

Vinyl Chloride and Cancer

	Animal Studies	Human Studies
Angiosarcoma of liver	<u>✓</u>	<u>✓</u>
Liver Cancer	<u>✓</u>	<u>✓</u>
Brain Cancer	<u>✓</u>	<u>✓</u>

Brain Cancer in Epidemiologic Studies of Vinyl Chloride

	Study	Year	Brain Cancer SMR	% Brain Cancer Increase
Large Studies				
	North America (Mundt 2000)	2000	142*	42% Increase
	European (Ward 2001)	2001	93	No Increase
Smaller Studies				
	Russia (Smulevich 1988)	1988	154	54% Increase
	Germany (Weber 1981)	1981	162	62% Increase
	Taiwan (Wong 2002)	2002	286**	186% Increase

* Statistically significant **Calculated from Table 2, Wong, 2002

Brain Cancer Risk in North American Vinyl Chloride Study

First Author	Year of Study	Brain Cancer SMR	% Brain Cancer Increase over General Population
Tabershaw	1974	Not provided	Brain cancer “over represented”
Cooper	1981	203*	103% Increase
Wong	1991	180*	80% Increase
Mundt	2000	142*	42% Increase

** Statistically significant*

Studies of Brain Cancer at PVC Processing Facilities

	Features	RR	% Increase
Chiazze (1977)	PMR study	115	15% Increase
Weber (1981)	SMR study	535*	435% Increase
Hagmar (1990)	SMR study (1/2 VC exposed)	229	129% Increase

* *Statistically significant*