

Evolving cancer incidence in persons with HIV in France between 2014-2023: A nationwide study using the French National Health Data System

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***No conflicts of interest**



Introduction

- **Background**

- **Antiretroviral therapy (ART)** has radically reshaped **cancer** epidemiology in person with HIV (PWH) ([Haas C, et al. JAMA Oncol 2025](#))
- In France, **several studies** mainly based on the **French Hospital Database on HIV (ANRS CO4 FHDH)** (174 HIV centers) investigated incidence of **AIDS-defining cancers (ADC)** and **non-AIDS-defining cancers (NADC)**
 - **Limitations of prior studies:**
 - Underreporting cancer in HIV centers → underestimated cancers burden
 - Last data available up to **2018** ([Grabar, S et al. EACS 2023](#))

- **Objective**

Using reimbursement data from **French Health Insurance Databases (SNDS)**, covering **99% of individuals living in France (2014–2023)**:

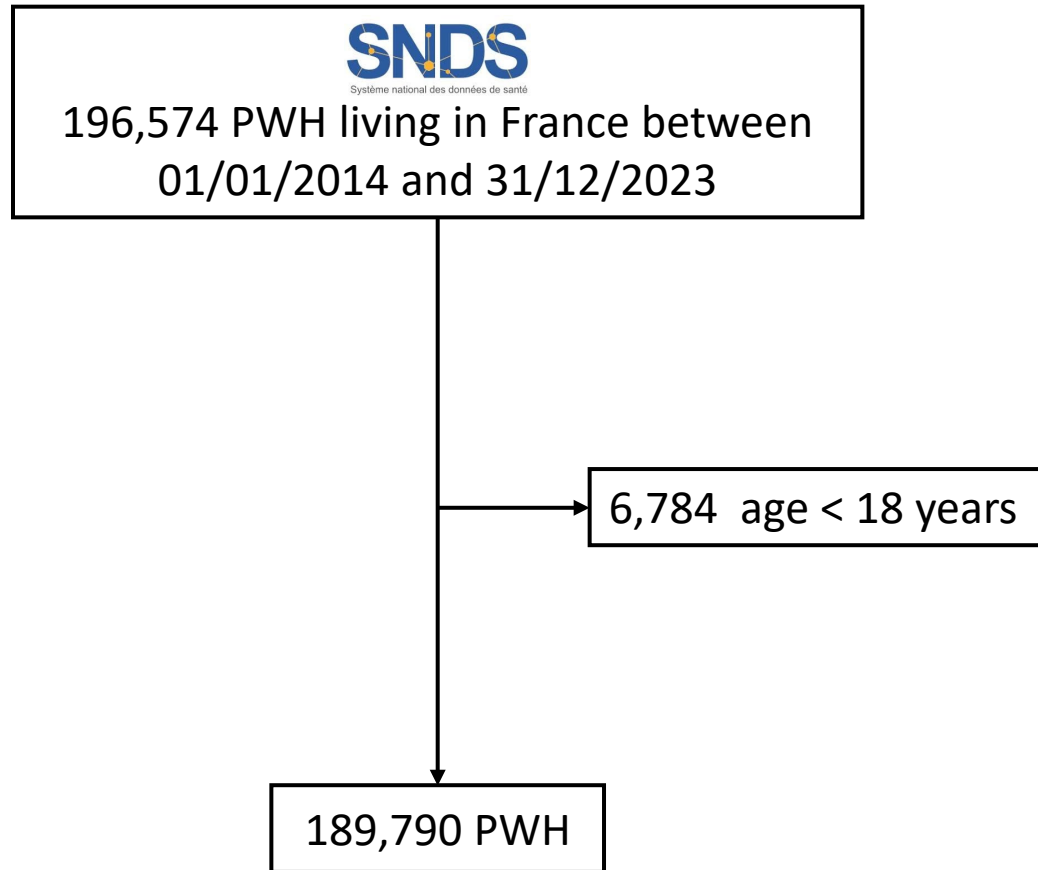
- To provide an updated assessment of cancer incidence in PWH
- To analyze temporal trends in:
 - ADC (Non-Hodgkin lymphoma, Kaposi's sarcoma and cervical cancer)
 - **Virus-associated** NADC (Hodgkin lymphoma, liver, and anal cancers)
 - **Non-virus-associated** NADC (Lung, colorectal, breast, and prostate cancers)



