State of the Network Community Plenary

Sharon Nachman, MD IMPAACT Network Chair 23 September 2024

IMPAACT

International Maternal Pediatric Adolescent AIDS Clinical Trials Network

ANNUAL MEETING 2024

2 State of the Network: A Snapshot



- Research Agenda
- Network Activities and Achievements
- Study Updates and Achievements
- Looking Forward



Our Mission

To improve health outcomes for infants, children, adolescents, and pregnant and postpartum people who are impacted by or living with HIV by evaluating novel treatments and interventions for HIV and its complications and for tuberculosis and other HIV-related conditions



IMPAACT Research Agenda





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AIDS Clinical Trials Network

Scientific Aims

Advance **treatment during pregnancy and postpartum**, aiming to optimize maternal and child health outcomes and accelerate the evaluation (pharmacokinetics (PK), safety, antiviral efficacy), licensure and optimal use of **potent and durable ARVs and other therapeutics** for pregnant people and infants, children, and adolescents with HIV and related diseases and conditions



Evaluate the potential for **ART-free HIV remission** through therapeutic interventions aimed at prevention, clearance and post-treatment control of HIV reservoirs in infants, children and adolescents with HIV and leverage expertise for evaluation of **vaccines** for HIV and related/co-occurring conditions in these populations



Evaluate novel approaches for **TB prevention**, **diagnosis and treatment** in infants, children, adolescents and pregnant and postpartum people with and without HIV that will lead to optimal dosing and regimens, licensing and decreased morbidity and mortality

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Determine optimal and feasible biological and behavioral methods for the prevention and management of **neuropsychological and mental health complications of HIV and its treatment** in infants, children, adolescents and pregnant and postpartum people

Current Portfolio

includes evaluation of the following interventions/agents

Therapeutics

- DTG in Neonates, Infants, Children & Adolescents
- Opportunistic, Selected ARV and TB drugs in Pregnant/ Postpartum People
- •LA CAB/RPV in Children/ Adolescents & in Pregnancy
- •Oral PrEP (TDF/FTC) in Pregnancy
- •GLE/PIB for Hepatitis C in Pregnancy
- Ceftriaxone & Benzathine Penicillin G During Pregnancy

Brain & Mental Health

- Group-based Counseling Intervention in Treatment Nonadherent Adolescents
- Exploring Therapeutics in Pregnancy & Adolescence
- Understanding Lactation & Feeding
 Decisions

HIV Cure & Immunotherapy NVP, LPV/r, RAL, DTG, & bNAbs for early intensive treatment in Infants

- HIVconsvX Vaccines
- bNAbs in Infants & Children

Tuberculosis

- Pretomanid in Children
- RPT/INH in Children
- BDQ in Children
- DLM in Children
- Combination Regimen for RR-TB in Children
- RPT/Mfx in Pregnancy
- Vaccines in preadolescents



IMPAACT Participants on Study October 2023 to August 2024



The Network has a robust and growing portfolio of current studies and new proposals in the pipeline



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Network Activities and Achievements



Drug Licensure based on IMPAACT Data



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Recent and Planned Contributions to Expanded Treatment Options

- Data from IMPAACT 2019, ABC/3TC/DTG informed EMA regulatory decision to expand approval of *Triumeq PD* to infants and children with HIV as young as 3 months of age who weigh at least 6 kg
- Longer term, additional data from IMPAACT P1093 submitted to US FDA to inform DTG dosing in infants and children
- Longer term, additional data from IMPAACT 2017 anticipated to be submitted to US FDA in 2025 to inform use of CAB/RPV in adolescents



Ongoing Collaborations to Enhance and Accelerate Research in IMPAACT's Populations

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Four Children Surpass a Year of HIV Remission after Treatment Interruption: IMPAACT P1115 Results Presented at CROI 2024

 Four of six children remained free of detectable HIV for more than one year after their ART was interrupted to see if they could experience HIV remission.

 The children, who acquired HIV before birth, were closely monitored in IMPAACT P1115 for safety and HIV viral suppression.

 The outcomes reported follow planned ART interruption once the children met predefined virologic and immunologic criteria.

Study Weeks off ART (no detectable plasma HIV-1 RNA) Α 80 R >64 >52 (>48 D E 8 3 F

IMPAACT Community Advisory Board

Advocating for people living with HIV/AIDS, Protecting the interests of research participants, and Building Community, through:



IMPAACT COMMUNITY ADVISORY BOARD LEADERSHIP GROUP



Emanueli Msuya



Jayda Arrington



Ernest Moseki



Early Career Investigator Program

Project Development

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Develop a project using existing data or samples generated by IMPAACT Network studies.

Mentorship Work with a Network mentor to complete the research project.

03



Skills Building

Build skills to improve health outcomes for infants, children, adolescents, and pregnant & postpartum people impacted by or living with HIV, TB, & other HIVrelated conditions.

