

# CANCER IN PEOPLE WITH HIV: VACS DATA

---

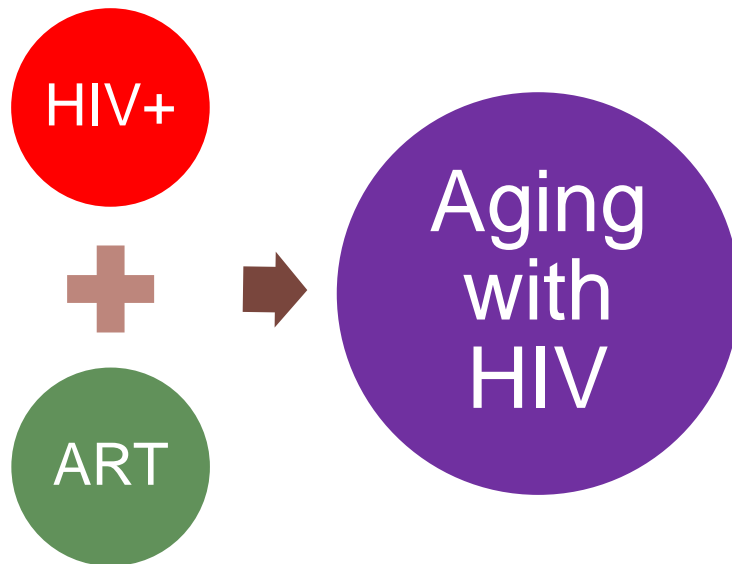
Maria C. Rodriguez-Barradas, MD

Michael E. DeBakey VAMC

From Research to the Real World: Sharing Science Symposium

January 31, 2017

# Why We Did this Study



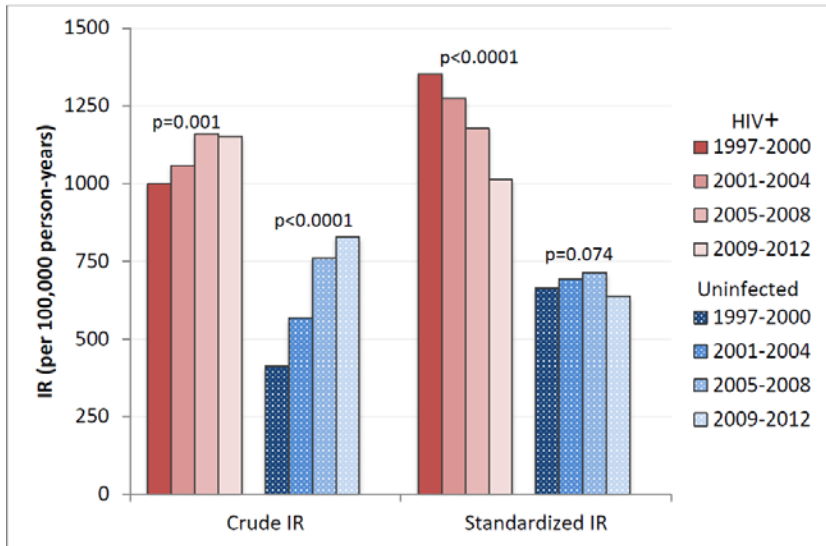
- In VA system, more than half of HIV infected people are older than 50 years.
- Cancer is a disease that affects older people at a higher rate
- HIV can also increase risk for non-AIDS cancers
- ART improves most of the conditions associated with HIV
- What happens with cancer in people with HIV on ART and/or with controlled viremia?

