

Commentary

September Accelerated Revision Posting

September 27, 2024

In accordance with USP's *Rules and Procedures of the Council of Experts ("Rules*"), and except as provided in Section 9.02 *Accelerated Revision Processes*, USP publishes proposed revisions to the *United States Pharmacopeia and the National Formulary (USP–NF)* for public review and comment in the *Pharmacopeial Forum (PF)*, USP's free bimonthly journal for public notice and comment. After comments are considered and incorporated as the Expert Committee (EC) deems appropriate, the proposal may advance to official status or be republished in *PF* for further notice and comment, in accordance with the Rules. In cases when proposals advance to official status, a summary of comments received and the appropriate Expert Committee's responses, as well as Expert Committee-initiated changes, are published in the Proposal Status/Commentary section of USPNF.com at the time the official revision is published.

The *Commentary* is not part of the official text and is not intended to be enforceable by regulatory authorities. Rather, it explains the basis of Expert Committees' responses to public comments on proposed revisions. If there is a difference or conflict between the contents of the *Commentary* and the official text, the official text prevails.

For further information, contact: USP Executive Secretariat United States Pharmacopeia 12601 Twinbrook Parkway Rockville, MD 20852-1790 USA **Monograph/Section:** Fexofenadine Hydrochloride and Pseudoephedrine Hydrochloride Extended-Release Tablets/Multiple sections **Expert Committee:** Small Molecules 5 **No. of Commenters:** 2

Comment Summary #1: The commenter recommended widening the resolution requirement between pseudoephedrine and ephedrone (methcathinone) in *Organic Impurities, Procedure 1* from NLT 1.7 to NLT 1.5 to align with the resolution requirement of NLT 1.5 between pseudoephedrine and ephedrone (methcathinone) in *Assay, Procedure 1*. Both methods use the same chromatographic system.

Response: Comment incorporated. The resolution requirement between pseudoephedrine and ephedrone (methcathinone) in *Organic Impurities, Procedure 1* was revised from NLT 1.7 to NLT 1.5 to align with the resolution requirement between pseudoephedrine and ephedrone (methcathinone) in *Assay, Procedure 1*.

Comment Summary #2: The commenter indicated that in *Assay Procedure 1* and in *Organic Impurities Procedure 1* a high baseline noise was observed due to the difference in buffer (acetate buffer pH 4.6) UV cut off (240nm) and detection wavelength (215nm) making quantitation of peaks of interest difficult.

Response: Comment not incorporated. Future revisions may be considered upon the receipt of supporting data.

Comment Summary #3: The commentor observed that the methods in *Assay Procedure 1*, in *Assay Procedure 2*, and in *Organic Impurities Procedure 1* are not specific for DMF listed impurities of pseudoephedrine hydrochloride as all pseudoephedrine impurities (norephedrine hydrochloride, norpseudoephedrine hydrochloride, 1-ephedrine hydrochloride, d-ephedrine hydrochloride, l-pseudoephedrine base) eluted at same retention time of the pseudoephedrine peak.

Response: Comment not incorporated. Future revisions may be considered upon the receipt of supporting data.

Comment Summary #4: In *Assay Procedure 2* the commenter observed a low response of the pseudoephedrine peak due to differences in wavelength maxima, wavelength maximum for pseudoephedrine is 205 nm and the detection wavelength is 220 nm. The low response of the pseudoephedrine peak at 220 nm makes quantitation of the pseudoephedrine peak difficult. **Response:** Comment not incorporated. Future revisions may be considered upon the receipt of supporting data.

Comment Summary #5: In *Organic Impurities Procedure 2* the commenter recommended that that tertiary dehydrated impurity (fexofenadine olefin) be excluded from the fexofenadine related impurity profile.

Response: Comment not incorporated. Future revisions may be considered upon the receipt of supporting data.

Comment Summary #6: In *Organic Impurities Procedure 3* the commenter indicated that pseudoephedrine, desmethyl fexofenadine (EP Impurity F) and ephedrine, (pseudoephedrine DMF listed impurity) are observed at same retention time.

Response: Comment not incorporated. Future revisions may be considered upon the receipt of supporting data.

Comment Summary #7: In *Organic Impurities Procedure 4* the commenter indicated that benzaldehyde, benzoic acid, and ephedrone (methcathinone) are not part of a pseudoephedrine hydrochloride DMF.

Response: Comment not incorporated. Future revisions may be considered upon the receipt of supporting data.