

APPENDIX 1 (as supplied by the authors): Supplementary tables

Supplementary Table 1: Studies used to abstract relative risks of oral contraceptives and hormone therapy use for associated cancer sites						
First Author/Year	Risk factor	Cancer sites	Analysis	Search time frame	Number of Studies included (Quality) ^a	Study design and population size
Gierisch et al. 2013 (1)	Oral contraceptive use	Breast	Meta-analysis	January 1, 1990 to June 29, 2012	Twenty three studies (12 good, 9 fair, 2 poor quality)	Fifteen case-control studies: 38,682 women; Eight cohort studies: 317,341 women across 5 studies and 3,981,072 person-years across 3 studies.
Gierisch et al. 2013	Oral contraceptive use	Endometrium	Meta-analysis	January 1, 1990 to June 29, 2012	Nine studies (4 good, 2 fair, 1 poor quality)	Three case-control studies and 4 cohort studies: 308,198 women across 4 studies and 3,981,072 person-years across other 3 studies.
Havrilesky et al. 2013 (2)	Oral contraceptive use	Ovary	Meta-analysis	January 1990 to June 2012	Seventeen studies (11 good, 6 fair, 1 poor quality)	Seventeen case-control studies: 10,031 cases and 21,025 controls
Shah et al. 2005 (3)	Hormone therapy	Breast	Meta-analysis	Up to September 2003	Eight studies (8 good quality)	Four case-control studies and 4 cohort studies: 655,559 women
Beral, 2003 (4)	Hormone therapy	Breast	Relative Risk Estimate	NA	One study: the Million Women Study (Quality assessment not available)	One cohort study: 3202 cases among 285,987 participants
Brinton et al. 2014 (5)	Hormone therapy	Endometrium	Meta-analysis	NA	Fourteen studies (Quality assessment not available)	Nine case-control studies and 5 cohort studies: population size not available.
Beral et al. 2005 (6)	Hormone therapy	Endometrium	Relative Risk Estimate	NA	One study: the Million Women Study (Quality	One cohort study: 64 cases among 58,300

Appendix to: Grevers X, Grundy A, Poirier AE, et al. Cancer incidence attributable to the use of oral contraceptives and hormone replacement therapy in Alberta in 2012. *CMAJ Open* 2016.

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					assessment not available)	participants
Beral et al. 2015 (7)	Hormone therapy	Ovary	Meta-analysis	1998 to January 2013	Seventeen studies (Quality assessment not available)	Seventeen cohort studies: 6,601 cases
Beral et al. 2015 (7)	Hormone therapy	Ovary	Meta-analysis	1998 to January 2013	Twelve studies (Quality assessment not available)	Twelve cohort studies: population size not available.
^a only for studies included in the meta-analysis examining the association of interest.						

Supplementary Table 2: Observed cancer cases in Alberta (2012) and population attributable risks associated to oral contraceptive and hormone therapy use

Age at Exposure	Age at Outcome	Cancer Site	Observed Cases	PAR ^a (%) (95% CI)		
				Oral Contraceptive - Ever Use	Hormone Therapy - Current Use	Hormone Therapy - Ever Use
35-44	43-52	Breast	463	7.0 (0.3,13.3)		
		Endometrium	57	-64.8 (-111.5,-27.9)		
		Ovary	36	-33.2 (-46.0,-21.4)		
45-54	53-62	Breast	584	6.9 (0.2,13.1)	9.3 (8.2,10.5)	9.0 (3.0,15.6)
		Endometrium	183	-63.4 (-108.2,-26.9)	-4.0 (-7.0,-0.4)	-5.9 (-7.8,-3.9)
		Ovary	46	-32.6 (-45.2,-21.5)	6.0 (4.8,7.3)	4.8 (3.6,6.1)
55-64	63-72	Breast	559	6.5 (0.2,12.4)	15.2 (13.5,17.0)	19.0 (6.9,30.2)
		Endometrium	152	-57.3 (-95.1,-24.6)	-7.3 (-13.0,-0.7)	-15.3 (-20.9,-9.7)
		Ovary	46	-30.0 (-41.1,-19.4)	10.0 (8.1,12.2)	10.8 (8.1,13.4)
≥ 65	≥ 73	Breast	522	5.2 (0.3,10.1)	11.4 (9.8,13.1)	19.1 (6.5,30.2)
		Endometrium	90	-40.4 (-62.8,-18.7)	-5.1 (-9.0,-0.6)	-15.3 (-21.0,-9.8)
		Ovary	51	-22.3 (-30.0,-14.9)	7.4 (5.7,9.1)	10.8 (8.1,13.4)

^a PAR, population attributable risk (%). It represents the proportion (%) of cancer cases attributable to oral contraceptive ever use or hormone therapy ever use or hormone therapy current use. The negative values represent preventable proportions of cancer cases due to protective effect.

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