US ERA ARCHIVE DOCUMENT



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

1473 AA

OCT 13 1989

OFFICE OF PESTICIDES AND TOXIC SUBSTANCES

## MEMORANDUM

SUBJECT: Brodifacoum, Report of Apparent Human Self Poisoning

TO:

William Miller PM-16/5

Registration Division (H7505C)

FROM:

Robert P. Zenezian Ph.D.

Senior Pharmacologist SACB, HED (H7509C)

THROUGH:

Albin Kocialski Ph.D. E 7 ich mok

Head

Registration Standards and Special Review Section

Reto Engler Ph.D.

Chief

Science Analysis and Coordination Branch

Compound; Brodificoum

Tox Chem #114AA

Registration #16-782

Registrant; ICI

Accession #409729-01

Tox Project #9-1819

## Action Requested

Comment on the following document;

Ltr re, Brodifacoum - Possible Poisoning Incident ICIA Letter dated October 12, 1988, from D.L. Ierley Pesticide Regulatory Specialist to W. H. Miller, Jan 23, 1989 w/attachment

medical records re

MRID 409729-01

## Comments

Subject document consists of a cover letter transmitting a set of medical records for covering the period of her admission to on 3/23/88 to her death on

4/27/88 at the hospital.

The patient presented with a history of extended menstrual bleeding apparently secondary to a coagulopathy. She was

admitted due to failure to control the bleeding with intravenous fresh frozen whole plasma and "birth control pills". This pathology was stated as "presumed secondary to super Warfarin ingestion". The patient continued to show coagulation abnormalities, as shown by increased PT and APTT, dispite continuation of whole plasma treatment. Patient was allergic to vitamin K preparations. The patient developed septocemia, apparently due to contamination of an indwelling cathater, and died of septic shock on 4/27/88.

The report provides no direct evidence as to 'ingestion' of brodificroum beyond the persistant coagulopathy. Brodificoum is know to have a half life of 6 months in the rat and has a history of persistant coagulopathy (bleeding) for months following a single ingestion dispite continued treatment with vitamin K and intravenous coagulation factors.

The report speaks of attempts to analyze for brodificoum but there is no evidence that such analysis was ever performed.

It is apparent from the report that the attending physisions were not aware of the extremely high toxicity and persistance of brodificoum. No attempt appears to have been made to 'get around' the allergy to vitamin K preparations and institute aggressive treatment with K. The case appears to have been further complicated by "Psychiatric disorder".