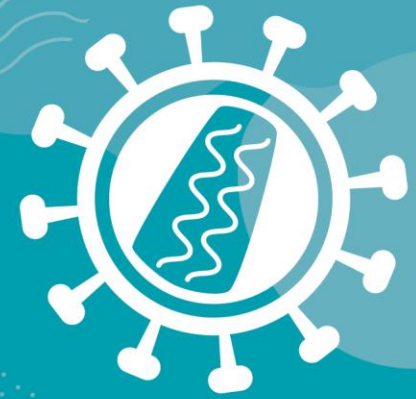


High-risk HPV prevalence and serostatus in women living with perinatally acquired HIV (the SHiP study)

Tamara Elliott

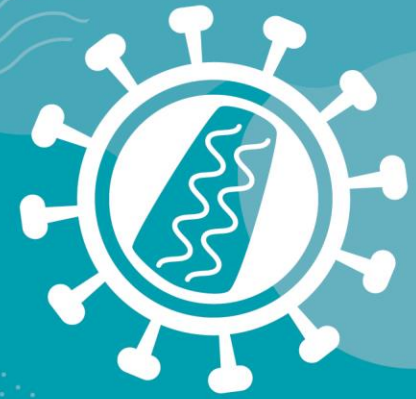
Imperial College London, UK



High risk HPV prevalence and serostatus in people with a cervix living with perinatally acquired HIV

