

Histology QC process

September 2021

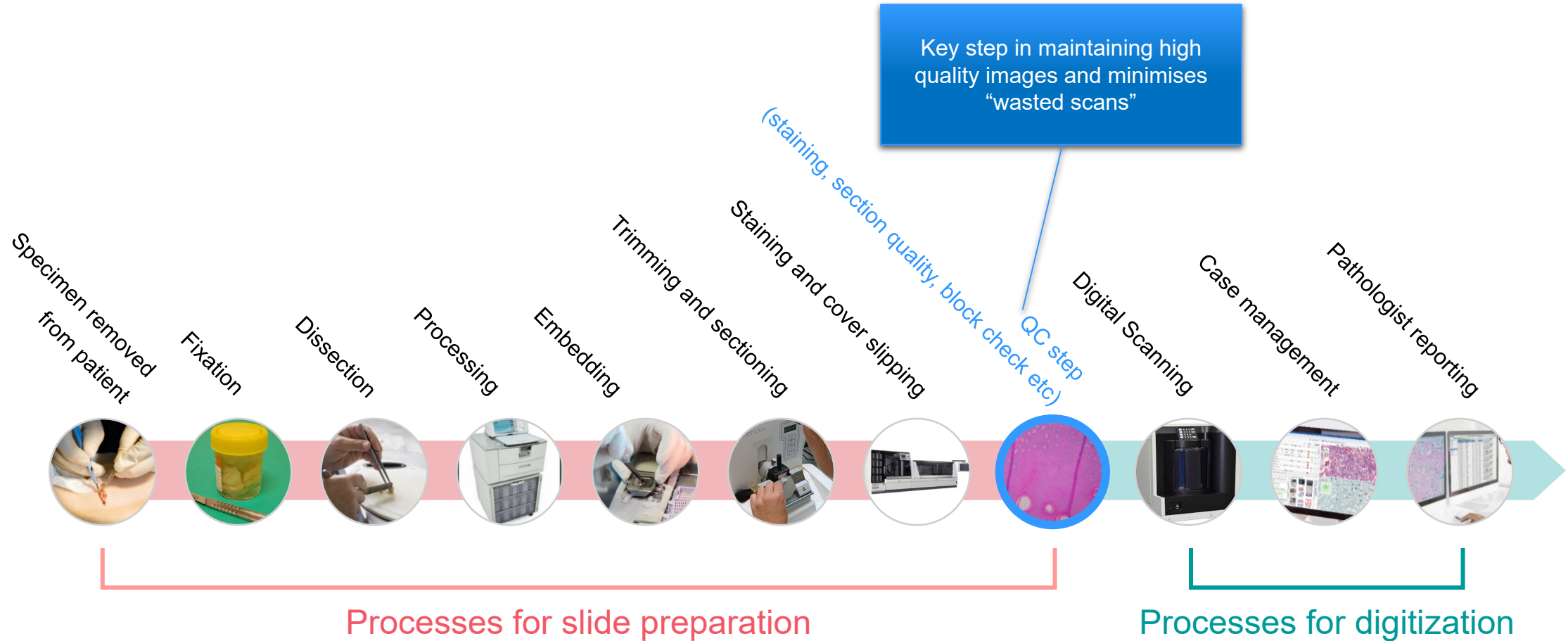
Document produced in collaboration with Path Links Pathology, UK

Histology Process Overview

The processes within a Histology laboratory are much the same throughout the UK and the world. Quality checks are carried out throughout these processes. It stands to reason that there should be some quality checks prior to scanning slides.

These checks can minimise the risk of scanning slides which are unsuitable for diagnostic reporting. These unsuitable images can take up valuable storage space and are time consuming to delete.

Histology Process Overview



Current process at Path Links, UK.

1. Coverslipping



Sakura Finetek
Glass coverslipper

Slides once coverslipped are left in these racks within the stainer.

*There is a 10 minute drying step until the slides are considered complete.



2. Slides laid out

Slides are then laid out in to a slide tray.



