1. COVID-19 in Peru

1. The National Academy of Sciences of Peru, issue a warning on COVID-19, Feb 17, 2020, urging authorities to prepare.
3. Presidential advisory group formed, with some academicians as members, Dr. Ciro Maguíña.
4. May 8th, 2020, Ministry of Health approved scheme of treatment including Ivermectine + HCQ + AZ
6. On 30-05-2020, medical facilities are near capacity.
7. Some regions like Loreto (Iquitos), seems passed a wave.
SARS-CoV-2 tests results

PCR & antibody tests, positive results

https://web.ins.gob.pe/
Peru, daily deaths - reported & Hospitalized

In May, average 87 deaths/day, median 92 d/d

Hospitalized COVID-19 patients, ICU to capacity

Open Data: Applications for data, deaths, tests.

https://www.datosabiertos.gob.pe/search/field_topic/covid-19-917
Andean regions spared

Low number of deaths in highlands > 3000 mamsl, due to genomic characteristics and/or sparse population.
Deaths in Loreto region (Iquitos)

Ivermectin approved, and massively used in Iquitos
Construction of mechanical ventilators, to be approved for production.
R&D of Vaccines, in the preclinical phase in mice. Collaboration with Mexico.
Treatment with antibodies from chickens as therapy for severe cases, it has been shown that chickens that have been immunized with virus proteins and produce antibodies against the viral protein, pass it to the egg. From blood or antibodies purified from the chicken's egg. Start of pre-clinical trial in pigs.
Treatment with alpaca (*Lama pacos*) antibodies, infecting animals, purifying lymphocytes, selecting which produce antibodies of interest, extracting genetic material, cloning, and producing the antibodies in laboratories. In two weeks they will produce DNA.

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UnCovid
Molecular detection of SARS-CoV-2 using CRISPR / Cas, High molecular sensitivity and specificity Incorporated in electronic data collection system
Steps to follow and potential cooperation:
Multi-center clinical validation
Scaling up production and distribution
Application of the system in other infectious

Other Covid projects:
Mass Screening of SARS-CoV-2 Main Protease Inhibitors
Aptamers as Possible Inhibitors of Spike / ACE2 Interaction

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Conclusions

1. COVID-19 cases are steadily increasing, however deaths seem to be holding, even decreasing in some regions.

2. Collaborative efforts for treatments, PCR Tests, vaccine development, & mathematical modelling.

Additional information regarding collaborative efforts:

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