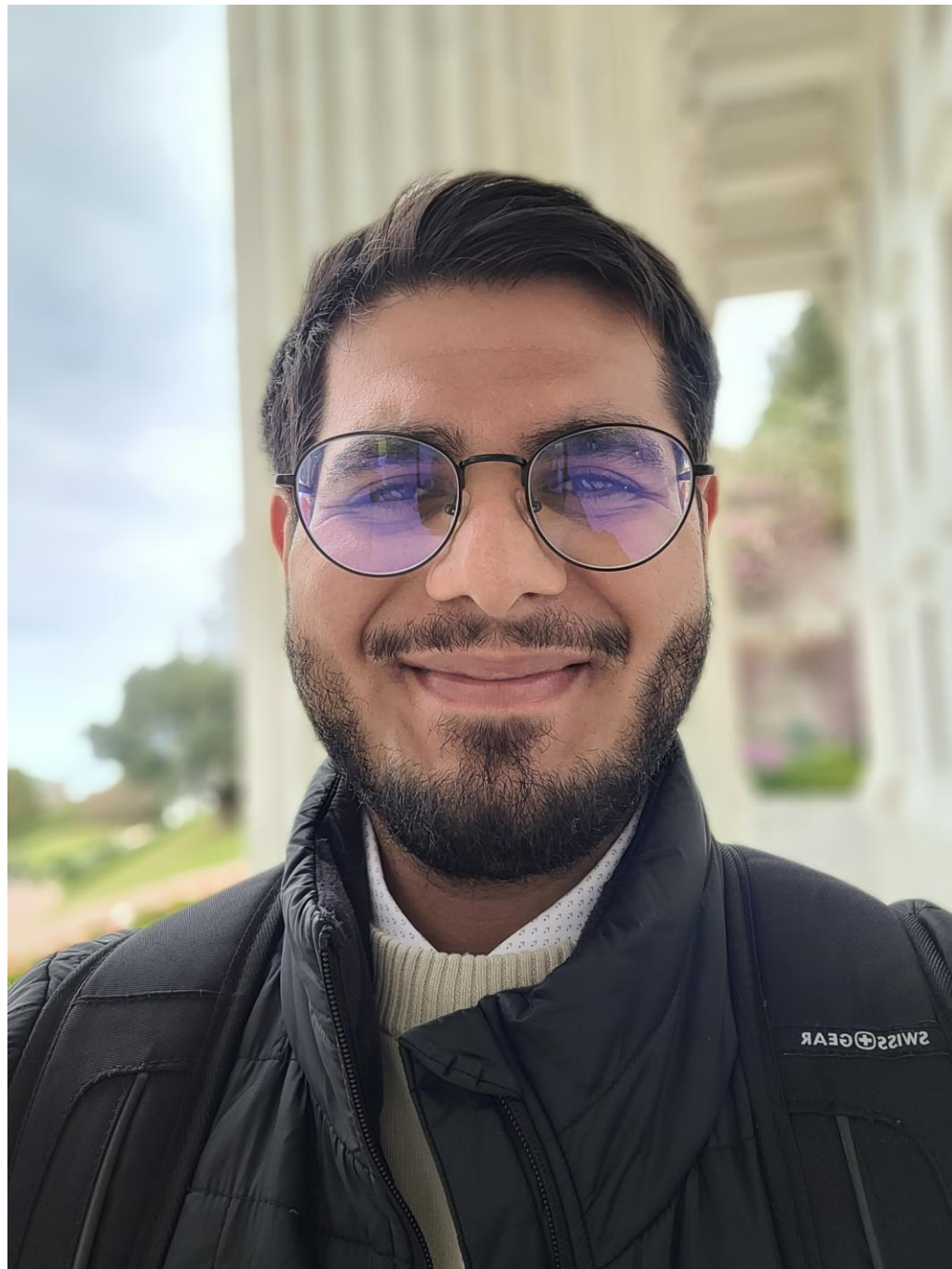




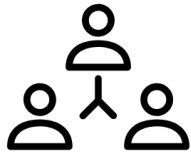
# Health Coverage and Integrated Systems are Important for Achieving HIV Viral Undetectability Efficiently After Rapid Treatment Start Among Migrant Populations

