DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Food and Drug Administration
Rockville, MD 20857

NDA 21-116

Lloyd Inc.
Attention: W.E. Lloyd, D.V.M., Ph.D.
Chief Executive Officer
P. O. Box 130
604 West Thomas Avenue
Shenandoah, Iowa 51601-0130

Dear Dr. Lloyd:

Please refer to your new drug application (NDA) dated August 19, 1999, received August 20, 1999, submitted pursuant to section 505(b)(2) of the Federal Food, Drug, and Cosmetic Act for Thyro-Tabs® (levothyroxine sodium tablets, USP) 25, 50, 75, 88, 100, 112, 125, 150, 175, 200, and 300 mcg strengths.

We acknowledge receipt of your submissions dated June 27, July 6 and 31, and August 11, 2000, April 17, May 17 and 23, June 8, July 24, October 5 and 30, and December 14, 2001, and April 22, May 27, September 5 and 25, and October 4, 14, 16, 21, and 22, 2002. We also refer to the telephone conversations between you and Ms. Enid Galliers of this Division on October 22 and 23, 2002, in which you agreed to the editorial changes described below to the labeling.

The April 22, 2002, submission constituted a complete response to the Agency's June 20, 2000, action letter.

This new drug application provides for the use of Thyro-Tabs (levothyroxine sodium tablets, USP) for hypothyroidism and suppression of thyroid-stimulating hormone.

We have completed our review of this application, as amended. It is approved, effective on the date of this letter, for use as recommended in the agreed upon labeling text (package insert enclosed) which includes the following agreed upon revisions:

To the package insert (PI) submitted October 14, 2002:

1. Move the "**R_x only**" statement from the last page (following the **STORAGE CONDITIONS** section) to the top of the package insert so it immediately follows the proprietary and established names and precedes the **DESCRIPTION** section.

2. Replace the current **STORAGE CONDITIONS** statement with "**Store at 25 °C (77°F) with excursions permitted to 15°-30°C (59°-86°F). Protect from moisture and light."**

3. In the **HOW SUPPLIED** section, delete the column titled (**b)----------(b)------**

4. Insert the title **"DESCRIPTION"** at the beginning of that section as in the package insert submitted on May 27, 2002.

To the Bottle and Shipper Labels (bottles of 100 and 1000; cartons of 12 bottles (100-ct and 1000-ct) submitted May 27, 2002:

5. Replace the(b)----------(b)---------- with "**R_x only.**"

6. On the side panel of the bottle and shipper labels, replace the phrase (b)----------(b)----------. . ." with the phrase " **Store at 25°C (77°F) with excursions permitted to 15°-30°C (59°-86°F), protect from moisture and light."**

Final printed labeling (FPL) must be identical, and include the revisions listed above, to the submitted labeling (text for the package insert submitted October 14, 2002, and bottle and shipper labels submitted May 27, 2002). These revisions are terms of the NDA approval. Marketing the product with FPL that is not identical to the approved labeling text may render the product misbranded and an unapproved drug.

Please submit an electronic version of the FPL according to the guidance for industry titled *Providing Regulatory Submissions in Electronic Format - NDAs*. 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. Individually mount ten of the copies on heavy-weight paper or similar material. For administrative purposes, designate this submission "FPL for approved NDA 21-116." Approval of this submission by FDA is not required before the labeling is used.

The Office Clinical Pharmacology and Biopharmaceutics has reviewed the data submitted on October 4, 2002, regarding your dissolution and tolerance specifications for Thyro-Tab tablets and has set the following specifications:

Apparatus Type	USP # 2 (paddles)
Media	0.01 N HCl containing 0.2% sodium lauryl sulfate
Volume	500 mL
Speed of Rotation	50 RPM
Tolerance Specifications	N(b)-------(Q) of the labeled amount of levothyroxine sodium is dissolved in 45 minutes.

In addition, we request that you submit four copies of the introductory promotional materials you propose to use for this product. Submit all proposed materials in draft or mock-up form, not final print. Send one copy to this Division 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

We have not completed validation of the regulatory methods. However, we expect your continued cooperation to resolve any problems that may be identified.

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 Steve McCort, Regulatory Project Manager, at (301) 827-6415.

Sincerely,

{See appended electronic signature page}

David G. Orloff, M.D.
Director
Division of Metabolic and Endocrine Drug
Products, HFD-510
Office of Drug Evaluation II
Center for Drug Evaluation and Research

ENCLOSURE

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

/s/

David Orloff

10/24/02 11:38:28 AM