Dr Tamara Elliott

Clinical Research Fellow, Imperial College London

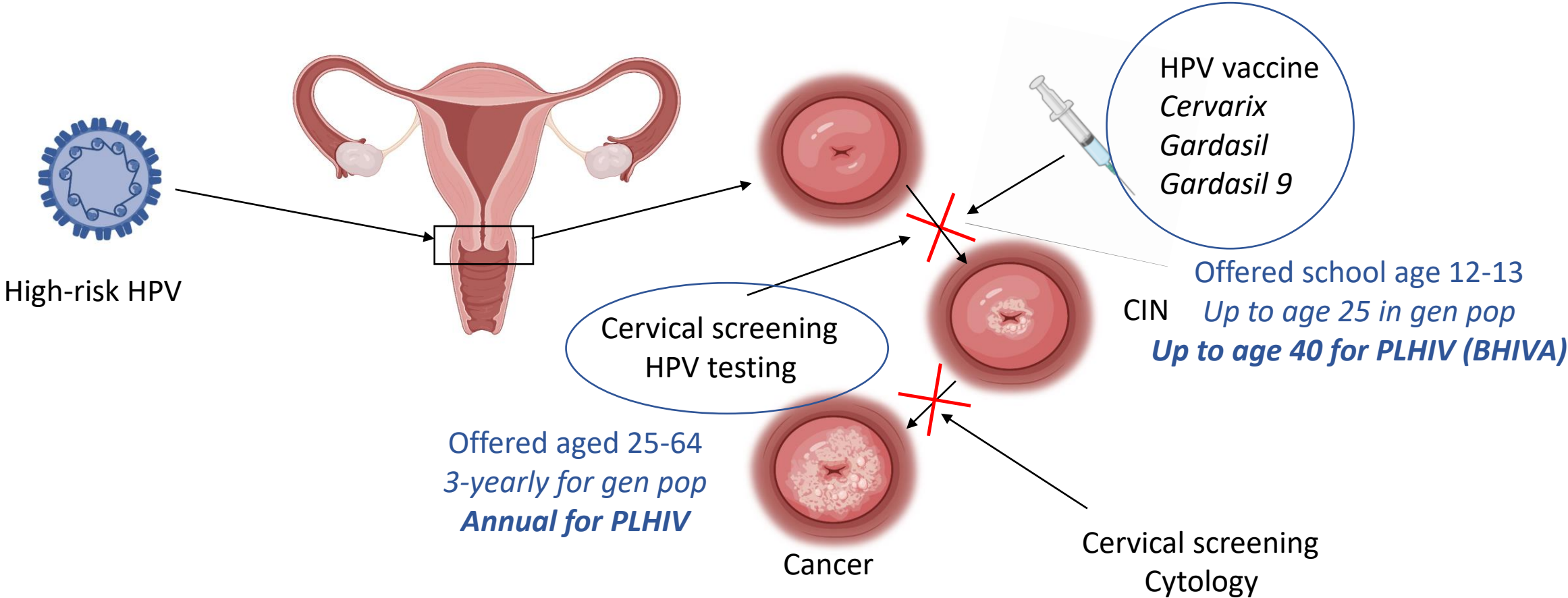


Conflict of Interest

In relation to this presentation, I declare that I have no conflict of interest

Speakers are required by the Federation of the Royal Colleges of Physicians to disclose conflicts of interest at the beginning of their presentation, with sufficient time for the information to be read by the audience. They should disclose financial relationships with manufacturers of any commercial product and/or providers of commercial services used on or produced for patients relating to the 36 months prior to the event. These include speaker fees, research grants, fees for other educational activities such as training of health professionals and consultation fees. Where a speaker owns shares or stocks directly in a company producing products or services for healthcare this should also be declared.

Background



Very little data on those with perinatally acquired HIV
could these individuals be at greater risk from an earlier age?

Project aims

In a cohort of young people with a cervix with perinatally-acquired HIV we aimed to identify:

1. High-risk HPV (hrHPV) prevalence
2. Serological responses to HPV vaccination

Methods

Recruitment

- People living with PaHIV with a cervix
- Aged 18+
- Able to give informed consent
- Non-pregnant

Investigation

- Clinical and demographic data
- HPV vaccine history (electronic records where available or self-reported)
- Cervical sampling
 - Cytology (CSL)
 - HPV testing (Cepheid GeneXpert)
 1. 16
 2. 18/45
 3. 31/33/35/52/58
 4. 51/59
 5. 39/56/66/68
- Blood for serology (UKHSA) HPV 6/11/16/18/45/31/33/52/58

