

# State of the Network

Sharon Nachman, MD  
IMPAACT Network Chair  
24 September 2024



**IMPAACT**

International Maternal Pediatric Adolescent  
AIDS Clinical Trials Network

**ANNUAL MEETING**  
2024

# In Memory of Steven Douglas

1939 - 2024



# 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**

International Maternal Pediatric Adolescent  
AIDS Clinical Trials Network





# IMPAACT Research Agenda



**Pregnant & PP People**



**Infants**



**Children**



**Adolescents**

**Novel and Durable Therapeutic/Preventive Interventions**



**Cure and Immunotherapy**



**Tuberculosis**



**Brain and Mental Health**



# Scientific Aims

1

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

2

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

3

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

4

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

# THERAPEUTICS





# TUBERCULOSIS



# BRAIN & MENTAL HEALTH





# CURE & IMMUNOTHERAPY



SOLICITATION FOR  
NEW MEMBERS  
EXPECTED SOON!



# 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 Non-adherent 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 pre-adolescents



# Current Portfolio

## *25 active studies*

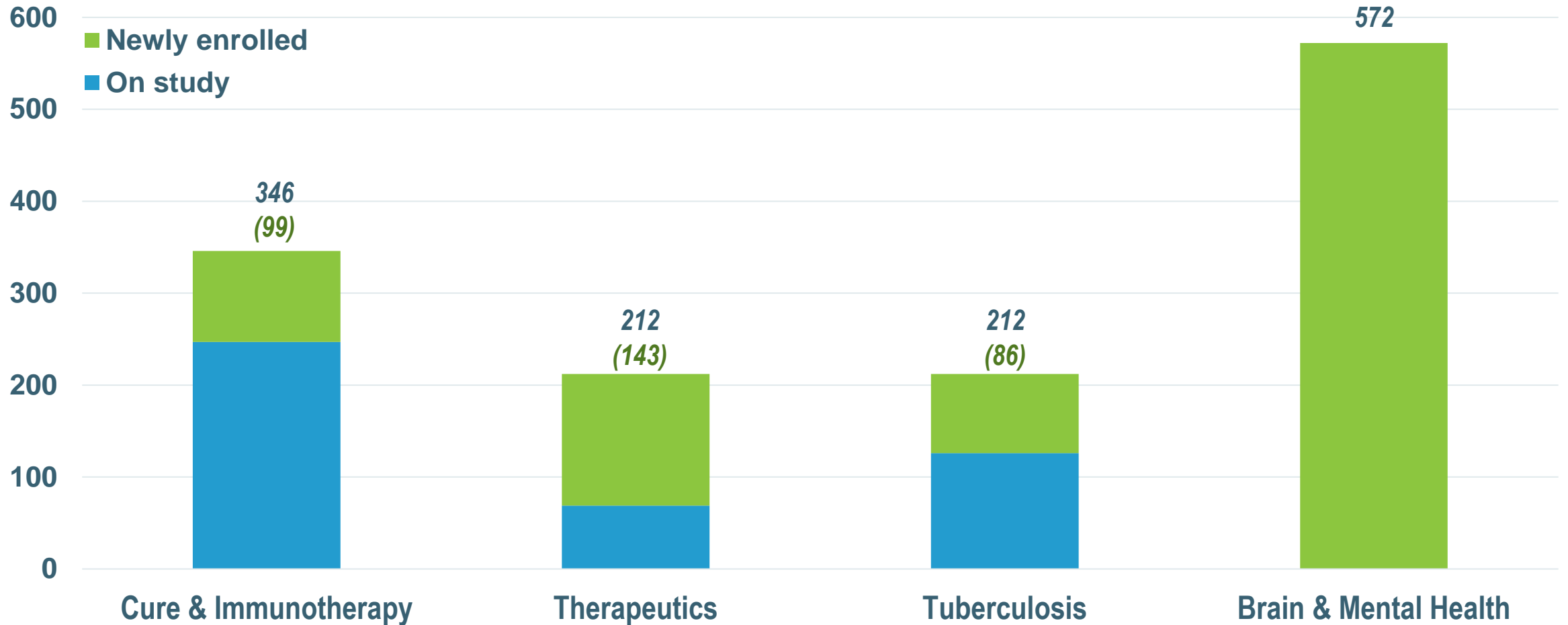
	2 Proposals Recently Approved	6 Protocols in Development	3 Pending and Open	9 Enrolling	2 in Follow-Up	3 Closed to Follow-Up*
Therapeutics		2044, 2043, 2041	2040, 2037	2036, 2026, 2023	2017	2009, P1093
Tuberculosis	2047	2020, 2024		2034, 2005, 2003B	P1108	
Brain and Mental Health	2046			2016		
Cure and Immunotherapy		2039	2042	2028, P1115		2021

*Approximately 30 additional studies and ancillary studies (NWCS, DACS, DR) in analysis and manuscript writing phase*

