

**From:** [OC GCP Questions](#)  
**To:** [redacted]  
**Subject:** Quantity of Reserve Sample required  
**Date:** Friday, August 01, 2014 2:59:49 PM  
**Attachments:** [CFR-2011-title21-vol5-sec320-38.pdf](#)

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Good morning –

Below is what the Center for Drugs (CDER) has said in the past with regard to reserve samples. If the below information does not adequately answered your question, please contact CDER directly at [druginfo@fda.hhs.gov](mailto:druginfo@fda.hhs.gov). Additionally you will need to contact CDER to discuss the required quantity of reserve samples.

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Please see the guidance document and Final rule on handling reserve samples.

<http://www.fda.gov/downloads/RegulatoryInformation/Guidances/UCM126836.pdf>

Additionally reserve samples are mentioned in FDA regulations under 21 CFR 320.38 and 320.63.

The applicant of an abbreviated application or a supplemental application submitted under section 505 of the Federal Food, Drug, and Cosmetic Act, or, if bioequivalence testing was performed under contract, the contract research organization shall retain reserve samples of any test article and reference standard used in conducting an in vivo or in vitro bioequivalence study required for approval of the abbreviated application or supplemental application. The applicant or contract research organization shall retain the reserve samples in accordance with, and for the period specified in, 320.38 and shall release the reserve samples to FDA upon request in accordance with 320.38.

This requirement applies to BE and BA studies submitted to the US FDA, regardless of where the studies are conducted. Clinical sites should not return reserve samples to the sponsor, as this invalidates the integrity of the reserve samples. It is acceptable for testing sites to store the reserve samples at an independent third party, not involved in the study, packaging, or manufacturing of the tested product. If the clinical portion of the study is conducted at the sponsor's own facility, the reserves should be stored in a place with access limited to certain personnel, and separately from other drug products and manufacturing reserves, or else at an independent party. Again for bioequivalence and bioavailability studies, reserve samples must be retained at the study site, or an independent third party. If these are returned to the sponsor or packager, they are considered compromised, and data from the study will likely be rejected.

I hope this information is helpful. Please contact us again at [gcp.questions@fda.hhs.gov](mailto:gcp.questions@fda.hhs.gov) should you have additional questions.

Kind regards,

Doreen M. Kezer, MSN

Senior Health Policy Analyst

Office of Good Clinical Practice

Office of the Commissioner, FDA

This communication does not constitute a written advisory opinion under 21 CFR 10.85, but rather is an informal communication under 21 CFR 10.85(k) which represents the best judgment of the employee providing it. This information does not necessarily represent the formal position of FDA, and does not bind or otherwise obligate or commit the agency to the views expressed.

**From:** [redacted]  
**Sent:** Friday, August 01, 2014 1:50 PM  
**To:** OC GCP Questions  
**Subject:** RE: Quantity of Reserve Sample required

Hello Doreen,

Thank you for your response. I sent this email on reserve sample requirement for a bio-clinical study as I thought this would relate to general clinical practice as this is about the reserve samples that need to be maintained at the clinical sites. Could you please clarify further?

Regards

[redacted]

**From:** OC GCP Questions [<mailto:gcp.questions@fda.hhs.gov>]  
**Sent:** August-01-14 8:15 AM  
**To:** [redacted]  
**Subject:** Quantity of Reserve Sample required

Good morning --

This is a general good clinical practice mailbox. You will need to send your question to the Center for Drugs (CDER) at [druginfo@fda.hhs.gov](mailto:druginfo@fda.hhs.gov).

Kind regards,

Doreen M. Kezer, MSN

Senior Health Policy Analyst

Office of Good Clinical Practice

Office of the Commissioner, FDA

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**From:** [redacted]

**Sent:** Friday, August 01, 2014 12:35 AM

**To:** OC GCP Questions

**Subject:** Quantity of Reserve Sample required

Dear FDA,

We are aware of the requirement of sufficient quantity of reserve sample to perform five times release testing as indicated in the Retention of Bioavailability and Bioequivalence Testing Samples. We also understand that for inhaled products such as the nasal sprays and aerosols, FDA's guidance indicates that the lesser of 50 units or 5 times release CofA is sufficient for reserve samples, and we understand that this would also be applicable for orally inhaled products (either metered dose inhalers and dry powder inhalers) for a pharmacokinetic study (single centre).

For a multi-centre comparative clinical endpoint study between a generic and a reference product for a dry powder inhaler, what is the required quantity of reserve sample? And would the requirement be per study site or can the required quantity of reserve sample be retained at the CRO?

Regards

[redacted]