

SUMMARY OF EVALUATIONS – VOLUME 100A

	Agent	Group [†]	Human evid [‡]	Sites on which <i>sufficient</i> human evidence is based	Other sites with limited human evid	Animal evid [‡]	Sites on which <i>sufficient</i> animal evidence is based	Established mechanistic events	Other likely mechanistic events
ANTI-CANCER DRUGS									
1	Busulfan	1	S	AML		L		Genotoxicity, alkylating agent	
2	Chlorambucil	1	S	AML		S	M: lympho, lung R: lympho	Genotoxicity, alkylating agent	Immunosuppression
3	Semustine (Methyl-CCNU)	1	S	AML		L		Genotoxicity, alkylating agent	
4	Cyclophosphamide	1	S	AML, bladder		S	M: mammary, lung, lymph R: bladder, mammary	Genotoxicity, bladder inflammation	Immunosuppression
5	Etoposide + cisplatin & bleomycin	1	S	AML		ND		Genotoxicity, translocations in MLL gene	
	Etoposide Group 2A in 2000	1 ^{NEW}	L			I		Genotoxicity, translocations in MLL gene	
6	Melphalan	1	S	AML		S	M: lung, skin	Genotoxicity, alkylating agent	
7	MOPP	1	S	AML, lung		ND		Genotoxicity	
9	Thiotepa	1	S	leukaemia		S	M: lymphohaematopoietic R: lymphohaematopoietic	Genotoxicity	
10	Treosulfan	1	S	AML		ND		Genotoxicity	

HORMONAL DRUGS

[†] 1, 2A, 2B, 3, 4

[‡] *Sufficient, Limited, Inadequate, ESLC*

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8	Tamoxifen	1	S	endometrium ESLC: breast (reduces risk)		S	R: liver adenocarc	receptor-mediated (uterus), genotoxicity	
	Estrogens, nonsteroidal	GR							
11	Diethylstilbestrol	1	S		Endometrium	S	M: uterus, cervix, vagina, ovary, testis, pituitary (female), lymph (female) R: vagina, uterus, mammary H: kidney (male)	Genotoxicity, ER-mediated events, including mitogenesis	
				Breast (exposure during pregnancy)				Genotoxicity	
				Vagina (CCA, exposure in utero) Cervix (CCA, exposure in utero)	Cervix (SCC, exposure in utero) Testis (exposure in utero)			Genotoxicity, ER-mediated events, including mitogenesis	Epigenetic programming (perinatal exposure)
	Estrogens, steroidal	GR							
12	Estrogen-only menopausal therapy	1	S	Endometrium, ovary ESLC: colorectum	Breast	S	Estradiol M: mammary R: mammary H: kidney Estrone M: mammary	Receptor mediated, tissue specific, agent specific cell prolifer (uterus)	Genotoxicity Receptor mediated, tissue specific, agent specific cell prolifer (breast)
13	E-P menopausal therapy, Combined	1	S	Breast Endometrium (increased E-induced risk decreases with #days with P) ESLC: colorectum		L		Receptor mediated, tissue specific, agent specific cell prolifer	Estrogen genotoxicity; stromal paracrine mediated effects

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14	E-P contraceptives, Oral combined	1	S	Breast, cervix, liver ESLC: endometrium (reduces risk); ovary (reduces risk); colorectum		S	R: mammary, liver M: mammary	Receptor mediated, tissue specific, agent specific cell prolifer	Estrogen genotoxicity; stromal paracrine mediated effects; Estrogen-stimulated expression of HPV genes
	E-P contraceptives, sequential	1							
OTHERS									
15	Azathioprine	1	S	NHL, skin (SCC)		S	M: lymphohaematopoietic	Immunosuppression, DNA damage	
16	Chlornaphazine	1	S	bladder		L		metabolism to 2-naphthylamine derivatives, alkylation(?)	
17	Cyclosporine	1	S	NHL, skin (non-melanocytic), multiple other sites		L		immunosuppression	DNA damage (ox stress), DNA repair
18	Plants containing aristolochic acid [new name]	1	S	Renal pelvis, ureter		S(extr acts)	R: renal pelvis	DNA adducts in humans A:T→T:A transversions in human humours in p53	
	Aristolochic acid (Group 2A in 2002)	1 ^{NEW}	L			S	R: forestomach, renal pelvis	- DNA adducts formed in animals are the same as those found in humans exposed to plants - A:T→T:A transversions in p53 - ras activation	

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19	Methoxsalen+UV	1	S	Skin (SCC)		S	Skin (SCC, fibrosarc)	Genotoxicity following photo-activation	
20	Phenacetin mixtures	1	S	Renal pelvis, ureter		L			
	Phenacetin (Group 2A in 1987)	1^{NEW}	S	Renal pelvis, ureter		S	R: kidney M: nasal cavity, urinary	DNA damage, DNA strand breaks in human cells, chromo aberr, prolifer in urothelia, bladder, renal pelvis	