*\*closed to follow-up in the last year*

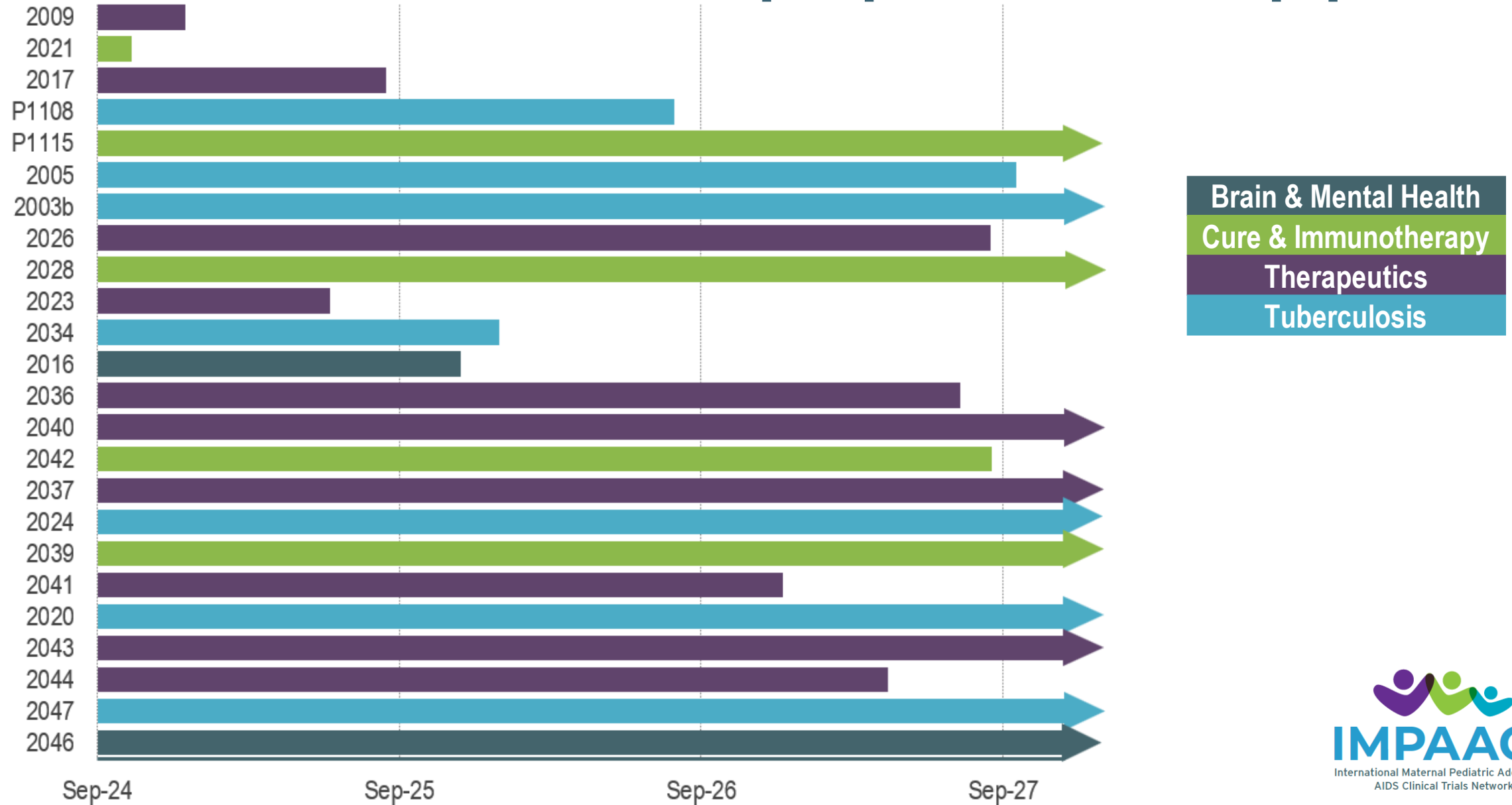
# IMPAACT Participants on Study

## October 2023 to August 2024



**Total On Study = 1,464 participants**  
**Newly Enrolled = 947 participant**

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






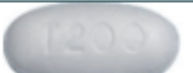


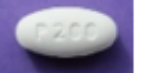



# Network Activities and Achievements



# Drug Licensure based on IMPAACT Data

17

		Birth	1 mth	2 mths	6 mths	2 yrs	6 yrs	12 yrs	18 yrs	Pregnancy			
Dolutegravir (DTG)		Dispersible tablet		Dispersible and film-coated tablets									
Abacavir (ABC)/DTG/lamivudine (3TC)*					Immediate-release and dispersible fixed-dose tablets								
Raltegravir (RAL)		Oral granules for suspension and chewable tablets											
Cabotegravir/rilpivirine (CAB/RPV)						Long-acting injectable		Long-acting injectable		Long-acting injectable			
Doravirine (DOR)/3TC/TDF									Fixed-dose tablet				
Etravirine (ETR)					Tablet						Approved		
Maraviroc (MVC)*		Oral liquid										In progress	
Bedaquiline (BDQ)		Tablet											
Pretomanid (Pa)*					Immediate-release and dispersible tablets								
Remdesivir											Injection		

\*Approved in children using weight-based dosing

# 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



IPHASA 2023

2nd International Paediatric HIV Symposium in Africa (IPHASA 2023)

Meeting Report

Virtual  
12-14 December 2023

Platinum sponsor

Bronze sponsor

ViiV Healthcare

IMPAACT  
International Maternal Pediatric Adolescent AIDS Clinical Trials Network

With support from  
World Health Organization



**Tuberculosis & Pregnancy**

Building consensus on inclusion in research

February 2024



SANTHE  
SUB-SAHARAN AFRICAN NETWORK FOR TB/HIV RESEARCH EXCELLENCE

WRIR  
WORLD RESEARCH INSTITUTE  
MILITARY HIV RESEARCH PROGRAM

**Analytical Treatment Interruption (ATI) Consensus Workshop**

May 2024 · Trademark Hotel, Nairobi, Kenya

**PROGRAMME**

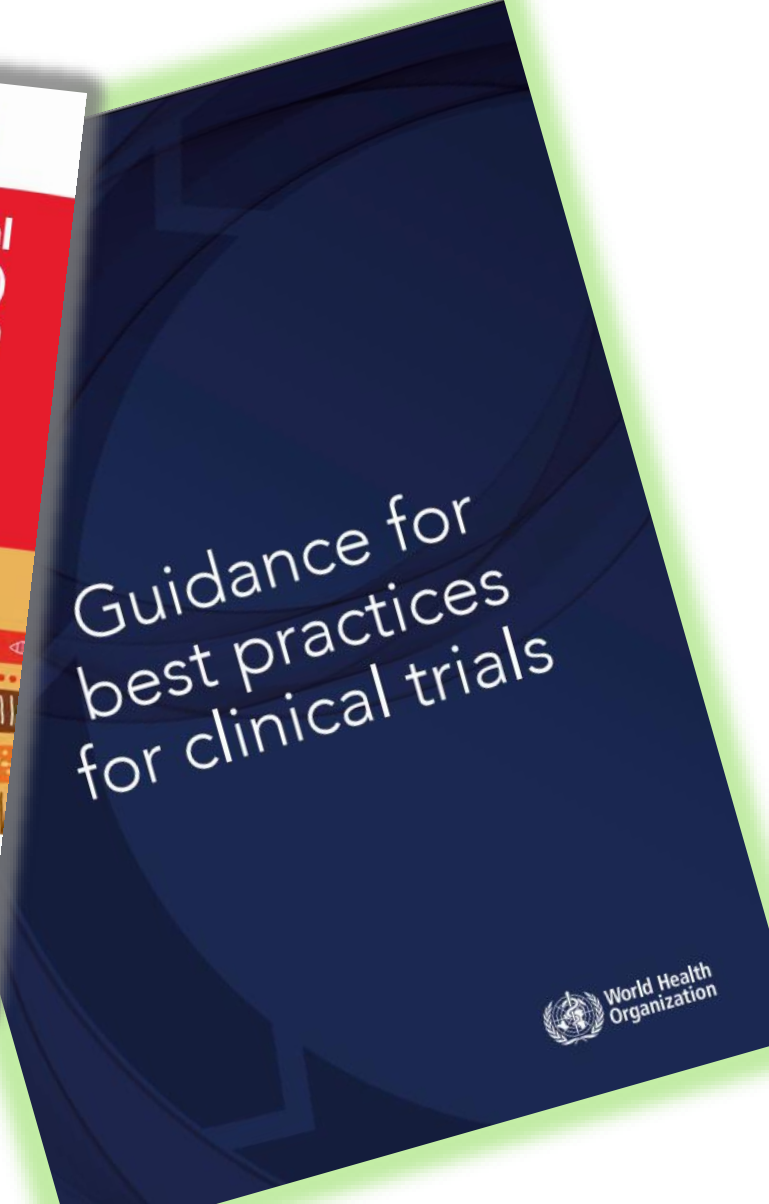
ELINDA TES foundation

NIH National Institutes of Health  
Turning Discovery into Health

DELIVER

Ragon Institute

GILEAD  
Creating Possible



Guidance for best practices for clinical trials

World Health Organization

# 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.

<b>Study Weeks off ART</b> (no detectable plasma HIV-1 RNA)	
A	80
B	>64
C	>52
D	>48
E	8
F	3



# IMPAACT Community Advisory Board

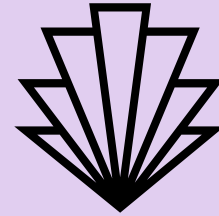
**Advocating** for people living with HIV/AIDS,  
**Protecting** the interests of research participants, and  
**Building** Community, through:



**Input on  
protocol  
development**



**Support for  
study  
implementation**



**Results  
dissemination**



**Capacity  
building**

# IMPAACT COMMUNITY ADVISORY BOARD LEADERSHIP GROUP



**Emanueli Msuya**



**Jayda Arrington**



**Ernest Moseki**

# Early Career Investigator Program

## 01 | Project Development

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



## Skills Building

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



## 02

## 03 | Mentorship

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



## Share Results

**Submit manuscript** to a peer-reviewed journal and present findings at the IMPAACT Annual Meeting and at one or more other scientific meetings.