If hr-HPV positive or abnormal cytology
- Colposcopy referral for review

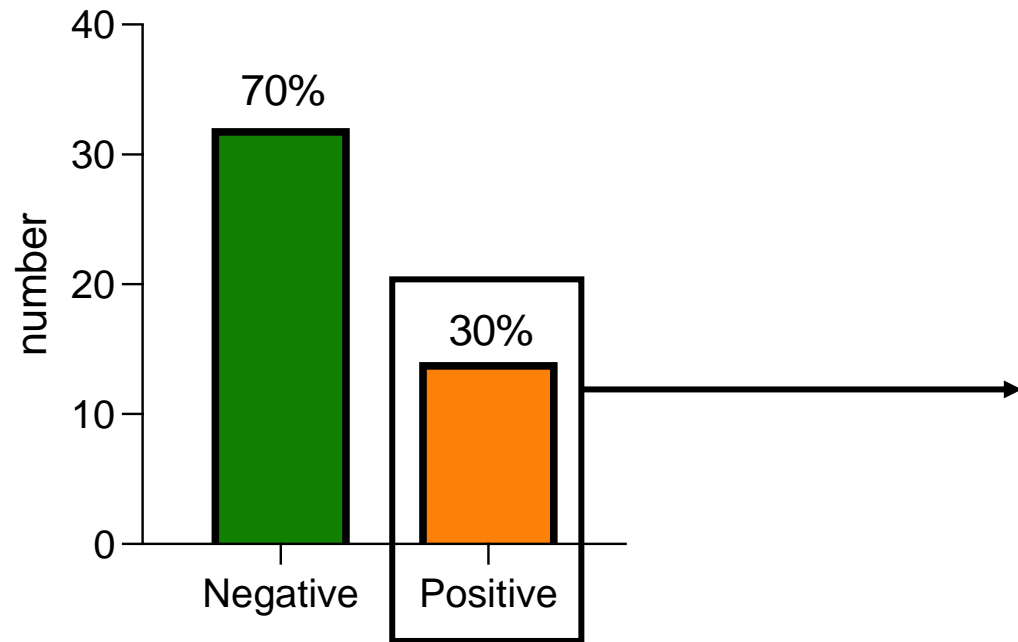
Results - demographics

Demographics and lifestyle factors	n (%) Total = 57
Age, median (range)	25 (18-34)
Black ethnicity	47 (83%)
CD4 count at recruitment (cells/uL), median (range)	681 (78-1600)
HIV VL <50 copies/mL at last follow-up	43 (75%)
Ex/current smoker	24 (56%)
Previous HPV vaccine*	40 (70%)
Previous genital warts	4 (7%)
Previous smear	22 (39%)

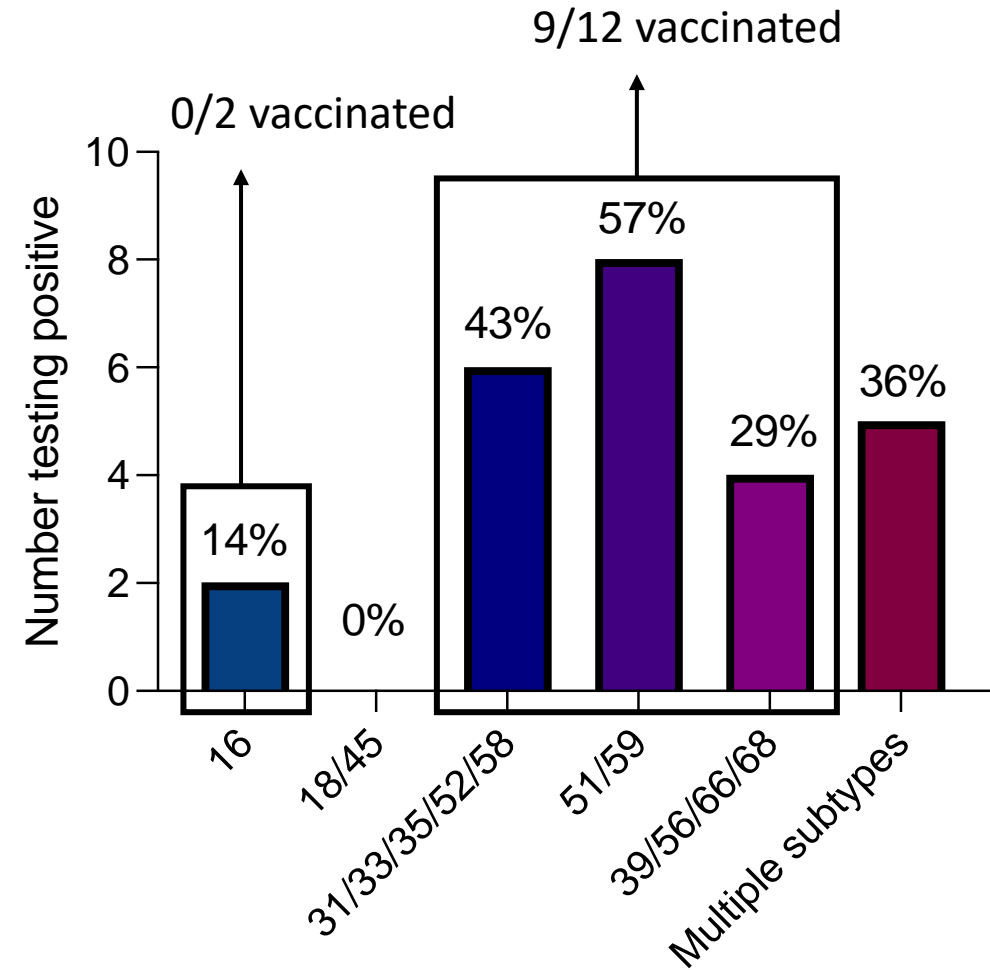
* From electronic records or self-reported. Does not include unsure/unknown

High-risk HPV prevalence (cervical sample)

