

Optimising ART December 2017

This is a monthly update shared with all members involved in projects aimed at optimising ART, and is meant to provide a short update of major achievements, challenges, and plans for the future. Please submit any inputs to Celia Serenata before the 1st Wednesday of every month.

Several organisations and individuals from the ART optimisation work funded by USAID and Unitaid attended a 2½ day meeting focused on 2nd line ART, CADO3. A report on the meeting will be submitted for publication in January 2018.



Similarly, a very successful joint Programme Advisory Committee (PAC) meeting was held from 2-3 November. The organising committee of the PAC is preparing the report. Presentations from the PAC meeting can be found on the DropBox.



OPTIMIZE made USAID's "Top Ten" list of accomplishments for 2017. The OPTIMIZE consortium is excited for its work to be profiled in this way. **See here:** <https://www.usaid.gov/what-we-do/global-health/hiv-and-aids/information-center/hiv-and-aids-research-corner/top-10>.



Upcoming Events

None for December. Please note that Wits RHI will close for the Christmas holidays on 22 December, and reopen on 2 January 2018. (This is also the case for SACS).

There will not be a newsletter in January – the first one for 2018 will be in early February, covering December and January.

Queries can be directed to:

Cecilia Serenata, Wits RHI,

Achievements from November 2017

ADVANCE STUDY, Wits RHI

- Screening hit 1000 participants in November, with 1022 participants screened, and 744 enrolled as at end of November.
- The following recruitment initiatives have been directed at boosting enrolment:
 - Meetings have been held with Ekurhuleni district and facility managers to introduce the study, and to start recruitment at five high-yield clinics identified within this region. This has been a slow process, but now that all the approvals are in place, and coordination meetings have been held, we are hopeful that recruitment efforts will be supplemented.
 - Planning phase to deploy a mobile clinic to test and refer participants in non-traditional spots like taxi-ranks, outside malls and libraries, etc., to access those groups of people who do not seek healthcare via clinics or hospitals, specifically adolescents.
- The NIH DSMB reviewed the ADVANCE study, and is happy with the progress to date, despite the recruitment lag. The DSMB requested that in the next meeting (April 2018) that safety data be presented, disaggregated by adults and adolescents.

LOW-DOSE DARUNAVIR STUDY, Wits RHI

- Post-trial access has been provided to the first set of participants who have exited the study.
- The NIH DSMB reviewed the study, and as the study will be completed in mid-2018, the DSMB provided some recommendations related to the final analysis, but it will not have any further reviews of the study.

EFAVIRENZ 400mg TB PK STUDY (SSAT062), Mylan (St. Stephen's AIDS Trust)

- Protocol version 7.0 was approved and has been implemented at the UK site.
- All participants have completed the study in the UK site, and now is in the ongoing monitoring phase.
- Approval is still pending for the NDA submission in Uganda.
- The NIH DSMB reviewed the study, and seeing as the study would be completed before the next meeting, indicated that there would be no further reviews.

DTG-RIF TB PK STUDY (RADIO), St. Stephen's AIDS Trust

- All participants have been enrolled in the study, with the final group being baselined on 24 November. Final results are planned in early 2018.

NANOTECHNOLOGY, University of Liverpool

- UoL has completed the ATV *in vivo* experiment.
- The ATV/r LC-MS method is under development.
- Amy Lin from USAID presented slides on solid-dose nanoformulations at the Buyers and Sellers Forum in Cape Town in early November.
- Nandita Sugandhi presented on the UoL nanoformulation work for the ICAP Grand Rounds ARV Optimization webinar.

DARIFI STUDY, UCT

- The key processes to start the study are either underway, or completed. This includes:
 - An order was placed for the study drugs, with expected delivery in January – early February 2018.
 - The subcontract with Desmond Tutu, where the study will be implemented, is being finalised.
 - UCT applied to the provincial government and is currently awaiting approval for study site access.