## 04



**Clement Gascua  
Adu-Gyamfi**



**Taguma Allen  
Matubu**



**Nyarai Soko**



**Chikondi  
Malamba-Banda**



**Brenda Kakayi**

**2025 CYCLE OPEN NOW!  
APPLICATIONS DUE  
1 OCTOBER**

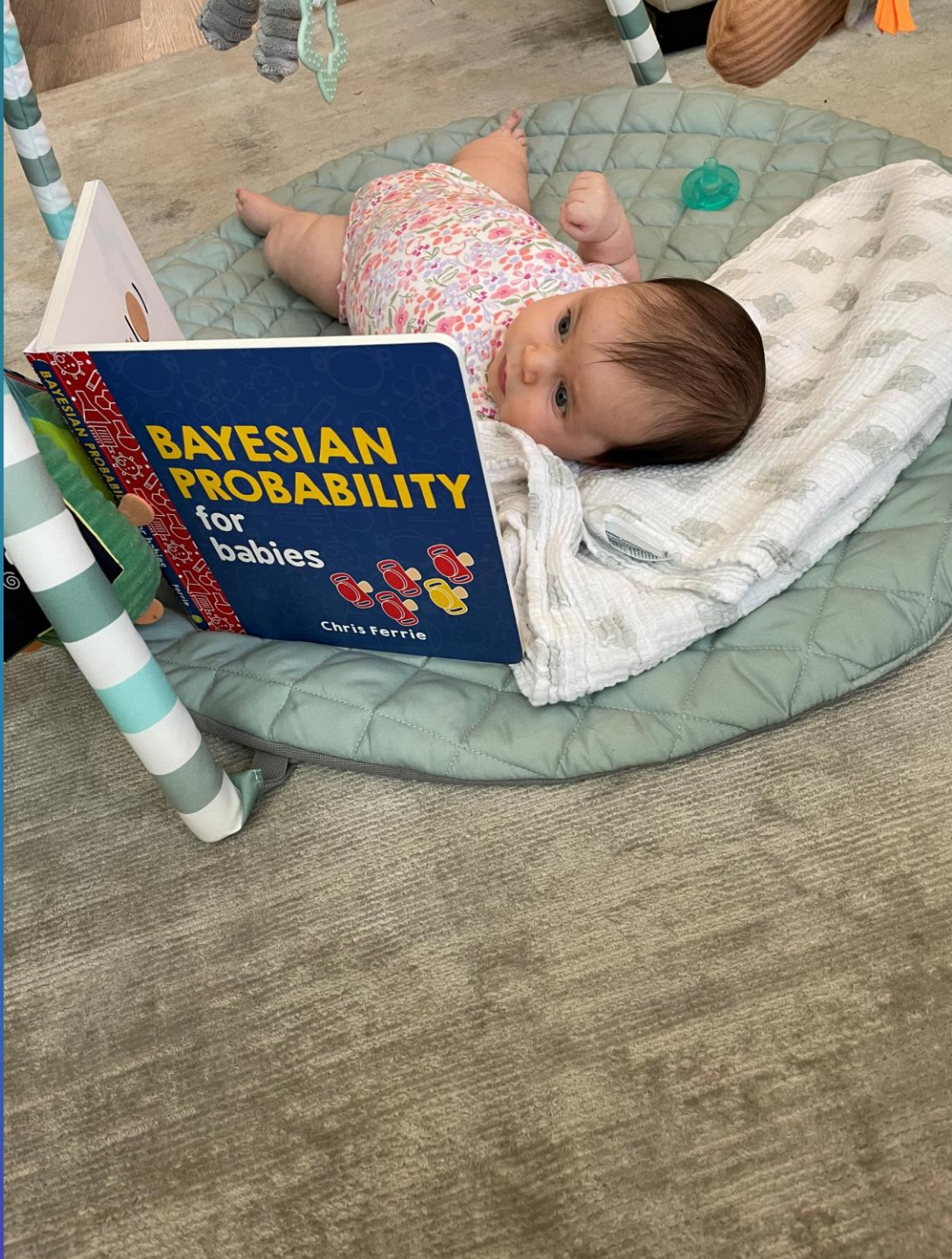


**Patience Atuhaire**



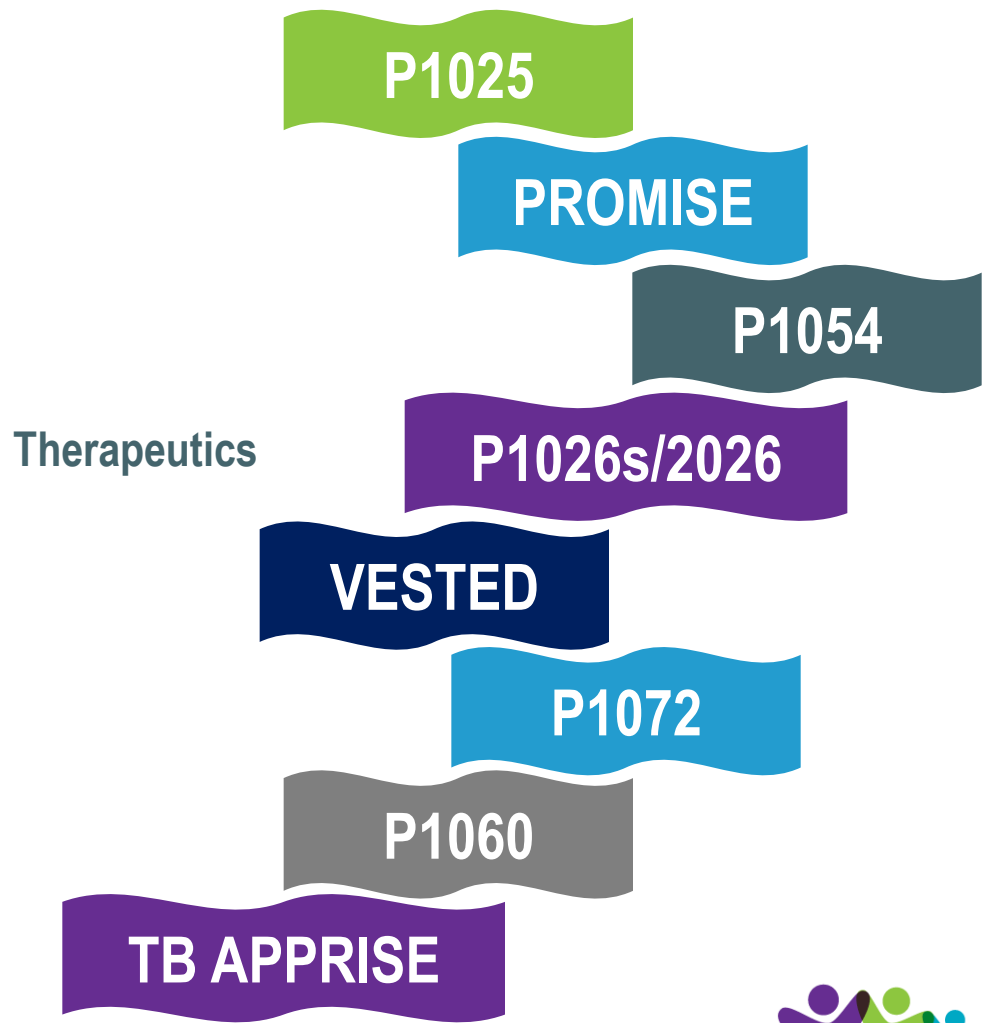
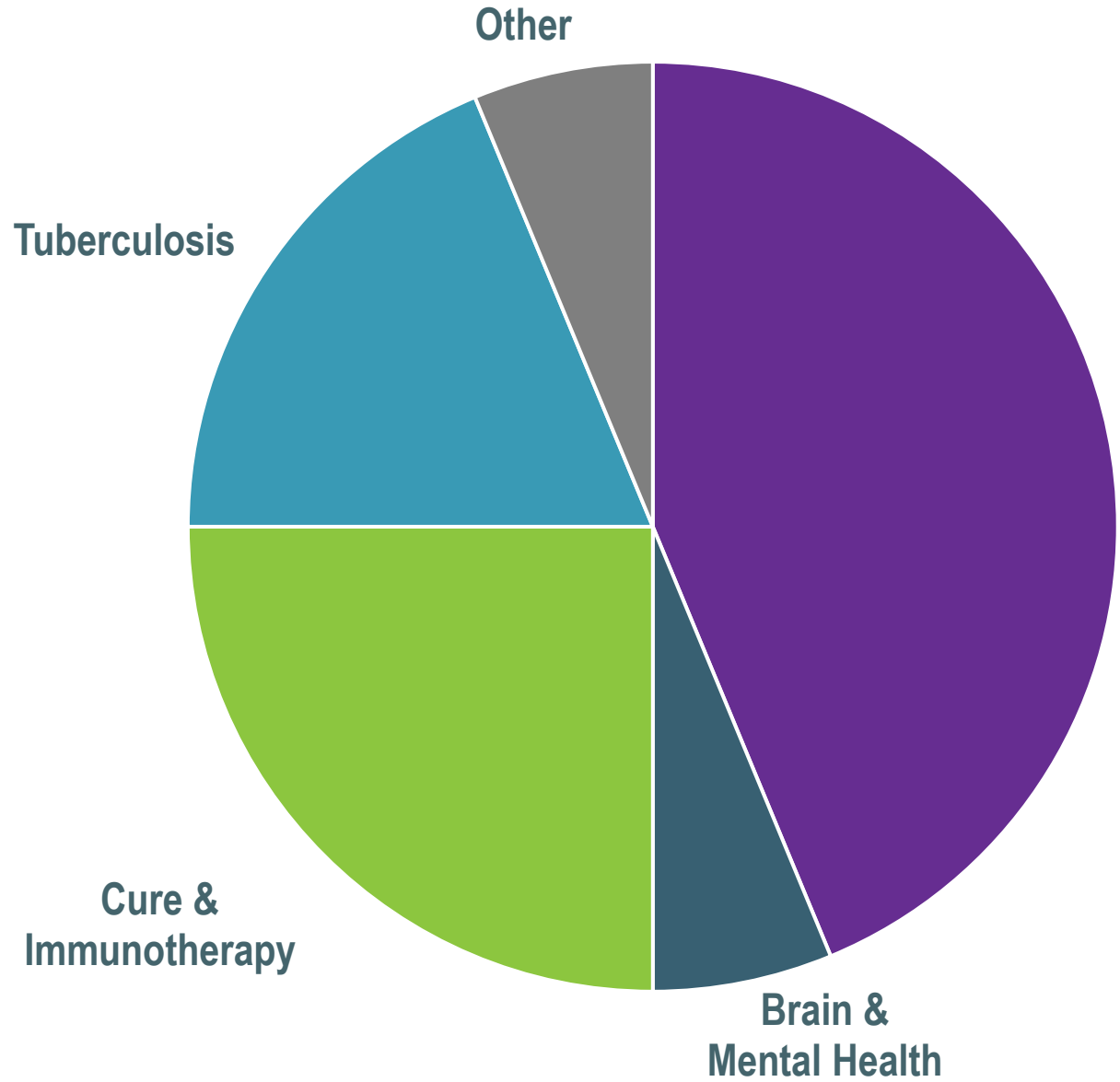
