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# Guidance for Industry ANDAs: Stability Testing of Drug Substances and Products

**U.S. Department of Health and Human Services  
Food and Drug Administration  
Center for Drug Evaluation and Research (CDER)**

**June 2013  
Generics**

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# Guidance for Industry ANDAs: Stability Testing of Drug Substances and Products

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# Guidance for Industry<sup>1</sup>

## ANDAs: Stability Testing of Drug Substances and Products

This guidance represents the Food and Drug Administration's (FDA's) current thinking on this topic. It does not create or confer any rights for or on any person and does not operate to bind FDA or the public. You can use an alternative approach if the approach satisfies the requirements of the applicable statutes and regulations. If you want to discuss an alternative approach, contact the FDA staff responsible for implementing this guidance. If you cannot identify the appropriate FDA staff, call the appropriate number listed on the title page of this guidance.

### I. INTRODUCTION

This guidance recommends that abbreviated new drug applications (ANDAs) submitted under section 505(j) of the Federal Food, Drug and Cosmetic Act, and the drug master files (DMFs) that support ANDAs, follow the stability recommendations provided in the International Conference on Harmonisation (ICH) stability guidances.

FDA's guidance documents, including this guidance, do not establish legally enforceable responsibilities. Instead, guidances describe the Agency's current thinking on a topic and should be viewed only as recommendations, unless specific regulatory or statutory requirements are cited. The use of the word *should* in Agency guidances means that something is suggested or recommended, but not required.

### II. BACKGROUND

Over the past few years, the Office of Generic Drugs (OGD) has received numerous inquiries about what stability data FDA expects in ANDA submissions. Currently, the only published direction from OGD is contained in a 1995 letter to industry which states that OGD will accept ICH recommended long-term room temperature conditions for stability studies (i.e., 25±2°C, 60±5% RH). Although adequate in the context of other guidance existing at that time, this recommendation is no longer sufficient to serve as a basis for stability testing for ANDAs.

The following existing ICH guidances address stability for new drug substances and products:

1. Q1A (R2) Stability Testing of New Drug Substances and Products.
2. Q1B Photostability Testing of New Drug Substances and Products.
3. Q1C Stability Testing for New Dosage Forms.

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<sup>1</sup> This guidance has been prepared by the Office of Generic Drugs, Office of Pharmaceutical Science in the Center for Drug Evaluation and Research (CDER) at the Food and Drug Administration.

4. Q1D Bracketing and Matrixing Designs for Stability Testing of New Drug Substances and Products.
5. Q1E Evaluation of Stability Data.<sup>2</sup>

In the discussion that follows, these guidances are referred to as ICH stability guidances.

### **III. DISCUSSION**

Although the ICH stability guidances were developed by ICH to provide guidance on the information that should be provided in new drug applications to ensure the stability of new drug substances and drug products, we believe the recommendations also should be applied to ANDAs.

When following the ICH stability recommendations, you, the applicant, should:

1. Submit data from three pilot scale batches **or** two pilot scale batches and one small scale batch. If the size of the pilot scale batch does not follow ICH recommendations, the applicant should provide a justification.
2. At the time of submission, provide 6 months of data that include accelerated and long-term conditions. FDA recommends following ICH guidelines with respect to utilization of intermediate conditions to support shelf-life.
3. Use multiple lots of drug substance as appropriate.
4. Manufacture and package the drug product using principles that are representative of the commercial process.
5. Provide a fully packaged primary batch.
6. Use drug product from all three primary batches when using bracketing and matrixing designs under ICH Q1D.
7. Provide statistical analysis of the data as appropriate, in accordance with ICH Q1E, Appendix A.

If you choose not to follow the above recommendations, you should provide FDA with a justification for the approach you intend to follow in your ANDA submissions to ensure stability.

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<sup>2</sup> We update guidances periodically. To make sure you have the most recent version of these guidances, check the FDA Drugs guidance Web page at <http://www.fda.gov/Drugs/GuidanceComplianceRegulatoryInformation/Guidances/default.htm>.