



Europe Speaks (on Covid + Hiv)

Over the decades I have learned to trust EACS and even BHIVA much more than our U.S. based HIV and ID societies. Here's what they issued today.

April 30, 2020 By [Mike Barr](#)

The first published clinical accounts of HIV+ persons with Covid-19 have found no evidence of a higher infection rate nor for different disease course in people living with HIV. (see papers from Jose Blanco's team (Spain), Georg Härter's (Germany), and Wei Guo's (China) within references list at the end of this article.)

And while there has been and continues to be ongoing discussion and research around HIV antiretroviral medications that may have some activity against Covid-19, the first randomised clinical trial with lopinavir/ritonavir (aka Kaletra) demonstrated no benefit over standard care in 199 hospitalised adults with severe Covid-19. There is also at this time no evidence to support the use of other antiretrovirals, including protease inhibitors [in either the treatment or prevention of Covid-19]; indeed, structural analysis demonstrates "no darunavir (aka Prezista) binding to the Covid-19 protease."

Despite lack of in-vitro data to support antiviral activity of TDF/FTC against CoV-2, and only molecular docking evidence, which may not be predictive of activity, and limited binding data, a large randomised phase 3 placebo-controlled study in Spain using the HIV PrEP combination TDF/FTC and low-dose hydroxychloroquine as prophylaxis for Covid-19 in health workers is planned. The observation that there have been Covid-19 infections in HIV-patients on TDF or TAF at least speaks against a complete protection from these agents. Clearly, the trial results have to be awaited to shed light on the usefulness of this PEP strategy.

[More recent work, published April 30th in the journal [Nature](#), concluded that inhibitors of messenger RNA activity and of the "sigma 1" and "sigma 2" receptors appeared to be the most promising viral targets-- for drugs already FDA approved or in clinical trials for other therapeutic indications. The two drugs observed to target mRNA translation, [ternatin-4](#) and [zotatifin](#), are currently FDA approved for the treatment of multiple myeloma. In the second category, the Sigma receptors, two different classes of drugs turned up: antipsychotics ([haloperidol](#) and [melperone](#)) and two antihistamines ([clemastine](#) and [cloperastine](#)). Curiously, it is the H2 receptor antagonist used for acid reflux, Pepcid, that a [NYC](#) medical team recently decided to study after a chance observation among Chinese Covid patients that patients coming in on chronic Pepcid/famotidine therapy (as opposed to those on Prilosec/omeprazole) appeared to have better clinical outcomes.

And as if to add something of a celebratory selfie stick jump to their work, the team also noted that PROGESTERONE displayed activity against the virus. Medical teams at Cedar-Sinai and Stony Brook who recently began [administering female hormones](#) to Covid patients appear to have been ahead of the crowd on this one.]

Spanish researchers appear to be asking whether Truvada might have an ameliorative effect on Covid disease rather than outright preventing Sars-Cov-2 infection.

Currently no evidence is available to justify switching a patient from their usual antiretroviral therapy. Additionally there is no evidence to support HIV-negative people taking antiretrovirals outside the context of pre-exposure prophylaxis (PrEP) to prevent HIV acquisition—PrEP should be taken as directed and there is no current evidence that PrEP is effective against Covid-19.

COVID-19 Data Collection & Resources

A Covid-19 drug interactions website (www.covid19-druginteractions.org) has been developed for the experimental drugs being tested to treat Covid-19 in different parts of the world. [EACS](#) and [BHIVA](#) have agreed to support it financially.

Two resources for reporting Covid-19 cases:

- The NEAT ID Foundation has developed a 'data dashboard' to monitor Covid-19 case numbers, hospitalisations and mortality in people living with HIV at European and country level. The data will be available for public viewing via www.NEAT-ID.org and if your centre has not signed up, you can do so via this [link](#).
- The Lean European Open Survey on SARS-CoV-2 Infected Patients (LEOSS) launched by the German Society for Infectious Diseases (DGI) and ESCMID's Emerging Infections Task Force (EITaF) an open register based on anonymous questionnaires and they are keen to collaborate with other registries. See <https://leoss.net>, contact them by email at info@leoss.net and the register can be accessed here <https://leoss.net/statistics>

The coronavirus outbreak is rapidly evolving. [EACS](#) and [BHIVA](#) will continue to share any updates to specific guidance for people living with HIV. Wishing you all well. Stay healthy.

References

1. Blanco JL, Ambrosioni J, Garcia F, Martínez E, Soriano A, Mallolas J, Miro JM; COVID-19 in HIV Investigators. COVID-19 in patients with HIV: clinical case series. [Lancet HIV](#). 2020 Apr 15. pii: S2352-3018(20)30111-9.
2. Härter G et al. [Infection](#) (submitted).
3. Guo W, Ming F, Dong Y et al. A Survey for COVID-19 among HIV/AIDS Patients in Two Districts of Wuhan, China. [Preprint research paper](#), The Lancet, 2020.
4. Cao B, Wang Y, Wen D et al. A Trial of Lopinavir-Ritonavir in Adults Hospitalized with Severe Covid-19. [N Engl J Med](#) 2020; doi: 10.1056/NEJMoa2001282.
5. Choy KT, Wong AY, Kaewpreedee P et al. Remdesivir, lopinavir, emetine, and homoharringtonine inhibit SARS-CoV-2 replication in vitro. [Antiviral Res](#). 2020 Apr 3;178:104786. doi: 10.1016/j.antiviral.2020.104786.
6. Wu C, Liu Y, Yang Y et al. Analysis of therapeutic targets for SARS-CoV-2 and discovery of potential drugs by computational methods. [Acta Pharm Sin B](#). 2020 Feb 27. doi: 10.1016/j.apsb.2020.02.008
7. <https://www.biorxiv.org/content/10.1101/2020.03.18.997585v1>; accessed 26th April 2020
8. <https://clinicaltrials.gov/ct2/show/NCT04334928>; accessed 26th April 2020