Methods

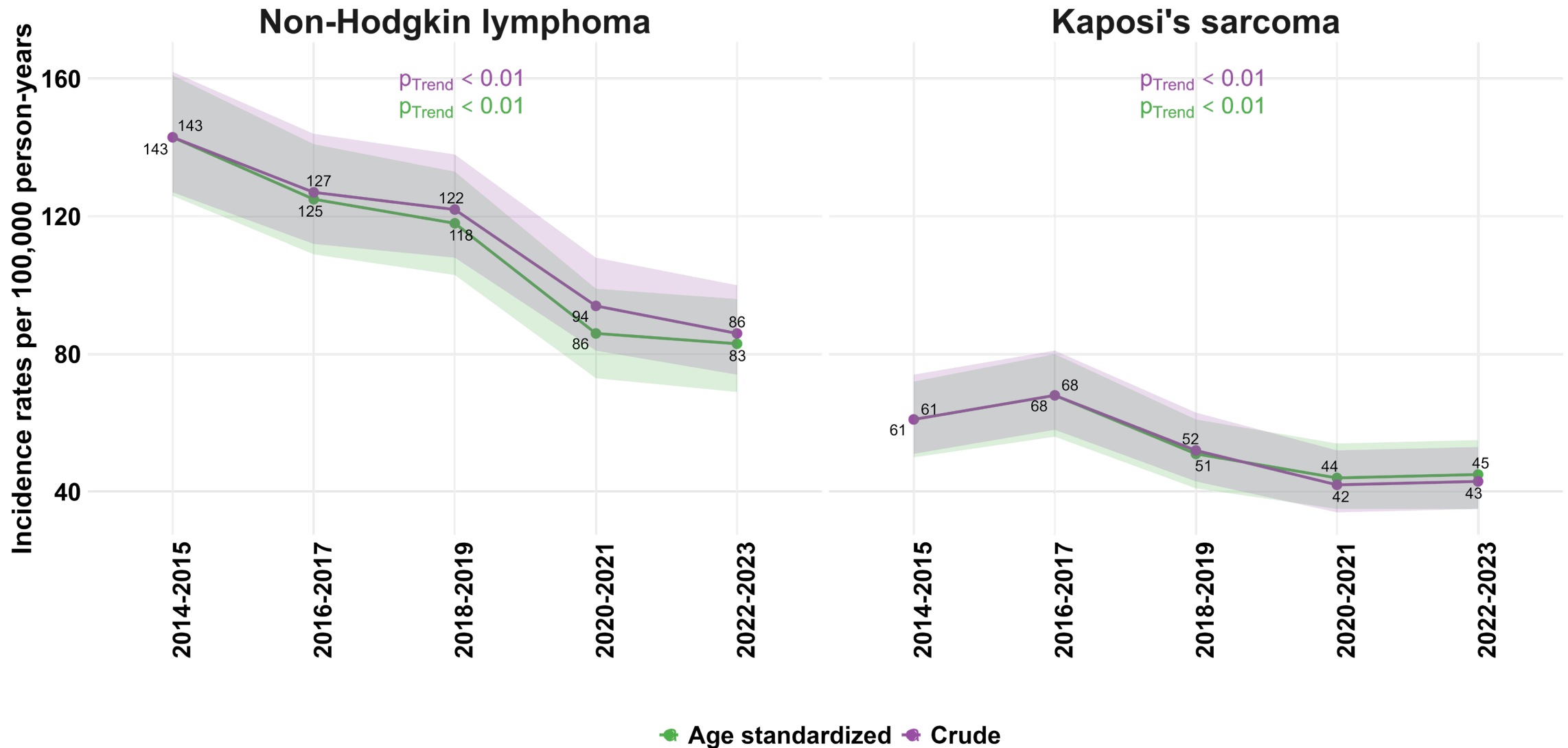
- Adults Living with HIV (2014–2023) were identified in the [SNDS](#) based on:
 - Coverage for HIV by the long term disease program
 - Hospitals stays with a ICD10 code related to HIV
 - Dispensation of HIV-specific treatments
 - HIV-specific laboratory tests
- Cancers (2014–2023) were identified in the SNDS database based on:
 - Coverage by the long term disease program for specific cancer
 - Hospitals stays with a cancer ICD10 code
- Statistical analysis
 - **Crude and age-standardized (Pop Ref = PWH 2014-2015)** incidence rates (IR) were calculated
 - Stratified by sex
 - For five periods: 2014–2015, 2016–2017, 2018–2019, 2020–2021, and 2022–2023
 - Trends were tested using **Poisson regression models**