**Violet Korutarro**





# A VERY EARLY CAREER INVESTIGATOR

# 16 Ancillary Study Proposals Received



# Study Updates and Achievements

# Study Highlight: P1108

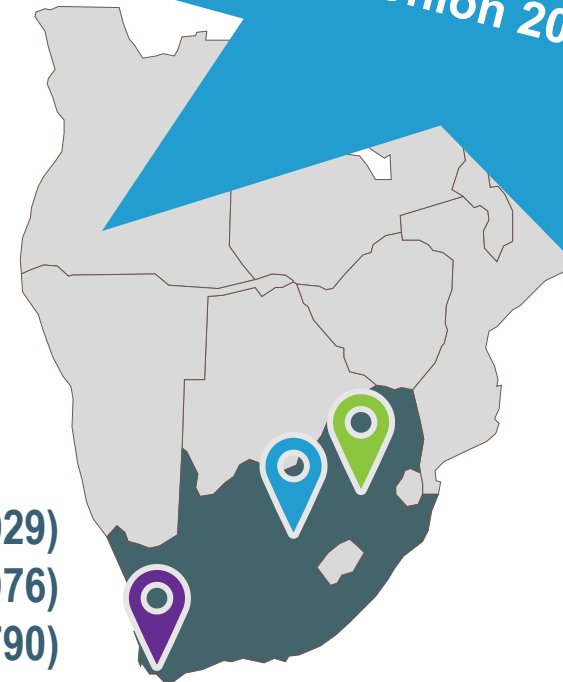
## PK and Safety of Bedaquiline in Children with RR-TB

28

- 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)