# What We Did

- We used VACS and VA Cancer Registry data to examine the following questions:
  - Changes over time in incidence of cancer in persons living with HIV/AIDS in the antiretroviral therapy (ART) era: 1997-2012
  - Effect of long-term viral suppression in cancer incidence among HIV-infected Veterans compared to uninfected
- VACS: Veterans Aging Cohort Study
  - Built on VA Electronic Health Record (EHR)
  - Largest single provider of HIV care in US
  - Prospective, living cohort updated annually
  - HIV+ and 1:2 age/sex/race/site matched uninfected
  - HIV+ N=44,782
  - Uninfected N=95,039
- VA Central Cancer Registry (VACCR)
  - VA database for patients with cancer diagnosis

# What We Found

## Cancer risk over time



HIV infected people: 44, 787 persons

3,519 had a new cancer

Crude incidence rate (IR): Increased

Standardized IR (adjusted for age, race and sex):

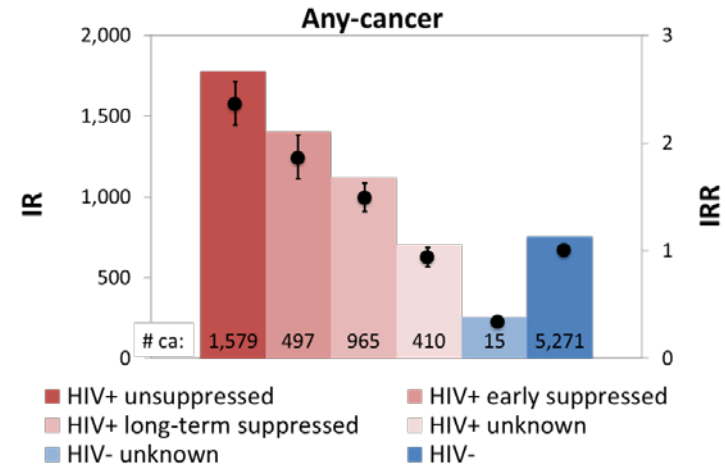
Declined

Uninfected people: 96,852 persons

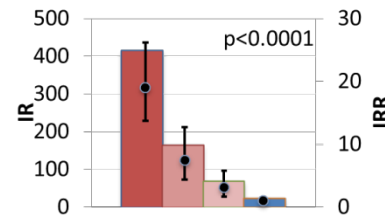
5,434 had a new cancer.

IR: Increased. Standardized IR: Remain stable

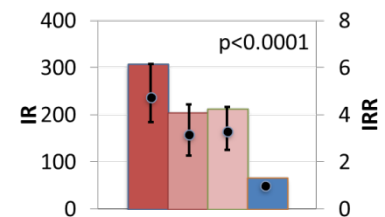
## Effect of viral suppression on cancer risk



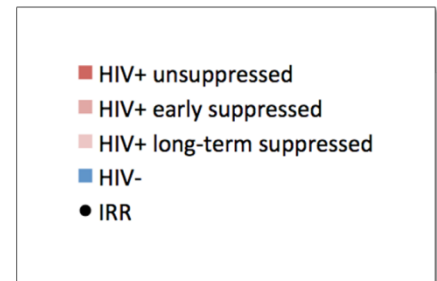
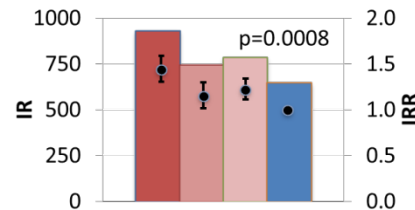
### AIDS-defining



### Virus-related NADC



### Non-virus NADC



# What Our Results Mean and Why this Matters

- Cancer risk has decreased with time:
  - Overall, 25% decline.
    - AIDS cancers, 55% decline
    - Non-AIDS cancers, 15% decline
- Compared to uninfected patients, cancer risk:
  - HIV+ unsuppressed > early suppressed > long-term suppressed
- ART reduces cancer risk in HIV infected persons

# Acknowledgments

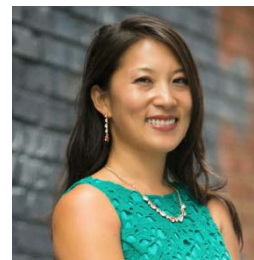


## National VACS Project Team

## VACS Cancer Core



Robert Dubrow, MD  
Founding Director



Leslie Park, PhD\*  
Current Co-Director



Keith Sigel, MD  
Current Co-Director