Flowchart and Characteristics

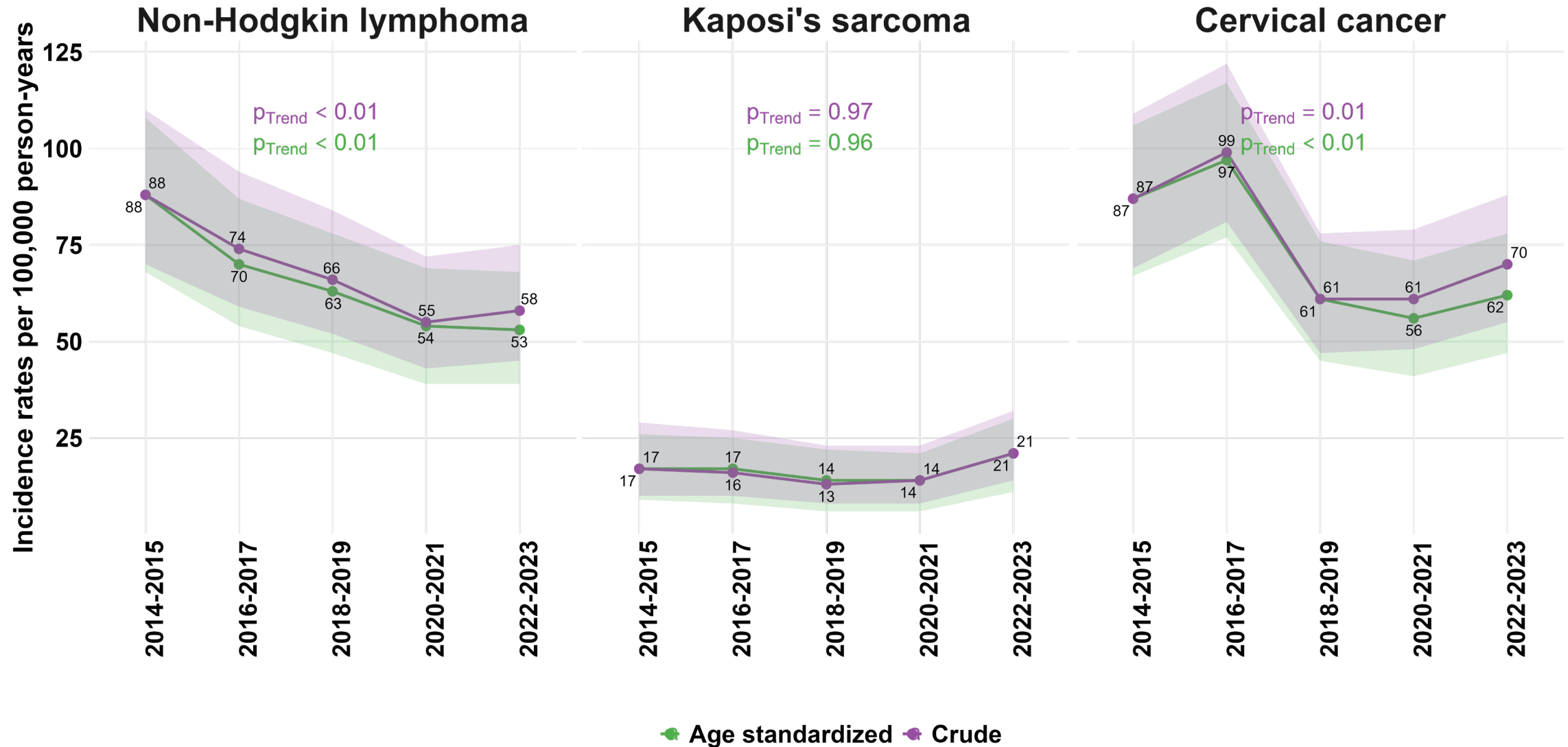


Characteristics	N = 189,790
Age, Median (IQR)	46 (37, 54)
Sex at birth, n (%)	
Female	61,105 (32)
Male	128,685 (68)
Region, n (%)	
Paris region	71,951 (38)
Others mainland region	108,502 (57)
French overseas departments	9,337(5)

