Indirect treatment comparison of pegloticase in combination with methotrexate versus nanoencapsulated sirolimus plus pegadricase for the treatment of uncontrolled gout (20260129)

First published: 29/10/2026

Last updated: 30/10/2026

Study Ongoing

Administrative details

EU PAS number

EUPAS1000001127

Study ID

1000001127

DARWIN EU® study

No

Study countries

☐ Other

Study description

Secondary evidence synthesis using randomized controlled trial (RCT) data and published aggregate evidence. An Amgen systematic literature review identified four eligible RCTs: C405/C406, MIRROR RCT, COMPARE, and DISSOLVE I/II. Individual participant data (IPD) are available for C405/C406 and MIRROR RCT; aggregate data are available for COMPARE and DISSOLVE I/II. The primary analysis is an anchored matching-adjusted indirect comparison (MAIC) using MIRROR RCT and COMPARE, with treatment response at month 6 as the primary endpoint. Treatment response is defined as maintaining serum uric acid (sUA) <6 mg/dL for ≥80% of the assessment period. Additional supportive treatment-response analyses will evaluate month 3 and months 3 and 6 combined. Analyses follow NICE DSU TSD 18 and EU Joint Clinical Assessment guidance.

Study status

Ongoing

Contact details

Study institution contact

Global Development Leader Amgen Inc.

medinfo@amgen.com

Study contact

medinfo@amgen.com

Primary lead investigator

Global Development Leader Amgen Inc.

Primary lead investigator

Study timelines

Date when funding contract was signed
Planned: 12/03/2026

Actual: 12/03/2026

Study start date
Planned: 12/10/2026

Actual: 12/10/2026

Data analysis start date
Planned: 19/10/2026

Actual: 19/10/2026

Date of interim report, if expected
Planned: 20/11/2026

Date of final study report
Planned: 18/12/2026

Sources of funding

- Pharmaceutical company and other private sector

More details on funding

Amgen Inc.

Study protocol

Protocol-Published Original pegloticase 20260129_Redacted version.pdf (1.9 MB)

Regulatory

Was the study required by a regulatory body?

No

Is the study required by a Risk Management Plan (RMP)?

Not applicable

Methodological aspects

Study type

Study type list

Study topic:

Human medicinal product

Study type:

Non-interventional study

Scope of the study:

Effectiveness study (incl. comparative)

Data collection methods:

Secondary use of data

Study design:

Secondary evidence synthesis; anchored matching-adjusted indirect comparison (MAIC) for the primary treatment-response comparison using MIRROR RCT IPD and COMPARE aggregate data.

Main study objective:

The primary objective is to estimate the relative treatment effect of pegloticase + methotrexate (MTX) versus NASP on treatment response during month 6 among adults with uncontrolled gout. Treatment response is maintaining sUA <6 mg/dL for ≥80% of the assessment period. Additional supportive analyses evaluate month 3 and months 3 & 6 combined.

Study Design

Non-interventional study design

Other

Non-interventional study design, other

Indirect treatment comparison / evidence synthesis using randomized controlled trial (RCT) data (anchored MAIC)

Study drug and medical condition

Medicinal product name

KRYSTEXXA

Medicinal product name, other

Coadministered with Methotrexate

Study drug International non-proprietary name (INN) or common name

PEGLOTICASE

METHOTREXATE

Anatomical Therapeutic Chemical (ATC) code

(M04AX02) pegloticase

pegloticase

(L04AX03) methotrexate

methotrexate

Medical condition to be studied

Gout

Population studied

Short description of the study population

Short description of the study population: Adults with uncontrolled gout despite prior xanthine oxidase inhibitor (XOI) therapy, represented by the populations enrolled in four eligible RCTs: C405/C406, MIRROR RCT, COMPARE, and DISSOLVE I/II. The evidence base includes 715 participants across the four trial intention-to-treat (ITT) populations as described in the protocol; no new participants are enrolled in the indirect treatment comparison (ITC).

Age groups

- **Adult and elderly population (≥18 years)**
  - Adults (18 to < 65 years)
    - Adults (18 to < 46 years)
    - Adults (46 to < 65 years)
  - Elderly (≥ 65 years)
    - Adults (65 to < 75 years)
    - Adults (75 to < 85 years)
    - Adults (85 years and over)

Study design details

Setting

Secondary analysis of existing RCT evidence in adults with uncontrolled gout. No prospective enrollment, direct patient contact, or new individual-level data collection will be undertaken.

Interventions: Pegloticase + methotrexate (8 mg IV Q2W + oral MTX 15 mg/week); NASP (ImmTOR 0.15 mg/kg + pegadricase 0.2 mg/kg IV Q4W)

Comparators

NASP (nanoencapsulated sirolimus plus pegadricase; investigational comparator)

Outcomes

Primary: treatment response at month 6, defined as maintaining serum uric acid (sUA) <6 mg/dL for ≥80% of the assessment period. Supportive: treatment response at month 3 and months 3 and 6 combined.

Data analysis plan

Primary anchored MAIC using MIRROR RCT IPD and COMPARE aggregate data. MIRROR will be reweighted to match COMPARE on age, BMI, baseline sUA, and baseline tophi; weighted logistic regression with robust variance will estimate the adjusted log-OR, reported as ORs with 95% confidence intervals (CIs). Sensitivity analyses assess broader covariate adjustment (sex and race), exclusion of participants with missing baseline covariates, and removal of population adjustment. Binary outcomes use odds ratios (ORs); sUA change from baseline (CFB) uses mean differences (MDs). Results are reported with 95% CIs for MAIC.

Summary results

Protocol-stage feasibility assessment indicates that treatment response has the strongest cross-trial comparability and supports an anchored MAIC using

MIRROR RCT and COMPARE. Final comparative ITC results are not yet available.

Data management

ENCePP Seal

The use of the ENCePP Seal has been discontinued since February 2025. The ENCePP Seal fields are retained in the display mode for transparency but are no longer maintained.

Data sources

Data source(s), other

Amgen clinical-trial analysis data model (ADaM) datasets for MIRROR RCT and C405/C406; published/publicly available aggregate data for COMPARE and DISSOLVE I/II; Amgen-sponsored SLR evidence base.

Data sources (types)

Clinical trial

Other

Use of a Common Data Model (CDM)

CDM mapping

No

Data quality specifications

Check conformance

Unknown

Check completeness

Unknown

Check stability

Unknown

Check logical consistency

Unknown

Data characterisation

Data characterisation conducted

Not applicable