

# Case Discussion

58 yo woman with a hx of IVDA, tobacco abuse, depression and HIV

- HIV History:
  - dx~ 15 years.
  - Pt's nadir T4 was 106, most recently it was 268.
  - Her viral level has been <50 during the past three visits, but was >100,000 one year ago when she was off medications for six months during a bout of depression.
  - Current Anti-Retroviral Therapy includes a boosted PI and two nucs.

She transferred to your care six months ago and has been sporadic about keeping appointments. She presents today for a follow-up visit and wants to know if she should change her ART. She missed her last two scheduled appointments, but has recently been picking up her medications regularly- according to the pharmacy.

# Risk of Non-adherence to Regimen-

Which characteristic is likely to have the most impact on adherence in this patient?

1. Race.
2. Age.
3. Gender.
4. Depression.
5. ART choice.

# Depression/Mental Health Issues

- A meta-analysis of several studies showed a consistent relationship between depression and noncompliance, which was “substantial and significant, with an odds ratio of 3.03 (95% confidence interval, 1.96-4.89).”

# CAD Risk-

Which characteristic would you consider the greatest cardiac risk for this 58 yo HIV+ woman?

1. Family history of heart disease at young age.
2. Pts age.
3. Current smoker.
4. Type of ART.
5. Lipid status.

# Smoking and CAD Risk

- The Data Collection of Adverse Events of Anti-HIV Drugs (DAD) was a cohort study of over 33,594 person-years, 157 cases of CHD occurred.

Hazard Ratio “Current Smoking” = 2.97.

“PI use” = 1.13.

# Cancer Risk-

Which statement is true concerning cancer risks in women with HIV?

1. Among Non-AIDS malignancies, breast cancer is increased in women with HIV compared to the general population.
2. Among Non-AIDS malignancies, there is a lower risk of anal cancer in people with HIV compared to the general population.
3. Among Non-AIDS malignancies, lung cancer is most common in people with HIV.