**Anish K. Arora**<sup>1,4</sup>, Serge Vicente<sup>1,2,4</sup>, Kim Engler<sup>2,4</sup>, David Lessard<sup>2,4</sup>, Edmundo Huerta<sup>2,4</sup>, Joel Ishak<sup>2,4</sup>, Nadine Kronfli<sup>2,5</sup>, Jean-Pierre Routy<sup>5</sup>, Joseph Cox<sup>5,6</sup>, Giada Sebastiani<sup>5</sup>, Benoit Lemire<sup>7</sup>, Lina Del Balso<sup>5</sup>, Marina Klein<sup>5</sup>, Alexandra de Pokomandy<sup>1,5</sup>, Isabelle Vedel<sup>1,8</sup>, Amélie Quesnel-Vallée<sup>6,9</sup>, ASAP Migrant Advisory Committee<sup>2</sup>, **Bertrand Lebouché**<sup>1-5</sup>

1. Department of Family Medicine, McGill University; 2. Centre for Outcomes Research & Evaluation, Research Institute of the McGill University Health Centre; 3. Infectious Diseases and Immunity in Global Health Program, Research Institute of the McGill University Health Centre; 4. Canadian Institutes of Health Research Strategy for Patient-Oriented Research (CIHR/SPOR) Mentorship Chair in Innovative Clinical Trials in HIV Care; 5. Chronic Viral Illness Service, McGill University Health Centre; 6. Department of Epidemiology, Biostatistics, and Occupational Health, McGill University; 7. Pharmacy Department, McGill University Health Centre; 8. Lady Davis Institute, Jewish General Hospital; 9. Department of Sociology, McGill University



# Conflict of Interest Disclosure for Bertrand Lebouché



Holder of a **CIHR SPOR Mentorship Chair** in Innovative Clinical Trials



Supported by a **Clinician scientist salary award** from **FRSQ** and **Research Scholar Award of LE 250 FMOQ/MSSS** (Ministry of Health, Quebec, Canada)



Received **consultancy fees** and/or honoraria from: **MSD/Merck, ViiV, Gilead**

Received **research funding** from **MSD, Merck, Gilead, ViiV** (managed by the **MUHC Research Institute**)



# Background – Migrants Living with HIV

- **Migrants** = people who move to a new country temporarily or permanently irrespective of their reason for translocation<sup>1</sup>
- Migrant populations experience a large burden of HIV
  - In Canada, **45%** of all new HIV diagnoses were attributed to migrants in 2020<sup>2</sup>
- When compared to native-born populations, migrants experience higher rates of **delayed entry into HIV care & poorer HIV-related outcomes**<sup>3</sup>
  - This is due to numerous barriers migrants encounter across the HIV Care Cascade
  - Negative impacts for both individuals and populations

1. Department of Economic and Social Affairs. International Migration 2019 Report. United Nations; 2019.

2. Government of Canada. HIV in Canada, Surveillance Report. December 31, 2020.

3. Arora AK, et al. Barriers and facilitators affecting the HIV care cascade for migrant people living with HIV in OECD countries: a systematic mixed studies review. *AIDS Patient Care and STDs*, 2021;35(8), 288-307.

# Background – Migrants Living with HIV

- To improve HIV care and treatment engagement for migrants, the following are recommended<sup>3,4</sup>
  - Free antiretroviral treatment
  - Rapid treatment initiation
  - Treatment dispensation on-site
  - Care provided in a multidisciplinary environment
- However, quantitative evidence supporting such an approach to care for migrants living with HIV is lacking

3. Arora AK, et al. Barriers and facilitators affecting the HIV care cascade for migrant people living with HIV in OECD countries: a systematic mixed studies review. *AIDS Patient Care and STDs*, 2021:35(8), 288-307.

4. Arora AK, et al. Experiences of Migrant People Living with HIV in a Multidisciplinary HIV Care Setting with Rapid B/F/TAF Initiation and Cost-Covered Treatment: The 'ASAP' Study. *Journal of Personalized Medicine*, 2022:12(9), 1497.