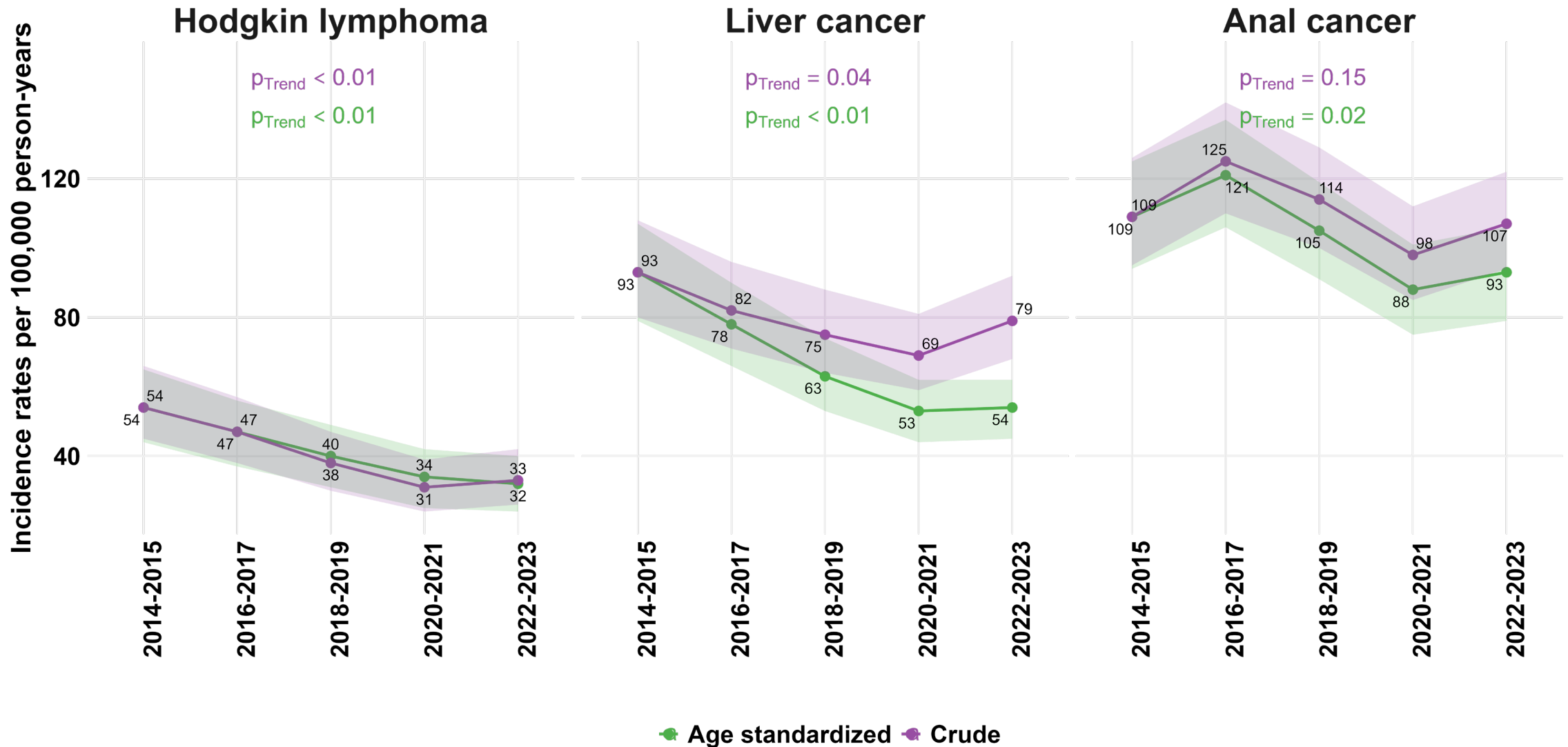
Incidence rates of AIDS-defining cancers in **men** living with HIV



