



# Cascade of Care in Romanian Patients who grew up with HIV from a Tertiary Care Facility

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## Background

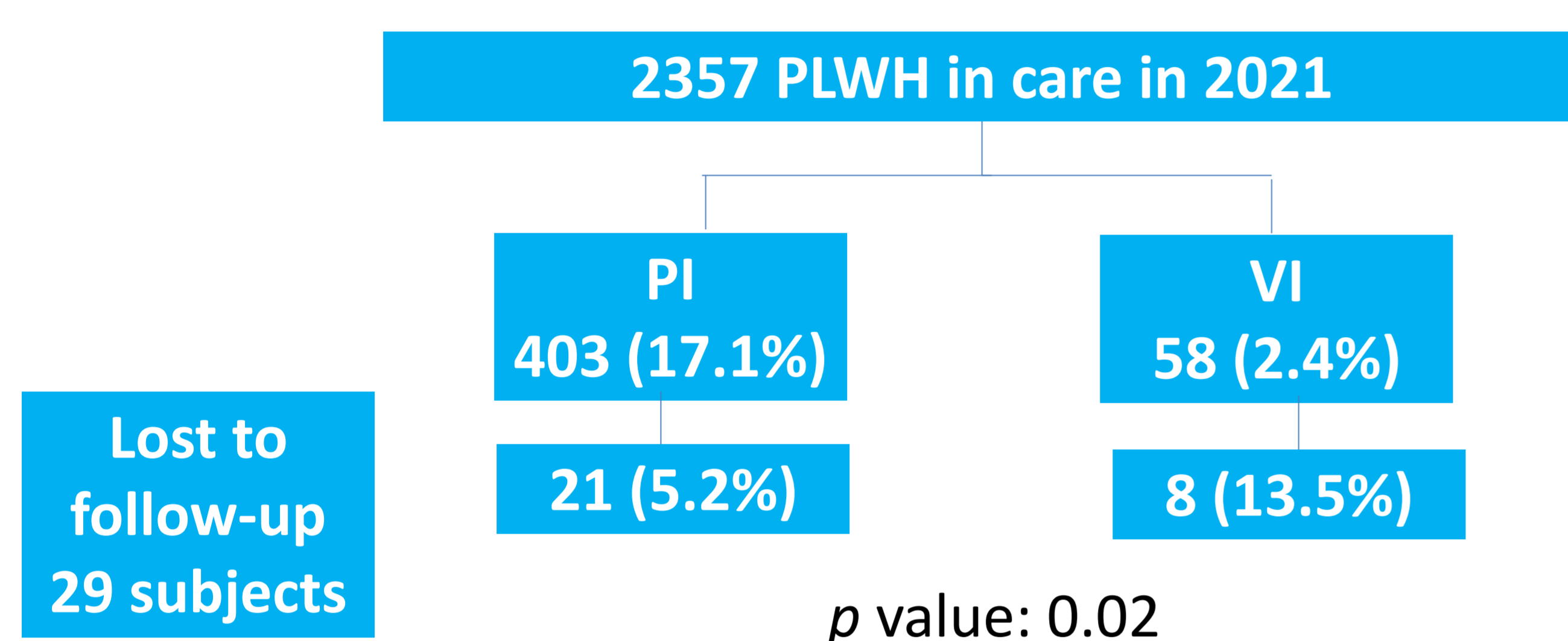
- A particular aspect of HIV epidemic in Romania is the homogenous group of individuals, infected by parenteral mode, with subtype F1, in early childhood, in the late 80's. Among 11.500 reported cases at national level, 45% were in active care at the end of 2021.
- The aim of the study was to evaluate antiretroviral treatment (ART) coverage and effectiveness in people living with HIV (PLWH), infected by parenteral mode during childhood (PI), in active care at Victor Babes regional center, Bucharest (VBH).