# Purpose

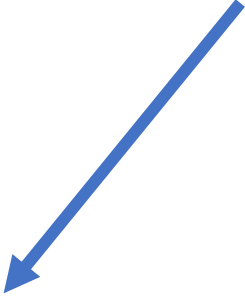
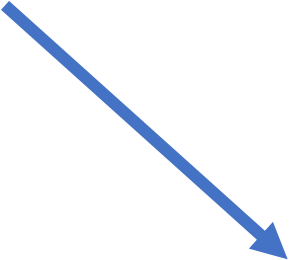
**To examine time to treatment\* & undetectability\* for migrants enrolled in multidisciplinary care with free, rapid, and on-site treatment initiation**

**\*Time to events from linkage to our clinic**

# The 'ASAP' Study



# Study Site: Chronic Viral Illness Service (CVIS)





# Study Site: Chronic Viral Illness Service (CVIS)



Integrated screening and prevention service for HIV & other STBBIs from Public Health Montreal  
**(FREE BLOOD TESTS)**



# Study Design: Prospective cohort study

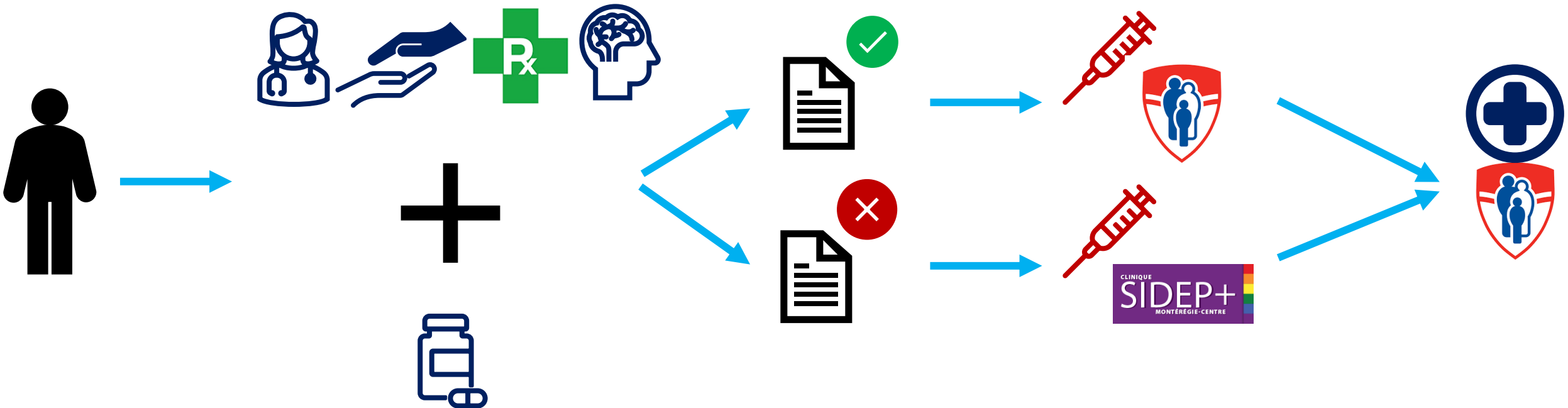
**ART-naïve people living with HIV**  
(Referred to CVIS)

**Multidisciplinary Care (standard of care)**  
(HIV-specialist nurse, pharmacist, physician, social worker, psychologist/psychiatrist)  
+  
**Cost-covered B/F/TAF**  
Administered on-site and rapidly

**Assess for Health Coverage**

**Blood test**

**Followed @ CVIS for 96 weeks**  
(Cost-covered visits and B/F/TAF for those without coverage)



# Methods

- **Study Sample:**

- As of Dec 2022, data for 31/37 ART-naïve enrolled migrants (i.e., people born outside Canada) were available

- **Survival Analysis:**

1. Median time to events
2. Kaplan-Meier estimation
3. Cox regression with stratified bootstrapping for p-values

- **Comparison by:**

- Birth region, immigration status, age, sex, sexual orientation, health coverage, & occupational status

