

## COVID-19 Information

[Public health information \(CDC\)](#)

[Research information \(NIH\)](#)

[SARS-CoV-2 data \(NCBI\)](#)

[Prevention and treatment information \(HHS\)](#)

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 U.S. National Library of Medicine

*ClinicalTrials.gov*



## Hydroxychloroquine Efficacy and Safety in Preventing SARS-CoV-2 Infection and COVID-19 Disease Severity During Pregnancy and Postpartum (COVID-Preg)



The safety and scientific validity of this study is the responsibility of the study sponsor and investigators. Listing a study does not mean it has been evaluated by the U.S. Federal Government. [Know the risks and potential benefits](#) of clinical studies and talk to your health care provider before participating. Read our [disclaimer](#) for details.

ClinicalTrials.gov Identifier: NCT04410562

[Recruitment Status](#) ⓘ : Recruiting

[First Posted](#) ⓘ : June 1, 2020

[Last Update Posted](#) ⓘ : January 22, 2021

See [Contacts and Locations](#)

### Sponsor:

Barcelona Institute for Global Health

### Collaborators:

Hospital Clinic of Barcelona

Fundació Institut de Recerca de l'Hospital de la Santa Creu i Sant Pau

University Hospital of Torreon

Fundación de investigación HM  
 Hospital Sant Joan de Deu  
 Hospital del Mar  
 Hospital Universitario Infanta Leonor  
 Hospital Universitario Fundación Alcorcón  
 Hospital General de Segovia  
 Institut Català de la Salut

### Information provided by (Responsible Party):

Barcelona Institute for Global Health

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## Study Description

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### Brief Summary:

It still unclear how SARS-CoV-2 affects pregnant women and their offspring, as well as which factors may influence obstetrical disease and outcomes, including the timing of maternal viral exposure by gestational age, the effects of parity, age, host immune responses, coexisting medical and obstetrical conditions and the effects of treatment regimens. While further information is gathered, based on the existing evidence from other infections causing pneumonia, pregnant women should be considered to be at high risk for developing severe infection during the current COVID-19 epidemic. Results from clinical trials with HCQ in nonpregnant adults may not be directly extrapolated to pregnant women given the special features of the pregnancy status. Thus, clinical research is urgently needed to improve the care and reduce the risk of poor pregnancy outcomes of women in this and in future epidemics.

| <u>Condition or disease</u> ⓘ          | <u>Intervention/treatment</u> ⓘ           | <u>Phase</u> ⓘ |
|--|---|----------------|
| Pregnancy Related<br>COVID<br>Covid-19 | Drug: Hydroxychloroquine<br>Drug: Placebo | Phase 3        |

### Detailed Description:

This is a randomized, double blinded, placebo-controlled multicenter clinical trial including 714 pregnant women (200 SARS-CoV-2 infected -100 symptomatic with mild disease and 100 asymptomatic- pregnant women and 514 SARS-CoV-2 uninfected pregnant women who are contacts with a SARS-CoV-2 case) with the main objectives of assessing the safety and efficacy of oral hydroxychloroquine (HCQ) in reducing maternal viral shedding by PCR, and preventing incident SARS-CoV-2 infection and disease severity. Pregnant women undergoing antenatal follow up at five maternity hospitals, presenting at least one sign and/or one mild suggestive symptoms and a positive SARS-CoV-2 PCR test, or who are contacts of a suspected or confirmed case, will be recruited and randomized 1:1 to receive HCQ orally (400 mg/day for 3 days, followed by 200 mg/day for 11 days) or placebo. Women will be followed up for the duration of the intervention. One week after intervention completion, a SARS-CoV-2 PCR test will be repeated. At delivery, the

pregnancy outcome will be registered, and a cord blood sample will be collected to measure for IgG and IgM of SARS-CoV-2. A neonatal nasopharyngeal aspirate will be collected to perform PCR SARS-CoV-2 testing.

## Study Design

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### Study Type ⓘ :

Interventional (Clinical Trial)

### Estimated Enrollment ⓘ :

714 participants

### Allocation:

Randomized

### Intervention Model:

Parallel Assignment

### Intervention Model Description:

Randomized, double-blinded, placebo-controlled multicentre clinical trial.

