

# A Study to Evaluate the Safety, Tolerability, and Effects on NSAID-Induced Small Bowel Pathology of K-196 in Healthy Volunteers.

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Primary:1. To characterize the safety and tolerability of multiple oral doses of K-196 alone and in combination with naproxen/omeprazole in healthy subjects.Secondary:1. To assess the effects of K-196 compared to placebo on the proportion of...

<b>Ethical review</b>	Approved WMO
<b>Status</b>	Recruitment stopped
<b>Health condition type</b>	Gastrointestinal inflammatory conditions
<b>Study type</b>	Interventional

## Summary

### ID

NL-OMON51579

### Source

ToetsingOnline

### Brief title

CS0394

### Condition

- Gastrointestinal inflammatory conditions

### Synonym

Inflammatory bowel disease (IBD)

### Research involving

Human

### Sponsors and support

**Primary sponsor:** Kallyope, Inc.

**Source(s) of monetary or material Support:** Kallyope;Inc.

## Intervention

**Keyword:** safety, tolerability

## Outcome measures

### Primary outcome

To characterize the safety and tolerability of multiple oral doses of K-196 alone and in combination with naproxen/omeprazole in healthy subjects.

### Secondary outcome

Small bowel mucosal breaks; PK

## Study description

### Background summary

Treatment of Crohn's disease (CD) and ulcerative colitis (UC) is based on the disease severity and aimed at alleviating symptoms, improving quality of life, and inducing disease remission. Currently available treatments target the intestinal inflammation associated with disease, typically with general anti-inflammatory medications, including corticosteroids and aminosalicylates, followed by immunomodulatory therapies. Despite significant treatment options, IBD remains an area of critical unmet need with less than 50% of patients with moderate-severe disease attaining long-term clinical remission. In vitro, K-196 was shown to protect against low calcium-induced disassembly of intercellular junctions resulting in reduced permeability of test probes across cellular monolayers. In a dextran sodium sulfate (DSS) chemical injury colitis model, K-196 prevented DSS-induced intestinal permeability, body weight loss, rectal bleeding, and diarrhea. K-196 treatment reduced levels of fecal lipocalin, an abundant neutrophil protein shed into stool that is used as a marker of inflammation and barrier integrity. In a DSS recovery paradigm where K-196 dosing was initiated only after the onset of colitis, K-196 treatment resulted in less body weight loss, bleeding, and diarrhea vs. vehicle. Additionally, in a 5-fluorouracil-induced injury model, K-196 prevented the development of diarrhea, reduced body weight loss, and reduced fecal lipocalin levels. Altogether these data suggest that K-196 can modulate barrier function by altering permeability of intercellular junctions and by protecting the

viability of epithelial cells against cytotoxic stressors.

## Study objective

Primary:

1. To characterize the safety and tolerability of multiple oral doses of K-196 alone and in combination with naproxen/omeprazole in healthy subjects.

Secondary:

1. To assess the effects of K-196 compared to placebo on the proportion of subjects with 1 or more small bowel mucosal breaks detected by video capsule endoscopy (VCE) following naproxen/omeprazole.
2. To assess the effects of K-196 compared to placebo on the mean number of small bowel mucosal breaks detected by VCE following naproxen/omeprazole.
3. To characterize the pharmacokinetics on K-196 on Day 14 in healthy subjects (AUC<sub>0-8h</sub>, C<sub>max</sub>, C<sub>trough</sub>).

## Study design

This is a 14-day, randomized, double blind (Sponsor open), placebo-controlled, parallel-group trial.

K-196 or placebo will be administered in a double-blind manner.

Naproxen/omeprazole will be open-label.

## Intervention

K-196 capsules or matching placebo, naproxen, omeprazole.

## Study burden and risks

Since the study is being executed in healthy volunteers, there are no anticipated benefits of the IMP. Please see the overall benefit/risk in the CSP for further information.

## Contacts

### Public

Kallyope, Inc.

East 29th Street 430

New York NY 10016

US

### Scientific

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## Trial sites

### Listed location countries

Netherlands

## Eligibility criteria

### Age

Adults (18-64 years)

### Inclusion criteria

1. Understand the trial procedures and agree to participate by providing written informed consent.
2. Be willing and able to comply with all trial procedures and restrictions.
3. Be healthy between 18 to 59 years of age, inclusive, at the Screening Visit.
4. Have a Body Mass Index (BMI)  $\geq 18.0$  and  $< 30.0$  (kg/m<sup>2</sup>) at the Screening Visit.
5. Be a nonsmoker who has not used tobacco or nicotine-containing products (e.g., nicotine patch) for at least 3 months before administration of the initial dose of trial drug and agrees to abstain from smoking tobacco or the use of nicotine-containing products while on study.
6. Be judged to be in good health by the Investigator, based on clinical evaluations including laboratory safety tests, medical history, physical examination, 12-lead ECG, and vital sign measurements performed at the Screening Visit and before administration of the initial dose of trial drug.

### Exclusion criteria

1. Has participated in another investigational study within the following time period: 30 days, 5 half-lives or twice the duration of the biological effect of the investigational product (whichever is longer or based on local regulations) prior to the Screening Visit. The window will be derived from the date of the last study procedure and/or AE related to the study procedure in the previous study to the Screening Visit of the current study.
2. Is an employee or immediate family member (e.g., spouse, parent, child, sibling) of the Sponsor or study site.

3. Has a history of significant multiple and/or severe allergies (e.g., food, drug, latex allergy) or has had an anaphylactic reaction or significant intolerance to prescription or nonprescription drugs or food.
4. Has a known hypersensitivity or contraindication to any component of K-196, related compounds or its excipients.
5. Has known hypersensitivity to naproxen or any components of the drug product
6. Has history of asthma, urticaria or other allergic-type reactions after taking naproxen or other NSAIDs.

## Study design

### Design

Study type:	Interventional
Intervention model:	Parallel
Allocation:	Randomized controlled trial
Masking:	Double blinded (masking used)
Control:	Placebo
Primary purpose:	Treatment

### Recruitment

NL	
Recruitment status:	Recruitment stopped
Start date (anticipated):	31-05-2023
Enrollment:	70
Type:	Actual

### Medical products/devices used

Product type:	Medicine
Brand name:	Klean-Prep
Generic name:	Klean-Prep
Registration:	Yes - NL intended use
Product type:	Medicine
Brand name:	Lactulose
Generic name:	Lactulose

Registration:	Yes - NL intended use
Product type:	Medicine
Brand name:	Nap.
Generic name:	Nap.
Product type:	Medicine
Brand name:	Naproxen
Generic name:	Naproxen
Registration:	Yes - NL intended use
Product type:	Medicine
Brand name:	Omeprazole
Generic name:	Omeprazole
Registration:	Yes - NL intended use

## Ethics review

Approved WMO	
Date:	22-12-2022
Application type:	First submission
Review commission:	BEBO: Stichting Beoordeling Ethiek Bio-Medisch Onderzoek (Assen)
Approved WMO	
Date:	05-01-2023
Application type:	First submission
Review commission:	BEBO: Stichting Beoordeling Ethiek Bio-Medisch Onderzoek (Assen)
Approved WMO	
Date:	14-01-2023
Application type:	Amendment
Review commission:	BEBO: Stichting Beoordeling Ethiek Bio-Medisch Onderzoek (Assen)

## Study registrations

**Followed up by the following (possibly more current) registration**

No registrations found.

**Other (possibly less up-to-date) registrations in this register**

No registrations found.

**In other registers**

<b>Register</b>	<b>ID</b>
EudraCT	EUCTR2022-003522-42-NL
CCMO	NL83065.056.22