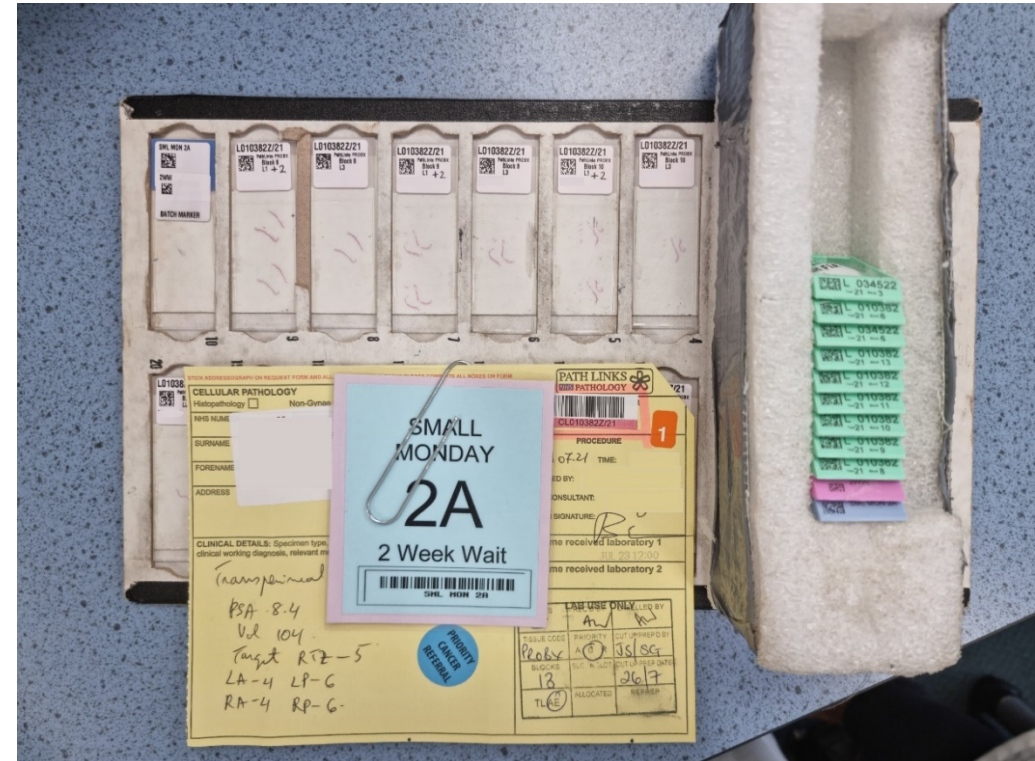
3. Slides matched to blocks

The batch of slides is matched to the corresponding batch of blocks.



4. Request forms matched

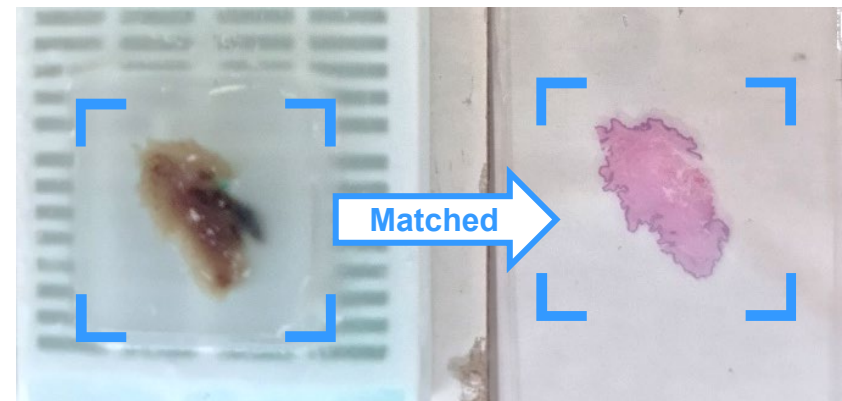
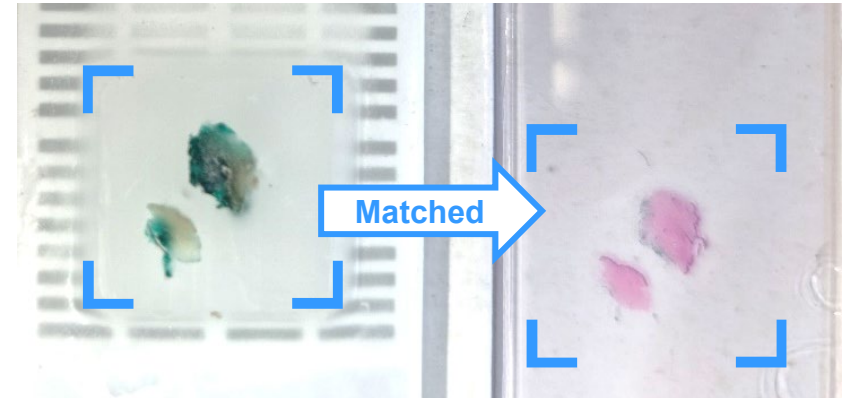
Corresponding specimen request cards are then matched to blocks and slides.