### Masking:

Quadruple (Participant, Care Provider, Investigator, Outcomes Assessor)

### Primary Purpose:

Treatment

### Official Title:

Hydroxychloroquine Efficacy and Safety in Preventing SARS-CoV-2 Infection and COVID-19 Disease Severity During Pregnancy and Postpartum

### Actual Study Start Date ⓘ :

May 13, 2020

### Estimated Primary Completion Date ⓘ :

May 13, 2021

### Estimated Study Completion Date ⓘ :

August 1, 2021

### Resource links provided by the National Library of Medicine





[Drug Information](#) available for: [Hydroxychloroquine](#) [Hydroxychloroquine sulfate](#)

[U.S. FDA Resources](#)

## Arms and Interventions

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| Arm    | Intervention/treatment    |
|---|--|
| <p>Experimental: Hydroxychloroquine</p> <p>Participants will be then randomized in a 1:1 ratio to HCQ (400 mg/day for three days, followed by 200 mg/day for 11 days)</p> | <p>Drug: Hydroxychloroquine</p> <p>Participants will receive a bottle containing 19 tablets of study medication. They will be instructed to take two tablets for the first three days and one tablet for the following 11 days. (400 mg/day for three days, followed by 200 mg/day for 11 days).</p> <p>Other Name: Dolquine</p> |
| <p>Placebo Comparator: Placebo</p> <p>Participants will be then randomized in a 1:1 ratio to placebo (2 tablets for three days, followed by one tablet for 11 days).</p>  | <p>Drug: Placebo</p> <p>Participants will receive a bottle containing 19 tablets of placebo. They will be instructed to take two tablets for the first three days and one tablet for the following 11 days.</p>  |

## Outcome Measures

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### Primary Outcome Measures :

1. Number of PCR confirmed cases among pregnant women [ Time Frame: 21 days after intervention ]  
Number of PCR-confirmed infected pregnant women assessed from collected nasopharyngeal and oropharyngeal swabs at day 21 after treatment start

### Secondary Outcome Measures :

1. Incidence of COVID-19 disease during pregnancy [ Time Frame: through study completion, an average of 1 year ]
2. Incidence of COVID-19-related admissions [ Time Frame: through study completion, an average of 1 year ]
3. Incidence of all-cause admissions [ Time Frame: through study completion, an average of 1 year ]
4. Incidence of all-cause outpatient attendances [ Time Frame: through study completion, an average of 1 year ]
5. Mean duration of symptoms-signs of COVID-19 [ Time Frame: through study completion, an average of 1 year ]

6. Frequency and severity of adverse events [ Time Frame: through study completion, an average of 1 year ]
7. Incidence of preeclampsia [ Time Frame: through study completion, an average of 1 year ]
8. Incidence of gestational diabetes [ Time Frame: through study completion, an average of 1 year ]
9. Incidence of SARS-CoV-2 infections during pregnancy [ Time Frame: through study completion, an average of 1 year ]
10. Prevalence of intrauterine growth restriction [ Time Frame: through study completion, an average of 1 year ]
11. Maternal mortality rate [ Time Frame: through study completion, an average of 1 year ]
12. Proportion of neonates with SARS-CoV-2- intrauterine infection by PCR-confirmed SARS-CoV-2- infection in nasopharyngeal aspirate. [ Time Frame: through study completion, an average of 1 year ]
13. Proportion of neonates with clinical signs/symptoms of COVID-19 [ Time Frame: through study completion, an average of 1 year ]
14. Prevalence of low birth weight (<10th centile according to local standards) [ Time Frame: through study completion, an average of 1 year ]
15. Prevalence of preterm birth (<37 weeks of gestational age) [ Time Frame: through study completion, an average of 1 year ]
16. Prevalence of embryo and foetal losses (miscarriages and stillbirths) [ Time Frame: through study completion, an average of 1 year ]
17. Frequency of congenital malformations [ Time Frame: through study completion, an average of 1 year ]
18. Proportion of adverse perinatal outcome [ Time Frame: through study completion, an average of 1 year ]
19. Neonatal morbidity [ Time Frame: through study completion, an average of 1 year ]
20. Neonatal mortality rate [ Time Frame: through study completion, an average of 1 year ]

## Eligibility Criteria

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### Information from the National Library of Medicine



*Choosing to participate in a study is an important personal decision. Talk with your doctor and family members or friends about deciding to join a study. To learn more about this study, you or your doctor may contact the study research staff using the contacts provided below. For general information, [Learn About Clinical Studies.](#)*

