Covid-19 infectiON and medicines In preGNancy



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on behalf of the the EU PE & PV Research Network

Contributing organizations

- University Medical Center Utrecht, Utrecht, the Netherlands (UMCU)
- UKOSS, NPEU, University of Oxford, ITOSS, Rome, Italy , NOSS, Nordic countries, Inserm, France
- Universiteit Utrecht, Utrecht, The Netherlands (UU)
- Agenzia Regionale di Sanita' Toscana Italy (ARS)
- Aarhus University (AUH)
- University Copenhagen, Denmark (UCPH)
- Leibniz-Institute for Prevention Research and Epidemiology BIPS, Germany (BIPS)
- Hospital Sanitaria Vall d'Hebron, Spain (FICF)
- Foundation for the Promotion of Health and Biomedical Research of Valencian Region (FISABIO), Spain
- Karolinska Institute, Sweden (KI)
- RTI Health Solutions (RTI-HS), Barcelona, Spain; North Carolina and Massachusetts, USA
- University Oslo, Norwegian Institute of Public Health, Norway (UiO)
- Instituto Aragonés de Ciencias de la Salud, Zaragoza Spain (IACS)
- University Swansea, UK (USWANSEA)
- University Bordeaux (BPE)
- University Lausanne/Bern, (UniBern)
- University of Manchester, UK.(UMAN)

Many questions remain, 10 months into COVID-19

Is a pregnant woman at higher risk to get COVID-19?

Is a pregnant woman with COVID-19 at higher risk of severe disease?

> Is there a chance for vertical transmission of SARS-Cov-2?



What is the impact of COVID-19 disease on pregnancy outcomes? What is the impact of medicines to treat COVID-19 on pregnancy outcomes?



Aim

To guide evidence based decision-making for regulators about COVID-19 vaccine indications, vaccination policies, and treatment options for pregnant women.



Objectives

- Assess use of medicines for COVID-19 treatment in pregnant women and compare with non-COVID-19/non-pregnant women of same age
- Describe severity and clinical outcomes of COVID-19 disease in pregnant women and compare to nonpregnant women of reproductive age with COVID-19.
- To assess and compare pregnancy and neonatal outcomes in different treatment groups of pregnant women for COVID-19
- To establish collaborations with other global initiatives (ICMRA) and have sustainability



CONSIGN works with strong networks in pregnancy field



Innovative Medicines Initiative funded project with 88 partners aiming to build an ecosystem in Europe for monitoring medicines safety in pregnancy and lactation https://www.imi-conception.eu



Multinational collaboration of organisations conducting prospective population-based studies of serious illnesses in pregnancy and childbirth, doi: 10.1111/aogs.12316. Epub 2013 Dec 30.



Multinational collaboration of organisations conducting prospective population-based studies of serious illnesses in pregnancy and childbirth

Approach

- Primary data collection (specific for purpose)
 - INOSS: ongoing standardized data collection at delivery for women with COVID-19 during pregnancy in INOSS countries
 - COVI-PREG: ongoing standardized data collection in health clinics at each visit for pregnant women with suspected COVID-19 in > 200 health facilities
 - Case control analyses
- Secondary use of real world data collected in health care
 - 9 Population based electronic health and medical birth registers in 8 countries, covering more than 1 million births per year
 - Women of childbearing age
 - Using ConcePTION tools and common data model



Overlaps and differences

EHR databases & registries: women of child-bearing age DK, NO, SE, UK, DE, IT, ES, FR

Pregnancy ended 2019: prior to COVID-1**9** Pregnancy ended 2020 Potential exposure to COVID-19

COVI-PREG: pregnancies with suspected SARS-CoV-2 & tested >200 sites in Europe: UK, CH, ES, PT, NL, LI, IR, FR, DE, BE, IT INOSS: Pregnancies with proven SARS-CoV-2 infection in Europe: BE, DE, FI, FR, IC, IT, NO, SL, SE, UK

Areas of overlap may allow for validity checks



Collaboration & sustainability

Collaboration with other international initiatives

- Sentinel
- CNODES (Health Canada)
- US-CDC
- Other ICMRA available options
- INOSS network outside of Europe
- COVI-PREG sites outside of Europe
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- Sustainability of collaboration and pooling of data
 - In Europe
 - Globally



Deliverables and timing

- Description of the network of electronic health care data sources, quality and background rates (January 2021)
- Study protocols for retrospective analyses (October 2020)
- Description how studies can be extended to other continents (December 2021)
- A report describing the prevalence of medicines and other treatments used in pregnant women with COVID-19, pregnant women without COVID-19 and non-pregnant women (July 2021)
- Report covering the results of the study for medicines effects on COVID-19 outcomes (July 2021)
- Report covering the results to assess medicines effects on pregnancy outcomes (July 2021)





Questions?