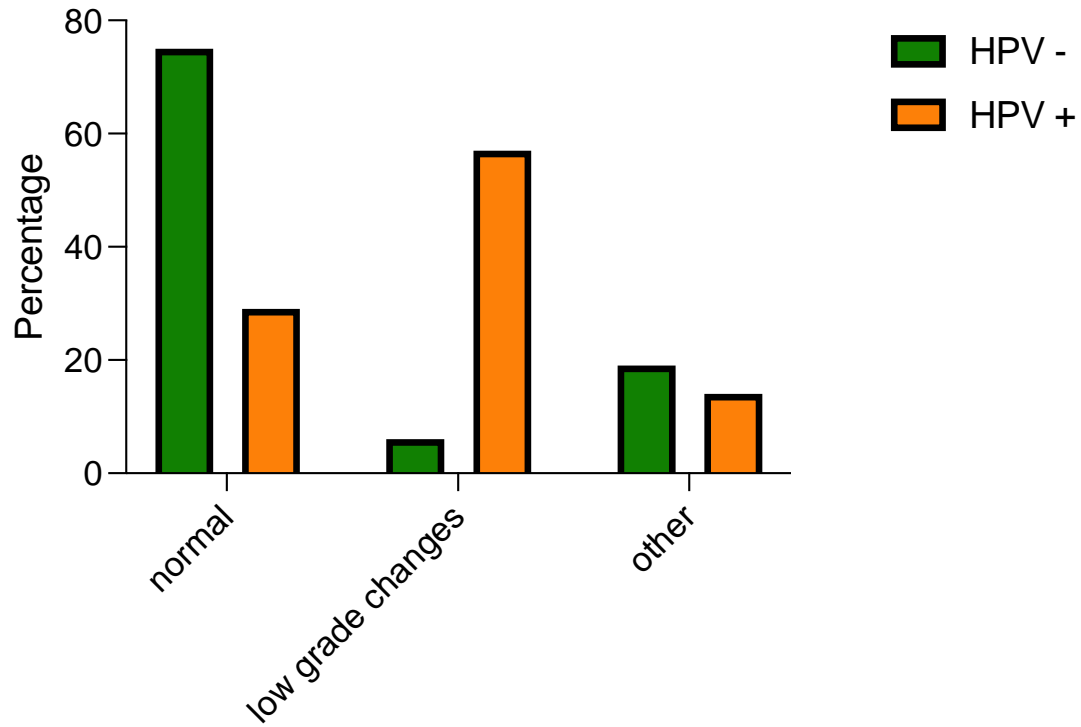
n=46



n=14

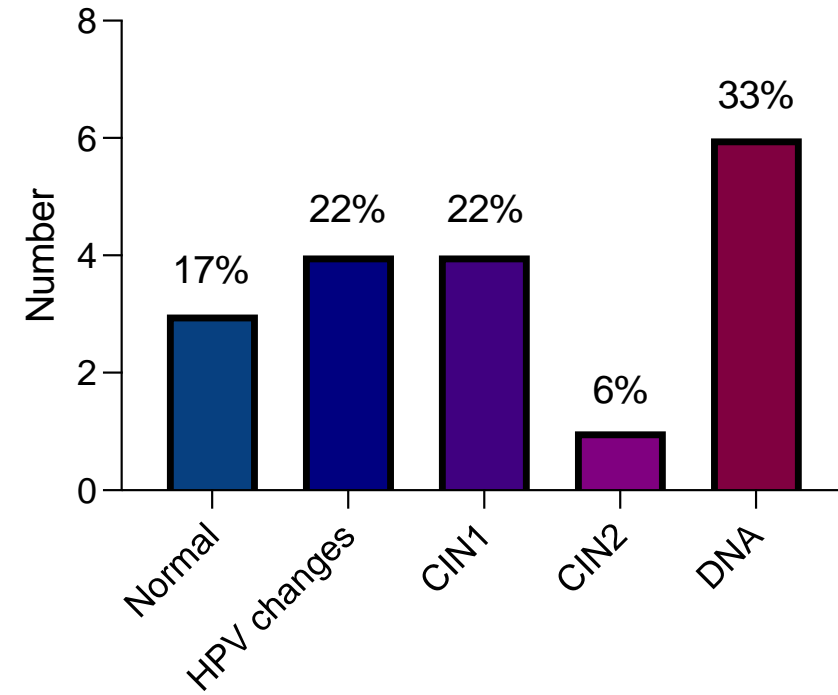


Cytology results

