

<b>Title</b>	Summary of evidence: the use of angiotensin converting enzyme inhibitor (ACEI) and receptor antagonists of the angiotensin II (RAA II) in suspected or confirmed Covid-19 patients.
<b>Identification code</b>	03172020IH
<b>Requesting Area</b>	COVID-191. Keralty Public Health Crisis Committee
<b>Name</b>	COVID-191. Comité de Crisis en Salud Publica Keralty
<b>Date of response</b>	17 03 2020

### Questions:

1. Should the ACEI or the RRA be stopped in patients with a high risk of coronavirus COVID-19 infection?
2. Should the ACEI or the RRA be stopped in patients with an upper respiratory tract infection with high risk of coronavirus COVID-19 infection?

### Methodology:

A fast-systematic search was performed. (Fast Systematic Search Manual. Institute of Clinical Global Excellence. 2019)

Terms of search: COVID 19, Angiotensin-Converting Enzyme Inhibitors, Coronavirus, Angiotensin Receptor Antagonists.

Types of studies: Scientific societies consensus, clinical practice guidelines, literature systematic reviews, meta-analysis, clinical trials and other primary studies.

**Source of information:** PubMed and Scopus

**Background:** A growing non formal information targeted towards multiple groups is documented: patients, communities, health professionals, professionals that suggest an increase in the susceptibility of the SARS-CoV2 infection and an increase in its replication in patients who consumed either the angiotensin converting enzyme inhibitor (ACEI) or the receptor antagonists of the angiotensin II (RAA II).

### Summary of evidence:

**Question 1:** There is no evidence that supports the stopping or changing the ACEI or the RAA II prescription in patients with high risk of coronavirus COVID-19 infection. There is no experimental or clinical data that show positive or negative outcomes with the previous use of these medications in patients with COVID 19.

**Question 2:** The clinicians may consider the use of different medications that control blood pressure in patients with a high risk of coronavirus infection. On the other side, to this date, there is no evidence that suggests that stopping the ACEI or the RAA II improves the outcomes in patients with an upper respiratory tract infection with high risk of coronavirus COVID-19 infection.

Note: There is existing evidence of use of the angiotensin converting enzyme receptor as a potential pharmacological target in the treatment of Coronavirus caused infections. Based on future available research the results of the recommendations included in this Evidence Summary will need to be updated or modified.

### Recommendations:

1. To this moment there is no available data that supports stopping or systematically changing prescription of patients who routinely use ACEI or RAA II as a prevention method in Covid-19 respiratory infection. It is recommended to continue these treatments in patients who have them prescribed according to the established clinical practice guidelines due to their benefits in cardiac failure, hypertension or ischemic cardiopathy.
2. To this moment there is no available data that supports stopping or systematically changing prescription of patients who routinely use ACEI or RAA II and who are being treated for Coronavirus COVID-19 respiratory infection. In these cases, it is recommended to take an individualized decision according to the clinical evaluation, severity of the disease and hemodynamic state of the patient. It is not suggested to start or stop treatments with ACEI or RAA II, except as part of the actions based on standard clinical practice.

### Patient recommendations:

1. If at the moment you are taking medications known as ACEI (enalapril, lisinopril or perindopril, quinapril, among others) or RAA II (for example losartan, candesartan, ibesartan, valsartan, among others), there is NO reason, based on the available scientific evidence, for you to change your treatment in relation with the risk of coronavirus COVID-19 infection.
2. You should continue your treatment for your hypertension or any other cardiovascular disease the same way that it has been prescribed.
3. If you have any questions or doubts please consult your physician, your program or Keralty's orientation numbers.

### References:

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