

Table 2.3.1: Cohort studies on relationship of endocrine disruptors with endometrial cancer

Region and subjects	Number of subjects	Follow-up period	Compound	Confounders considered	Relative risk (SMR, SIR, etc.) by category			
					1	2	3	P trend
Hoover, 1997 Kentucky, U.S. White women treated with oral premarin (synthetic estrogen) in a private hospital Retrospective study	908, of which 21 used DES concomitantly	1939-69	DES (used concomitantly with premarin)		O/E=3/0.1, SIR 30 (95%CI: 6.2-87.7)			
Bibbo, 1978 U.S. RCT Groups treated and not treated with DES in 1951-52	2162; 840 exposed, 806 unexposed (interviewed were exposed 693 and unexposed 668)	Up to 1976-77	DES	Age of menarche, number of pregnancies, number of children delivered, age of menopause, history of reserpine use, oral contraceptive use, estrogen therapy, hysterectomy, family history, body height (no difference between exposed and unexposed group)	Prevalence: 4 (0.6%) exposed, 1 (0.2%) unexposed			
Titus-Ernstoff, 2001 Boston, U.S. Mothers Study cohort (1980s) and Dieckmann Study cohort (1950s)	7560 (3844 exposed, 3716 unexposed)	Up to 1994	DES	Age, calendar year, age x calendar year (adjusted) Age at participation in the program, age, calendar year, BMI, education, family history, age of menarche, oral contraceptives, miscarriage, age of the first delivery, pregnancy, age of menopause, hormone therapy, hysterectomy, smoking history (e.g. more miscarriages in the exposed group)	Relative mortality risk (95%CI) 0.71(0.28-1.75)			

Table 2.3.2: Case-control studies on relationship of endocrine disruptors with ovarian cancer

Region and number of subjects (case/control)	Compound	Comparison of serum levels		P value	Odds ratio by category				P trend
		Case	Control		1.00	2	3	4	
Donna, 1984									
Alessandria, Italy Hospital-based 60/127	Pesticides				Ovarian mesothelioma				
				1.00	Certainly exposed + probably exposed; 4.38(1.90-16.07)				
				1.00	Probably exposed; 2.20(0.77-6.32)				
Donna, 1989									
Alessandria, Italy 20-69 year old women Patients in hospitals Controls from local population 65/137	Triazine				Probably exposed		Certainly exposed		
		All subjects		1.00	1.6 (0.8-3.0)		2.3 (0.9-5.7)		
		Farm workers only		1.00	2.1 (0.8-5.2)		3.0 (1.1-8.5)		
Glinda S, 2004									
Los Angeles, U.S. 18-74 Year old women registered in Cancer Surveillance Program 20% of controls from Health Care Financing Administration registry, 80% from the neighborhood Population-based 356/424	phenolphthalein Use of phenolphthalein-containing laxatives				Epithelial ovarian cancer				
				1.00	Unexposed		1.1(0.75-1.5)		0.9

Table 2.3.3: Ecological studies on relationship of endocrine disruptors with ovarian cancer

Region and number of subjects	Compound	Comparison of serum levels			Odds ratio by category				
		Case	Control	P value	1(Low)	2	3	4(High)	P trend
Schreinemacher, 1999									
4 Regions in Minnesota, U.S. 1980-89 Whites	Ethylenebisdithiocarbamates and other herbicides (?)				SRR (95% CI) (compared with urban and forest areas) Region 1 (corn, soybean) 0.84(0.76-0.92) Region 2 (wheat, corn, soybean) 0.65(0.52-0.82) Region 3 (potato, wheat, sugar beet; heavy use of pesticides) 0.89(0.72-1.10)				
Schreinemacher, 2000									
U.S. Whites 152 Counties in Minnesota, North Dakota, South Dakota and Montana producing spring wheat and durum wheat treated with chlorophenoxy herbicides 1980-89 Ecological study	Chlorophenoxy herbicides				SRR (95% CI) for counties with acreage < 23,000 acres 23,000-110,999 acres ≥111,000 acres				
Hopenhayn-Rich, 2002									
120 Counties in Kentucky, U.S. 3.7 Million of population (92% whites) Data from 1993-97 Ecological study	atrazine Score calculated from concentration in public tap water, corn acreage and atrazine sales				OR (95% CI) by category adjusted for incidence (low group as reference category) Total score 1.00      1.01(0.83-1.21)    0.77(0.66-0.90)    0.76(0.65-0.88) Atrazine sales score 1.00      1.06(0.92-1.22)    0.86 (0.73-1.01)    0.80(0.67-0.96) Corn acreage 1.00      0.95(0.82-1.10)    0.83 (0.71-0.97)    0.76(0.64-0.90) Public tap water level 1.00      0.98(0.85-1.14)    0.90 (0.78-1.04)    0.85(0.73-0.98)				
Koifman, 2002									
11 States in Brazil Data from 1996-98 Ecological study	Pesticides				Correlation factor (95% CI) (pesticide sales in 1985 with ovarian cancer mortality in 1990s) 0.71(-0.14-0.85)				