

Covid High-intensity Immunosuppression in Cytokine release syndrome

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Patients with COVID-19 related CRS treated with immunosuppressive treatment have better clinical outcomes compared to patients treated according to standard care.

Ethische beoordeling

Positief advies

Status

Werving gestart

Type aandoening

-

Onderzoekstype

Observationeel onderzoek, zonder invasieve metingen

Samenvatting

ID

NL-OMON20650

Bron

Nationaal Trial Register

Verkorte titel

CHIC

Aandoening

COVID-19 pneumonia

Ondersteuning

Primaire sponsor: Zuyderland Medical Center

Overige ondersteuning: so far none specific

Onderzoeksproduct en/of interventie

Uitkomstmaten

Primaire uitkomstmaten

1. Time to clinical improvement: defined as the time from start of immunosuppressive treatment to improvement of at least 2 points on an ordinal scale 1-7 or hospital discharge, whichever comes first. This endpoint is recommended by WHO and used as the primary

endpoint in the Lopinavir-Ritonavir trial. (17) The ordinal scale categories are: 1) non-hospitalized, able to resume normal activities; 2) non-hospitalized, but unable to resume normal activities; 3) hospitalized, not requiring oxygen therapy; 4) hospitalized, requiring additional oxygen therapy; 5) hospitalized, requiring high-flow nasal oxygen therapy, non-invasive mechanical ventilation, or both; 6) hospitalized, requiring ECMO, mechanical ventilation, or both; and 7) death.

Toelichting onderzoek

Achtergrond van het onderzoek

Patients diagnosed with COVID-19 and severe pulmonary involvement (COVID-19 pneumonia; CORADS ≥ 4) who present to the emergency department with compromised respiratory status (O₂ requirement) are screened for treatment protocol. A CRS is deemed to exist if at least two of the following three criteria are met: CRP > 100; Ferritin > 900, D-Dimers > 1500. After informed consent, patients are treated with methylprednisolone (MP) receive 250mg bolus intravenously, followed by at least 4 days MP 1mg/kg body weight iv (bolus). If the clinical situation deteriorates or does not improve after 48 hours, a single tocilizumab (8mg/kg body weight) is added.

Patients are monitored daily in a 24/7 multidisciplinary consultation responsible for treatment decisions, with emphasis on immunosuppressive regime and optimal anticoagulation. Outcome measures are collected up to 6 months after admission: mortality, discharge, ICU admission, respiratory status (including oxygen support) and 3- and 6-month functionality and QoL.

The results of this cohort study will be compared with the results of age-gender and prognostic factor-matched control patients with COVID-19 pneumonia from before the start date of the protocol (1-4-2020). This concerns more than 400 patients.

Doele van het onderzoek

Patients with COVID-19 related CRS treated with immunosuppressive treatment have better clinical outcomes compared to patients treated according to standard care.

Onderzoeksopzet

3, 5, 7, 10, 14, 28 days and 3 and 6 months

Onderzoeksproduct en/of interventie

Methylprednisolone, eventually supplemented by tocilizumab

Contactpersonen

Publiek

Zuyderland Medical Center
Sofia Ramiro

+31626568596

Wetenschappelijk

Zuyderland Medical Center
Sofia Ramiro

+31626568596

Deelname eisen

Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

Eligibility for immunosuppressive treatment is based on the Zuyderland treatment protocol (named; 'Standpunt werkwijze behandeling COVID Zuyderland', due to frequent updates will the most recent version be leading at any time).

According to Zuyderland treatment protocol version from 01.04.2020, this means:

1. Detection of diffuse interstitial pneumonia or bilateral infiltrations on chest x-ray or CO-RADS score ≥ 4 based on CT-thorax findings
2. Oxygen saturation at rest in ambient air $\leq 94\%$ or tachypnea $\geq 30/\text{min}$.
3. Presence of at least 2 of the following risk factors for CRS
 - a. High ferritin ($> 900 \mu\text{g/L}$ or two times the level at admission within 48 hours)
 - b. High C-reactive protein ($> 100 \text{ mg/L}$)
 - c. High D-dimer ($> 1500 \mu\text{g/L}$)

Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

No specific exclusion criteria

Onderzoeksopzet

Opzet

Type:	Observationeel onderzoek, zonder invasieve metingen
Onderzoeksmodel:	Anders
Toewijzing:	Niet-gerandomiseerd
Blinding:	Open / niet geblindeerd
Controle:	N.v.t. / onbekend

Deelname

Nederland	
Status:	Werving gestart
(Verwachte) startdatum:	23-04-2020
Aantal proefpersonen:	160
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:	23-04-2020
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 NL8551

Ander register Bureau Wetenschappelijk Onderzoek Zuyderland Medical Center : Z2020077

Resultaten