

# ADVANCED SAMPLE IDENTIFICATION AND LABWARE PREPARATION

**Done correctly, appropriate labeling and preparation of labware improves accuracy, enables productivity, and eliminates errors**

## INTRODUCTION

When it comes to running a laboratory, maintaining a cohesive organizational system ensures that important documents or samples, vital to relevant research, are not misplaced or tampered with. Lab managers often consider a systematic approach toward maintaining their lab settings, and an accurate labeling system goes a long way toward facilitating a structured and efficient research environment.

Laboratories are busy environments where lab managers face various obstacles concerning sample management including the loss of samples, mislabeling and sample errors, storage and safety, data integrity, and the tracking of information. Labeling systems rely on shorthanded keywords and phrases to convey critical information to the reader. An

effective label provides the researcher with sufficient information and data regarding the samples and tools they intend to utilize in their workflow. Labels that lack these features are ineffective.

Although the development of a standardized labeling system may sound tedious, it is an important tool that can save a lot of time. In the case of healthcare labs and procedures surrounding medical treatments, labeling systems can also guarantee the safety of patients and their lives. Effective labeling of tools and samples reinforce a lab's role as a central hub of research and innovation while streamlining the data collection process.

## OPTIMIZING YOUR LABWARE SERVICES

Pre-barcoded labware provide a means to identifying and labeling labware and equipment before their delivery





to a laboratory or research facility. A barcode-optimized laboratory requires custom prefixes and sequences to maintain detailed audit trails and consistent testing procedures. The use of pre-barcoded labware comes with the advantage of enhancing labware with functional and branded markings such as color identifiers, fill lines, write-on patches, and logos, while simultaneously optimizing laboratory workflows. In prepared labware services, pre-barcoded labware is the starting point and can include additional features such as tare weighting, sorting, kitting, etc. These features help reduce prep work, eliminate pre-analytical testing variables, and ensure sample and data integrity. Together, pre-barcoded and prepared labware services encompass five essential elements of the laboratory environment: labware sourcing and procurement, labware sequencing, labeling, and marking, sequence management, pre-tare weighing, and the sorting and packaging of prepared labware.

## CREATING A BAR-CODE-OPTIMIZED LAB

Computype's approach toward pre-scientific preparation for strategic laboratory management focuses on allowing every laboratory to determine which service elements are most crucial to their workflow while dismissing those that are redundant. Computype's labware prep services eliminate the need for prep work before testing and analysis by single sourcing all labware within their service including high recovery vials, microplates, molded vials, microscope slides, reagent bottles, open top tubes, etc. Labware labeling, barcoding, and marking are facilitated by the use of sequential barcodes, functional markings, human-readable labels, and more. Labeling solutions, such as pressure sensitive labels, direct mark printing, laser marking technology, and ceramic IDs provide a complete means toward

enhanced labware labeling and increased functionality. In the case of the latter, Computype has gone one step further with the development of fused barcode marking technology that provides greater accessibility while demonstrating durability that rivals ceramic IDs.

## CONCLUSION

Pre-barcoded laboratory services ensure that lab managers can receive their labware already labeled, tared, sorted, and kitted to the lab's specifications. This significantly helps in saving time, budget, staffing, and inventory. Computype's advanced sample identification and labware preparation service provides labware ready to use immediately upon delivery allowing labs to focus on what is most important, research and innovation, while optimizing resources, efficiency, accuracy, and consistency. Catering to various organizations focused on pharmaceutical development, biotechnology, clinical studies, and repository storage, Computype helps lab managers track their way to success through a flexible laboratory service program that enables accuracy, quality, and reliability while tailoring solutions that can flexibly meet the demands, budgets, and restraints of any laboratory facility.



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To find out how pre-barcoded laboratory services can save your laboratory time, boost throughput, and improve workflow, visit [Computype.com/pre-barcoded-labware](https://www.computype.com/pre-barcoded-labware)