MARKET ACCESS AND PRODUCT INTRODUCTION, ICAP

Global

- ICAP participated in the TSC and PAC meetings in Washington DC in November to present the accomplishments in Y2, as well as plans for Y3
- ICAP hosted a Grand Rounds webinar on “Introducing a new generation of ARVs in LMIC” on 21 November, which over 100 participants attended. An archived recording is accessible at <http://www.icap.columbia.edu/news-events/events/detail/icap-grand-rounds-webinar-optimize-introducing-a-new-generation-of-arvs-in>.
- Dr. Nandita Sugandhi participated in the CADO3 meeting in Johannesburg.

Kenya

- ICAP received approval from KEMRI for the situational analysis protocol.
- ICAP successfully completed the test for the Enhanced Data System supported by ICAP, in collaboration with NASCOP and other key stakeholders. This system is designed to support a national enhanced ARV monitoring system.
- ICAP participated in the first ART Guideline Review Committee, including representatives from NASCOP, WHO, ICAP, CHAI, KNH, and FACES. The committee discussed the sections of the guidelines due for review, proposed evidence review questions, and agreed on the composition of the thematic groups to spearhead the guideline review process.
- ICAP participated in the Guideline Review Technical Working Group meeting to finalise the guideline review questions, and summarise the evidence and proposed recommendations ahead of the national guideline review stakeholders meeting.

Mozambique

- ICAP hosted an ART optimisation meeting on November 28th with MISAU. The purpose of the meeting was to develop a plan for implementation of recommendations developed in the May 2017 Macaneta meeting, including the decision to adopt DTG as an alternative 1st line for adults and adolescents.
- During the meeting ICAP shared the findings of the Mozambique Needs Assessment, new evidence on DTG and other optimised ARVs, and ICAP’s Optimal ARV Implementation Guide.
- As an output, the group developed a roadmap for the introduction of DTG into the national program.

Zimbabwe

- The Zimbabwe Needs Assessment has been submitted to Wits RHI and USAID for final review and approval.

DEMAND CREATION AND COMMUNITY ENGAGEMENT, HIV i-Base

- HIV i-Base is currently working on a DTG/TLD factsheet for communities in early adopter or preparing to transition African countries (in collaboration with TAC and AfroCAB), to be launched in January 2018.
- The bumper annual printed edition of HTB South is also underway for distribution with the Southern African *Journal of HIV Medicine* in early 2018. The Southern African HIV Clinicians Society will also manage email and web distribution. With the SAHCS, i-Base plans to distribute regular email updates of relevant HTB articles to the membership.
- Started research for the next *Fit for Purpose* which is due to be launched at CROI 2018. Also to be launched at CROI is the new i-Base "Op-ART Trial tracker" supported by the CHAI/Unitaid Optimal ARV Project.
- i-Base has begun planning the community engagement project and materials to support the University of Liverpool DoIPHIN2 study. This is being planned in collaboration with AfroCAB.
- i-Base was part of the CADO3 steering committee, and co-chaired a session on Planning for the Future.

COMMUNITY ENGAGEMENT, TAC

- TAC conducted two trainings in November. The first, in KwaZulu-Natal, was a Provincial Training of Trainers, with 26 staff members and branch educators reached.
- In the Eastern Cape provincial training, 387 people were trained.

CLINICIAN/HEALTH WORKER ENGAGEMENT, Southern African HIV Clinicians Society (SAHCS)

- CME trainings were held in Mpumalanga (18 November, 28 doctors trained), and East London (25 November, 44 doctors trained). These were the final CMEs of 2017.
- Planning continues for the SA HIV Clinicians Society conference in 2018 (www.sahivsoc2018.co.za)
- Materials development:
 - SAHCS will distribute i-Base's *Fit for Purpose* at key national meetings, as well as link to the i-Base website.
 - i-Base will produce the HTB South quarterly for online and email distribution via both i-Base and SAHCS. The next distribution of HTB South is scheduled for mid-January 2018, targeting 2200 doctors and healthcare workers (distributed along with the SAHCS Journal).
 - *HIV Nursing Matters* distributed to 2710 nurses and clinics.
 - i-Base to produce a DTG factsheet and other materials for communities – SAHCS to contribute and assist with distribution.

