Table 2. Influenza-like illness in HIV patients winter 2017-2018

| Not vaccinated | Standard vaccine | High-dose vaccine | p-value* |
|----------------|------------------|-------------------|----------|
| n=23           | n=77             | n=219             |          |
| Confirmed influenza | 0.0% | 2.6% | 4.3% | 1.00 |
| No influenza | 23 (100.0%) | 75 (97.4%) | 113 (98.6%) |          |
| Modified CDC ILI | 0 (0.0%) | 8 (10.4%) | 6 (5.9%) | 0.16 |
| No modified CDC ILI | 23 (100.0%) | 69 (89.9%) | 113 (94.9%) |          |
| Protocol defined ILI | 5 (23.8%) | 16 (20.8%) | 12 (10.5%) | 0.04 |
| No protocol defined ILI | 20 (97.0%) | 61 (79.2%) | 107 (89.9%) |          |

ILI = Influenza-like Illness; CDC = Center for Disease Control
* Fisher’s exact test

**Conclusion:** During the 2017–2018 winter season, the CDC reported an influenza attack rate of 14.7% in adults in the US and overall vaccine effectiveness was 58%. Our study demonstrated a 50% reduction in ILI with the HDIV compared to the standard-dose vaccine in HIV-infected patients. A larger prospective randomized control trial is warranted.

**Disclosures:** Wissam El Atrouni, MD, Viiv (Advisor or Review Panel member)

26. Factors Associated with Meningococcal Vaccination among Patients with Newly Diagnosed High-Risk Conditions
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**Session:** P-2. Adult Vaccines

**Background:** Vaccination is recommended for persons at increased risk for invasive meningococcal disease (IMD) due to complement component deficiency (CD), asplenia or human immunodeficiency virus (HIV) infection. However, uptake of quadrivalent conjugate and polysaccharide meningococcal vaccines (MenACWY) one year following a new high-risk diagnosis is very low (doi:10.1093/ofid/ofz360.2403). This retrospective cohort study identified factors associated with MenACWY vaccination among patients newly diagnosed with CD or HIV.

**Methods:** Patients identified from a large US commercial administrative claims database (Optum Research Database) with continuous enrollment for ≥12 months before and ≥26 months after appearance of an incident high-risk diagnosis through the end of the study period (3/31/2018) were considered eligible (Figure). Cox proportional hazards regression models were used to identify characteristics associated with time to receipt of ≥1 dose of MenACWY during time periods corresponding with Advisory Committee on Immunization Practices (ACIP) recommendations.

**Figure:** Study Design Schematic

**Results:** The CD cohort consisted of 1,470 (mean=40.9 years of age) patients and the HIV cohort of 1,208 (38.8 years). Only 7.9% and 20.8% of patients with CD or HIV, respectively, received ≥1 dose of MenACWY between their index date and the end of the study period. A strong association between receipt of MenACWY and pneumococcal vaccines was seen for CD (hazard ratio (HR): 3.2; 95% CI: 1.8–5.7) and HIV (23.6; 13.9–38.1). Age (11–18 years; for CD only) and having a well-care visit after the index date (for CD and HIV) was associated with higher likelihood of vaccination. Vaccination rates for HIV were lowest in the South.

**Conclusion:** The association of MenACWY vaccination with age in patients with CD suggests confusion between routine age-based and high-risk recommendations, whereas in patients with CD or HIV, the association with pneumococcal vaccines suggests that providers recognize the overlap in risk factors for IMD and pneumococcal disease. Ensuring healthcare access for these vulnerable patients and educating providers about high-risk recommendations is crucial.

**Funding:** GlaxoSmithKline Biologicals SA (study identifier: HO-18-19581)

**Disclosures:** Parinaz Ghaswalla, PhD, ORCID: 0000-0002-2883-5590, GlaxoSmithKline (Employee, Shareholder) Lindsay Bengtson, PhD, MPH, Optum (Employee, I am an employee of Optum. Optum was paid by GSK for this work. My employment at Optum is not contingent upon this work.) Gary S. Marshall, MD, GlaxoSmithKline (Consultant, Scientific Research Study Investigator, Merck (Consultant, Scientific Research Study Investigator, Pfizer (Consultant, Scientific Research Study Investigator, Sanofi Pasteur (Consultant, Grant/Research Support, Scientific Research Study Investigator, Honorarium for conference lecture), Seqirus (Consultant, Scientific Research Study Investigator) Ami R. Buikema, MPH, Optum (Employee, I am an employee of Optum. Optum was paid by GSK for this work. My employment at Optum is not contingent upon this work.) Krista Schladweiler, PhD, Optum (Employee, I am an employee of Optum. Optum was paid by GSK for this work. My employment at Optum is not contingent upon this work.) Patricia Novy, PhD, GSK (Employee, Shareholder) Cosmina Hogea, PhD, GlaxoSmithKline (Employee, Shareholder)

27. Hepatitis B Virus Screening and Vaccination in Patients with HIV: A Survey of Physicians’ Current Clinical Practices
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**Session:** P-2. Adult Vaccines

**Background:** Hepatitis B virus (HBV) and HIV co-infection is associated with high morbidity and mortality, but data and guidelines vary in terms of the best vaccination, re-vaccination, and monitoring practices. The purpose of this study was to evaluate the current HBV monitoring and vaccination practices of physicians who care for patients living with HIV.

**Methods:** A Web-based survey was distributed to the University of California San Diego (UCSD) Infectious Diseases division via the UCSD ID listserv, Infectious Disease Society of America (IDSA) members via the IDEA Exchange listserv, and to ID and HIV social network members via Twitter and Facebook. The survey consisted of demographic questions followed by two sets of case-based questions. The case questions focused on type, timing, and dosage of HBV vaccination administration among people living with HIV, HBV monitoring post-vaccination, and clinical approach to patients with isolated hepatitis B core antibody.

**Results:** A total of 67 clinicians from 24 states completed the survey (Table 1). Most (55%) provide care for more than 20 patients living with HIV per month. The majority of participants (82%) would not defer HBV vaccination until HIV viremic suppression. Almost half of participants (43%) indicated they would use Hepisav-B over older HBV vaccine formulations (Energix-B or Recombivax-HB) for initial vaccination of susceptible patients. The majority (88%) would repeat a vaccination series if the patient does not seroconvert; 23% would repeat with a standard dose series of Energix-B or Recombivax-HB, 24% with a double dose series of Energix-B or Recombivax-HB, and 45% would repeat with Hepisav-B. Approach to management of a patient living with HIV with isolated hepatitis B core antibody was varied. The majority would check a HBV DNA level (42%), while 25% would initiate a vaccination series and 24% would not pursue further intervention (Table 2).