CENTER FOR DRUG EVALUATION AND RESEARCH

APPLICATION NUMBER:

75-297

MICROBIOLOGY REVIEW

MAY 18 1999

REVIEW TO HFD-617
OFFICE OF GENERIC DRUGS
MICROBIOLOGY STAFF
MICROBIOLOGIST REVIEW OF AN ANDA
17 May 1999

A. ANDA 75-297

PRODUCT NAME: PACLITAXEL INJECTION
APPLICANT: Zenith Goldline Pharmaceuticals
140 Legrand Avenue

DOSAGE FORM: For Injection in 30-mg/5 mL, 150 mg/25 mL strengths
METHOD OF STERILIZATION:
PHARMACOLOGICAL CATEGORY: Anticancer Agent

B. INITIAL APPLICATION DATE: 30 December 1997
ASSIGNED FOR REVIEW: 19 April 1999

C. REMARKS: A consult was requested from the OGD to review the sterility assurance information in this ANDA. The active ingredient of the drug product is paclitaxel. Paclitaxel is manufactured by Inc. and is extracted, isolated and purified from biomass of an ornamental yew, *Taxus X media "Hicksii"*. It is a hybrid of the European yew, *Taxus baccata* and the Japanese yew, *Taxus cuspidata*. This plant is commonly used as a landscape plant.

Injection for both Zenith Goldline Pharmaceuticals and Baker Norton Pharmaceuticals, Inc. Zenith and Baker Norton are wholly owned subsidiaries of IVAX Corporation.

On December 24, 1997, Baker Norton received tentative approval for Paxene (paclitaxel) Injection, NDA 20-826. Marketing of Paxene is delayed until August 4, 2004 pending the expiry of the orphan drug exclusivity of Taxol. Information included in this ANDA was also included in the CMC section of the Baker Norton NDA 20-826. The CMC data contained in this ANDA has been reviewed by the Division of Oncology Drug Products, ODE I and found acceptable. The applicant is therefore requesting an expedited review of the application.

D. CONCLUSIONS: The ANDA 75-297 is recommended for approval from the standpoint of product quality microbiology. Please see section E for Review Notes.

17 May 1999

Patricia F. Hughes, Ph. D.
Review Microbiologist

5/17/99

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Micro Rev.

AUG 4 1998

38. Chemistry Comments to be Provided to the Applicant

ANDA: 75-297 APPLICANT: Zenith Goldline Pharmaceuticals

DRUG PRODUCT: Paclitaxel Injection, 30 mg/5mL and 150 mg/25mL

The deficiencies presented below represent MAJOR deficiencies.

A. Deficiencies:

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5. The in-process specification for the potency

batch records. Please clarify.

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8/4/98

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stability.

B. In addition to responding to the deficiencies presented above, please note and acknowledge the following comments in your response:

1. The firms referenced in your ANDA application relative to the manufacturing and testing of the product must be in compliance with cGMP's at the time of approval.

2. The FDA district office will be performing method validation on the drug substance, the finished drug product, Paclitaxel Injection concentrate and dilute.

3. Our microbiology review has not been completed. After this review is completed, any deficiencies found will be communicated to you under a separate cover.

Sincerely yours,

Rashmikant M. Patel, Ph.D.
Director
Division of Chemistry I
Office of Generic Drugs
Center for Drug Evaluation and Research