## Methods

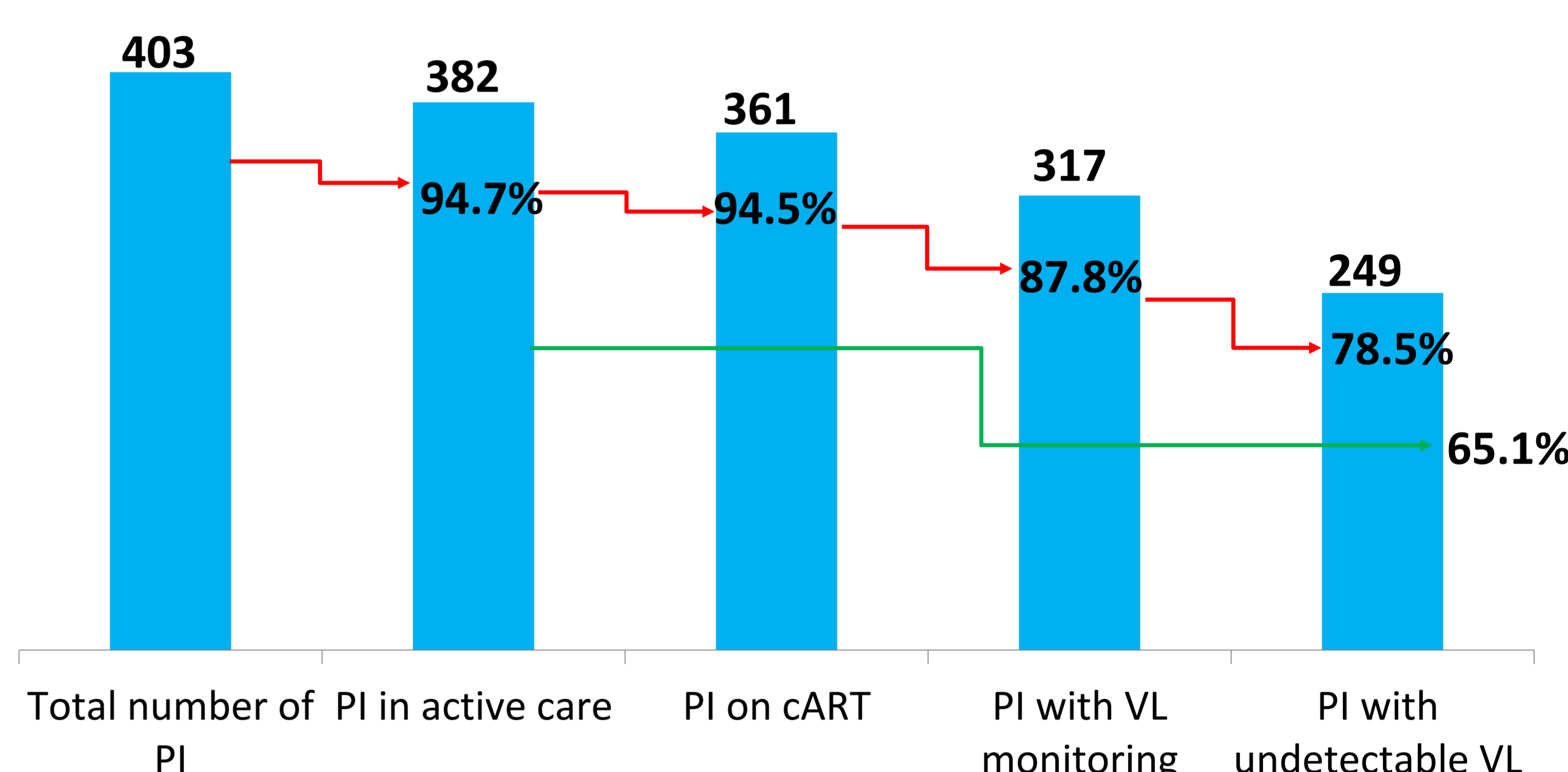
- Demographic data, ART and HIV parameters (CD4 count and viral loads-VL) were collected from medical records.
- Data from PI was compared with vertically infected subjects (VI). Cascade of care for this subpopulation was conducted for year 2021.
- PLWH were considered virally suppressed if their most recent VL, measured within the past year, was less than 50 copies/mL.

