo-controlled trial comparing NASH resolution w/o worsening of fibrosis after 18 months (60-month trial, n = ~2,000 with ~1,100 patients necessary to support filing)
Strong IP position	• Refreshed core IP in NASH: interlocking patents for F8 formulation / hepatic fat and fibrosis treatment treatment, through 2040 • New pen containing optimized formulation backed by IP and to be used in Ph. 3 trial

Phase 3 Trial Design

Study Design: Phase 3, double-blind, randomized, placebo-controlled clinical trial

- Total Enrollment (n=2,790)
  - Part 1: (n= 547) to ensure completion of ~437 subjects per arm, assuming a dropout rate of 20% after 18 months of treatment
  - Part 2: Continue enrollment to get up to a study total of 790 subjects per arm (1,820 in tesamorelin vs. 970 in placebo arms; randomization 3:1), followed-up for ~5 years
- Cohort Enrollment: ~100 HIV patients with NASH with liver fibrosis

Purpose: Evaluating efficacy and safety of tesamorelin vs. placebo in adult subjects with noncirrhotic NASH with stage 2/3 liver fibrosis

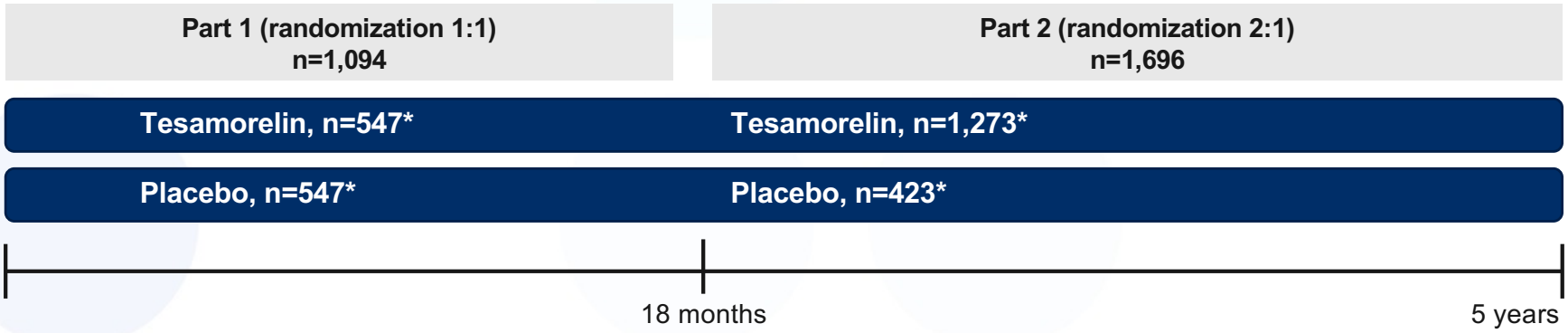
- Part 1: Supportive of sBLA filing with accelerated review
- Part 2: To be conducted similarly to a Phase 4 follow-on study

Timeline:

Recruitment of all 1,094 patients in Part 1 is expected to take **24 months**

For the patients necessary to perform interim futility analysis:

- Recruitment of the necessary patients is expected to take **12 months**
- Followed by **18 months** of treatment
- Followed by **2 months** for analysis (Total: **32 months**)



* Subcutaneous injection with a device.
Theratechnologies, Data on File.

Phase 3 Trial Endpoints

PART 1

Primary endpoint

- Proportion of subjects achieving NASH resolution without worsening of liver fibrosis at Month 18 (tesamorelin vs. pbo)

Key secondary endpoint:

- Proportion of tesamorelin treated subjects relative to placebo achieving improvement of liver fibrosis of ≥ 1 stage and/or NASH resolution at Month 18 compared to baseline

PART 2

Primary endpoints (time to first):

- Death (all causes)
- Histopathologic progression to cirrhosis
- Liver transplant
- MELD score ≥ 15
- Ascites (requiring intervention)
- Hospitalization for onset of variceal bleed, hepatic encephalopathy, spontaneous bacterial peritonitis

Key secondary endpoint:

- Patient-Reported Outcome Evaluations (CLDQ-NAFLD and SF-36) in tesamorelin treated subjects relative to pbo from screening biopsy to Month 12 and every year after

Exploratory endpoint:

- MACE events

CLDQ-NAFLD: Chronic Liver Disease Questionnaire-Non-Alcoholic Fatty Liver Disease;
MACE: major adverse cardiovascular events;
MELD: model for end-stage liver disease; SF-36: Short Form Health Survey.
Theratechnologies, Data on File.

THERA technologies

Thank You