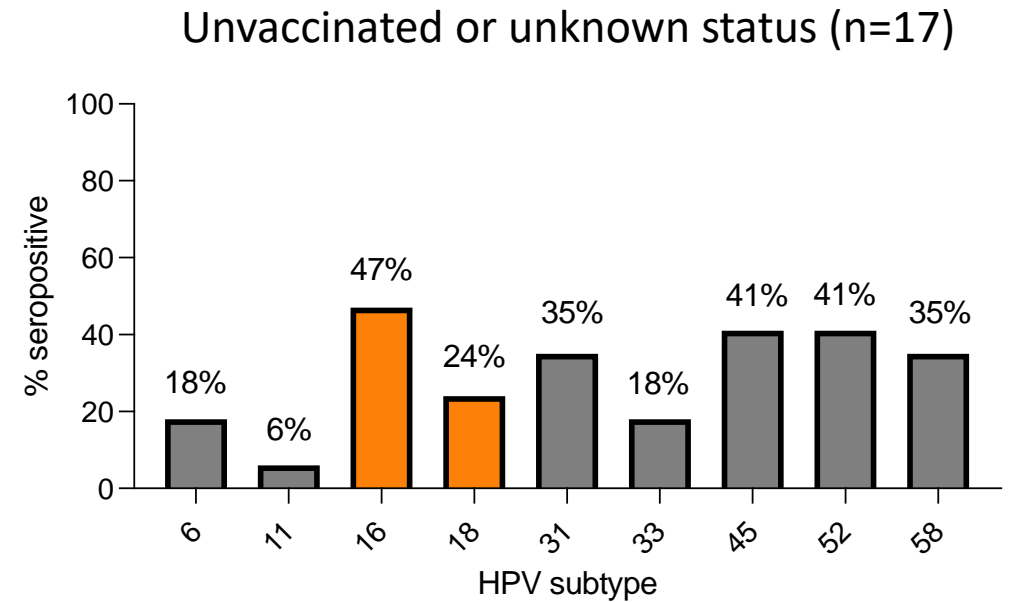
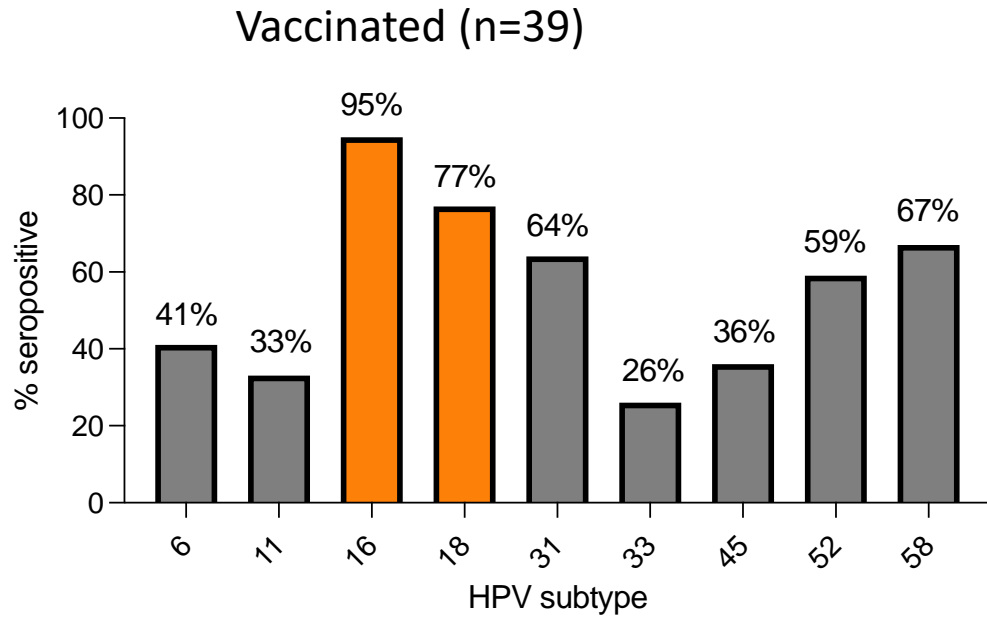
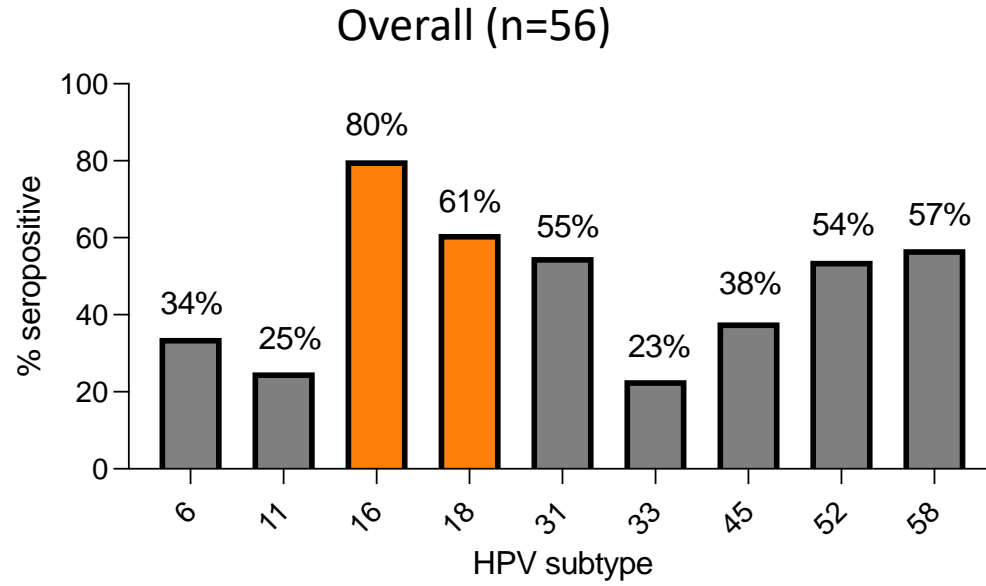


