should be conducted for the duration of the desired bulk holding time. Typically, this should be not more than 6 months from the date of its quality-control release if this date does not exceed 1 month beyond the date that the API was first used in the manufacturing process. For a holding time of 6 months, testing time points of 0, 3, and 6 months would be adequate unless dictated otherwise by data. For each product strength, the bulk holding time should be established. The established bulk holding time of one strength would not be transferable to the other strengths of a product line without supportive stability data for these strengths. If the bulk holding time is not established concomitantly with the development of the stability profile of the ANDA batch, it will be necessary to establish the bulk holding time post-ANDA approval. This may create some bottlenecks during prospective validation studies in preparation for a product's launch into the market. Generally, if a bulk holding time of not more than 3 months is desired, stability testing beyond the initial quality release testing is not necessary to accept this time frame routinely as a packaging deadline for solid oral dosage forms.

Bracketing

The CDER has accepted the ICH recommendations on bracketing designs for stability studies, which are available in published guidances [5,22]. In a bracketing design, at any time point for example, only the samples on the extremes of container sizes, fill quantities, and/or dosage strengths are tested. The design assumes that the stability of the samples corresponding to the intermediate conditions is represented by the stability data at the extremes. The guidances that provide extensive details on the principles of various bracketing designs should be studied before the development of a design for a particular product. The general concepts described in the guidances are equally applicable to both new and generic drugs and will be summarized for solid oral dosage forms.

A bracketing design can be used for most types of drug products, including IR and MR solid oral dosage forms where the drug is available in multiple sizes or strengths. For a range of container sizes/fill quantities for a drug product of the same strength, a bracketing design may be applicable if the material and composition of the container and inner seal of the closure are the same throughout the range. Where either the container size or fill quantity varies, whereas the other factors remain the same, the bracketing design may be applicable without justification. Where both container size and fill quantity vary, a bracketing design is applicable if appropriate justification is provided. Such justification should demonstrate that the various aspects (e.g., surface area/volume ratio, dead space/volume ratio, container wall thickness, and closure geometry) of the intermediate sizes will be adequately bracketed by the extremes selected.

For a range of dosage strengths for a drug product in the same container/closure system with identical material and identical size, a bracketing design may be applicable if the formulation is identical or very closely related with respect to the components/composition. Examples of the former include tablet weights from a common blend made with different compression forces or capsule weights made by filling a common blend into different-size capsule shells. A very closely related formulation