

**Table 2.12. Case-control studies of HPV and grade 3 vaginal intraepithelial neoplasia (VaIN3)**

Reference, study location	Sites included	No. of cases	No. of controls	Method of detection	HPV prevalence (%)		Odds ratio (95% CI)	Comments
					Cases	Controls		
Carter <i>et al.</i> (2001), USA	Sera	105	1804	Seropositivity to HPV16 and HPV18 capsid proteins by ELISA (L1)	N=46/105 (43.8%) HPV16 L1 Ab	N=264/1804 (14.6%) HPV16 L1 Ab	4.7 (3.1–7.1)	Sera
					N=18/26 (69.2%) HPV16 L1 Ab + HPV16 DNA	N=264/1804 (14.6%) HPV16 L1 Ab + HPV16 DNA	13.1 (5.6–30.4)	
					N=29/105 (27.6%) HPV18 L1 Ab	N=258/1802 (14.3%) HPV18 L1 Ab	2.3 (1.5–3.6)	
					N=1/1 (100%) HPV18 L1 Ab + HPV18 DNA	N=258/1802 (14.3%) HPV18 L1 Ab + HPV18 DNA	–	
Daling <i>et al.</i> (2002), USA	Sera from patients with no history of vaginal cancer	119	2041	Seropositivity to HPV16 and HPV18 capsid proteins by ELISA (L1)	N=46/105 (43.8%) HPV16 L1 Ab	N=263/1800 (14.6%) HPV16 L1 Ab	4.2 (2.8–6.4)	Sera
					N=25/38 (65.8%) HPV16 L1 Ab + HPV16 DNA	N=263/1800 (14.6%) HPV16 L1 Ab + HPV16 DNA	10.7 (5.3–21.4)	
					N=29/105 (27.6%) HPV18 L1 Ab	N=257/1798 (14.3%) HPV18 L1 Ab	2.1 (1.3–3.2)	