Primary results  
to be presented  
at Union 2024

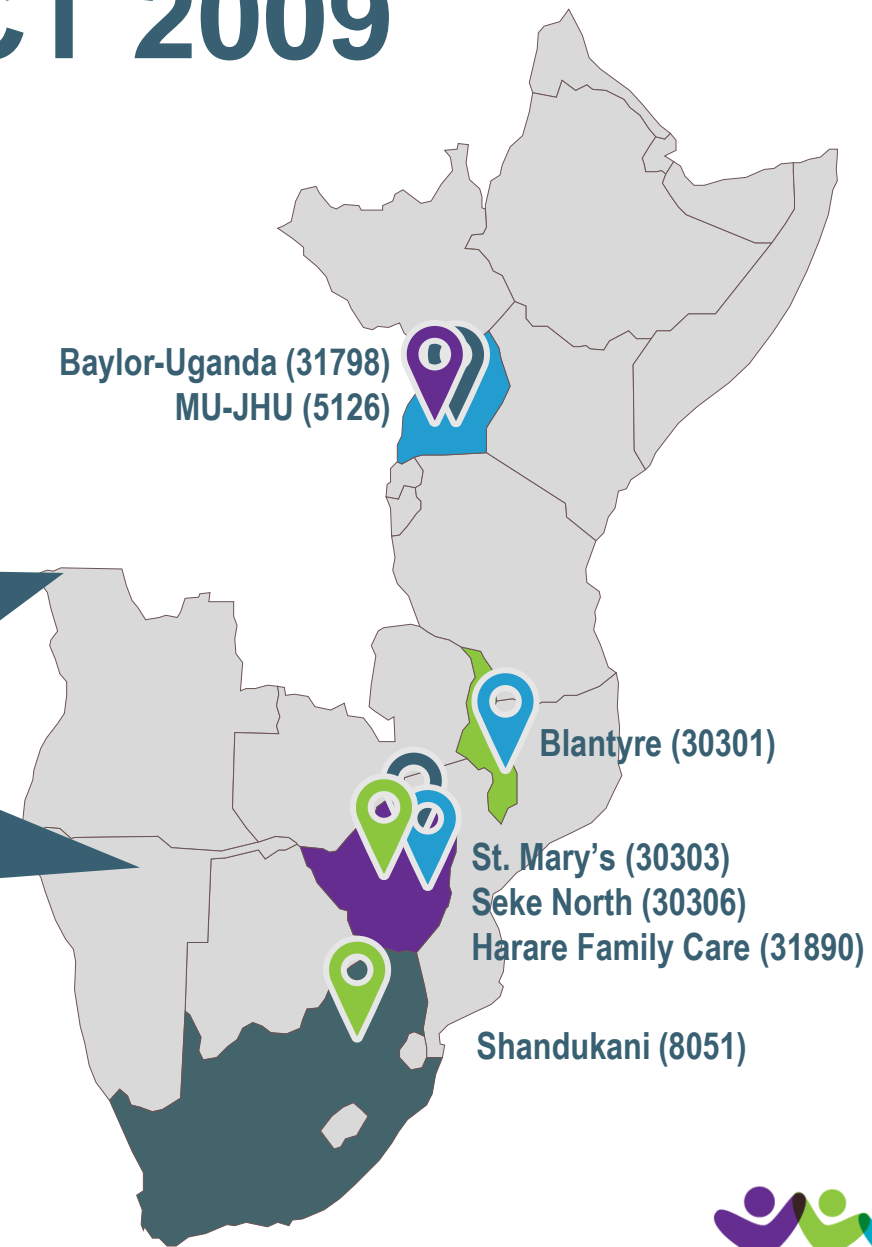


# Study Highlight: IMPAACT 2009

## PrEP in Pregnancy

29

Completed  
follow-up of 350  
mother-infant pairs in  
the PrEP Comparison  
Component as of  
24 Feb 2024