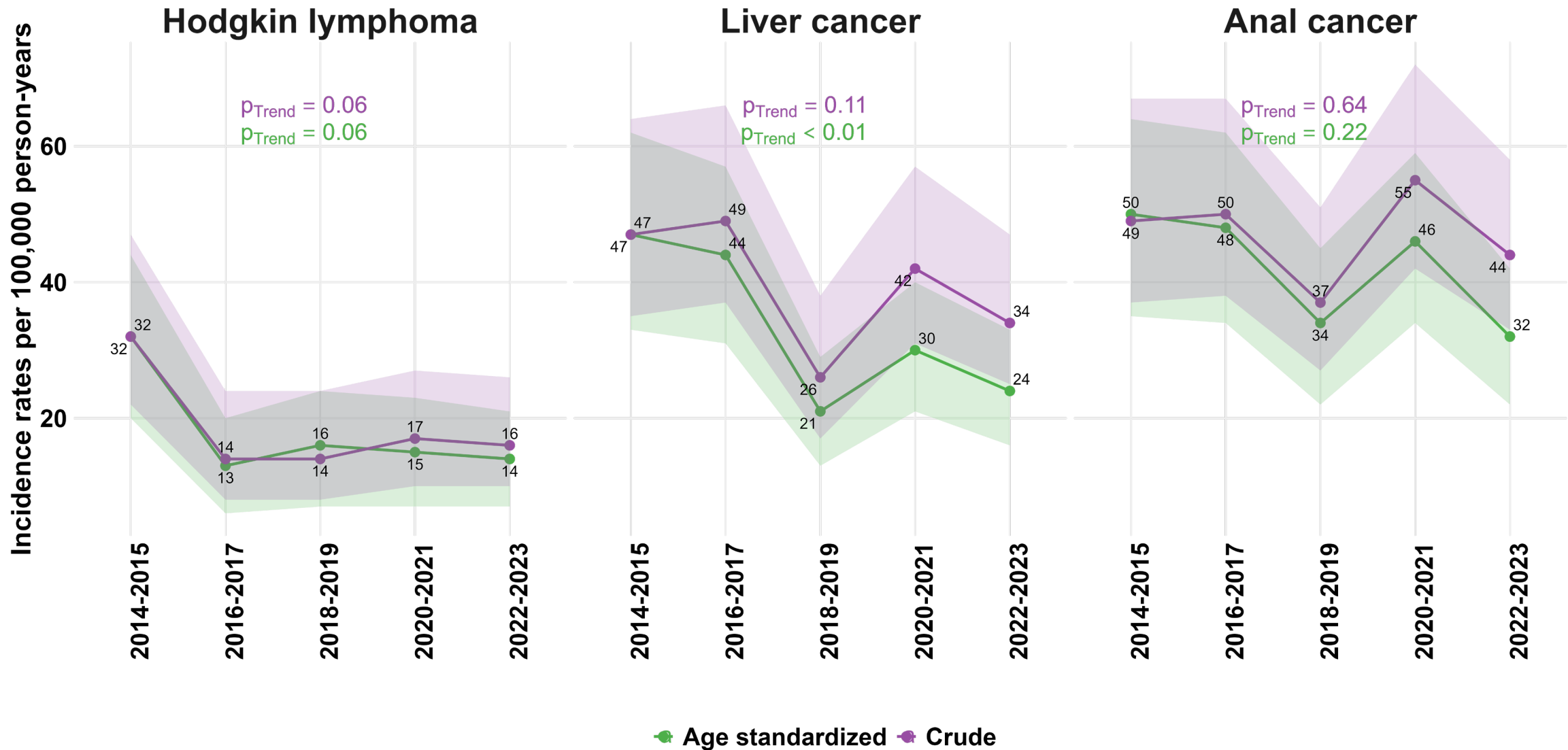
Incidence rates of AIDS-defining cancers in **women** living with HIV