## Results

### PI and VI PLWH in active care VBH in 2021



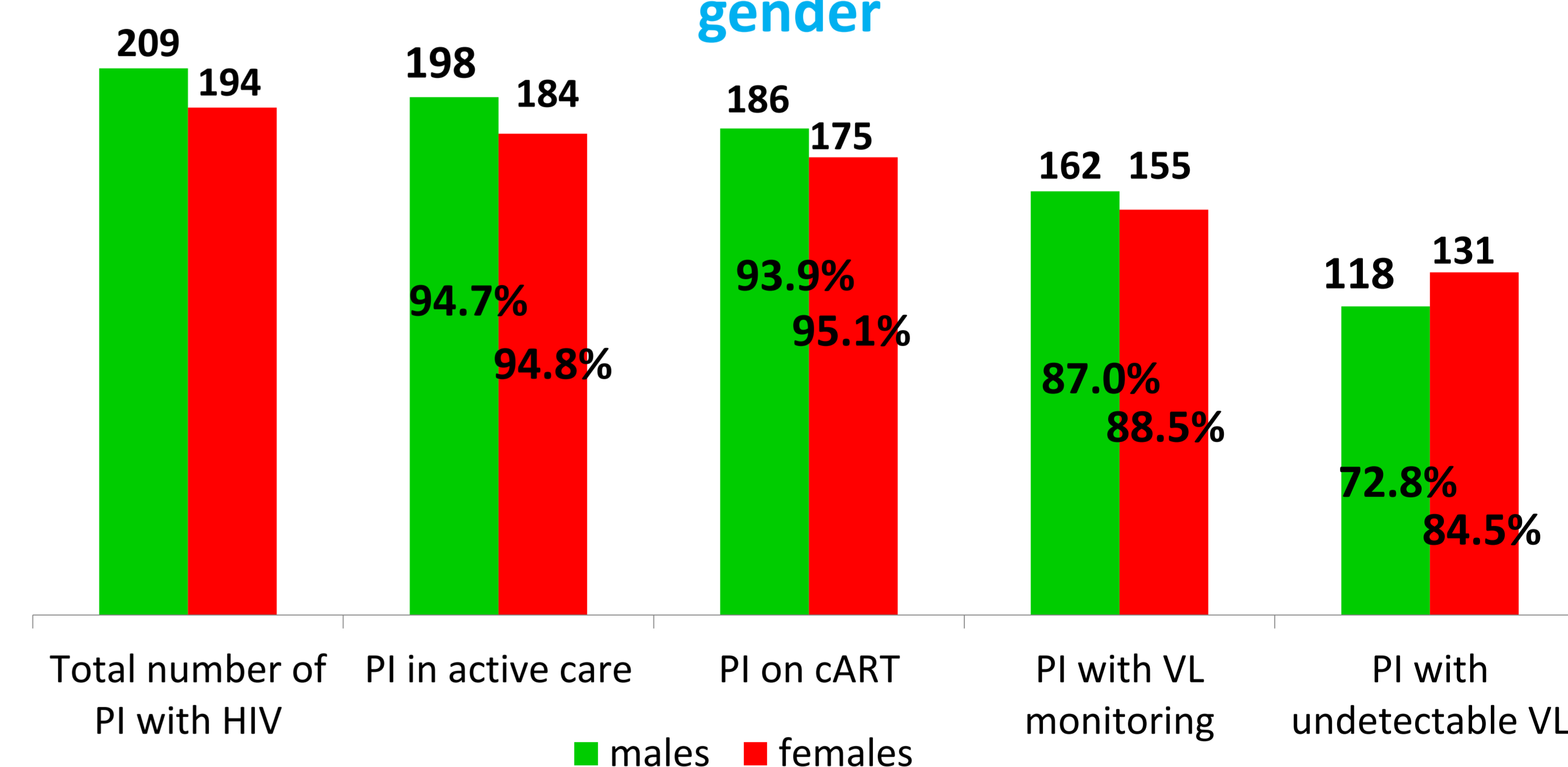
### Cascade of care in PLWH infected by parenteral mode during childhood (PI)



### Study group: demographics, ART and lab screens

| Characteristics                      | Total n=432    | PI n=382       | VI n=50         | p value |
|--------------------------------------|----------------|----------------|-----------------|---------|
| Age (years) median (IQR)             | 33 (33, 34)    | 33 (33, 34)    | 19 (13, 24)     | <0.0001 |
| Male sex n (%)                       | 227 (52.5)     | 198 (51.8)     | 29 (58.0)       | 0.25    |
| Patients on ART n (%)                | 405 (93.7)     | 361 (94.5)     | 47 (94.0)       | 0.61    |
| CD4 cell count/ $\mu$ L median (IQR) | 631 (390, 888) | 626 (392, 880) | 846 (429, 1184) | 0.08    |

