

US EPA ARCHIVE DOCUMENT



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SUBJECT: Cyanazine (188C), Atrazine (63) and Simazine (783) ^{OFFICE OF PESTICIDES AND TOXIC SUBSTANCES}
Quantitative Risk Assessment Comparisons on Malignant
Mammary Gland Tumors only in Rats.

From: Bernice Fisher, Biostatistician
Science Support & Special Review Section
Science Analysis & Coordination Branch
Health Effects Division (H7509C)

Bernice Fisher 5/13/91

To: Karl Baetcke, Ph.D., Chief
Toxicology Branch I (IRS)
Health Effects Division (H7509C)

Thru: Esther Rinde, Ph.D., Acting Section Head
Science Support & Special Review Section
Science Analysis & Coordination Branch
Health Effects Division (H7509C)
and
Reto Engler, Ph.D., Chief
Scientific Analysis & Coordination Branch
Health Effects Division (H7509C)

e.R.

Estimated⁺ Q_1^* (mg/kg/day)⁻¹ for Cyanazine, Atrazine and
Simazine in Sprague-Dawley Female Rats

	Tumors in the Mammary Gland	Rat Q_1^* (mg/kg/day) ⁻¹	In Human Equiv. ⁺⁺
Cyanazine	Carcinoma, Adenocarcinoma & Fibrosarcoma	1.66x10 ⁻¹ (a)	8.8x10 ⁻¹
Atrazine ¹	Carcinoma	1.72x10 ⁻² (b)	9.2x10 ⁻²
Simazine	Carcinoma	2.25x10 ⁻² (b)	1.2x10 ⁻¹

+ Based on results from Stattox computer program

++ Derived by the use of surface area correction -
(Human Wt./ Rat Wt.)^{1/3}

- (a) Multi-Stage Model (Global86)
- (b) Time-to-tumor Multi-Stage Model (Weibull83)

1 HED's previous estimate of Q_1^* was 2.2x10⁻¹ based upon both
benign & malignant mammary gland tumors. For the purposes
of comparison with Cyanazine & Simazine, only malignant
tumors were used in the estimation of the unit risk, Q_1^* .