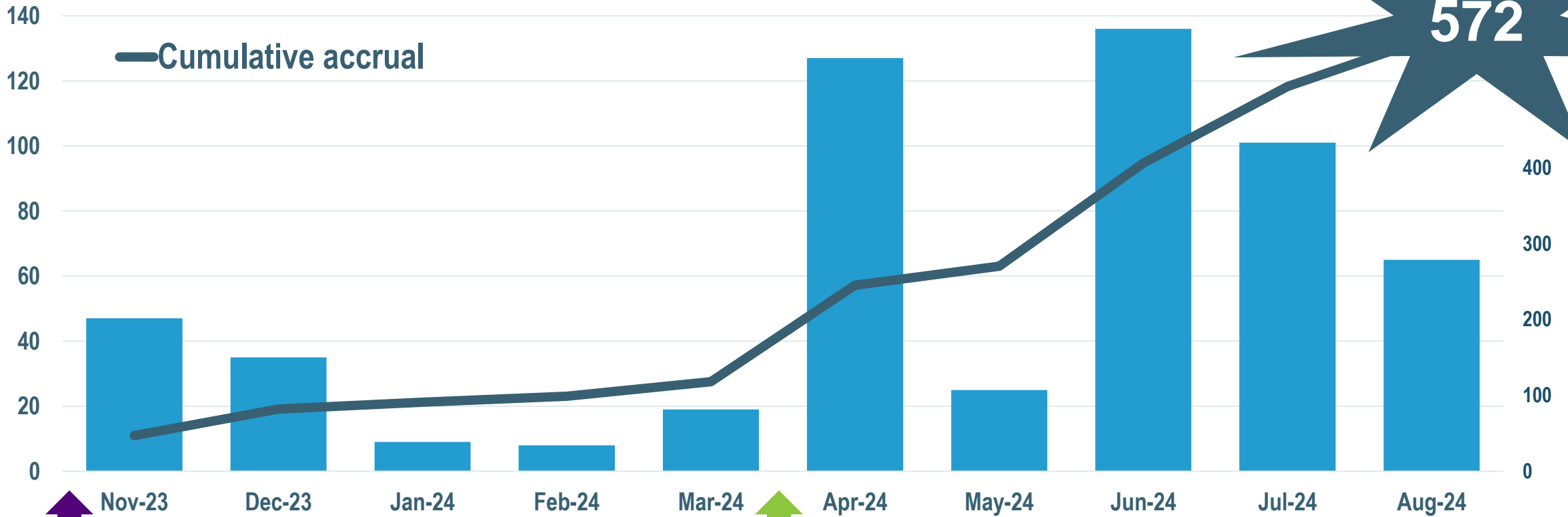






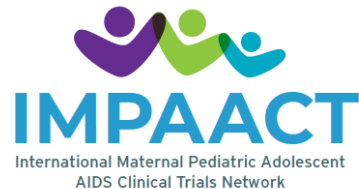
# Study Highlight: IMPAACT 2016

## Group-Based Intervention to Improve Mental Health and ART Adherence among Youth



**Pilot Tests Began**

**Randomized Control Trial Enrollment of Youth and Caregivers Began**

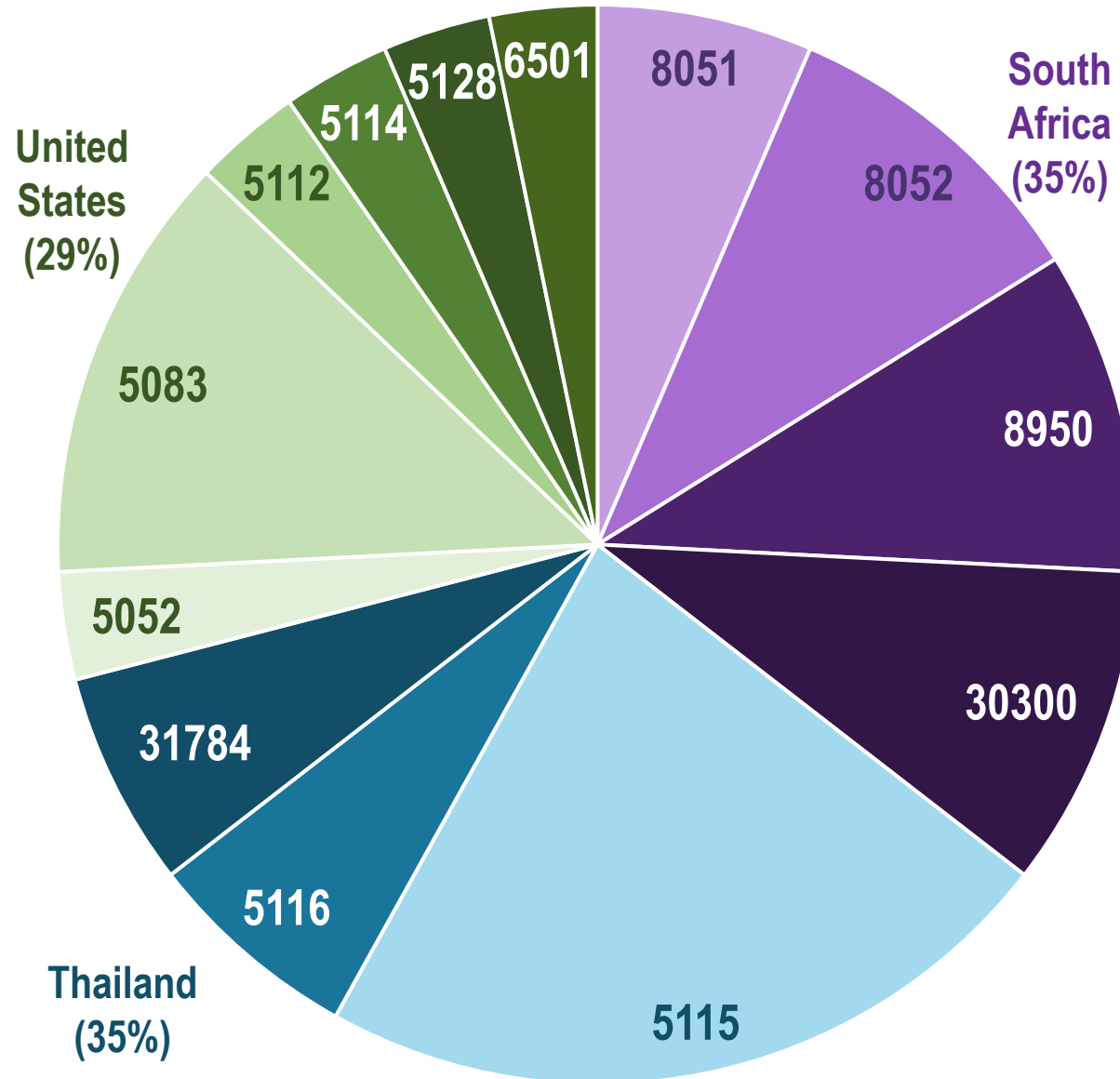


# Study Highlight: IMPAACT 2023

## Safety & PK of DTG in Neonates Exposed to HIV

31

Therapeutics



- 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

# CRAYON

IMPAACT 2036

Cabotegravir and Rilpivirine  
Long-Acting Injections in Young Children

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

12 SITES IN BOTSWANA,  
BRAZIL, SOUTH AFRICA,  
THAILAND, & THE US

9 SITES ACTIVATED

8 SITES  
ENROLLED

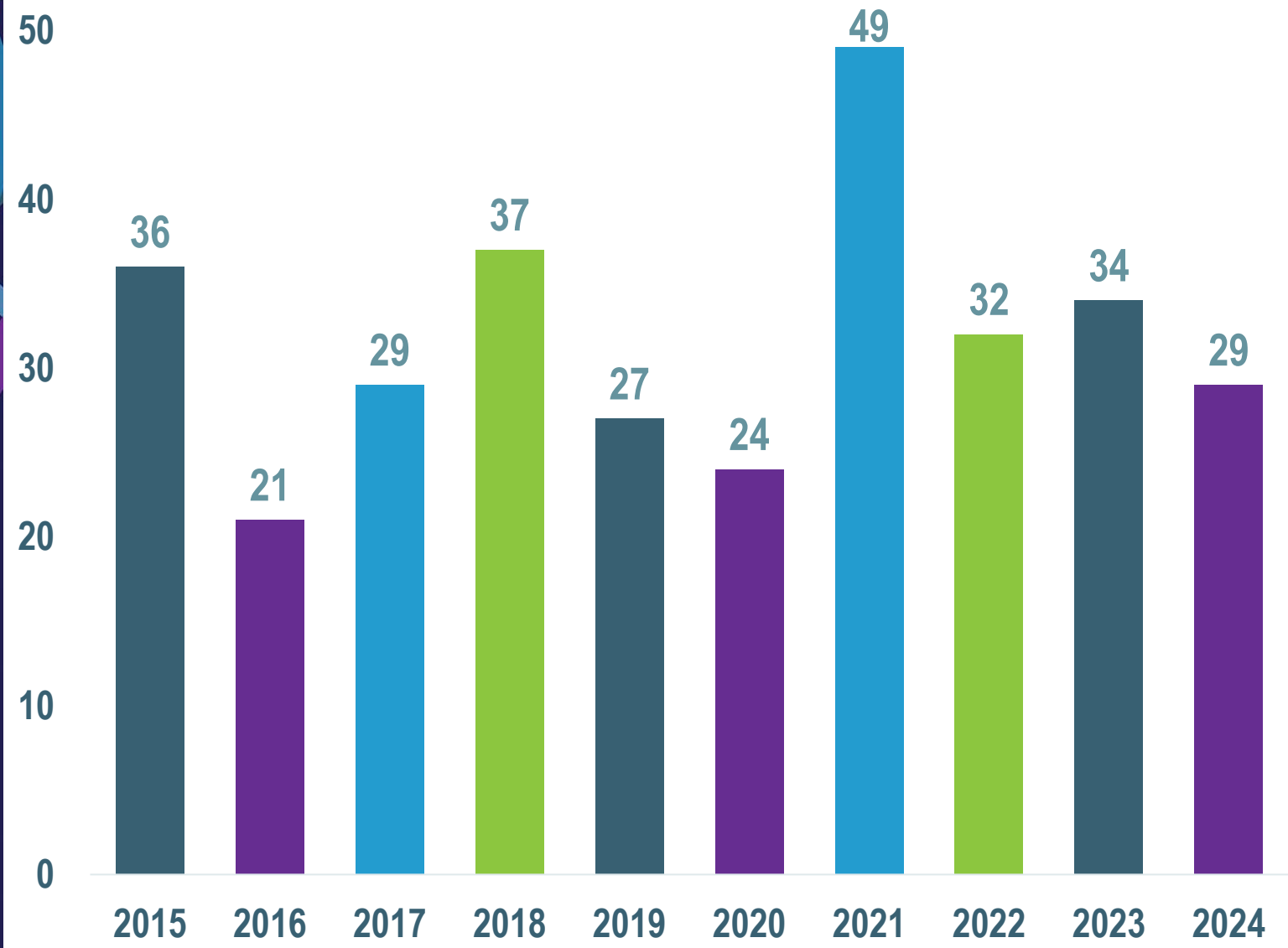
35 PARTICIPANTS  
ENROLLED!