# Preliminary Results

# Time to ART

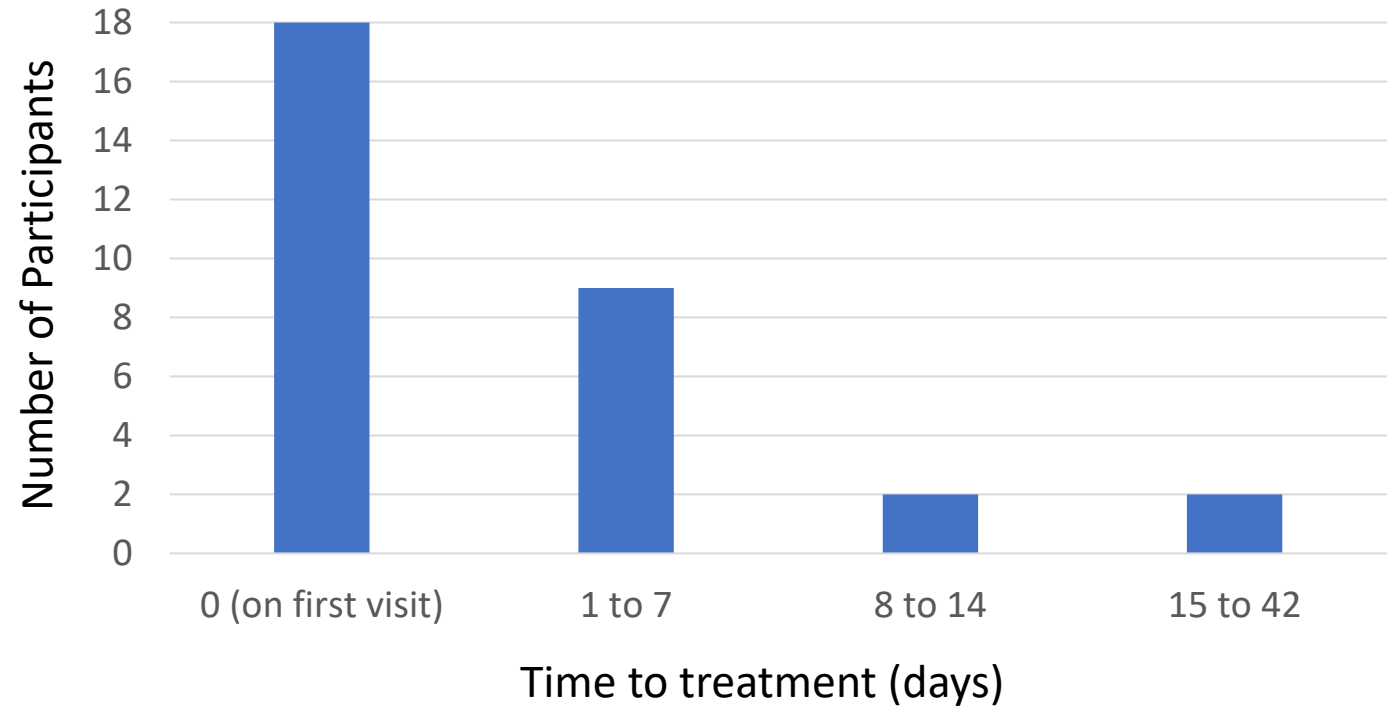
Sociodemographics	n (%)
<b>Full sample</b>	
All participants	31 (100%)
<b>Birth region</b>	
Africa	14 (45%)
Caribbean	6 (19%)
Eurasia	6 (19%)
Latin America	5 (16%)
<b>Immigration status</b>	
Refugee claimant	14 (45%)
Refugee, permanent resident, or Canadian citizen	4 (13%)
Temporary resident or undocumented	12 (39%)
Not reported	1 (3%)
<b>Sex</b>	
Male	24 (77%)
Female	7 (23%)
<b>Sexual orientation</b>	
Heterosexual	14 (45%)
Men who have sex with men	16 (52%)
Not reported	1 (3%)
<b>Health coverage</b>	
No or low	9 (29%)
Sufficient	21 (68%)
Not reported	1 (3%)
<b>Occupational status</b>	
Unemployed	22 (71%)
Paid employment	8 (26%)
Not reported	1 (3%)

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**65%**  
**African or  
Caribbean**

# Time to ART



**Median days to treatment for the whole sample = 0  
(range: 0-42)**

**87% (n=27) initiated treatment within 7 days**

**No significant differences detected among sub-groups**



<b>Sociodemographics</b>	<b>n (%)</b>
<b>Full sample</b>	
All participants	26 (100%)
<b>Birth region</b>	
Africa	13 (50%)
Caribbean	6 (23%)
Eurasia	3 (12%)
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<b>Immigration status</b>	
Refugee claimant	10 (38%)
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# Time to Undetectability

