

## **ADDITIONAL VALIDATION AND REVALIDATION OF THE TEST METHOD**

Additional method validation and revalidation of the test method may be needed when there are regulatory changes and when the expectation for the method performance characteristics is higher. Sometimes, an alternative raw material supplier is chosen and a different impurity profile is expected due to a different synthetic manufacturing route for the API. When an old analysis technique is replaced by new techniques, method validation will be required again. The last possibility is that the validated procedure requires modification due to a discovered defect and the modified method must be revalidated, properly documented, and finally submitted as a supplemental amendment to the ANDA application.

## **SUMMARY AND CONCLUSIONS**

Development of accurate and reliable analytical methods is an important element of pharmaceutical development. Good analytical methods support correct decisions being made from data for formulation development and stability studies. All analytical methods must be validated before they are used to generate data that will support a regulatory decision.

Analytical development can proceed efficiently if a thorough literature search is made of the available information on the API and drug product, including related compounds. A good source of information is the portion of the DMF that the API manufacturer is willing to share with its customers. When compendia method(s) is not available, then it is a good idea to work closely with the laboratory personnel from the API manufacturer in developing methods for the API and identify unknown impurities in the API.

Analytical development and validation must follow a timeline keyed to the other activities in developing a drug product. Analytical methods will usually be needed to support other plant activities such as cleaning validation or packaging development. The analytical method should be evaluated for robustness and reliability before committing the time and effort to validate a method.

A validated method can still be updated for special situations encountered during the method application. Such update may or may not involve an addendum or supplement to the method validation. This is usually part of the life cycle of the test method application.

The validation report is necessary for documenting the capability of the test method. All data that support the validation must be clearly identified and audited. These data will be scrutinized by the regulatory agency granting a drug product approval in a preapproval inspection.

## **REFERENCES**

1. U.S. Food and Drug Administration, Title 21 CFR 314.94, Office of Federal Register, National Archives and Records Administration, 2003.
2. U.S. Food and Drug Administration, Center for Drug Evaluation and Research. Guidance for Industry: Dissolution Testing of Immediate Release Solid Oral Dosage Forms, Office of Training and Communications, Division of Communications and Management, Drug Information Branch, HFD 210, 5600 Fishers Lane, Rockville, MD 20857, August 1997.