



Atrazine / Review #54 / 3.28.86 / 3 pages

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

MAR 28 1986

Releasable

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

MEMORANDUM

SUBJECT: Atrazine, Probable Cause for Concern with Respect
to Adenocarcinomas in Female Rats.

FROM: Herbert Lacayo, Statistician
Mission Support Staff
Toxicology Branch/HED (TS-769)

Herbert Lacayo Jr 27/Mar/86

TO: Henry Spencer, Ph.D.
Section VII
Toxicology Branch/HED (TS-769)

THRU: Bertram Litt, Leader, Statistical Team
Mission Support Staff
Toxicology Branch/HED (TS-769)

Bertram Litt

THRU: Reto Chief, Chief
Mission Support Staff
Toxicology Branch/HED (TS-769)

Reto Chief

At your request a cursory examination was done of EPL's summary tables (i.e., chronic rat study for Atrazine sponsored by Ciba-Geigy). We found that the adenocarcinoma data (Fig. 1) exhibits a tumor-dose trend significant at less than .00025 using the Cochran-Armitage test ($\chi^2 = 16.6$, 1 deg. of freedom)

FIG. 1

Adenocarcinomas of the Mammary Glands in Rats

Dose (ppm)	0	10	70	500	1000
TBA ¹	15	15	26	27	35
# Examined	66	64	68	65	64

1 TBA: Tumor Bearing Animal



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CASWELL FILE

004453

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

MEMORANDUM

SUBJECT: Atrazine: An Interim Report on a Chronic
Feeding/ Oncogenicity Rat Study.
(Neoplasms in Charles River Strain)
Toxicogenics Study 4104102.
Accession Number 253912
EPA Registration No. 100-529.

Caswell No. 63

FROM: Henry Spencer, Ph.D. *Hand 4/25/85*
Section 7
Toxicology Branch
Hazard Evaluation Division (TS-769)

TO: Robert Taylor, Product Manager #25
Herbicide Branch
Registration Division (TS-767) *ABK 5/9/85*
WHS 5/16/85

THRU: Albin B. Kocialski, Ph.D.
Section Head, Section 7
Toxicology Branch
Hazard Evaluation Division (TS-769)

Background:

A previously completed IBT study was found by the registrant to suggest an oncogenic response. However, as the study was subsequently questioned as to its validity, the registrant, Ciba-Geigy Limited, commissioned the present study.

Comments:

There was an apparent increased incidence of both adenocarcinomas and fibroadenomas of the mammary tissues in female rats as reported by the registrant. Although these effects occurred only at the 1000 ppm dosage level (HDT), and the report is of an interim nature, Toxicology Branch considers the interim findings sufficient to warrant the close scrutiny of any additional requests for tolerances until the full study has been submitted and reviewed.

The interim findings reported by the registrant with respect to mammary tumors in females were as follows.

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Incidence of Mammary
Neoplasms After 13 Months

<u>Pathologic Findings</u>	<u>Historic Control</u>	<u>Concurrent Control</u>	<u>10 ppm</u>	<u>70 ppm</u>	<u>500 ppm</u>	<u>1000 ppm</u>
Adenocarcinoma	3/75	0/22	1/5	1/1	0/5	8/25
Fibroadenoma	3/75	0/22	0/5	1/1	1/5	3/25