

Table 2.68. Additional cohort studies on tobacco smoking and cervical cancer, cervical intraepithelial neoplasia (CIN) and carcinoma *in situ* (CIS) (with or without control for human papilloma virus (HPV) status)

Reference Country and years of study	Name of study	Cohort sample	Cases/ deaths identification	Exposure assessment	Comments
<i>Adjusted for HPV</i>					
Kapeu <i>et al.</i> (2009) Finland, Iceland, Sweden, Norway (5 large serum banks)	Finnish Maternity Cohort, Iceland Maternity Cohort, Northern Sweden Maternity Cohort, Northern Sweden Health and Disease Study (comprising MONICA), Janus Serum Bank Oslo	Finland: ~75000 women (1300000 samples) Sweden Maternity Cohort: ~86000 women (120000 samples) Sweden Health and Disease Study: ~74000 persons (70000 samples) Norway: 331801 donors (430000 samples)	Study I: 171 cases, 496 cases Study II: 588 cases, 2861 controls	Cotinine level as surrogate for smoking with <29 ng/ml for non smokers or passive smokers, 20–100 ng/ml for light smokers, 100+ ng/ml for heavy smokers	Nested case control study, study I with 171 cases and 496 controls, study II with 588 cases and 2,861 controls Matched on age at serum sampling, storage time, county in Norway Results stratified on age at diagnosis provided with significant trend across cotinine categories in women older than 50 years
<i>Restricted to HPV positive</i>					
Tolstrup <i>et al.</i> (2006) Copenhagen, Denmark, May 1991-January 1993	Population based cohort study in Denmark, Copenhagen	Randomly selected cohort of women from Copenhagen examined at baseline and re- examined ~2 years later, identification of cases at follow-up (n=126 of which 94 were infected with high risk HPV), controls were selected randomly among the cohort study(n=1000 of which were 454 infected with high risk HPV)	94 cases, 454 controls	Smoking status, age at smoking initiation, duration of smoking and amount of smoking units assessed in interview by trained female nurse	Nested case-control study based on cohort of 10758 20-29- yrs old women with normal cytology from municipality of Copenhagen, born in Denmark with high risk HPV types: 16,18,31, 33, 25, 39, 45, 51, 52, 56, 58, 59, 66, 68
McIntyre-Seltman <i>et al.</i> (2005) USA, Nov. 1996-Dec. 1998	ASCUS-LSIL randomized trial in Birmingham, AL; Pittsburgh, PA; Oklahoma City, OK; Seattle, WA on management of low- grade squamous intraepithelial lesion cytology interpretation	5060 women overall of which 3488 with ASCUS cytology and 1572 with LSIL cytology follow-up examination every 6 month for 2 years	3,133 HPV positive women of whom 506 with ≥CIN3 and 361 with CIN2		Classification on HPV positive status based on hybrid capture 2 and PCR techniques, oncogenic HPV were HPV 16, 18, 31, 33, 35, 39, 45, 51, 52, 56, 58, 59, 68