A Rational Approach to Qualifying a Contract GMP Testing Laboratory

Every pharmaceutical and biotech company will have to work with a contract testing laboratory sooner or later. Small organizations do so because they do not have the size, or often, in-house technical experience to perform the work themselves. Large organizations do so because it is too difficult for them to increase their staff just to accommodate short term increases in workload. Regardless of the reason for working with a contract lab every sponsor will have to go through the process of finding a contract facility and qualifying it prior to initiating testing.

Most organizations require a GMP compliance audit to be performed prior to initiating testing. This audit is intended to ensure that the laboratory has the appropriate systems and procedures in place and is capable of performing acceptable GMP-compliant testing. Some organizations combine the GMP compliance audit with a technical assessment. The technical assessment involves individuals from the sponsor who are knowledgeable about the proposed test activity. They visit the laboratory to ensure, from a technical point of view, that besides having systems and procedures in place that the facility has adequate personnel and equipment to perform testing and are knowledgeable about the proposed activity.

The Problem – Not Enough to Evaluate

The problem with this approach is that neither the compliance assessment nor the technical assessment performed in this manner actually performs the function intended: to ensure that the contract laboratory will perform the testing in an acceptable technical and compliant manner. The reason for this is that the technical and compliance assessment are not evaluating anything more then general systems and the appearance of technical competency. Worse, no evaluation is made of how well the contract laboratory follows its own systems and procedures in practice or how well it performs on the sponsor's specific samples.

The Solution – A Rational Approach

The way for a sponsor to avoid this problem is to take a rational approach to qualifying a contract GMP testing laboratory. Regardless of how a specific laboratory has been chosen, the sponsor should do everything possible to ensure that the actual testing has the greatest chance of being performed in a compliant and technically correct manner. One way of increasing the chances for this is to provide an opportunity for a more substantive compliance and technical assessment during the qualification process.

Test Samples

The success of this approach depends upon submitting actual samples to the contract laboratory, having them perform testing, and using those samples as the basis of the compliance audit and technical assessment. These samples are "test samples" in that while they are genuine samples upon which testing can be performed, they are not samples that the sponsor has to file or disclose the results of for any purpose. Test samples can be generated from generic materials or drug product, manufacturer sample lots, or previously failed or disqualified batches of raw material or finished product (as

long as they didn't fail for the test being contemplated). There is a way to prepare or procure test samples for any type of outsourced GMP testing: raw material, API, finished product, or stability. Even in the case where the sponsor may be considering transferring to or having the contract lab develop a unique form of test, a surrogate process/samples can be used for evaluation. An example of this is if the sponsor is considering developing a unique release rate test for their product. The sponsor cannot send test samples for a procedure that does not yet exist. In this case they can ask the laboratory to perform a more generic form of release rate testing and use this as the basis of the compliance audit and technical assessment.

Assessment

Once the sponsor has the results for the test samples they can use them as the basis of the compliance and technical assessment, which were probably planned anyway. When the compliance audit is performed the laboratory can be evaluated not just for systems and procedures in place, but for how well they were followed. Items such as sample receipt and documentation, equipment qualification, individual training, client communication, out of specification result investigations, and raw data documentation may all be directly evaluated. When the technical assessment is performed the laboratory can be evaluated not just for the appearance of expertise, but for their actual application of expertise in sample testing. Items such as how well and timely they communicate issues to the client, how well they execute and report test results, how accurately they comply with sponsor-specific directions or deviations to their procedures can all be directly evaluated.

Follow Up

In a perfect world if the contract lab does not perform well on the test samples, either from a compliance or technical perspective, the sponsor can decide not to work with them and look for another service provider. In a practical sense so much time and resources have already been invested that "walking away" is rarely an option. It is important to recognize the reasons why the laboratory may not have performed well and if finding another lab is not an option, working with them to improve in these areas prior to initiating activities. It is better to know about and be able to deal with problems before activities begin!

Other Issues

The sponsor's responsibility does not end once a laboratory is qualified and the work begins. The sponsor must exercise diligence by reviewing and approving all results reported by the laboratory and at least periodically auditing and inspecting data packages provided by the laboratory for that purpose. The frequency of this data validation should be in direct proportion to the criticality of the work for a future filing. Besides reviewing all results and periodically reviewing data, the sponsor should have a pre-defined interval for requalification, whether that is for something as simple as a survey or as involved as a compliance and technical re-assessment.