



# Ensure Data Integrity in Your Analytical Lab

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**OpenLab**

Use this checklist to make sure that your lab is doing everything it can to stay compliant and maintain data integrity.

## Preventive controls

- Create and adopt strong **quality agreements** with all contract manufacturing organizations (CMOs).
- Use **data and business flow diagrams** to help identify security vulnerabilities.
- Develop clear SOPs** and keep them up to date.
- Train all users** in your data review procedures—including all SOPs.
- Have **controlled systems in place for validating changes** in laboratory operations. This includes changes to application configuration and functionality, as well as system updates and patches.
- Involve QA** in your overall process.
- When **validating system configuration**, always validate changes against predefined configurations, as well as functional and user specifications.
- Keep method development** consistent with ICH and FDA guidelines. Methods developed by sponsor companies should be transferred to the CMO and the CMO must revalidate before QA/QC production begins.
- Make sure that **analytical records are complete**, and all tests and results summaries are validated.

- Create a **controlled sample tracking mechanism** to ensure that samples are tested and tracked through completion.
- Document and thoroughly investigate** unexpected discrepancies.
- Be sure that results summaries are **traceable** to the raw data.
- Adhere to **out-of-specification (OOS) procedures**, including timely completion of the investigation.
- Retain raw data** (such as chromatograms) throughout its life cycle, and have controls in place to prevent deletion and overriding of raw data.
- Maintain a strong **stability testing** program with stability test methods for assays and impurities. Demonstrate accuracy, specificity, range, ruggedness, robustness, and system suitability.

### Detective controls

- Review data and associated metadata in the **source system** before each batch release.
- Review **instrument error logs**.
- Establish a **recipe or a method management system**.
- Implement data **monitoring mechanisms** to flag anomalies.
- Be certain that **instrument error alarms** notify the appropriate users.

Learn more about the paradigm shift in regulatory audits and what it means for analytical laboratories. View the on-demand webinar: *Addressing the Paradigm Shift in Regulatory Inspection*  
[www.agilent.com/chem/regulatory-inspections-webinar](http://www.agilent.com/chem/regulatory-inspections-webinar)

Learn more about keeping your data consistent, accurate, and protected.  
[www.agilent.com/chem/openlab-cds-data-integrity](http://www.agilent.com/chem/openlab-cds-data-integrity)

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Published in the USA, October 1, 2018  
5994-0294EN