DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Food and Drug Administration
Rockville, MD 20857

NDA 17-106/ S-032

Meridian Medical Technologies, Inc
Attention: Ellen Kay Losciuto
2550 Hermelin Drive
St. Louis, MO 63144-2591

Dear Ms. Losciuto:

Please refer to your supplemental new drug application dated May 17, 2004 and received on May 18, 2004; submitted under section 505(b) of the Federal Food, Drug, and Cosmetic Act for AtroPen® (atropine) Injection in an Auto-Injector.

We also acknowledge receipt of your amendments dated September 7, 13 and 16, 2004.

This supplemental new drug application provides for an additional lower strength AtroPen® Auto-Injector (0.25 mg) and revised labeling for use in infants.

We have completed our review of this application, as amended, and it is approved effective on the date of this letter for use as recommended in the agreed-upon attached labeling text. The immediate container and carton labels submitted September 13, 2004, are also found to be acceptable.

Please submit final printed labeling (FPL) that is identical to the agreed upon attached draft package insert and "Self-Aid and Caregiver Aid Directions for Use". The FPL can be submitted electronically according to the guidance for industry titled Providing Regulatory Submissions in Electronic Format – NDA. Alternatively, you may submit 20 paper copies of the FPL as soon as it is available, in no case more than 30 days after it is printed. Please individually mount 15 of the copies on heavy-weight paper or similar material. For administrative purposes, this submission should be designated "FPL for approved supplement NDA 17-106/S-032. Approval of this submission by FDA is not required before the labeling is used.

Carton/Container Label Color Scheme

We noted during our review your utilization of several color schemes in the packaging & labeling of the AtroPen® Auto-Injectors and are concerned that the use of both similar and/or dissimilar colors may lead to confusion. For example, three of the dosage forms use a "yellow" safety cap whereas the infant device utilizes a "gray" safety cap. However, the same infant device uses a "yellow" primary color scheme. Furthermore, we note that the "dark red" label for the 1 mg strength may appear very

close in color to the "blue" label used for the 0.5 mg strength, particularly in a dark or limited visibility environment.

We ask that you re-examine your use of color in your product packaging with these issues in mind and assure that your selected color schemes will not lead to confusion, particularly in an environment of a mass casualty event.

Post Marketing Commitment Fulfillment

We note that this supplemental application provided a complete response to the following postmarketing study commitment described in the Agency's approval letter dated June 19, 2003 (sent to NDA 17-106/S-028). We consider this commitment to be fulfilled.

> "We note your commitment to develop an additional, lower-strength, 0.25 mg auto-injector product for the treatment of organophosphorous insecticide and nerve agent poisoning in children 6 months of age and under. You have indicated that this auto-injector will be functionally identical to the EpiPen® Jr product that your firm currently manufactures and will deliver an intramuscular dose of 0.25 mg atropine in a volume of 0.3 mL. We also note your commitment to submit a supplemental application for this additional strength within 9 months of the date of this letter."

Post Marketing Commitment - CMC

We remind you of your additional postmarketing study commitments in your submission dated September 16, 2004. Please note that we consider the specifications included in your amendment dated September 13, 2004 and approved under this supplemental application to be interim specifications pending results from ongoing and planned stability studies with both "exhibition" and "commercial" batches and that the following commitments provide a framework for harmonization of specifications for your AtroPen products.

1. We note your commitment to (b)(4) with an (b)(4) for the Infant 0.25 mg AtroPen Auto-Injector. Data from the two 0.25 mg AtroPen exhibition batches, beginning at the 12 month time period, will be used to propose final specifications for this product. This information will be submitted to the FDA in a Prior Approval Supplement (PAS) by February, 2006.

   In addition, the first three commercial batches of the 0.25 mg AtroPen® Auto-Injector product will be placed in the cGMP stability program. One additional commercial batch will be placed in the stability program, each year, after the first three batches are put on stability. The harmonized methods will be used for stability testing of the 0.25 mg AtroPen® Auto-Injector before any shelf life (currently at two years) extension request is submitted to the FDA in a PAS.

2. We also note your commitment to submit by March, 2005, a developmental plan to the FDA regarding the use of the HPLC assay and development of new specifications for the 0.5 mg, 1 mg and 2 mg dose AtroPen® Auto-Injector products.

Submit chemistry, manufacturing, and controls protocols and all study final reports, as appropriate, to this NDA. In addition, under 21 CFR 314.81(b)(2)(vii) and 314.81(b)(2)(viii), you should include a status summary of each commitment in your annual report to this NDA. The status summary should include expected summary completion and final report submission dates, any changes in plans since the last annual report, and, for clinical studies, number of patients entered into each study. All

submissions, including supplements, relating to these postmarketing study commitments must be prominently labeled "**Postmarketing Study Protocol**", "**Postmarketing Study Final Report**", or "**Postmarketing Study Correspondence**."

Pediatric Research Equity Act (PREA)

All applications for new active ingredients, new dosage forms, new indications, new routes of administration, and new dosing regimens are required to contain an assessment of the safety and effectiveness of the product in pediatric patients unless this requirement is waived or deferred. We note that you have fulfilled the pediatric study requirement for this application.

In addition, submit three copies of the introductory promotional materials that you propose to use for these products. Submit all proposed materials in draft or mock-up form, not final print. Send one copy to the Division of Neuropharmacological Drug Products (HFD-120) and two copies of both the promotional materials and the package insert directly to:

Division of Drug Marketing, Advertising, and Communications, HFD-42
Food and Drug Administration
5600 Fishers Lane
Rockville, MD 20857

If you issue a letter communicating important information about this drug product (i.e., a "Dear Health Care Professional" letter), we request that you submit a copy of the letter to this NDA and a copy to the following address:

MEDWATCH, HFD-410
FDA
5600 Fishers Lane
Rockville, MD 20857

We remind you that you must comply with reporting requirements for an approved NDA (21 CFR 314.80 and 314.81).

If you have any questions, call Mr. Robbin Nighswander, MS, Supervisory Regulatory Health Project Manager, at (301) 594-2850.

Sincerely,

{See appended electronic signature page}

Russell Katz, M.D.
Division Director
Division of Neuropharmacological
Drug Products
Office of Drug Evaluation I
Center for Drug Evaluation and Research

Enclosures (2)

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

/s/

Russell Katz

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