How Efficient is Your Lab? Part I - Lose the Label!

fluidX™ From Brooks LIFE SCIENCES

FreezerPro

INTRODUCTION

The need to retain custom information can be a barrier for switching to 2D Coded tubes as the user may not know how to link the custom information from the label on the primary vessel to the 2D code on to aliquoted samples stored in 2D coded tubes. This report aims to provide guidance on how users can switch to 2D coded tubes whilst retaining this custom information both digitally and printed on the tube.

THE PROBLEM

Prior to biologic samples being stored in a biobank, collection sites can record specific tracking information on a primary vessel using labels, referenced here as 'Custom Information'. This custom information can be; patient specific, site specific or even internal custom tracking numbers and can be crucial to retain when storing and tracking a sample.

Upon reaching a biobank or store, these primary vessels are often aliquoted into smaller volume sample tubes, with the custom information from the primary vessel printed on labels and affixed to the new, aliquot tubes.

This creates a highly labour-intensive tracking and retrieval process when specific samples relating to a specific collection, recorded on a label, need to be retrieved. Using printed labels also creates reliability issues if labels are lost, damaged or unreadable.

Using non-coded tubes with a printed label can pose multiple risks if the label is damaged, lost or unreadable:

- Sample waste due to the inability to guarantee sample ID
- Lack of audit traceability
- Throughput restrictions based on highly manual processes

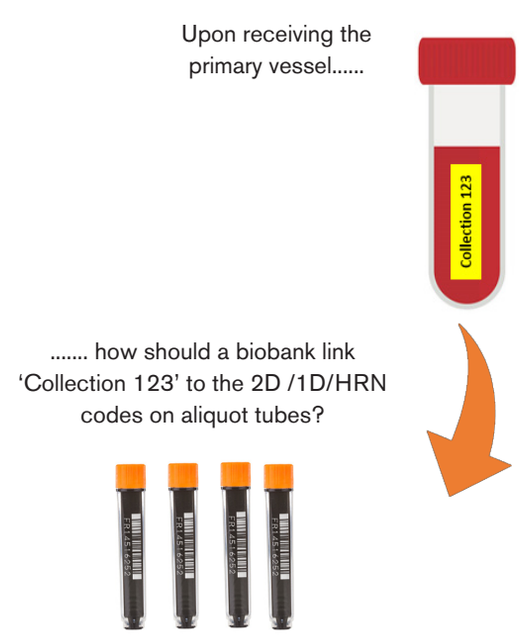

Figure 1

THE PROPOSED SOLUTION

A simple, holistic solution to the identified problems requires three core pieces of technology: high quality 2D coded tubes, robust sample management software and a reliable direct to tube printing solution. Using FluidX tubes, alongside FreezerPro and IntelliXmark this solution is visualised in figure 2.

EXAMPLE SOLUTION

Example: A Biobank receives a primary vessel belonging to a specific collection known as 'Collection 123'. There is a label adhered to the primary vessel noting 'Collection 123'.

It is vital that the biobank retains the ability to track based on the reference 'Collection 123' and the Biobank wants to aliquot the sample into smaller volume 2D Coded Tubes, to enable robust tracking and ease of retrieval whilst also allowing for visual identification that the sample belongs to 'Collection 123'. To do this the biobank needs to complete the steps below:

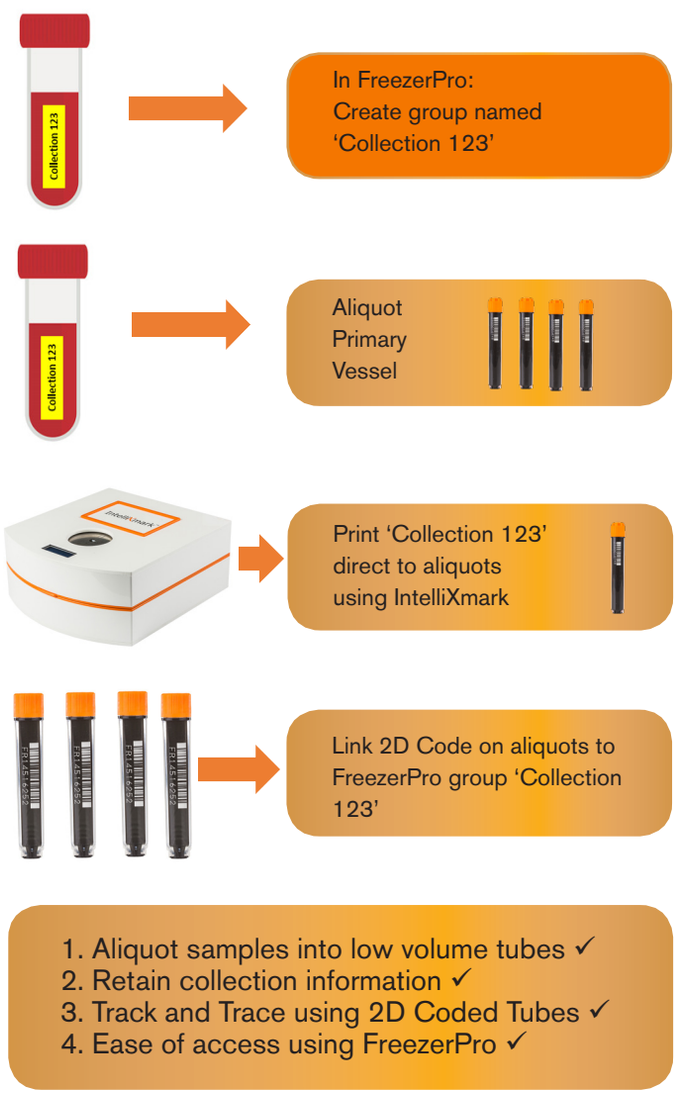

Figure 2

CONCLUSION

Retaining custom information from a primary vessel can be crucial to the biobanking or sample storage process, this is often done using printed labels affixed to the side of non-2D coded sample tubes.

Using labels combined with non-2D coded tubes is sub-optimal due to; risk of sample loss through lost labels, lack of audit traceability and throughput restrictions based on a highly manual process.

Taking a holistic approach to solving these problems is possible using three synergistic technologies; FluidX 2D coded tubes, FreezerPro sample management software and IntelliXmark. This enables greater efficiency, allows full traceability and ensures samples are not lost.