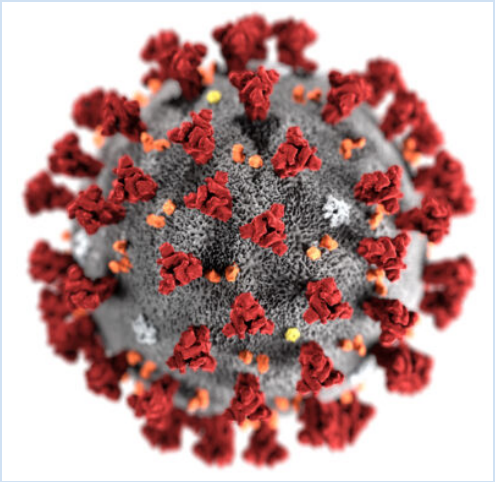
Treatment interruption studies during COVID-19

Community HIV Cure Workshop - CROI 2021



Simon Collins
i-Base.info and RIO study

COVID-19 and research

- Pandemic – unexpected
- Closing international borders and travel.
- Government pay citizens.
- 115 million cases and >2.5 million deaths
- Borrowing billions/trillions of dollars.
- Availability of multiple vaccines with >90% efficacy within a year.

COVID-19 and research

- Impact on research in all countries.
  - Diverted resources (to COVID) – clinics, laboratories, doctors, researchers, test kits etc
  - Cancelled operations and treatment.
  - Safety concerns – increased risk from more travelling, higher risk at clinics, interventions (ATIs)

Cure studies and ATIs

- Special challenges from cure research with ATIs – maybe many months.
- Issues of safety and risk were not clearly defined and only just emerging.
- Community input contributed to decisions to stop / pause / start studies.
- Decisions needed to allow for change: week 1 safe, week 2 lockdown.

ATIs and local changes

Week 1: COVID rates low (for several wks)

Week 2: safe to interrupt ART (ATI)

Week 3: local COVID rates rebound (2nd wave):

Participants are now at increased COVID risk, ART is strongly recommended, more strict isolation, impact on QoL, anxiety and actual risk, study results lost.

Limited data

- Transmission risks: participants and family: masks? distancing? Hospital setting? Best prevention?

- Impact of HIV, especially off ART.
- Other COVID risks.
- Duration of COVID-19: months vs years?

Two papers

Operationalizing HIV cure-related trials with analytic treatment interruptions during the SARS-CoV-2 pandemic: A collaborative approach. Michael J Peluso, Lynda Dee, Shirley Shao, Jeff Taylor, Danielle Campbell, Simon Collins, Monica Gandhi, Rowena Johnston, Steven G Deeks, John A Sauceda, Karine Dubé.
Clin Inf Dis, ciaa1260, DOI: 10.1093/cid/ciaa1260 (25 August 2020),
https://academic.oup.com/cid/advance-article/doi/10.1093/cid/ciaa1260/5897039

HIV Cure research in the time of COVID-19 - antiretroviral therapy treatment interruption trials: A discussion paper. Sarah Fidler, Sharon Lewin, Steven Deeks, Ole Sogaard, Linos Vandekerckhove, Simon Collins, Damian Kelly, Jerome Singh, Marina Caskey, John Frater.
J Vir Erad. doi:10.1016/j.jve.2020.100025 (December 2020)
https://www.sciencedirect.com/science/article/pii/S2055664020314746

Peluso et al. 1

Operationalizing HIV cure-related trials with analytic treatment interruptions during the SARS-CoV-2 pandemic: A collaborative approach. *Michael Peluso et al.*

Principles – importance of cure research and study question.
– harm reductions approach and tracking research

Informed consent – to include COVID directly, including emerging risks, re-consent etc.

Exclusion criteria – add higher COVID risks? Age >65, serious comorbidities including diabetes, CVD, obesity? Smoking/vaping?
Race, occupation, housing not included.

Study changes – telemedicine, home bloods and fewer, masks, taxi's etc.

Peluso et al. 2

Operationalizing HIV cure-related trials with analytic treatment interruptions during the SARS-CoV-2 pandemic: A collaborative approach. *Michael Peluso et al.*

SARS testing – free, baseline, before ATI, during, on request: positive result means restart ART or individualise? Opt-out permitted?

Local COVID? – to include plan for worsening COVID incidence.

Social impact – chance to track impact on participant needs, especially differences by population, sex, race/ethnicity, trans, older etc

Limitations – by city/region/hospital; changing technology (testing); by population etc

Fidler et al. 1

HIV Cure research in the time of COVID-19 - antiretroviral therapy treatment interruption trials: A discussion paper. *Sarah Fidler et al.*

- **Ethics, risks and practical factors** before re-opening HIV cure clinical trials – context of RIO study.
- **Importance of cure research** – when some regions had controlled COVID19: but ATIs > 6 months, 12 months
- **Individualise decision** – based on both COVID and study details.
- **Minimise participant risk** – of catching SARS-CoV-2 from increased visits, increased inflammation, worse COVID outcomes, worse ATI outcomes, access to ART supply.

Fidler et al. 2

HIV Cure research in the time of COVID-19 - antiretroviral therapy treatment interruption trials: A discussion paper. *Sarah Fidler et al.*

- **Risk assessment summary:**

- Limit high risk groups in entry criteria.
- Expand access to testing before and during ATI, early restart ART if COVID symptoms and confirmed PCR.
- Limit clinic visits, home sampling.
- Flexibility to local changes.
- Updated and revised patient information and consent.
- Proactive use of vaccines when available, inclusion with study? Add to entry criteria?

Vaccine update

- Vaccines and roll out significantly changes risk.
- Will ATI studies require vaccine cover?
- Define minimum cover: one dose?
- Changing incidence of variants.

Conclusion

- HIV researchers responded rapidly to new changes from COVID-19
- Continued commitment to cure research.
- Prioritised participant safety.
- Restarting studies now being planned including RIO: i-base.info/rio

Thanks

- Richard Jefferys
- Lynda Dee
- Community Cure Workshop
- Sarah Fidler, RIO study

Ref: Barney Graham – AVAC talk on COVID vaccines