DEPARTMENT OF HEALTH & HUMAN SERVICES Public Health Service

Food and Drug Administration
Rockville MD 20857

NDA 17-766/S-028

B. Braun Medical Inc.
2525 Mc Gaw Avenue
P.O. Box 19791
Irvine, CA 92623-9791
Attention: John G. D'Angelo, M.S., R.Ph.
Corporate Vice President
Regulatory and Medical Affairs

Dear Mr. D'Angelo:

Please refer to your supplemental new drug application dated November 8, 2001, received November 13, 2001, submitted under section 505(b) of the Federal Food, Drug, and Cosmetic Act for NephrAmine® (essential amino acid injection).

This "Changes Being Effected in 30 days" supplemental new drug application provides for revised WARNINGS and PRECAUTIONS sections.

We have completed the review of this supplemental application and have concluded that adequate information has been presented to demonstrate that the drug product is safe and effective for use as recommended in the agreed upon labeling text and with the minor editorial revisions listed below. Accordingly, the supplemental application is approved effective on the date of this letter.

1. Revise the 4th paragraph of the WARNINGS Section as follows.

   Administration NephrAmine to children, especially in high dose ranges, may result in hyperammonemia. Administration of NephrAmine to **infants, particularly neonates and low birth weight infants,** may result in elevated plasma amino acid levels (e.g. hypermethionemia) and hyperammonemia. In these very young age groups, amino acid formulations developed specifically for nutritional support of infants and children should be considered.

2. Revise the 3rd paragraph of the "Special Precautions in Pediatric Patients" subsection of the PRECAUTIONS section as follows.

> For **infants, especially neonates and low birth weight infants,** amino acid formulations developed specifically for nutritional support of infants and children should be considered. If NephrAmine is administered to these very young patients, extra caution in frequent monitoring of plasma amino acid levels and serum ammonia is strongly recommended.

The final printed labeling (FPL) must be identical, and include the minor editorial revisions indicated, to the submitted draft labeling (package insert submitted November 8, 2001). These revisions are terms of the approval of this application.

Please submit the copies of final printed labeling (FPL) electronically according to the guidance for industry titled *Providing Regulatory Submissions in Electronic Format - NDA* (January 1999). Alternatively, you may submit 20 paper copies of the FPL as soon as it is available but no more than 30 days after it is printed. Please individually mount ten of the copies on heavy-weight paper or similar material. For administrative purposes, this submission should be designated "FPL for approved supplement NDA 17-766/S-028." Approval of this submission by FDA is not required before the labeling is used.

If a letter communicating important information about this drug product (i.e., a "Dear Health Care Professional" letter) is issued to physicians and others responsible for patient care, we request that you submit a copy of the letter to this NDA and a copy to the following address:

MEDWATCH, HF-2
FDA
5600 Fishers Lane
Rockville, MD 20857

We remind you that you must comply with the requirements for an approved NDA set forth under 21 CFR 314.80 and 314.81.

If you have any questions, call Victoria Kao, Regulatory Project Manager, at (301) 827-7416.

Sincerely,

{See appended electronic signature page}

Cynthia McCormick, M.D.
Director
Division of Anesthetic, Critical Care,
and Addiction Drug Products
Office of Drug Evaluation II
Center for Drug Evaluation and Research

This is a representation of an electronic record that was signed electronically and this page is the manifestation of the electronic signature.

/s/

Cynthia McCormick
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