**Ages Eligible for Study:**

Child, Adult, Older Adult

**Sexes Eligible for Study:**

Female

**Accepts Healthy Volunteers:**

Yes

**Criteria**

## Inclusion Criteria:

- Presenting with fever ( $\geq 37.5^{\circ}\text{C}$ ) and/or one mild symptom suggestive of COVID-19 disease (cough, dyspnoea, chills, odynophagia, diarrhoea, muscle pain, anosmia, taste disorder, headache) OR contact of a SARS-CoV-2 confirmed or suspected case in the past 14 days
- More than 12 weeks of gestation (dated by ultrasonography)
- Agreement to deliver in the study hospitals

## Exclusion Criteria:

- Known hypersensitivity to HCQ or other 4-aminoquinoline compounds
- History of retinopathy of any aetiology
- Concomitant use of digoxin, cyclosporine, cimetidine
- Known liver disease
- Clinical history of cardiac pathology including known long QT syndrome
- Unable to cooperate with the requirements of the study
- Participating in other intervention studies
- Delivery onset (characterized by painful uterine contractions and variable changes of the cervix, including some degree of effacement and slower progression of dilatation up to 5 cm for first and subsequent labours)

**Contacts and Locations**

Go to

**Information from the National Library of Medicine**

*To learn more about this study, you or your doctor may contact the study research staff using the contact information provided by the sponsor.*

*Please refer to this study by its ClinicalTrials.gov identifier (NCT number): **NCT04410562***

**Contacts**

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**Locations****Spain**

Hospital General de Segovia **Recruiting**  
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Contact: Paloma Toro, MD [ptorop@saludcastillayleon.es](mailto:ptorop@saludcastillayleon.es)

Hospital del Mar **Recruiting**  
Barcelona, Catalunya, Spain, 08003

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Hospital Clínic de Barcelona **Recruiting**  
Barcelona, Catalunya, Spain, 08036

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Hospital de la Sant Creu i Sant Pau **Recruiting**  
Barcelona, Catalunya, Spain, 08041

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Hospital Sant Joan de Déu **Recruiting**  
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Hospital Universitario Fundación Alcorcón **Recruiting**  
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HM Puerta del Sur **Recruiting**  
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Hospital Universitario de Torrejón **Recruiting**  
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Contact: Maria del Mar Gil, MD, PhD 916 26 26 26 [mgil@torrejonsalud.com](mailto:mgil@torrejonsalud.com)

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**Sponsors and Collaborators**

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Fundación de investigación HM

Hospital Sant Joan de Deu

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Hospital Universitario Infanta Leonor

Hospital Universitario Fundación Alcorcón

Hospital General de Segovia

Institut Català de la Salut

**More Information**

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**Publications automatically indexed to this study by ClinicalTrials.gov Identifier (NCT Number):**

[González R, García-Otero L, Pons-Duran C, Marbán-Castro E, Goncé A, Llurba E, Gil MDM, Rodríguez-Zambrano MÁ, Chen H, Ramírez M, Bardají A, Menendez C. Hydroxychloroquine efficacy and safety in preventing SARS-CoV-2 infection and COVID-19 disease severity during pregnancy \(COVID-Preg\): a structured summary of a study protocol for a randomised placebo controlled trial. \*Trials\*. 2020 Jul 2;21\(1\):607. doi: 10.1186/s13063-020-04557-y.](#)

**Responsible Party:**

Barcelona Institute for Global Health

**ClinicalTrials.gov Identifier:**

[NCT04410562](#) [History of Changes](#)

**Other Study ID Numbers:**

2020-001587-29

**First Posted:**

June 1, 2020 [Key Record Dates](#)

**Last Update Posted:**

January 22, 2021

**Last Verified:**

April 2020



**Individual Participant Data (IPD) Sharing Statement:****Plan to Share IPD:**

Yes

**Plan Description:**

It would be shared at time of publication.

**Supporting Materials:**

Study Protocol

Statistical Analysis Plan (SAP)

Informed Consent Form (ICF)

Clinical Study Report (CSR)

**Time Frame:**

By the end of study

**Studies a U.S. FDA-regulated Drug Product:**

No

**Studies a U.S. FDA-regulated Device Product:**

No

**Keywords provided by Barcelona Institute for Global Health:**

pregnancy

covid-19

coronavirus

hydroxychloroquine

**Additional relevant MeSH terms:**

Infection

Hydroxychloroquine

Antimalarials

Antiprotozoal Agents

Antiparasitic Agents

Anti-Infective Agents

Enzyme Inhibitors

Molecular Mechanisms of Pharmacological Action

Antirheumatic Agents