

POPS2 NEWSLETTER

PERSISTENCE OF ORAL PAPILLOMAVIRUS STUDY

May 2015

Study Update for Collaborators and Participants

Thank you, everyone, for your help with POPS! This study could not have been done without your help. We are grateful for all that you do for POPS!

What is POPS studying?

Oral HPV Infection

- HPV now causes most tonsillar (oropharyngeal) cancers in the U.S.
- This study is helping us understand these oncogenic oral HPV infections.
- We are looking at how often people get oral HPV infection and how long these infections last.
- We also study why some people clear their oral HPV infections while other people do not.
- We hope this research will help doctors better understand these infections.

Study Update

- There are over 1600 people enrolled in POPS2 from the MACS and WIHS cohorts!
- 40% of participants have now completed study follow-up (8 or more visits).
- Some participants of high interest are having extended follow-up.
- We are planning another study to extend follow-up in everyone.

Who is in POPS?

- POPS is sub-study in MACS and WIHS to look at oral HPV in people with and without HPV.

What Is Collected?

- POPS collects an oral rinse sample every six months and tests for HPV DNA
- Risk factor information is also collected

Impact of POPS

Our research suggests:

- People with HIV and low CD4 cell counts have more difficulty clearing oral HPV infections
- The main risk factor for getting a new oral HPV infection is performing oral sex.
- Smoking can increase chances of getting infected and make it harder to clear HPV once infected

POPS Enrollment by Study Site

Cohort	Study Site	# Enrolled	# not yet done with sample collection
MACS	Baltimore	215	80
	Chicago	175	83
	Columbus	55	55
	Los Angeles	149	109
	Pittsburgh	179	92
WIHS	Atlanta	109	109
	Chapel Hill	79	79
	Brooklyn	226	78
	Bronx	202	86
	Chicago	225	126
	TOTAL	1614	937

If you have questions about POPS, please contact us at:

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Recent POPS Research Highlights

Risk Factors for Acquisition and Clearance of Oral Human HPV Among HIV+ and HIV-Adults December 2014: American Journal of Epidemiology

- Over 2 years, 34% of HIV-infected participants acquired a new oral HPV infection
- Over 2 years, 19% of HIV-uninfected participants acquired a new oral HPV infection
- Most oral HPV infections cleared quickly
- Male sex, older age, and current smoking all decreased oral HPV clearance
- Within 1 year, clearance among HIV-uninfected participants was
 - * 62% of incident infections
 - * 35% of prevalent infections
- Within 1 year, clearance among HIV-infected participants was
 - * 49% of incident infections
 - * 30% of prevalent infections

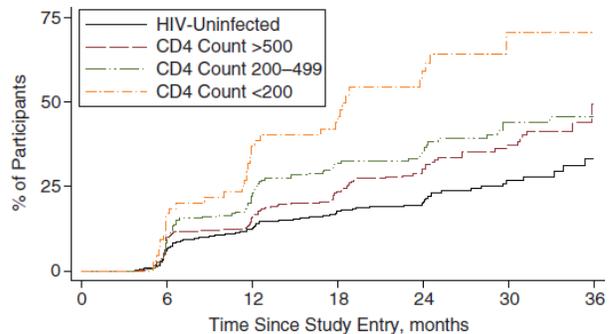
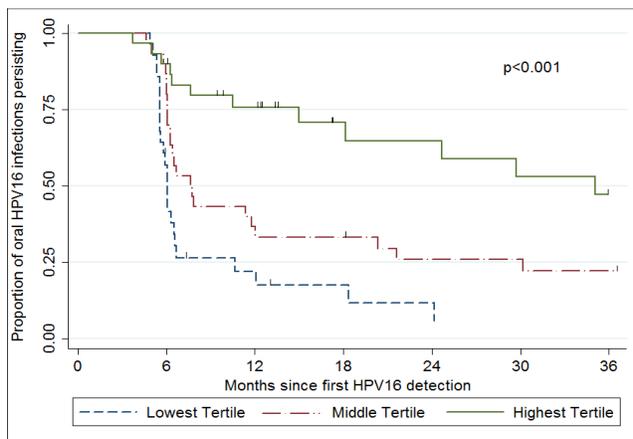


Figure 1. Cumulative incidence of any oral human papillomavirus (HPV) infection by human immunodeficiency virus (HIV) status and current CD4 cell count (cells/ μ L) in the Persistent Oral Papillomavirus Study, 2010–2013. This cumulative-incidence graph represents the percentage of participants with at least 1 incident oral HPV infection detected during the follow-up period. All persons in CD4 cell count categories were HIV-infected. Participants were considered to have an incident oral HPV infection if they tested positive for a type-specific oral HPV infection that they had tested negative for at the baseline visit. When HIV status/CD4 cell count was utilized as a categorical variable, the *P* value for trend was less than 0.001. This graph presents the linear trend in oral HPV incidence in these groups as derived using Wei-Lin-Weissfeld modeling.

High oral HPV16 viral load predicts long-term persistence Journal of Infectious Diseases: Publication pending



Higher HPV16 viral load at the first positive visit was associated with longer time to clearance.

- 92% of infections in the lowest viral load tertile cleared in 2 years
- 41% of infections in the highest viral load tertile cleared in 2 years