CENTER FOR DRUG EVALUATION AND RESEARCH

APPLICATION NUMBER:

75-175

ADMINISTRATIVE DOCUMENTS

- APPROVAL PACKAGE SUMMARY FOR 75-175

ANDA: 75-175

FIRM: Roxane Laboratories, Inc.

DRUG: Cromolyn Sodium Inhalation Solution

DOSAGE: Inhalation, unit dose vial of 2 mL

STRENGTH: 20 mg/2 mL

CGMP STATEMENT/EIR UPDATE STATUS: EER is acceptable 9/2/99

BIO STUDY/BIOEQUIVALENCE STATUS: Waiver granted 12/12/97

METHOD VALIDATION: The drug product is compendial

STABILITY: The firm has submitted satisfactory 3 months accelerated stability data at 40°C and 6 months room temperature stability data at 25-30°C.

LABELING REVIEW STATUS: Labeling is satisfactory 8/30/99

STERILIZATION VALIDATION: sterilization is satisfactory 8/23/99

BATCH SIZES: The firm has submitted manufacture procedure for scale up batches for and batches. Also provided a copy of the executed batch record lot #969086 of L. The firm will be using the same drug substance manufacture, same manufacturing procedure, and same equipment.

COMMENTS: The application is approvable.

Reviewer: Nashed E. Nashed, Ph.D. /S/ Date: 9/13/99

Supervisor: Paul Schwartz, Ph.D /S/ 9/14/99

Cromolyn Sodium Inhalation Solution, USP
20 mg/2 mL
ANDA # **75-175**
Reviewer: Z.Z. Wahba
File #75175w.797

Roxane Laboratories
Columbus, OH
Submission Date:
July 25, 1997

REVIEW OF A WAIVER REQUEST

BACKGROUND

1. The firm has requested a waiver of in vivo bioequivalence study requirements for its drug product, Cromolyn Sodium Inhalation Solution, USP, 20 mg/2 mL. The reference listed drug (RLD) is Intal® Inhalation Solution, 20 mg/2 mL (Fisons Corporation, NDA #18-596).

2. Cromolyn sodium inhalation is a solution dosage form indicated as a prophylactic agent in the management of bronchial asthma.

FORMULATION COMPARISON

Comparative compositions of the test and the reference Fisons' Intal® Inhalation Solution, 10 mg/1 mL, products are as follows:

Comparison of Formulation

Ingredient	Test Product (amount/2 mL)	RLD (amount/2 mL)
Cromolyn Sodium, USP	20 mg	20 mg
Purified Water, USP	qs to 2 mL	qs to 2 mL

Cromolyn sodium inhalation solution USP is clear, colorless, sterile, and has a target pH of 5.5.

COMMENTS

1. The drug product is classified "AN" in the list of the "Approved Drug Products with Therapeutic Equivalence Evaluations".

2. The firm's test solution product is identical, qualitatively and quantitatively, to the innovator product.

3. The waiver of in vivo bioequivalence study requirements may be granted based on 21 CFR section 320.22(b)(3) of the Bioavailability/Bioequivalence Regulations.

4. Labeling of test and reference products states that the products should be administered by nebulization. No specific brand of nebulizer is stated. The "AN" rating states that "solutions and powders intended for aerosolization that are marketed for use in any several delivery systems are considered to be pharmaceutically and therapeutically equivalent".

RECOMMENDATION

The Division of Bioequivalence agrees that the information submitted by Roxane Laboratories, Inc. demonstrates that Cromolyn Sodium Inhalation Solution, USP, 20 mg/2 mL, falls under 21 CFR Section 320.22(b)(3) of Bioavailability/Bioequivalence Regulations. The waiver of in vivo bioequivalence study for Cromolyn Sodium Inhalation Solution, USP, 20 mg/2 mL, of the test product is granted. From the bioequivalence point of view, the Division of Bioequivalence deems the test solution formulation to be bioequivalent to Fisons' Intal® Inhalation Solution, 20 mg/2 mL. The firm should be informed of the recommendation.

CC:

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BIOEQUIVALENCY - ACCEPTABLE

1. **WAIVER** (WAI)

Strengths: 20 mg/2mL
Outcome: AC

OUTCOME DECISIONS:

AC - Acceptable

WINBIO COMMENTS:

/S/
Zakaria Z. Wahba, Ph.D.
Division of Bioequivalence
Review Branch III

RD INITIALLED RMHATRE /S/ 12/12/97
FT INITIALLED RMHATRE

Concur: /S/ Date: 12/12/97
Dale P. Conner, Pharm.D.
Director
Division of Bioequivalence