# More to come at tomorrow's plenary!

<b>IMPAACT 2023</b>	Pharmacokinetics and Safety of Dolutegravir in Neonates Exposed to HIV-1	Jeremiah Momper
<b>IMPAACT P1108</b>	P1108: Impact on Global Policy and Access for Bedaquiline in Children	Anneke Hesseling
<b>IMPAACT 2009</b>	IMPAACT 2009 Updates	Benjamin Chi



# Publications in the Last Decade



Total publications **318**

Total times cited **4,689**

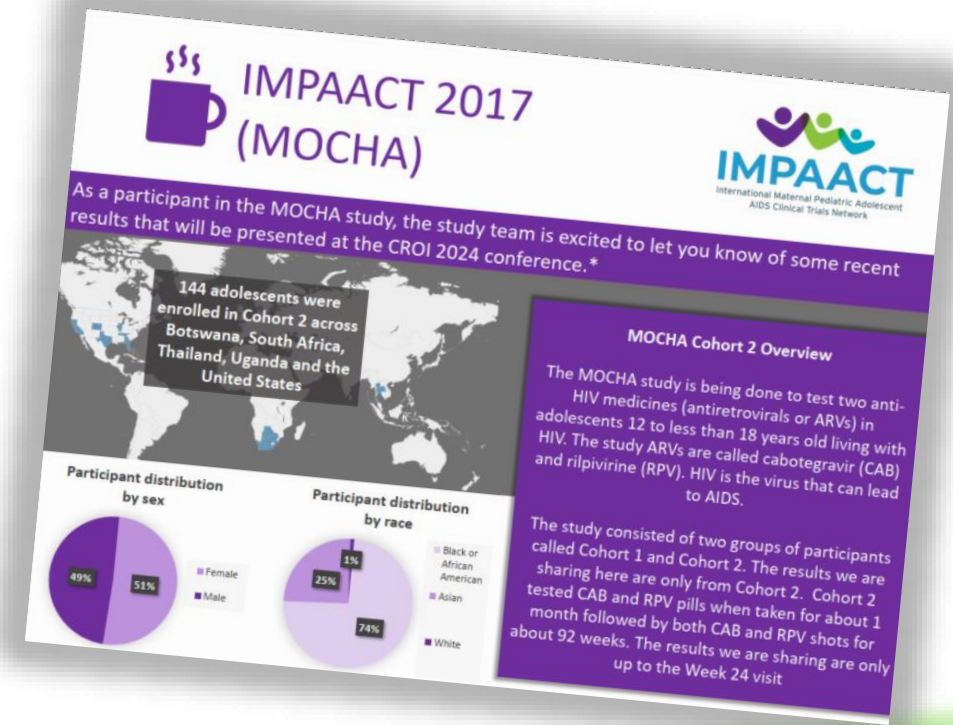
h-index **43**

Publications with over 50 citations **19**

# Abstracts

**15** at CROI 2024 and  
**5** at AIDS or Peds 2024

- ✓ 4 abstracts from MOCHA/ IMPAACT 2017
- ✓ 3 abstracts from IMPAACT 2019 and P1093
- ✓ 3 abstracts from IMPAACT 2009
- ✓ 2 abstracts from IMPAACT 2010/VESTED
- ✓ More abstracts from P1026s, PROMISE, TB APPRISE, P1106, P1115, IMPAACT 2016 and IMPAACT 2023, among others!



# And Many Other Studies

**IMPAACT 2034**  
Enrolling  
(3 Oct 2023)

**P1041**  
Concluded  
(20 Feb 2020)

**IMPAACT 2037**  
pending  
(13 Jun 2024)

**P1093** Closed  
to follow-up  
and POS/PAC  
(18 Oct 2023)

**P1107**  
Concluded  
(16 Mar 2023)

**MOCHA**  
Closed to accrual  
(27 Oct 2023)

**Tatelo Plus**  
pending  
(9 May 2024)

**P1080**  
Concluded  
(20 Sep 2023)

**IMPAACT 2015**  
Concluded  
(23 May 2024)

**IMPAACT 2014**  
Concluded  
(18 Dec 2023)

**P1092**  
Concluded  
(19 Apr 2024)

**IMPAACT 2021**  
closed to accrual  
(20 Nov 2023) and  
closed to follow-up  
(25 Apr 2024)

# 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 Moxifloxacin for **Tuberculosis During Pregnancy** (Radiant-Moms Plus)



# Protocols Currently in Development

## *One within the Cure & Immunotherapy Research Area*

2039

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*

2041

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

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

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

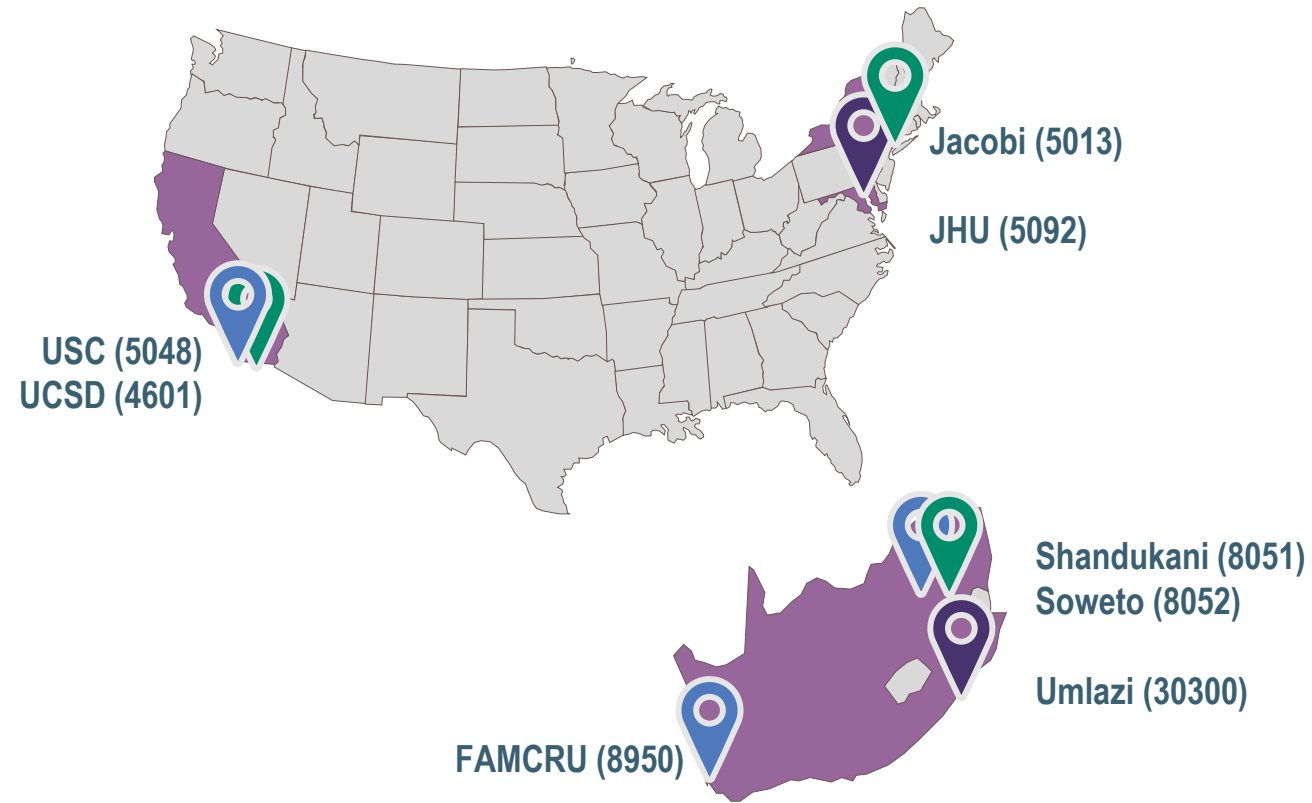
Study	P1115 Version 3.0	IMPAACT 2037	IMPAACT 2039	Tatelo Plus (IMPAACT 2042)
<b>Purpose</b>	Early intensive therapy for remission	Prevention	HIV control and remission	HIV control and remission
<b>Population</b>	Neonates and infants	Neonates	Children	Infants and children
<b>bNAbs</b>	VRC07-523LS	VRC07-523LS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