(<50 copies/mL)

**84% reached undetectability**

**73% of those undetectable are Africans or Caribbeans**

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**84%** reached undetectability

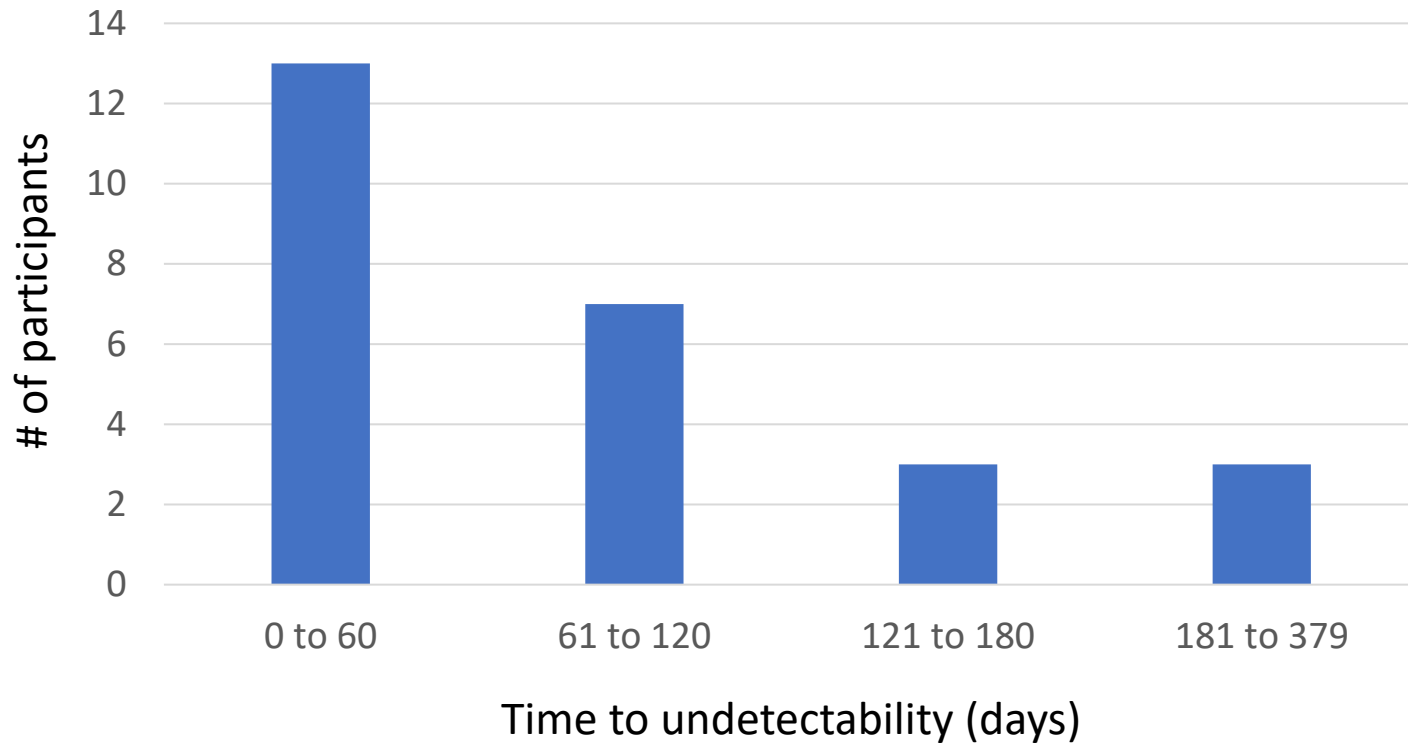
**73%** of those undetectable are Africans or Caribbeans

