CENTER FOR DRUG EVALUATION AND RESEARCH

APPLICATION NUMBER:

75834

BIOEQUIVALENCY REVIEW(S)

OFFICE OF GENERIC DRUGS
DIVISION OF BIOEQUIVALENCE

(2)

ANDA # : 75-834 SPONSOR : Baxter Healthcare Corporation

DRUG AND DOSAGE FORM : Milrinone Lactate in 5% Dextrose in PL 2408 Plastic Container

STRENGTH(S) : 20 mg/100 mL

TYPES OF STUDIES : N/A

CLINICAL STUDY SITE(S) : N/A

ANALYTICAL SITE(S) : N/A

STUDY SUMMARY : The test and reference products are qualitatively and quantitatively the same. The waiver is granted.

DISSOLUTION : N/A

DSI INSPECTION STATUS

Inspection needed: YES (NO)	Inspection status:	Inspection results:
First Generic _No__	Inspection requested: (date)	
New facility _____	Inspection completed: (date)	
For cause _____		
Other _____		

PRIMARY REVIEWER : Kuldeep R. Dhariwal BRANCH : II

INITIAL : KRD DATE : 6/7/00

TEAM LEADER : S. Nerurkar BRANCH : II

INITIAL : /S/ DATE : 6/7/2000

DIRECTOR, DIVISION OF BIOEQUIVALENCE : DALE P. CONNER, Pharm. D.

for

INITIAL : DPC DATE : 6/21/2000

BIOEQUIVALENCY COMMENTS TO BE PROVIDED TO THE APPLICANT

ANDA: 75-834 APPLICANT: Baxter Healthcare

DRUG PRODUCT: Milrinone Lactate in dextrose 5% in PL 2408 plastic container, 20 mg base/100 mL

The Division of Bioequivalence has completed its review and has no further questions at this time.

Please note that the bioequivalency comments provided in this communication are preliminary. These comments are subject to revision after review of the entire application, upon consideration of the chemistry, manufacturing and controls, microbiology, labeling, or other scientific or regulatory issues. Please be advised that these reviews may result in the need for additional bioequivalency information and/or studies, or may result in a conclusion that the proposed formulation is not approvable.

Sincerely yours,

/S/

for Dale P. Conner, Pharm. D.
Director
Division of Bioequivalence
Office of Generic Drugs
Center for Drug Evaluation and Research

CC: ANDA 75-834
ANDA DUPLICATE
DIVISION FILE
HFD-651/ Bio Drug File
HFD-655/ Dhariwal

Printed in final on 06/07/2000

6/7/00

BIOEQUIVALENCY - ACCEPTABLE

Submission date: March 31, 2000

1. **WAIVER** (WAI)

Strengths: 20 mg base/100 mL
100 mL container
200 mL container

Outcome: **AC**

Outcome Decisions: **AC** - Acceptable

WinBio Comments:

Milrinone Lactate in 5% Dextrose in PL 2408 Plastic Container, (20 mg base/100 mL); 100 mL, 200 mL
ANDA # 75-834
Reviewer: Kuldeep R. Dhariwal
File name: 75834W.300

Baxter Healthcare Corp.
I.V. Systems Division
Route 120 & Wilson Road
Round Lake IL 60073
Submission Date:
March 31, 2000

Review of a Waiver Request

The firm has requested a waiver of *in vivo* bioequivalence study requirements for its product Milrinone Lactate in dextrose 5% in PL 2408 plastic container, 20 mg base/100 mL. The reference listed drug is Primacor® in dextrose 5% in plastic container (20 mg base/100 mL) by Sanofi.

Milrinone Lactate injection is indicated for the short-term intravenous treatment of patients with acute decompensated heart failure.

Formulation: **NOT TO BE RELEASED UNDER FOI**

Ingredient	Test	Reference
Milrinone	0.2 mg/mL	0.2 mg/mL
Dextrose@	54.3 mg/mL (hydrous)	49.4 mg/mL (anhydrous)
Lactic acid	0.282 mg/mL	0.282 mg/mL
Lactic acid*	adjust pH	adjust pH
Sodium hydroxide	adjust pH	adjust pH
Water for injection	q.s.	q.s.

@ The firm lists dextrose hydrous in the composition table (page 17, 54) to be consistent with its other products. However, the firm has used 49.4 mg/mL dextrose anhydrous for the manufacture of this product (executed batch records: page 183, 200, 340 and 357, vol. 1.1).

* The pH is adjusted to between 3.2 and 4.0 with lactic acid or sodium hydroxide (PDR 2000).

Comments:

1. The test product is a solution intended solely for intravenous administration.
2. The inactive ingredients are qualitatively and quantitatively the same in test and reference products.
3. The reference product is supplied in flexible plastic container comprised of polyvinyl chloride with a foil overwrap. The test product is supplied in PL2408 plastic container. The Division of Chemistry will review the suitability of the test plastic container before final approval of the product.
4. The waiver may be granted.

Recommendations:

1. The Division of Bioequivalence agrees that the information submitted by Baxter Healthcare Corporation demonstrate that Milrinone Lactate in dextrose 5% in PL 2408 plastic container, 20 mg base/100 mL falls under 21 CFR 320.22 (b)(1) of the Bioavailability/Bioequivalence Regulations. The waiver of *in vivo* bioequivalence study requirements for Milrinone Lactate in dextrose 5% in 2408 plastic container, 20 mg base/100 mL is granted. From the bioequivalence point of view the Division of Bioequivalence deems the test product to be bioequivalent to Primacor® in dextrose 5% in plastic container, 20 mg base/100 mL by Sanofi.

2. The Division of Chemistry should review the suitability of the plastic container used by the firm before final approval of the product.

/S/

Kuldeep R. Dhariwal, Ph.D.
Review Branch II
Division of Bioequivalence

FD INITIALED S.NERURKAR
FT INITIALED S.NERURKAR /S/ Date 6/7/2000

Concur: /S/ Date 6/21/2000

Dale P. Conner, Pharm.D.
Director
Division of Bioequivalence