Plans for December 2017

ADVANCE, Wits RHI

- Assess recruitment status based on the new recruitment initiatives.

LOW-DOSE DARUNAVIR STUDY, Wits RHI

- Receipt of remaining batch of study drugs from the supplier.

EFAVIRENZ 400mg TB PK STUDY (SSAT062), Mylan (St. Stephen's AIDS Trust)

- Set-up activities for the Uganda site. Recruitment in Uganda is pending study approvals, and thus, due to the NDA review delays, recruitment is not expected to begin until early 2018.
- Data cleaning of the data from the UK cohort.

DTG-RIF TB PK STUDY (RADIO), St. Stephen's AIDS Trust

- The first 12 participants are due to complete their Day 42 PK visit on 19 December.

NANOTECHNOLOGY, University of Liverpool

- *In vivo* ATV data analysis.
- Development of method for stability analysis.
- Ongoing ATV/r LC-MS method development.
- Planning for any further *in vitro/in vivo* experiments.

MARKET ACCESS AND PRODUCT INTRODUCTION, ICAP

- Mozambique: ICAP to participate in the COP planning meeting with PEPFAR partners.
- Kenya:
 - Finalise the Kenya Situational Analysis and schedule a dissemination meeting for early 2018.
 - Conduct health facility trainings on enhanced monitoring at 6 facilities: JOOTRH (ICAP-supported); Siaya County Referral Hospital (CHS-supported); Moi Teaching and Referral Hospital, Chulaimbo Hospital, Webuye County Referral Hospital, and Kitale County Referral Hospital (AMPATH-supported).
 - Participate in the national guideline review process.
 - Install the Enhanced Data System at the initial enhanced monitoring facility.
- Zimbabwe: Finalise the Needs Assessment.
- Global: Finalise the ICAP OPTIMIZE website.

COMMUNITY ENGAGEMENT, TAC

- Training of Trainers scheduled for Free State and Eastern Cape.

Staffing Changes

- Welcome to Dr. Rendani Maboko as a sub-investigator on ADVANCE, supporting the Yeoville and Charlotte Maxeke research sites. Unfortunately, one of the doctors supporting both ADVANCE and the low-dose DRV study, Dr. Tessa Walton, resigned as of 30 November.

Outputs

Articles; manuscripts submitted for review; abstracts submitted; presentations given. (Also provide electronic version of such products for the Dropbox – see <https://www.dropbox.com/home/OPTIMIZE%20TechnicalSteeringCommittee/Calendar+Events>)

Also, to assist with all communication, branding and marketing opportunities, please find relevant guidance and documents in the Dropbox at: <https://www.dropbox.com/home/OPTIMIZE%20TechnicalSteeringCommittee/Communications+Branding+Marketing>

Papers published

- Andrew Hill, Francois Venter. 2017. The unexpected success of NRTIs in second-line treatment. The Lancet Infectious Diseases. Published online November 3, 2017. [http://www.thelancet.com/journals/laninf/article/PIIS1473-3099\(17\)30631-X/fulltext](http://www.thelancet.com/journals/laninf/article/PIIS1473-3099(17)30631-X/fulltext)

Talks Given

- 21 November 2017. Elaine Abrams and Nandita Sugandhi. ICAP Grand Rounds Webinar: OPTIMIZE: Introducing a new generation of ARVs in LMIC. <http://www.icap.columbia.edu/news-events/events/detail/icap-grand-rounds-webinar-optimize-introducing-a-new-generation-of-arvs-in>

Media Coverage

- None for November.