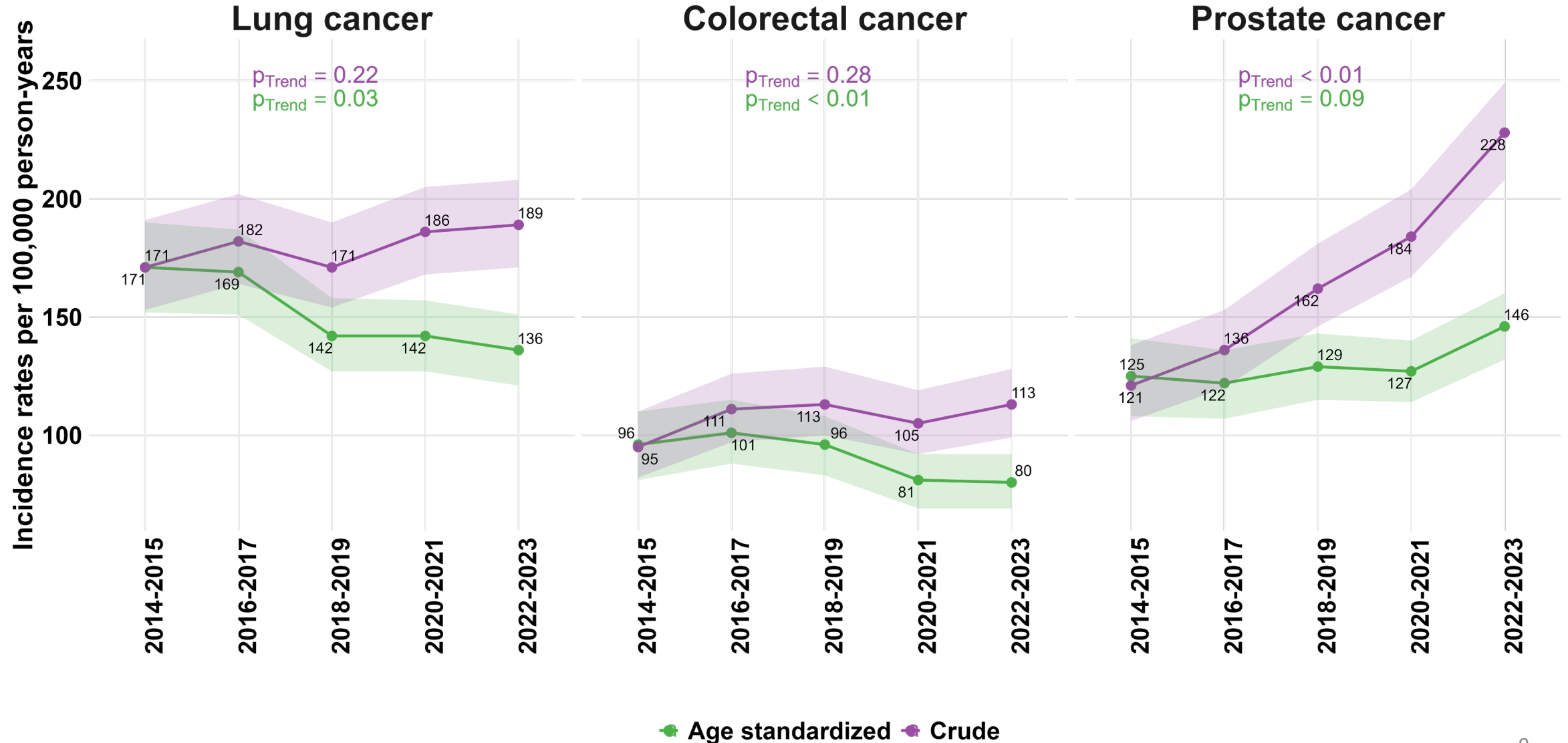
Incidence rates of virus-associated NADC in men living with HIV