# AIDS and Anal Cancer

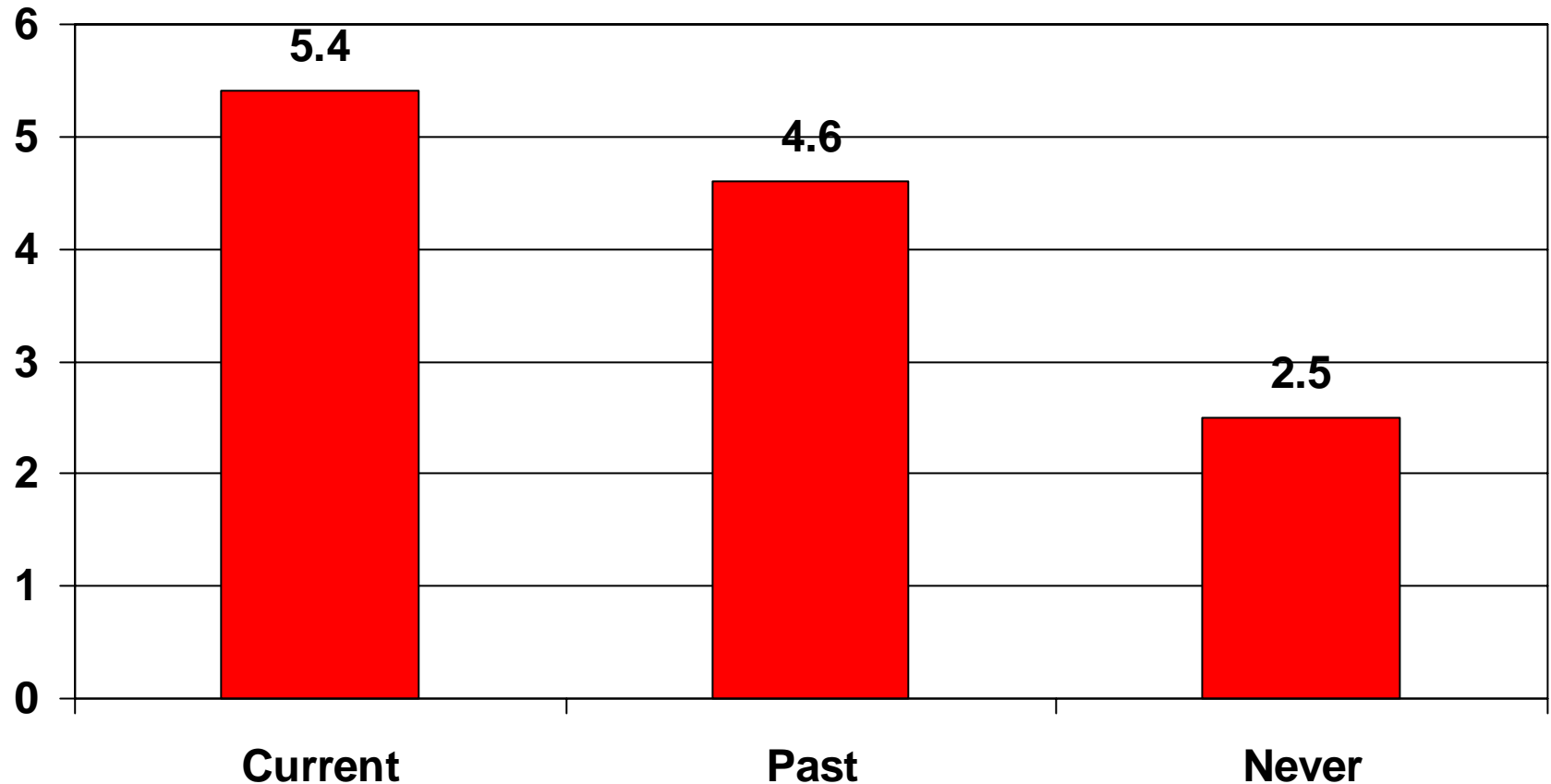
- A review of a population-based registry in NY state reported increased standardized incidence ratios of lower GI tract cancers among HIV+ compared to HIV- persons.
  - rectum, rectosigmoid, and anus:  
Male 3.3                      Female 3.0

# AIDS and Lung Cancer

- Population-based AIDS and cancer data from 11 regions in the US, including 375,933 HIV+ adults aged 15 to 69 years:
  - The most common cancer among people with HIV was lung cancer.

# HIV Mortality Rate by Smoking Status

*Mortality Rate =Deaths/100 Person Years*  $p<0.001$



After adjustment for age, race/ethnicity, CD4 count, viral load, hemoglobin, drug and alcohol use HR for death for current smokers was 2.0 ( $p=0.04$ ). *Crothers K, et al, J Gen Intern Med in press for Dec 2005*

