

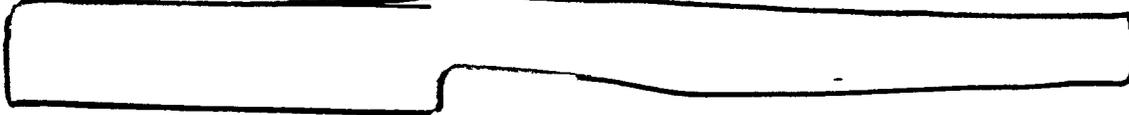
**CENTER FOR DRUG EVALUATION AND
RESEARCH**

APPLICATION NUMBER:

21-105

CHEMISTRY REVIEW(S)

SUPPORTING DOCUMENTS:



RELATED DOCUMENTS (if applicable):

NA

CONSULTS:

- 1. EER has been requested on June 29, 1999
- 2. Trade name assessment has been requested on 7/7/1999
- 3. Method validation has been requested on 7/7/1999.

REMARKS/COMMENTS: Zotrim is a combination product. It consists of sulfamethoxazole/trimethoprim (800mg/160mg respectively) and phenazopyridine 200mg. They are blister packaged for UTI Therapy. The drug product, sulfamethoxazole/trimethoprim has been marketed as generic drug product under the trade name, COTRIM. The drug, phenazopyridine (pyridium), sulfamethoxazole (gantanol) and trimethoprim (trimpex) are in use in the United States. The combination of sulfamethoxazole and phenazopyridine (Azo-Gantrisin) and combination of sulfamethoxazole and trimethoprim (bactrim, cotrim) are also marketed in the United States. The treatment regimen for sulfamethoxazole /trimethoprim will be BID for 10 days and for phenazopyridine, it will be TID for two days. The product will be used to treat urinary tract infection. This is a paper NDA with respect to clinical and pharmacological data.

CONCLUSIONS & RECOMMENDATIONS: The NDA is not approvable.

The firm should respond to the deficiencies mentioned under list of deficiencies.

/S/ 10/27/99

B. Vithal Shetty, Ph.D.
Review Chemist

cc: Orig. NDA #21-105
 HFD-520/Division File
 HFD-520/B.V. Shetty
 HFD-520/MO/*HAMILTON*
 HFD-520/Pharm/*Sathler*
 HFD-520/Micro/*Silver*
 HFD-520/CSO/*Duvall Miller*
 HFD-520/TL: Katague D. */S/11/16/99*
 R/D Init by: TL

APR 25 2000

DIVISION OF ANTI-INFECTIVE DRUG PRODUCTS
 Review of Chemistry, Manufacturing, and Controls

NDA #: 21-105 **CHEM.REVIEW #:** 2 **REVIEW DATE:** 3/15/00

<u>SUBMISSION/TYPE</u>	<u>DOCUMENT DATE</u>	<u>CDER DATE</u>	<u>ASSIGNED DATE</u>
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AMENDMENT	1/24/2000	1/27/2000	
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AMENDMENT/AC

NAME & ADDRESS OF APPLICANT: Able Laboratories Inc.
 6 Hollywood Court
 South Plainfield, N.J. 07080

DRUG PRODUCT NAME

Proprietary: ZOTRIM UTI Therapy
Nonproprietary/USAN: sulfamethoxazole 800mg,
 Trimethoprim 160mg
 ,phenazopyridine 200mg.
Chemical Type/3s
Therapeutic Class: Antibacterial

ANDA Suitability Petition/DESI/Patent Status:
 N/A [if applicable]

PHARMACOLOGICAL CATEGORY/INDICATION: UTI Therapy

DOSAGE FORM: tablets

STRENGTHS: TMP-SMZ: 160-800mg; phenazopyridine Hcl: 200mg

ROUTE OF ADMINISTRATION: oral

DISPENSED: _____ Rx X _____ OTC

CHEMICAL NAME, STRUCTURAL FORMULA, MOLECULAR FORMULA,
MOL. WT:

SUPPORTING DOCUMENTS:

[REDACTED]

RELATED DOCUMENTS (if applicable):

NA

CONSULTS:

1. EER has been requested on June 29, 1999
2. Trade name assessment has been requested on 7/7/1999
3. Method validation has been requested on 7/7/1999.

REMARKS/COMMENTS: The present review is the REVIEW #2. In reply to FDA letter of November 17, 1999 regarding CMC deficiencies, the firm has submitted the following information:

1. With regard to question #1, which requests flow chart and characterization of sulfamethoxazole, the firm refers to their approved [REDACTED]. The firm states that all the relevant information for the Trimethoprim and sulfamethoxazole drug substances as well as for the Sulfamethoxazole/Trimethoprim DS tablets, USP drug product are referred to ANDA and DMF. The firm has submitted a letter of authorization dated October 8, 1998 to refer to their [REDACTED]

Adequate

2. With regard to question #2, which requests method of preparation and specification for sulfamethoxazole reference standard, the firm states that they will use USP or in-house reference standard. For USP reference standard, potency is taken as being 100% unless specified otherwise, USP 24<11>, "Reference Standards". The potency for in-house reference standard shall be within [REDACTED]. The potency factor will be used in the respective test calculations.

Adequate

3. With regard to question #3 which requests impurity profile for sulfamethoxazole, the firm refers to [REDACTED]. The firm has also submitted a letter of authorization dated October 8, 1998 to refer to their [REDACTED]

Adequate

4. With regard to question #4, which requests in-process tests for the manufacture of Sulfamethoxazole/Trimethoprim DS tablets. The firm refers to [redacted]. The tablets are manufactured by Teva. The firm has submitted a letter of authorization dated October 8, 1998 to refer to their [redacted].

Adequate

5. With regard to question #5, which requests specifications and test methods for [redacted], the firm refers to their approved [redacted]. The firm states that detailed manufacturing information including weight composition of active and ingredients per tablet are given in the approved ANDA.

Adequate

6. With regard to question #6 which requests a statement as to whether a reprocessing of Sulfamethoxazole/Trimethoprim tablets are carried out, the firm states that no re-processed batch will be used.

Adequate

CONCLUSIONS & RECOMMENDATIONS: The NDA is APPROVABLE.
In summary, 1. Method Validation has been approved as per a letter dated November 29, 1999 from the Director, Science Branch, SIN -DO, HFR-SE560 which states that the methods can be used for quality control and regulatory purposes.
2. Inspection of Manufacturing and Control Facilities. A letter dated February 2, 2000 from Mr. Bruce W. Hartman of Compliance Branch, HFD-324 recommends approval.
3. Chemistry, Manufacturing and Control recommends approval.

only

/S/ 3/15/02

B. Vithal Shetty, Ph.D.
Review Chemist

cc: Orig. NDA #21-105
HFD-520/Division File
HFD-520/B.V. Shetty