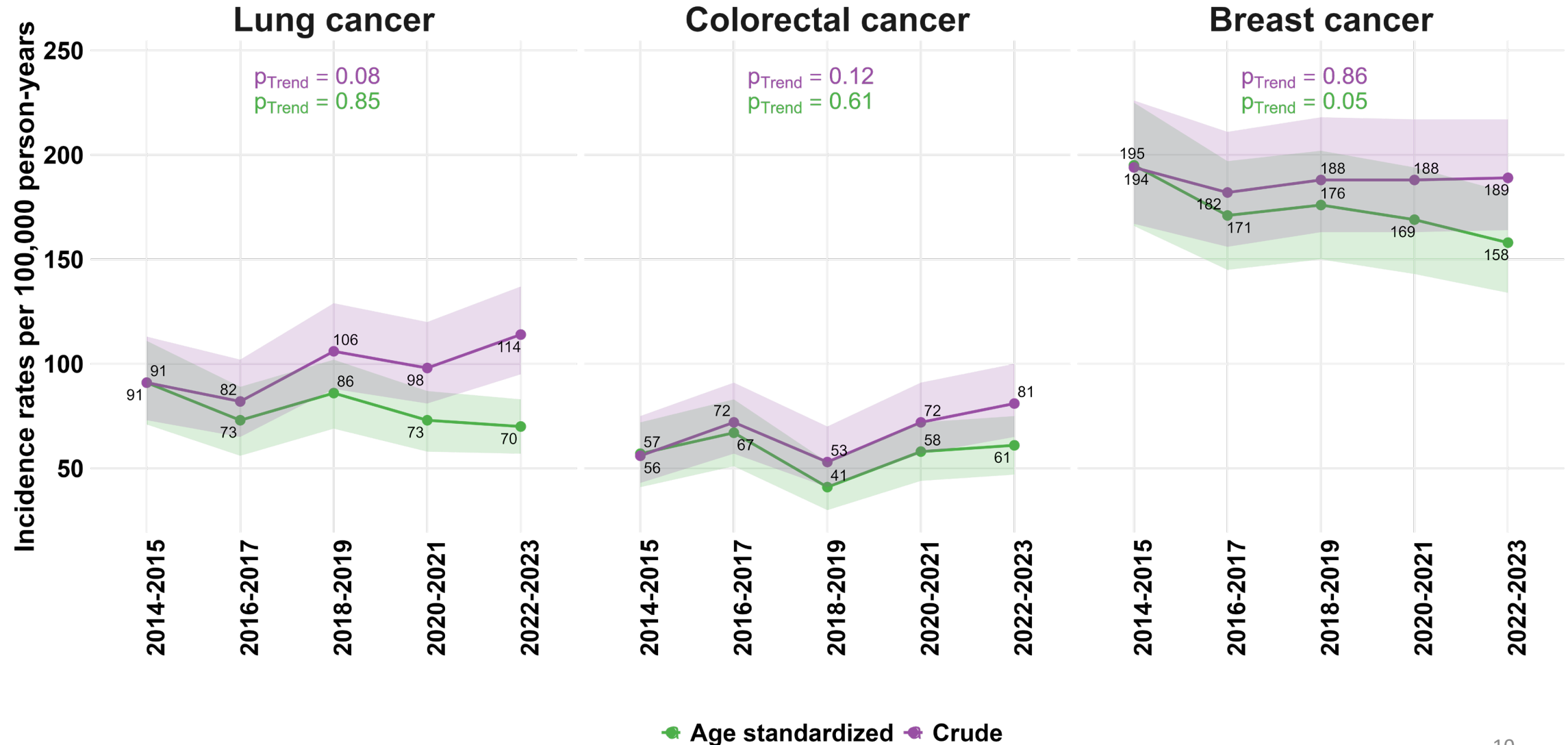
Incidence rates of virus-associated NADC in women living with HIV



Incidence rates of **non-virus-associated** NADC in **men** living with HIV



Incidence rates of non-virus-associated NADC in women living with HIV



Limitations & strengths

- Limitations

- Medico-administrative database SNDS
 - No clinical data: **viral load, CD4 counts ...**
 - No sociodemographic data: **ethnicity, gender identity, acquisition group, lifestyle risk factors ...**

→ **Future: linkage ANRS CO4 FHDH with SNDS**



- Strengths

- **Comprehensive data** of PWH living in France
- Statistical power due to the large population analyzed
- Covers the **recent decade (2014–2023)**

Conclusion

■ Men with HIV

- After adjusting for age, all studied cancers IR declined significantly, except **prostate cancer**
- **Prostate cancer**
 - Since 2014, crude IR increased significantly
 - The most frequent cancer in 2022-2023
 - IR stable after adjusting for age → Reflecting the aging of men with HIV

■ Women with HIV

- Declines were observed only for non-Hodgkin lymphoma, cervical, and liver cancer
- Breast cancer was the most frequent cancer in women during all studied periods

Many thanks

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One of the Largest Medico-Administrative Databases Worldwide

- Reimbursement data covering **over 99% individuals living in France**

