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A Phase I/II study of TGM-312-SC01 in healthy participants and adults with metabolic dysfunction-associated steatohepatitis

Submission date
05/02/2026

Recruitment status
Recruiting

Registration date
13/02/2026

Overall study status
Ongoing

Last Edited
13/02/2026

Condition category
Digestive System

[X] Prospectively registered
[_] Protocol
[_] Statistical analysis plan
[_] Results
[_] Individual participant data
[X] Record updated in last year

Plain English summary of protocol

Background and study aims
Metabolic dysfunction-associated steatotic liver disease (MASLD) is the most common chronic liver disease and is characterized by excessive accumulation of fat in the liver, also known as hepatic steatosis, in the absence of excessive alcohol intake. As MASLD patients progress in their disease, they develop inflammation, fibrosis (scarring of the liver tissue), and cirrhosis that can lead to liver failure. Numerous factors and conditions contribute to the underlying mechanisms of the disease, including central obesity, insulin resistance, lipid metabolism, liver function, dietary influences, the composition of intestinal microbiota, and genetic factors. Progression to metabolic dysfunction-associated steatohepatitis (MASH), the more severe form of MASLD, is promoted by lipotoxic insults driving hepatocyte (liver cells) injury, inflammation, and chronic activation of wound healing responses. The study aims to see if TGM-312-SC01, a possible treatment for MASH, is safe in healthy volunteers and people with MASH and also to see if there is any initial signs that the treatment may shows signs of working in people with MASH.

Who can participate?
Participants aged 18 years to 70 years: healthy volunteers in Part A and patients with MASH in Parts B and C

What does the study involve?
Participants will be randomly allocated to receive either TGM-312-SC01 or placebo via subcutaneous injection (an injection into a person's fat tissue). For Part A, participants would receive one dose of the trial treatment and for Parts B and C participants would receive two doses of the trial treatment, 4 weeks apart. All participants will be followed up for 16 weeks after their last dose of the trial treatment and will visit the research site up to seven times to complete study assessments such as blood sampling, vital signs, physical examinations and imaging performed on the liver. Participants in Parts B and C will have a liver biopsy on two occasions, performed before trial treatment and at the end of the study.

What are the possible benefits and risks of participating?
This is a first in human study, the trial cannot guarantee that there will be any benefit to

participants with MASH as it is unknown at this stage. For the healthy participants in Part A, there is no expectation of benefit from taking part.
The risks of taking the trial drug are unknown as this drug has never been given to people before. There are risks involved in some of the study procedures including bruising at the injection site or from blood sampling. Liver biopsies are associated with a small risk of complication for participants in Parts B and C of the study. These include pain at the biopsy site, temporary low blood pressure and mild bleeding.

Where is the study run from?
Part A of the study will be run at Richmond Pharmacology Clinical Research Unit London (UK) and Parts B and C of the study will be run from King's College Hospital Research Unit, London (UK).

When is the study starting and how long is it expected to run for?
February 2026 to September 2028

Who is funding the study?
Tangram Therapeutics (UK)

Who is the main contact?
clinicaltrials@tangramtx.com

Contact information

Type(s)
Principal investigator

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Scientific

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Additional identifiers

Integrated Research Application System (IRAS)
1012956

Central Portfolio Management System (CPMS)
70891

Study information

Scientific Title
A first-in-human, Phase I/II, randomized, masked, placebo-controlled, parallel-group, dose-escalation, adaptive study to evaluate the safety and pharmacokinetics of a single dose of TGM-312-SC01 in healthy participants and the safety, pharmacokinetics, pharmacodynamics and early signs of efficacy of multiple doses of TGM-312-SC01 in people with metabolic dysfunction-associated steatohepatitis (MASH)

Acronym
RESTORE-MASH

Study objectives

Ethics approval required
Ethics approval required

Ethics approval(s)

approved 30/01/2026, South Central - Berkshire B Research Ethics Committee (Health Research Authority, 2 Redman Place, Stratford, London, E20 1JQ, United Kingdom; +44 (0)207 1048276; berkshireb.rec@hra.nhs.uk), ref: 25/SC/0352

Primary study design
Interventional

Allocation
Randomized controlled trial

Masking
Blinded (masking used)

Control
Placebo

Assignment
Parallel

Purpose
Treatment

Study type(s)

Health condition(s) or problem(s) studied
Metabolic dysfunction-associated steatohepatitis (MASH)

Interventions
Participants will receive either the trial medication (TGM-312-SC01) or placebo via subcutaneous injection. Participants will be randomised to receive TGM-312-SC01 or placebo in a 1:1 ratio in Part A and 2:1 ratio for Parts B and C. Participants in Part A will receive the trial treatment once, participants in Parts B and C will receive the trial treatment twice, 4 weeks apart.

Doses for Part A are proposed as 15, 45, 100, 200, 400 and 600 mg. The dose for Part B/C will decided upon review of the data from Part A.

Intervention Type
Drug

Phase
Phase I/II

Drug/device/biological/vaccine name(s)
TGM-312-SC01

Primary outcome(s)
1. Safety and tolerability measured using the number and severity of treatment-emergent adverse events at baseline to the end of study visit (week 16 for Part A and week 20 for Parts B and C)

Key secondary outcome(s))
1. Pharmacokinetics of TGM-312-SC01 measured using blood sampling at predose, 0.5, 1, 2, 4, 6, 8, 12, 24, 36 and 48 hours (Part A)
2. Pharmacokinetics of TGM-312-SC01 measured using blood sampling at predose, 0.5, 1, 2, 4, 6, 8, 24 hours after dosing (Part B)
3. Pharmacodynamics effects of TGM-312-01 measured using tissue and blood sampling at predose, 2, 4, 8, 12 and 16 weeks after dosing (Part B)

Completion date
06/09/2028

Eligibility

Key inclusion criteria
1. Adults aged 18 to 70 years
2. Able to provide written informed consent
3. Medically suitable for study participation based on protocol-defined assessments

For the disease cohort, participants must have clinical features consistent with metabolic dysfunction-associated steatohepatitis, as defined in the protocol

Healthy volunteers allowed
Yes

Age group
Mixed

Lower age limit
18 years

Upper age limit
70 years

Sex
All

Total final enrolment
0

Key exclusion criteria
1. Clinically significant medical conditions, laboratory abnormalities, or other findings that, in the opinion of the investigator, could increase risk, interfere with study participation, or confound interpretation of study results
2. Recent participation in another investigational study
3. Use of medications that are prohibited by the protocol
4. Any other condition that would make the individual unsuitable for study participation as determined by the investigator

Date of first enrolment
16/02/2026

Date of final enrolment
05/04/2028

Locations

Countries of recruitment
United Kingdom

England

Study participating centre
Kings College Hospital
Denmark Hill
London
England
SE5 9RS

Study participating centre
Richmond Pharmacology Clinical Trial Unit,
1a Newcome Street
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Sponsor information

Organisation
Tangram Therapeutics plc

Funder(s)

Funder type

Funder Name
Tangram Therapeutics plc

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary
Not expected to be made available