5. Block check

Each block is matched to its corresponding slide.

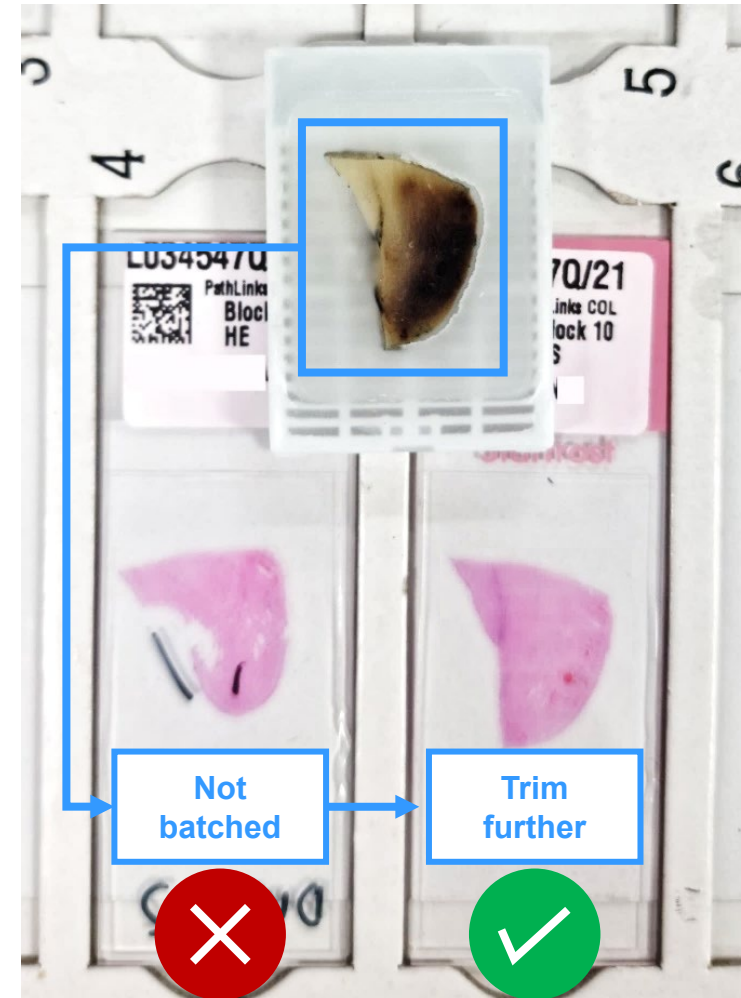
Check that tissue on the slide is a fair representation of the tissue in the block and that the tissue matches.



6. Block check fails

Sometimes tissue on the slide does not batch the block.

On this occasion we needed to trim further in to the block so that the tissue shape on the slide matches the tissue in the block.