*other = usually indicates sample or processing issue

Colposcopy (n=18)



Serology



Conclusions

In this small observational study of young adults with a cervix and living with perinatally-acquired HIV:

- **30% had hrHPV** on rapid cervical sampling
- **70% had prior HPV vaccination:**
 - 0% were positive for hrHPV 16/18
 - But 23% were positive for 'other' hrHPV subtypes
 - 95% and 77% were seropositive for vaccine subtypes HPV16 and HPV18

Outstanding questions and future work

- What are the acceptability and preferences in this cohort?
- What are the implications for those already vaccinated? Is there any benefit of re-vaccination with the nonavalent vaccine?
- Are there any implications for future guidelines within this unique cohort including those who are under 25?

We should offer HPV vaccination to anyone previously unvaccinated <40 years or with an unknown vaccination history (nonavalent preferable if available)

Acknowledgments

ICHNHS Trust/ICL:

Dr Merle Henderson

Professor Sarah Fidler

Dr Caroline Foster

Sara Ayres

Hana Jayadel

Dr Ellie Crook

Miss Deirdre Lyons

Miranda Cowen

Cytology Services London

Dr Hasit Patel & David Smith

North-West London pathology

Dr Corrina Wright

UKHSA

Dr Simon Beddows & Kavita Panwar

Imperial College NIHR BRC

Jefferiss Trust Laboratories, ICL

Jacque Ujetz, Maryam Khan & Andrew Lovell

Funding

BHIVA Research Grant Award

Imperial Health Charity