# CREATE

IMPAACT 2040 Cabotegravir & Rilpivirine  
Antiretroviral Therapy in Pregnancy

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



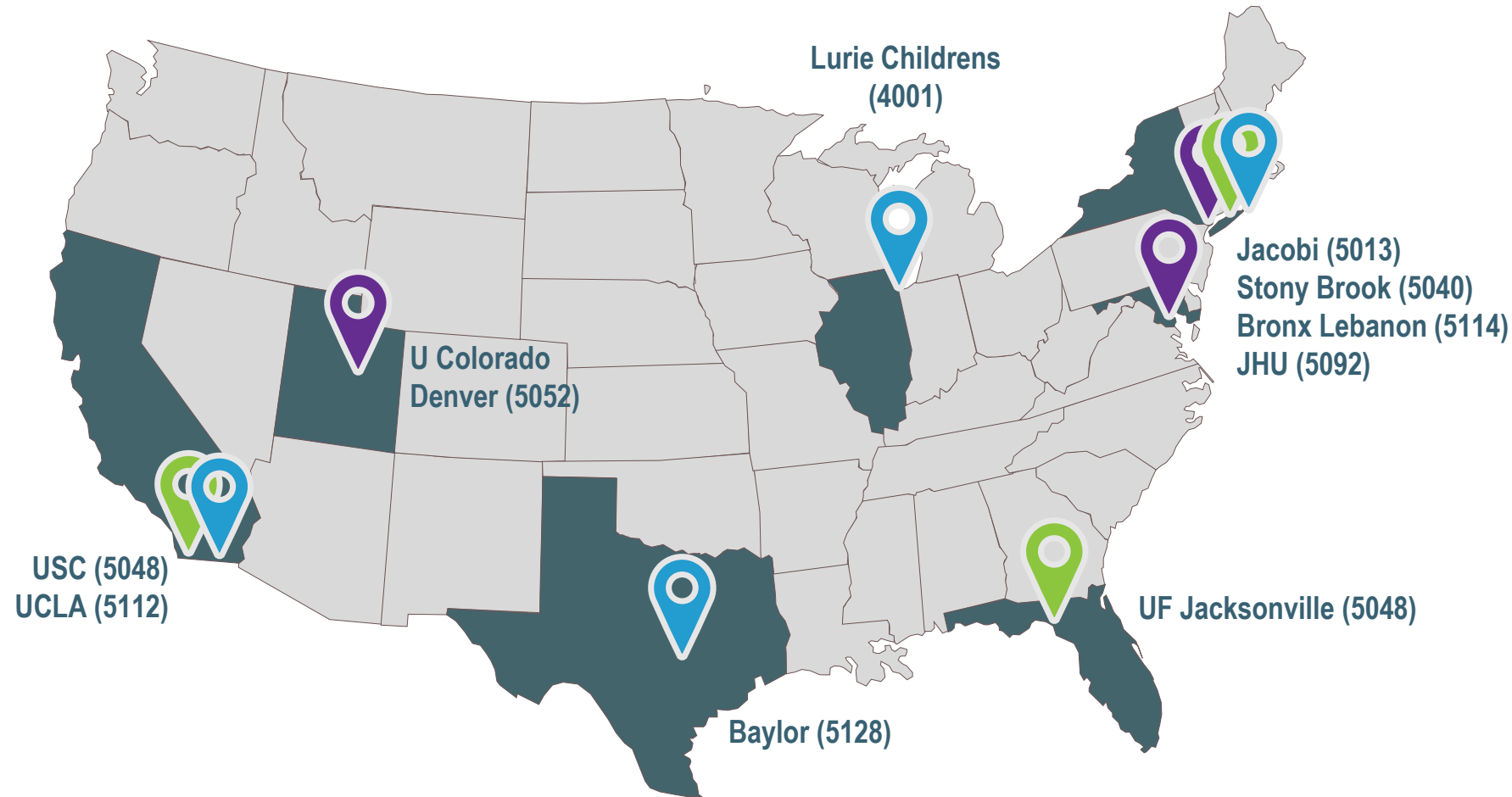
Anticipate opening to accrual by April 2025



# 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)



# IMPAACT Leadership Transition and RFA Timeline

<b>2024</b>			<b>SEPTEMBER</b> ✓ Co-Chair solicitation issued ✓ Applications due 14 November	<b>DECEMBER</b> ✓ Scientific Leadership Group votes on co-chair
<b>2025</b>	<b>JANUARY – MARCH</b> ✓ Co-chair elect joins SLG ✓ Vice Chair solicitation issued			
<b>2026</b>	<b>JANUARY – MARCH</b> ✓ RFA released ✓ Network structure finalized	<b>MAY – AUGUST</b> ✓ RFA response preparation	<b>SEPTEMBER – NOVEMBER</b> ✓ Proposal submitted	
<b>2027</b>			<b>SEPTEMBER</b> ✓ Funding recommendations to NIAID Council	<b>1 DECEMBER</b> ✓ New award/funding period begins

# Strategic Partnerships and Collaborations

46

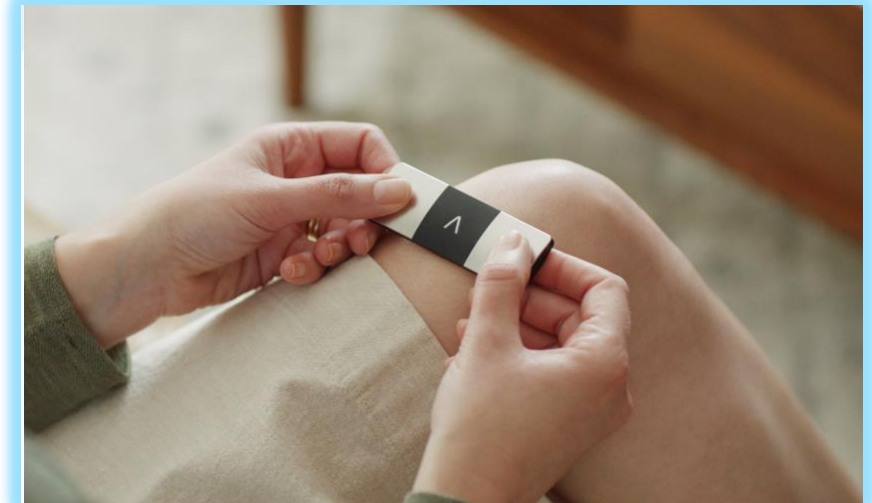


# Looking ahead

- 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

### Initiate

- Tatelo Plus
- IMPAACT 2037
- CREATE
- IMPAACT 2041
- IMPAACT 2024

### Complete Accrual:

- IMPAACT 2005
- IMPAACT 2016
- IMPAACT 2023
- CRAYON

### Finalize Protocol:

- IMPAACT 2020
- IMPAACT 2039
- IMPAACT 2044
- UPLIFT

### Complete Follow Up:

- P1108
- MOCHA

- Begin enrolling into P1115 Version 3.0

**Coming up in the next year**

# 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!

