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

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

TXR#: 0052927

DATE: December 6, 2005

MEMORANDUM:

SUBJECT: **PROPAZINE** - Review of *In vivo* Mammalian Spermatogonial Chromosome Aberration Test-mouse (MRID 46171701)

PC Code: 080805
DP Barcode Nos: D310325

From: Lisa Austin, Ph.D., Toxicologist
Registration Action Branch I
Health Effects Division (7509C)

Thru: P.V. Shah, Ph.D., Branch Senior Scientist
Registration Action Branch I
Health Effects Division (7509C)

To: James Tompkins (RM 25)
Registration Division (7505C)

ACTION REQUESTED: The Special Review and Reregistration Division (SRRD) requested Health Effects Division (HED) to perform a review of an *in vivo* mammalian spermatogonial chromosome aberration test in the mouse (MRID 46171701) for propazine. This study was required as part of the section 3 registration of propazine (petition 7F4837). The action was successfully completed, and the conclusions of the study are reported here.

I. CONCLUSIONS

The Registration Action Branch I (RAB 1) has reviewed the *in vivo* mammalian spermatogonial chromosome aberration test in the mouse and provided the data evaluation record (DER; see the attachment) for propazine. The study is classified as **Acceptable/Guideline**. The study is adequate

for regulatory purposes and adequate for Section 3 Registration.

II. STUDY REVIEWED

870.5380

1. *In vivo* Mammalian Spermatogonial Chromosome Aberration Test-mouse [§84-2]

CITATION: Erexson, G. L. (2003) Chromosomal Aberrations *In Vivo* in Mouse Spermatogonial Cells with Propazine. Covance Laboratories Inc., 9200 Leesburg Pike, Vienna, VA 22182-1699. Study Number: 23988-0-474OECD, February 28, 2003. MRID 46171701. Unpublished.

EXECUTIVE SUMMARY:

In a spermatogonial chromosome aberration test (MRID 46171701), 6 male Crl:CD-1®(ICR)BR mice/dose were treated via gavage with a single dose of propazine, (96.9 % a.i., lot # SG90502205) at doses of 0, 500, 1000, or 2000 mg/kg. Spermatogonial cells were harvested 24 hours post-treatment. The vehicle was 0.5% aqueous carboxymethyl cellulose (CMC).

Propazine was tested up to the limit dose, 2000 mg/kg. There were no clinical signs of toxicity or mortality in any of the treated animals. Cytotoxicity was not observed in spermatogonia cells at any dose level. The mitotic index was slightly decreased in the high dose group and slightly increased in the low and mid dose groups, relative to controls. There was no increase in chromosomal aberrations in any treated group when compared to controls. The vehicle and positive control values were appropriate. Historical control data were not provided for chromosome aberrations in mouse spermatogonial cells, but were provided for mouse bone marrow cells. **There is no evidence for a biologically or statistically significant increase over the vehicle control values in the number of cells with chromosome aberrations following treatment with propazine**.

This study is classified as **Acceptable/Guideline** and satisfies the guideline requirements for an *In vivo* Mammalian Spermatogonial Chromosome Aberration test (OPPTS 870.5380; OECD 483).

Encl: Copy of the DER is attached.