

<b>Headline</b>	Fact Summary: Teicoplanin antibiotic usage in probable or conformed covid-19 patients.
<b>Identification Code</b>	03232020IH
<b>Applicant Area</b>	COVID-191. Keralty Public Health Crisis Committee
<b>Name</b>	COVID-191. Keralty Public Health Crisis Committee
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### Questions:

1. Is there a potential Teicoplanin antibiotic usage in probable or conformed covid-19 patients?

### Methodology:

A Quick Systematic Review was carried out (Manual of Quick Systematic Reviews. Global Institute of clinical excellence. 2019)

**Searching Terms:** COVID 19, Teicoplanin, Coronavirus, SARS-CoV2, SARS-CoV.

**Study Types:** Scientific Societies common agreements, Clinical Practice Guidelines (CPG), Systematic Literature Reviews (SLR), meta analysis, Clinical Trials and other primary studies.

**Information Sources:** Pubmed y Scopus.

**Precedents:** It was found that Teicoplanin, a glycopéptide antibiotic commonly used to treat bacterial infections, was found to be active in vitro against SARS-CoV (1,3).

### Summary Evidence:

**Question 1.** There is an evidence that Teicoplanin may be useful in patients with coronavirus disease (1,3,5). There are no experimental or clinical data showing beneficial or adverse outcomes with the previous use of these agents in COVID 19 patients. "According to Zhou and colleagues, in coronaviruses, Teicoplanin acts in the first stage of virus life by inhibiting the breakdown of the virus tip protein by the cathepsin L in late endosomes, Thus preventing the release of viral genomic ARN and the going on of the virus replication cycle. A recent study by the same authors showed that this activity was conserved in SARS-Cov-2 (the target sequence that serves as the cathepsin's divided spot L is conserved among the top protein of SARS-CoV).The Teicoplanin concentration is necessary to inhibit the 50% of viruses (IC50) in vitro was de 1,66 µM, which is much lower to the concentration reached in human blood (8,78 µM for a daily dose of 400 mg)." (3 There is an evidence of effectiveness in vitro of Teicoplanin in the management of SARS-CoV infections(1,4).

**Annotation:** There is an evidence to use Captessin L as potential pharmacological target to treat SARS-CoV-2 (2,3,4).

### Recommendations:

1. At this time there is not supporting data about the usage of Teicoplanin for the routine treatment of COVID-19.

2. The Teicoplanin usage is not approved for COVID-19 treatment, But it is approved for the management of staphylococcal infections.
3. Teicoplanin can be used according to the criteria of the physician in charge as part of the COVID-19 treatment.
4. Teicoplanin has a known safety profile.
5. The evidence of the use of Teicoplanin for a treatment is in the process of change and evolution, and its monitoring must continue as another potential alternative for the management of COVID-19 patients.

#### Recommendations for patients:

1. The COVID-19 management is evolving, Teicoplanin is not yet a routine treatment, but it can be used by your doctor according to your specific assessment.
2. If you have or doubts please consult your physician, the program or Keralty guidelines.

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