### Cascade of care in PI group – comparison according on gender

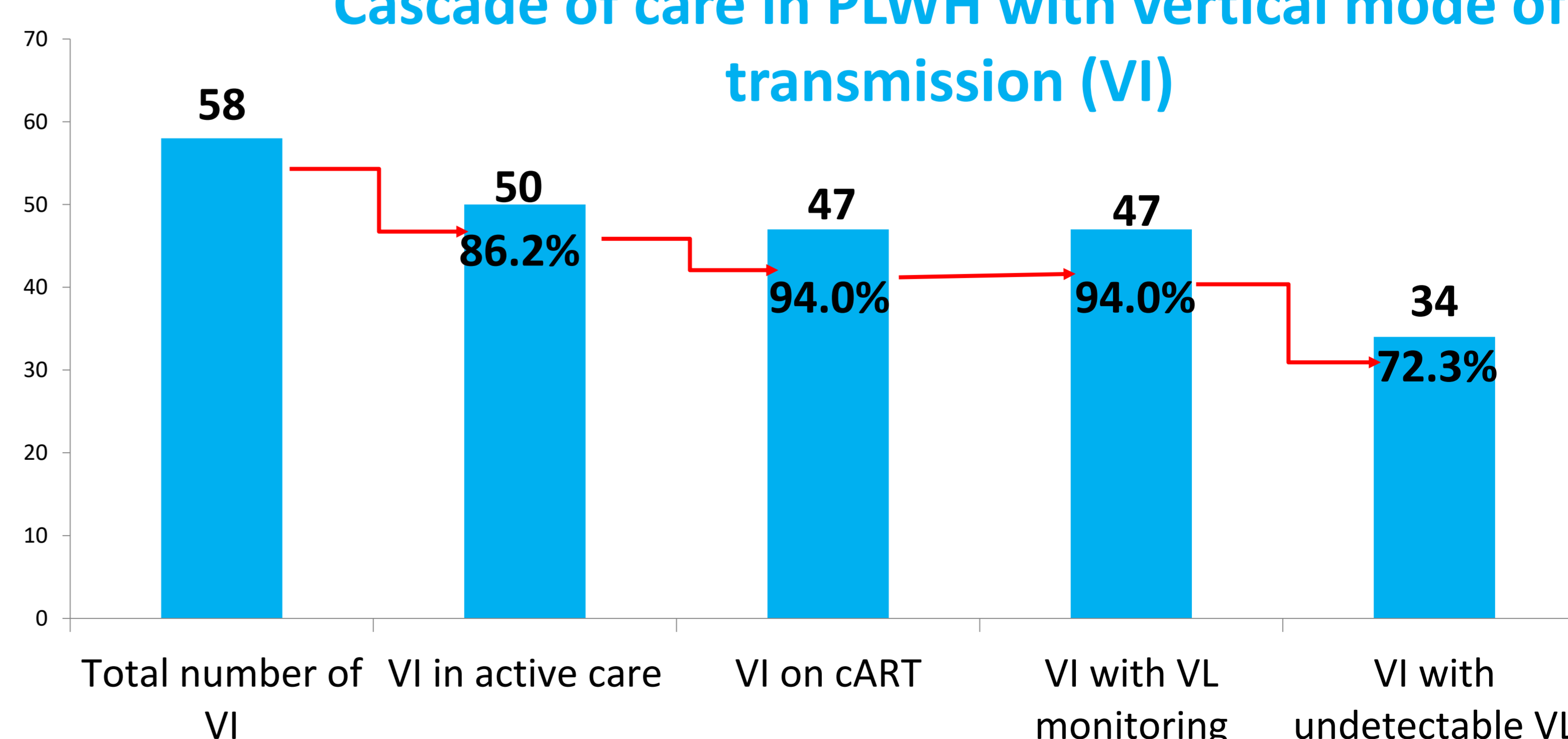


### ART regimens - comparison depending on modes of HIV acquisition

| ART regimens*   | Total N=375 | PI N=332   | VI N=43   | p value |
|-----------------|-------------|------------|-----------|---------|
| 2NRTI + INSTI   | 178 (47.4)  | 164 (49.3) | 14 (32.5) | <0.0001 |
| 2NRTI + PI/r    | 71 (18.9)   | 62 (18.6)  | 9 (20.9)  |         |
| 2NRTI + NNRTI   | 29 (7.7)    | 18 (5.4)   | 11 (25.5) |         |
| Salvage regimen | 97 (25.8)   | 88 (26.5)  | 9 (20.9)  |         |

\*ART regimens were available only for 375 patients, 332 PI and 43 VI

### Cascade of care in PLWH with vertical mode of transmission (VI)



## Conclusions

- Despite a good ART coverage, there were still some barriers in reaching the 90-90-90 UNAIDS targets in both groups.
- Virological failure was mainly due to lack of adherence and treatment fatigue in both groups.
- The COVID-19 pandemic had a negative impact on HIV cascade of care, affecting regular visits to clinic and HIV viral load monitoring.
- Intervention strategies to optimize treatment response and psychological support must be prioritized.