Share Results

Submit manuscript to a peerreviewed journal and present findings at the IMPAACT Annual Meeting and at one or more other scientific meetings. 04

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Clement Gascua Adu-Gyamfi



Brenda Kakayi

Matubu

Taguma Allen



Nyarai Soko



Chikondi Malamba-Banda

2025 CYCLE OPEN NOW! APPLICATIONS DUE 1 OCTOBER



Patience Atuhaire



Violet Korutaro





A VERY EARLY CAREER INVESTIGATOR



Study Updates and Achievements



21 Study Highlight: P1108 PK and Safety of Bedaquiline in Children with RR-TB

- Addressing critical need for better medications to treat children with MDR-TB
- Completed accrual of 54 children at 4 sites in Haiti and South Africa



Sizwe (31929) PHRU Matlosana (31976) DTTC (31790)







Therapeutics





24 Safety & PK of DTG in Neonates Exposed to HIV



- Completed enrollment into Cohort 1
- Cohort 2 is ~50% enrolled
- Cohort 2 interim analysis
 ongoing



FIRSTS IN IMPAACT 2028 Long-Term Study of Children who Received Early Treatment for HIV

FIRST

phase of accrual has been completed

FIRST

batches of specimens have been shipped for protocol-specified testing and repository storage

FIRST

round of proposals for use of study data and specimens will be solicited in 2025 IMPAACT 2036 <u>Cabotegravir and R</u>ilpivirine Long-Acting Injections in Young Children

- Continued successful collaboration from IMPAACT 2017 with ViiV/Janssen to study long-acting, injectable regimens in children
- Children age two to less than 12 years old
- Interim analysis ongoing





Looking Forward



Protocols Currently in Development Three within the Tuberculosis Research Area

2020	A Phase II Study of Shortened Oral Novel Treatment for Rifampicin- Resistant Tuberculosis in Children
2024	Phase I/II Dose Finding, Safety, and Tolerability Study of Daily Rifapentine Combined with Isoniazid (1HP) for Tuberculosis Prevention in Children 2 to <13 years of age with and without HIV
2047	Pharmacokinetics, Safety and Tolerability of High Dose Rifapentine Given with Moxiflaxacin for Tuberculosis During Pregnancy (Radiant- Moms Plus)



Protocols Currently in Development One within the Cure & Immunotherapy Research Area

Phase I/II Randomized Study of the Safety, Immunogenicity, and
 Efficacy of HIVconsvX Vaccines and Broadly Neutralizing
 Antibodies in Children Living with HIV

One within the Brain & Mental Health Research Area

2046

Understanding Parental Lactation and Infant Feeding Decisions Tailored to People with HIV (**UPLIFT Study**)

Protocols Currently in Development *Two within the Therapeutics Research Area*

Phase I/II Study of the Pharmacokinetics and Safety of
 Glecaprevir/Pibrentasvir Initiated During Pregnancy in People with Hepatitis C with and without HIV

2044

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Phase IV Study of the Pharmacokinetics and Safety of Ceftriaxone and Benzathine Penicillin G During Pregnancy

IMPAACT has a range of studies on broadly neutralizing antibodies, exploring innovative approaches to treatment, prevention, and remission

Study	P1115 Version 3.0	IMPAACT 2037	IMPAACT 2039	Tatelo Plus (IMPAACT 2042)
Purpose	Early intensive therapy for remission	Prevention	HIV control and remission	HIV control and remission
Population	Neonates and infants	Neonates	Children	Infants and children
bNAbs	VRC07-523LS	VRC07-523LS	VRC07-523LS	VRC07-523LS
			PGDM1400LS	PGDM1400LS
		PGT121.414.LS	PGT121.414.LS	PGT121.414.LS



IMPAACT 2040 Cabotegravir & Rilpivirine Antiretroviral Therapy in Pregnancy

- Continued successful collaboration from IMPAACT 2017 and 2036 with ViiV/Janssen to study longacting, injectable regimens
- Enrolling participants who are pregnant and living with HIV (and their infants)



Therapeutics

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Study Highlight: IMPAACT 2041 PK & Safety of Glecaprevir/Pibrentasvir during Pregnancy in People with Hepatitis C

- Collaboration with AbbVie and CDC
- Enrolling participants who are pregnant with Hepatitis C (and their infants)



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Looking ahead

- Population/simulation modeling to bridge gaps between research and implementation
- Ultra long-acting ARVs for children and during pregnancy
- New methods and tools to improve clinical trial efficiency:
 - AI for document development (for example, ICFs)
 - AI technology for ultrasounds
 - Mobile ECG machine
 - Tools to evaluate depression and other neuropsychological events





Using AI technology for ultrasounds. Image from Jeffrey Stringer, et al.



KardiaMobile® 6L portable ECG machine



□Publish remaining P1093 results

Finalize Protocol: IMPAACT 2020 IMPAACT 2039 IMPAACT 2044 UPLIFT

Coming up in the next year

Initiate

Tatelo Plus
IMPAACT 2037
CREATE
IMPAACT 2041
IMPAACT 2024

Complete Follow Up: DP1108 DMOCHA Complete Accrual: IMPAACT 2005 IMPAACT 2016 IMPAACT 2023 CRAYON

□Begin enrolling into P1115 Version 3.0



SAVE THE DATE

UPCOMING IMPAACT ANNUAL MEETING

7-12 SEPTEMBER 2025



THANKS!

THANK YOU TO SITE STAFF, TO THE COMMUNITIES, AND TO ALL OF THE INDIVIDUALS AND FAMILIES ENGAGED IN CLINICAL RESEARCH!

LET'S CONTINUE TO MOVE THE SCIENCE FORWARD!