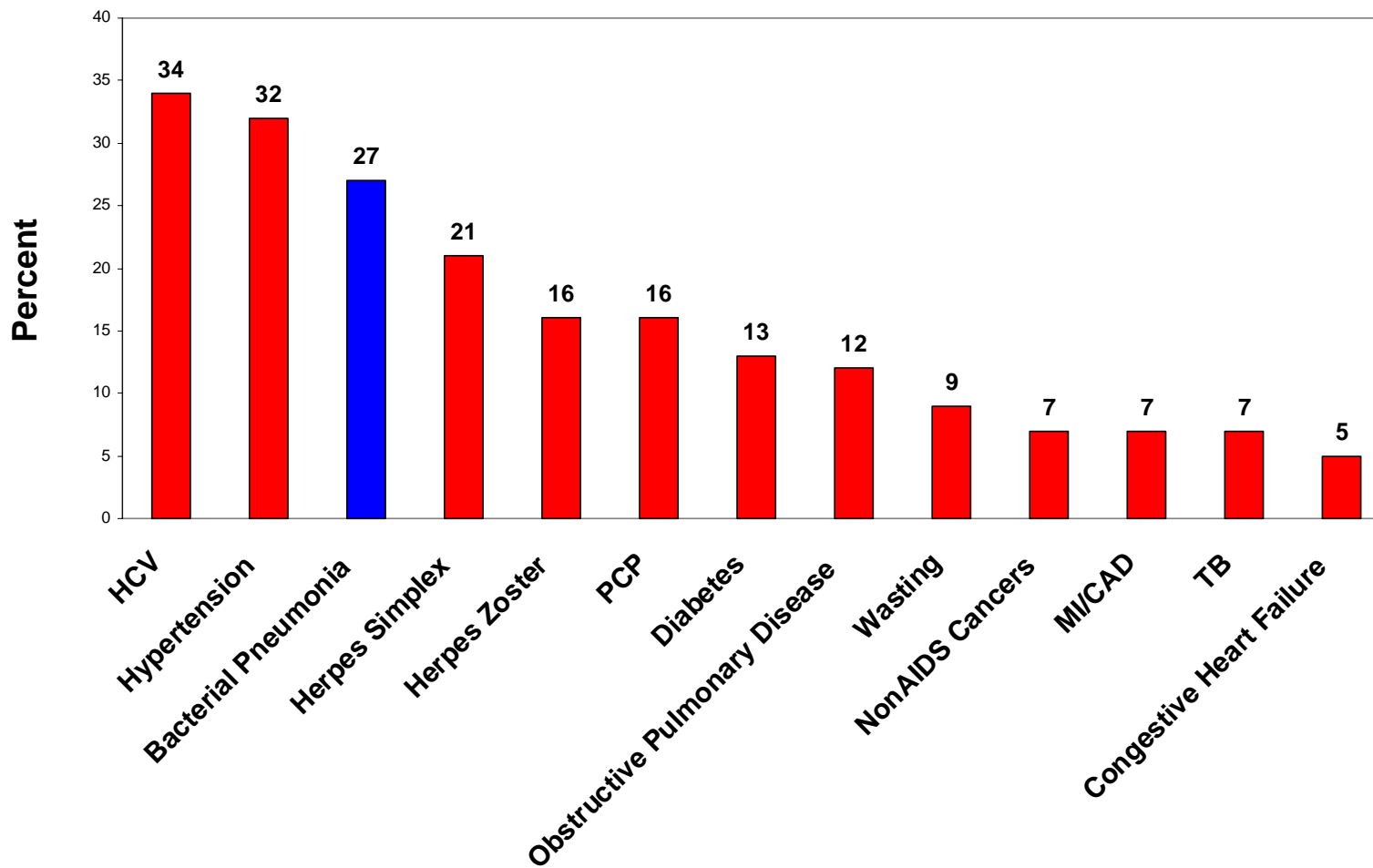


# Immunizations

Which immunization has the Most Impact in Persons with HIV?

1. Hep B
2. Influenza
3. Pneumococcal
4. MMR
5. Tetanus

# Common Medical Conditions in HIV



# Impact of Pneumococcal Vaccine

- \*The risk of pneumococcal infection is up to 300 times greater in HIV-infected persons than in other adults of similar age.<sup>1</sup>
- \*Pneumococcal vaccine is effective in producing antibodies in people with HIV and the proportion of those responding with adequate titers increases if the vaccine is provided prior to significant damage to the immune system (CD4>500.)<sup>2</sup>
- \*A large cohort study of HIV-infected persons, receiving pneumococcal vaccination was associated with an 8% reduction in the risk of death (95% confidence intervals, 4 to 12%), after adjusting for other prognostic factors.<sup>3</sup>

1. Schuchat JAMA 1991

2. Rodriguez-Barradas J Infect Dis. 1992

3. McNaughten CROI 1998 #10

# Case Discussion

- Primary Care for those with HIV disease should include cancer screening, preventative health education and treatment, immunizations, and mental health awareness and treatment.