

**CENTER FOR DRUG EVALUATION AND
RESEARCH**

APPLICATION NUMBER:

22-468

**RISK ASSESSMENT and RISK MITIGATION
REVIEW(S)**



**Department of Health and Human Services
Public Health Service
Food and Drug Administration
Center for Drug Evaluation and Research
Office of Surveillance and Epidemiology**

Date: September 17, 2009

To: Robert Justice, MD, Director
Division of Drug Oncology Products

Through: Kellie Taylor, PharmD, MPH, Team Leader
Carol Holquist, RPh, Director
Division of Medication Error Prevention and Analysis (DMEPA)

From: Zachary Oleszczuk, PharmD, Safety Evaluator
Division of Medication Error Prevention and Analysis (DMEPA)

Subject: Label and Labeling Review

Drug Name(s): Folutyn (Pralatrexate Injection) 20 mg/mL

Application Type/Number: NDA 022468

Applicant/sponsor: Allos Therapeutics, INC.

OSE RCM #: 2009-1623

1 INTRODUCTION

This review was written in response to a request from the Division of Drug Oncology Products (DDOP) to evaluate the container labels, carton and insert labeling for the product Folutyn (NDA 022468), for areas that could lead to medication errors.

2 METHODS AND MATERIALS

The Division of Medication Error Prevention and Analysis used Failure Mode and Effects Analysis (FMEA)¹ in our evaluation of the Folutyn container labels and carton labeling received September 4, 2009 (see Appendices A and B). Additionally, DMEPA evaluated the package insert labeling received August 28, 2009 (no image).

3 RECOMMENDATIONS

Our evaluation of the proposed container labels and insert labeling noted areas of needed improvement in order to minimize the potential for medication errors. We request the following recommendations be communicated to the Applicant prior to approval. We would be willing to meet with the Division for further discussion, if needed. Please copy the Division of Medication Error Prevention and Analysis on any communication to the Applicant with regard to this review. If you have further questions or need clarifications, please contact Sandra Griffiths, project manager, at 301-796-2445.

3.1 COMMENTS TO THE APPLICANT

A. General Comments

The Applicant presents the concentration of the 20 mg strength "20 mg/1 mL". However, the United States Pharmacopeia 30/National Formulary 25 (USP 30/NF 25) recommends that "1 mL" not be used when expressing strength per single milliliter. Strength per single milliliter should be expressed as mg/mL not as mg/1 mL.

Additionally, the highlighted strength on the container label and carton labeling is duplicative since the correct expression of strength (20 mg/mL) appears directly below the highlighted strength. Thus, DMEPA recommends to present all instances of the 20 mg strength as "20 mg/mL" on the container labels, carton and insert labeling and remove the duplicative strength from the carton labels and container labels.

B. Carton Labeling

1. Revise the abbreviation 'IV' to state 'intravenous'. We note that the abbreviation 'IV' has been misinterpreted as 'IU' or the number '10'. As part of a national campaign to prevent the use of dangerous abbreviations in 2006, FDA agreed not to approve such abbreviations in labels and labeling.

¹ Institute for Healthcare Improvement (IHI). Failure Modes and Effects Analysis. Boston. IHI:2004.

2. Revise the symbol '≥' to state 'at least' . We note that the greater than and less than signs have been confused for one another². As part of a national campaign to prevent the use of dangerous abbreviations in 2006, FDA agreed not to approve such abbreviations in labels and labeling.
3. Decrease the size of the graphic located directly above the proprietary name on the principal display panel. The proprietary and established name should be the most prominent information on the label and labeling (see CFR 201.15(a)(6)). The graphic detracts for the proprietary and established name as presented.

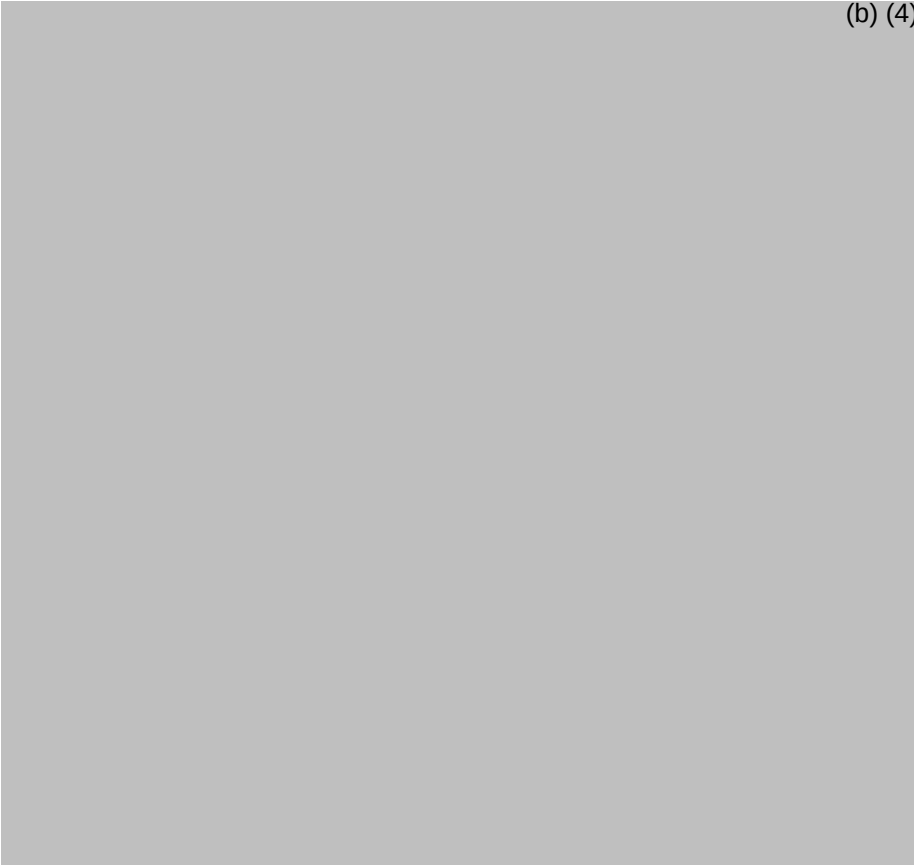
Appendix A: Container Labels 20 mg/mL and 40 mg/2 mL (at 400% magnification)



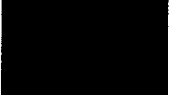
² IMSP's List of Error-Prone Abbreviations, Symbols and Dose Designations, <http://www.ismp.org/Tools/errorproneabbreviations.pdf>, cited November 3, 2008.

Appendix B: Carton Labeling 20 mg/mL and 40 mg/2 mL

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/s/

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