Other articles that could be of interest:

- Hermans LE, Moorhouse M, Carmona S, Grobbee DE, Hofstra M, Richman DD, Tempelman HA, Venter WDF, Wensing AMJ. 2017. **Effect of HIV-1 low-level viraemia during antiretroviral therapy on treatment outcomes in WHO-guided South African treatment programmes: a multicentre cohort study.** The Lancet. Published online November 17, 2017. [http://www.thelancet.com/journals/laninf/article/PIIS1473-3099\(17\)30681-3/abstract](http://www.thelancet.com/journals/laninf/article/PIIS1473-3099(17)30681-3/abstract)

- Hakim JG et al. **Long-term data do not support raltegravir as second-line HIV therapy.** 2017. Lancet Infect Dis. 2017. doi:10.1016/S1473-3099(17)30630-8. <https://www.healio.com/infectious-disease/hiv-aids/news/in-the-journals/%7Bb6d946f2-0eec-4e1a-9c28-d56d05a68d09%7D/long-term-data-do-not-support-raltegravir-as-second-line-hiv-therapy>
- Gatell JM et al. 2017. **Switching from a ritonavir-boosted protease inhibitor to a dolutegravir-based regimen for maintenance of HIV viral suppression in patients with high cardiovascular risk.** AIDS. November 14, 2017. <https://www.mdlinx.com/internal-medicine/medical-news-article/2017/11/14/cardiovascular-risk-cholesterol-dolutegravir-hiv-1/7484714/?rcid=93&inrc=0>
- 22 November 2017. Business Insider. **A new drug to treat HIV just got approved – and it could shake up a \$22 billion market.** <http://www.businessinsider.com/fda-approves-gsk-next-generation-hiv-drug-dolutegravir-2017-11>
- 21 November 2017. **FDA approves first two-drug regimen for certain patients with HIV.** <https://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm586305.htm>
- Dunning L, Francke JA, Mallampati D, MacLean RL, Penazzato M, et al. 2017. **The value of confirmatory testing in early infant HIV diagnosis programmes in South Africa: A cost-effectiveness analysis.** PLOS Medicine 14(11): e1002446
DOI: [10.1371/journal.pmed.1002446](https://doi.org/10.1371/journal.pmed.1002446). Published 21 November 2017.
<http://journals.plos.org/plosmedicine/article?id=10.1371/journal.pmed.1002446>
- Eakle R, Gomez GB, Naicker N, Bothma R, Mbogua J, Cabrera Escobar MA, et al. 2017. **HIV pre-exposure prophylaxis and early antiretroviral treatment among female sex workers in South Africa: Results from a prospective observational demonstration project.** PLoS Med 14(11): e1002444. <https://doi.org/10.1371/journal.pmed.1002444>
- Phillips AN, Cambiano V, Nakagawa F et. al. 2017. **Cost-effectiveness of public-health policy options in the presence of pretreatment NNRTI drug resistance in sub-Saharan Africa: a modelling study.** Lancet HIV. Published online November 22, 2017. [http://dx.doi.org/10.1016/S2352-3018\(17\)30190-X](http://dx.doi.org/10.1016/S2352-3018(17)30190-X).

Useful Websites

- USAID page on ART optimisation: <https://www.usaid.gov/what-we-do/global-health/hiv-and-aids/technical-areas/antiretroviral-therapy-optimization>
- UNITAID page on ART optimisation: <https://www.unitaid.eu/project/safer-robust-less-expensive-first-line-antiretroviral-therapy-advance-trial/> (for the grant with Wits RHI, see associated grants below that)

Future Conferences/Trainings

- 24-27 October 2018: 4th Southern African HIV Clinicians Society Conference, Gallagher Convention Centre, Midrand. www.sahivsoc2018.co.za

Acknowledgements

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Unitaid finds new and better ways to prevent, test and treat HIV, tuberculosis and malaria quickly and more affordably. It takes game-changing ideas and turns those into practical solutions that can help accelerate the end of the three diseases. Established in 2006 by Brazil, Chile, France, Norway and the United Kingdom, Unitaid plays an important part in the global effort to defeat HIV, tuberculosis and malaria. For more information, please visit: www.unitaid.org

