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# Guidance for Industry

## Bioequivalence

### Recommendations for

### Specific Products

#### ***DRAFT GUIDANCE***

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For questions regarding this draft document contact (CDER) Doan T. Nguyen, 301-827-0495.

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

**May 2007  
OGD**

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### Specific Products

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*See the CDER guidance page at <http://www.fda.gov/cder/guidance/index.htm>.*

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

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*Contains Nonbinding Recommendations*

*Draft — Not for Implementation*

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

## Bioequivalence Recommendations for Specific Products

This draft guidance, once finalized, will represent the Food and Drug Administration's (FDA's) current thinking on this topic.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 Office of Generic Drugs.

### I. INTRODUCTION

This guidance describes FDA's process for making available to the public FDA guidance on how to design bioequivalence (BE) studies for specific drug products to support abbreviated new drug applications (ANDAs). Under this process, applicants planning to carry out such studies in support of their ANDAs will be able to access BE study guidance on the FDA Web site, rather than having to request this information from the Agency and wait for the Agency to respond, as has been the case in the past. The FDA believes that making this information available on the Internet will streamline the guidance process, making it more efficient than the previous process. This process also will provide a meaningful opportunity for the public to consider and comment on BE study recommendations for specific drug products.

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

#### A. What Are BE Studies?

To receive approval for an ANDA, an applicant generally must demonstrate, among other things, that its product has the same active ingredient, dosage form, strength, route of administration and conditions of use as the listed drug, and that the proposed drug product is bioequivalent to the reference listed drug (21 U.S.C. 355(j)(2)(A); 21 CFR 314.94(a)). Bioequivalent drug products show no significant difference in the rate and extent of absorption of the therapeutic ingredient (21 U.S.C. 355(j)(8); 21 CFR 320.1(e)). BE studies are undertaken in support of ANDA submissions

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

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43 with the goal of demonstrating BE between a proposed generic drug product and its reference listed  
44 drug. The regulations governing BE are provided at 21 CFR in part 320.

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### **B. How Did the Agency Make This Information Available in the Past?**

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48 Previously, the Office of Generic Drugs (OGD) provided guidance on how to design BE studies for  
49 specific products only when asked for assistance by interested parties. We had determined that  
50 making recommendations to interested parties about how to design BE studies would help the  
51 generic drug industry, the innovator drug industry, contract research organizations, academia, and  
52 others understand the Agency's expectations with regard to demonstrating bioequivalence. In most  
53 cases, the requested information was not available anywhere else, and, in some cases, OGD  
54 performed its own research before responding to an interested party's request for product-specific  
55 information. In many cases, OGD responded to individual requests for information on BE studies in  
56 letter format after specific recommendations were prepared within the Center for Drug Evaluation  
57 and Research (CDER). This meant that information about BE studies was only being provided to  
58 those specifically requesting such information. In addition, the staff developing the  
59 recommendations and responding to requests for information have been the same individuals who  
60 are responsible for reviewing the BE data in ANDAs. With the increase in the number of ANDA  
61 submissions and in the requests for BE information during the last few years, the process of  
62 providing BE recommendations has become extremely time consuming for the Agency.

63

64 In 2000, to help address this growing problem, FDA issued the guidance *Bioavailability and*  
65 *Bioequivalence Studies for Orally Administered Drug Products – General Considerations*, which  
66 describes general recommendations for demonstrating bioequivalence. These general  
67 recommendations were helpful, but many parties have continued to seek assistance from the Agency  
68 in designing their product-specific BE studies, as certain drug products may raise BE issues not  
69 squarely addressed in more general guidance. As a result, after exploring various mechanisms that  
70 would allow us to conserve our resources while responding to the needs of industry and other  
71 interested persons, OGD has developed a new approach to making guidance available on product-  
72 specific BE studies. As before, BE recommendations will be developed by the agency based on its  
73 understanding of the characteristics of the listed drug, information derived from published literature,  
74 agency research, and consultations within different offices in CDER as needed based upon the  
75 novelty or complexity of the BE considerations. Once developed, BE recommendations for specific  
76 drug products will be made available through the process described here.

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### **III. PROCEDURES FOR MAKING RECOMMENDATIONS AVAILABLE**

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81 To streamline the process for making guidance available to the public on how to design product-  
82 specific BE studies, the Agency intends to use the following process:

83 • Product-specific BE recommendations will be developed and posted on the Internet on the  
84 CDER guidance page in draft to facilitate public comment.

85 • The recommendations can be viewed by clicking on the URL associated with this guidance  
86 on the CDER guidance page or on the Office of Generic Drugs Page (see

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87 [www.fda.gov/cder/ogd/index.htm](http://www.fda.gov/cder/ogd/index.htm)). Users can also search for a specific product BE  
88 recommendation using the search tool on the guidance page.

- 89 • Newly posted draft and final BE recommendations will be announced in the  
90 New/Revised/Withdrawn list, which is posted monthly on the CDER guidance page.
- 91 • The Agency will issue a notice in the *Federal Register* (FR) announcing the availability on  
92 the FDA Web site of new product-specific draft and final BE recommendations. The notice  
93 will identify a comment period for the recommendations.
- 94 • Comments on product-specific BE recommendations will be considered in developing final  
95 BE recommendations.
- 96 • The BE recommendations will be revised as appropriate to ensure that the most up-to-date  
97 BE information is available to the public.