**35%** of those undetectable did not have HIV-related health coverage

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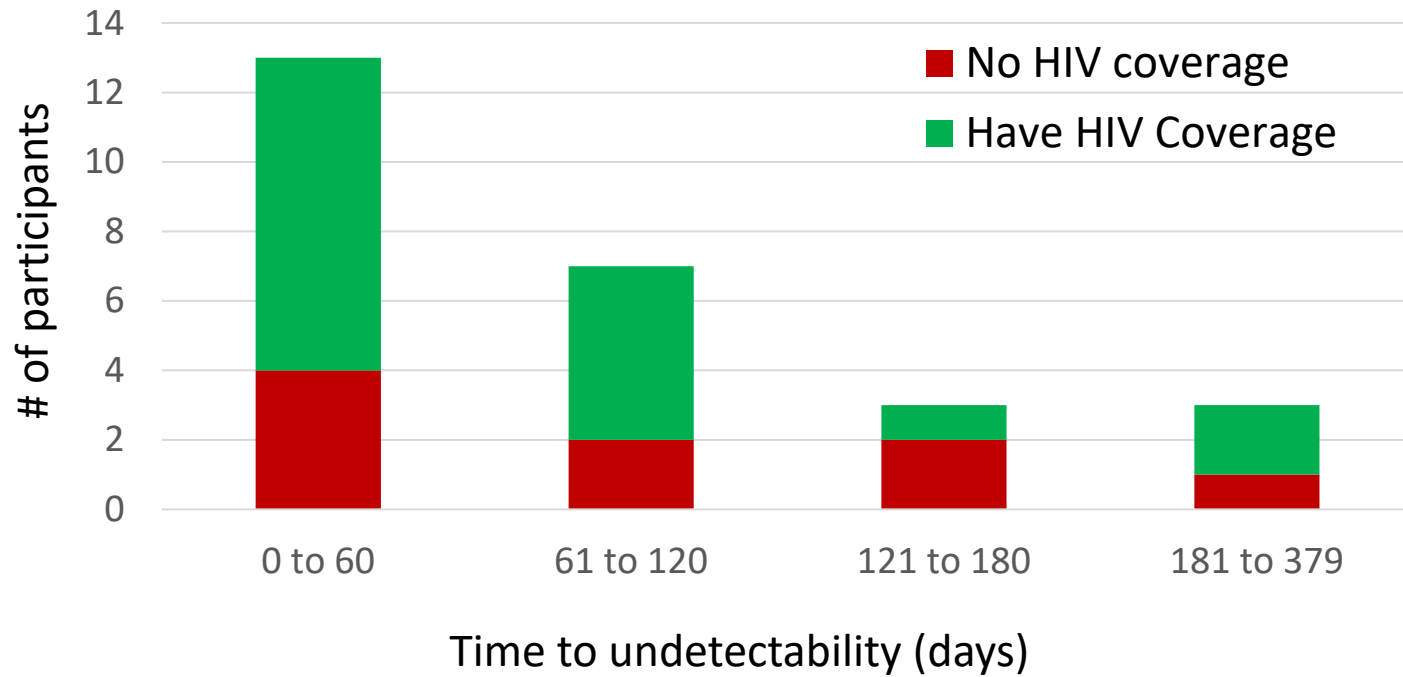
(<50 copies/mL)



**Median days to undetectability for the whole sample  
= 60 days (range: 0-379)**

# Time to Undetectability

(**<50 copies/mL**)



Those without HIV coverage took **30 days longer** on median to reach undetectability (p-value = 0.002)

No significant differences detected among other sub-groups

# Time to Undetectability

(<50 copies/mL)

# Discussion

- **Rapid start (ART <7 days after first visit) is feasible in this population**
- **Delay to reach undetectability in those without health coverage??**
  - Those without health coverage NEED to go to SIDE+ for blood tests
  - Delay with:
    - Booking appointments?
    - Conducting tests?
    - Transferring lab results to CVIS?
    - COVID-19? (First participant Jan 2020)

# Discussion

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    - COVID-19? (First patient Jan 2020)

**Rapid start needs free ART & free care (visits and blood test covered on-site)**



# Study Limitations

- **Small study sample (with even smaller sub-groups)**
  - Whenever cox regression was possible, bootstrapping for p-values was performed
- **Preliminary data**
  - All enrolled migrants just completed their week 24 follow-up (Apr 18<sup>th</sup>, 2023)
  - Working with funders to increase overall sample size





Department of  
Family Medicine

Département de  
médecine de famille

Merci à mon équipe de recherche !





# Thoughts/Comments/Questions?

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de santé McGill  
Institut de recherche



McGill University  
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