

# Countering Lung Damage in COVID-19 infection (CounterCovid) study

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Our hypothesis is that treatment with imatinib results in a reduction of the time to liberation from ventilation and supplemental oxygen and alive in Covid19.

|                             |                       |
|-----------------------------|-----------------------|
| <b>Ethische beoordeling</b> | Positief advies       |
| <b>Status</b>               | Werving gestart       |
| <b>Type aandoening</b>      | -                     |
| <b>Onderzoekstype</b>       | Interventie onderzoek |

## Samenvatting

### ID

NL-OMON23447

### Bron

Nationaal Trial Register

### Verkorte titel

CounterCovid19

### Aandoening

Covid19 positive pneumonitis with need for hospital admission

## Ondersteuning

**Primaire sponsor:** Amsterdam UMC

**Overige ondersteuning:** AMC foundation and VUmc Fonds

## Onderzoeksproduct en/of interventie

## Uitkomstmaten

### Primaire uitkomstmaten

time to liberation from ventilation and supplemental oxygen and alive during a 28day period after randomization

# Toelichting onderzoek

## Achtergrond van het onderzoek

Rationale: Covid19 infection is characterized by hypoxemic respiratory failure, caused by extensive vascular leak and pulmonary edema early in the course of disease. Although there is no proven therapy to reduce viral replication in Covid19, recent studies from our department have discovered that the tyrosine kinase inhibitor imatinib reinforces the endothelial barrier and prevents vascular leak in inflammatory conditions, while leaving the immune response intact. We hypothesize that reversing vascular leak is an effective approach to reduce disease burden and consumption of medical resources.

Objective: To test whether treatment with oral imatinib reduce disease burden and consumption of medical resources.

Study design: A randomized, double-blind, placebo controlled, clinical trial.

Study population: Patients (>18years) with proven Covid19 infection, admitted to the hospital with hypoxemic respiratory failure ( $\text{SaO}_2 < 92\%$  or  $\text{kPa} < 8$  on room air), with a study population of 386 patients (193/arm).

Intervention (if applicable): The intervention group will receive a starting dose of 800mg oral imatinib, followed by 400mg od during 10 days. The control group will receive a similar dosing schedule with a placebo.

Main study parameters/endpoints: The main study parameter is the time to liberation from ventilation and supplemental oxygen and alive during a 28day period after randomization.

Nature and extent of the burden and risks associated with participation, benefit and group relatedness: Participation involves randomization to either the intervention or the placebo group. In both groups patients will undergo blood sampling at 9 time-points, at each time-point 1 or 4 tubes of 5mL will be drawn. Additional tests include a viral swab from the throat at 2 time-points, and an ECG at 5 time-points. Part of these interventions are part of routine care. Physical discomfort associated with participation involves swallowing of tablets, and side effects of the study medication, which are considered mild (predominantly gastro-intestinal discomfort). Anticipated benefits from the study medication involve faster recovery from Covid19 and a lower risk for ICU admission or death.

## Doel van het onderzoek

Our hypothesis is that treatment with imatinib results in a reduction of the time to liberation from ventilation and supplemental oxygen and alive in Covid19.

## Onderzoeksopzet

2

## Onderzoeksproduct en/of interventie

Imatinib or placebo

## Contactpersonen

### Publiek

Amsterdam UMC, location VUmc  
Harm Jan Bogaard

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### Wetenschappelijk

Amsterdam UMC, location VUmc  
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## Deelname eisen

### Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

- Age >18 years
- Hospital admission with proven SARS2-Covid19 infection
- Hypoxemic respiratory failure (SaO<sub>2</sub> <92%, PaO<sub>2</sub> <8kPa)
- Ability to give informed consent

### Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

1. Pre-existing chronic pulmonary disease, including:
  - ☐ Known diagnosis of Interstitial Lung disease
  - ☐ Former diagnosis of COPD 4 or FEV<sub>1</sub><30%pred
  - ☐ DLCO <45%
  - ☐ Total lung capacity (TLC) < 60% of predicted
  - ☐ Lung cancer with non-surgical treatment in last year
2. Home oxygen treatment
3. Pre-existing heart failure with a known left ventricular ejection fraction <40%
4. Active treatment of hematological or non-hematological cancer with targeted, immuno- or chemotherapy in the last year
4. Inability to provide informed consent

5. Any subject who had received any investigational medication within 1 month prior to the start of this study or who is scheduled to receive another investigational drug during the course of this study
6. Active liver disease, porphyria or elevations of serums transaminases  $>3 \times \text{ULN}$  (upper limit of normal) or bilirubin  $> 1.5 \times \text{ULN}$
7. History or suspicion of inability to cooperate adequately.
8. White blood count  $< 4.0 \times 10^9/\text{l}$
9. Hemoglobin  $< 6.0 \text{ mmol/l}$
10. Thrombocytes  $< 100 \times 10^9/\text{l}$
11. Pregnant female subjects
12. Breastfeeding female subjects

## Onderzoeksopzet

### Opzet

|                  |                       |
|------------------|-----------------------|
| Type:            | Interventie onderzoek |
| Onderzoeksmodel: | Parallel              |
| Toewijzing:      | Gerandomiseerd        |
| Blinding:        | Dubbelblind           |
| Controle:        | Placebo               |

### Deelname

|                         |                      |
|-------------------------|----------------------|
| Nederland               |                      |
| Status:                 | Werving gestart      |
| (Verwachte) startdatum: | 31-03-2020           |
| Aantal proefpersonen:   | 386                  |
| Type:                   | Verwachte startdatum |

### Voornemen beschikbaar stellen Individuele Patiënten Data (IPD)

**Wordt de data na het onderzoek gedeeld:** Nog niet bepaald

## Ethische beoordeling

|                 |                  |
|-----------------|------------------|
| Positief advies |                  |
| Datum:          | 31-03-2020       |
| Soort:          | Eerste indiening |

## Registraties

### Opgevolgd door onderstaande (mogelijk meer actuele) registratie

Geen registraties gevonden.

### Andere (mogelijk minder actuele) registraties in dit register

Geen registraties gevonden.

### In overige registers

| Register       | ID                   |
|----------------|----------------------|
| NTR-new        | NL8491               |
| Ander register | METC VUMC : 2020.158 |

## Resultaten