

Table 2.6. Case-control studies of combined estrogen-progestogen menopausal therapy and colorectal cancer

Reference, location, study period	Characteristics of cases	Characteristics of controls	Exposure assessment	Therapy (type/regimen)	Cases	Controls	Odds ratio (95% CI)	Comments		
Newcomb <i>et al.</i> (2007), Washington State, USA, 1998–2002	578 cases; aged 50–74; mean age 64.2 yrs	590 controls; mean age 64.5 yrs	60-min telephone interview	EP	578	590		Registry-based study (578 cases from Surveillance Epidemiology and End Results (SEER) and 590 randomly selected controls). Significant risk reduction only for current users for at least 5 years. Adjusted for age, BMI, family history of colorectal cancer, screening sigmoidoscopy.		
				Never	454	414				
				Ever	130	183	0.7 (0.5–1.0)			
				Current	98	147	0.6 (0.5–0.9)			
				Duration (y)						
				<5	29	27	1.1 (0.6–2.0)			
				≥5	69	120	0.6 (0.4–0.8)			
				Former	31	36	0.9 (0.5–1.7)			
Dinger <i>et al.</i> (2007), Germany, 2000–2004	354 cases Age 50+ years	1422 matched controls by age ±2 years and residency; from an existing cohort study	Tumour centre and cancer registry	Combination–Sequential				55 cases/189 controls used estrogen only, 9 cases/35 controls used progestin only, 5 cases/14 controls had ever used tibolone—these were included in the main analysis, which found no significant association between hormone therapy and colorectal cancer overall or by duration of use. Subset analysis of progestin type used showed no overall association by progestin type, duration of use, or by sequential versus continuous progestin use. There were only 3 cases and 27 controls that had used CEE and MPA, the formulation most often associated with less colorectal cancer in WHI and previous IARC publications.		
				Ever	46	191	0.8 (0.51–1.20)			
				Duration (y)						
				1–4	5	49	0.47 (0.17–1.31)			
				5–9	14	66	0.66 (0.32–1.35)			
				10+	22	50	1.45 (0.70–3.04)			
				Continuous–Combined						
				Ever	40	176	0.8 (0.50–1.29)			
				Duration (years)						
				1–4	8	53	0.66 (0.26–1.66)			
				5–9	12	52	0.56 (0.25–1.20)			
				10+	9	47	0.65 (0.26–1.67)			

Table 2.6. Case-control studies of combined estrogen-progestogen menopausal therapy and colorectal cancer

Reference, location, study period	Characteristics of cases	Characteristics of controls	Exposure assessment	Therapy (type/regimen)	Cases	Controls	Odds ratio (95% CI)	Comments
Dinger <i>et al.</i> (2007) (contd)				Any combination				
				Ever	78	324	0.85 (0.59–1.21)	
				<i>Duration (y)</i>				
				1–4	13	94	0.56 (0.28–1.12)	
				5–9	23	104	0.71 (0.40–1.24)	
				10+	28	83	1.21 (0.67–2.21)	
				CEE + MPA				
				Ever	3	27		
				<i>Duration (y)</i>				
				1–4 years	0	9		
				5–9 years	1	7		
				10+ years	1	10		
				CEE or MPA				
				Ever	42	142	0.64 (0.38–1.10)	
				<i>Duration (y)</i>				
				1–4 years	6	36	0.64 (0.38–1.10)	
			5–9 years	13	46	0.63 (0.26–1.52)		
			10+ years	20	45	1.1 (0.49–2.47)		
			Progestin type					
			Norethisterone Acetate (NETA)					
			Ever	42	193	0.78 (0.48–1.25)		
			<i>Duration (years)</i>					
			1–4	7	57	0.54 (0.20–1.44)		
			5–9	13	61	0.73 (0.35–1.53)		
			10+	14	49	0.9 (0.42–1.94)		
			LNG					
			Ever	22	83	0.88 (0.46–1.68)		
			<i>Duration (years)</i>					
			1–4	2	21	0.45 (0.10–2.08)		
			5–9	6	35	0.53 (0.19–1.49)		
			10+	9	19	1.64 (0.51–5.30)		