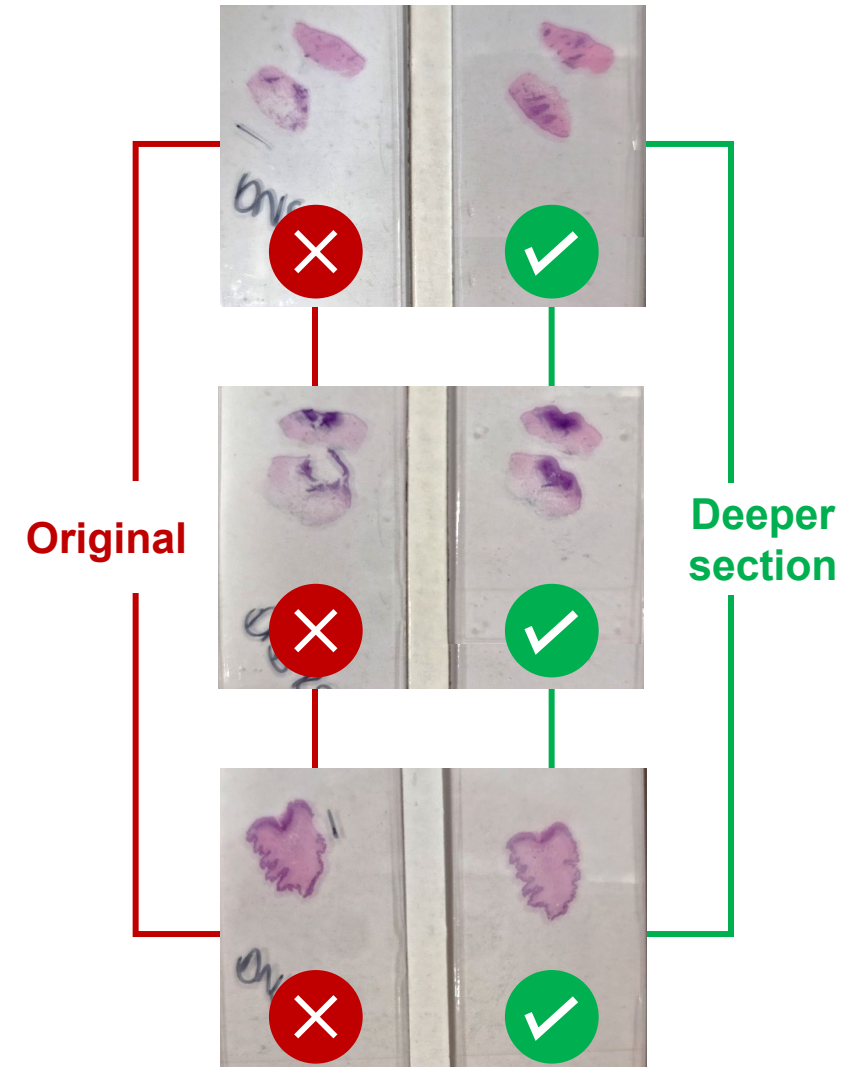


6. Block check Fails

In all examples the left slide is the original and the right is following a deeper section.

Small important aspects of the tissue are missing in the original slides.

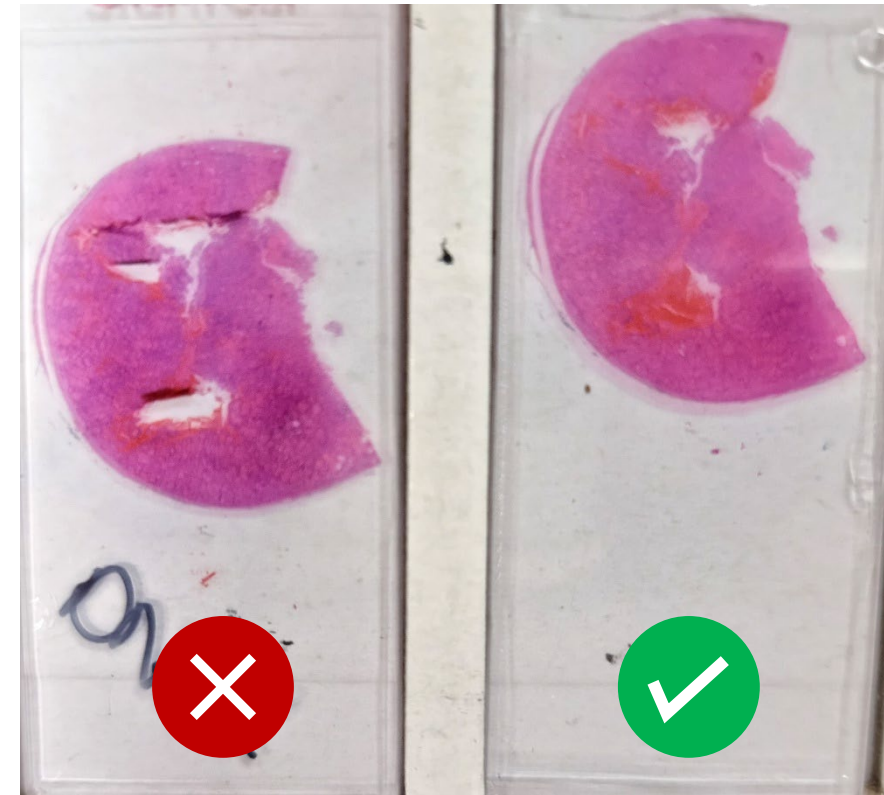
These, if scanned, would essentially be wasted scans.



7. QC Check

Slides are also checked for quality of the section. Creases etc are recut as shown.

If these slides were loaded straight from the stainer then a Pathologist would struggle to report from this.

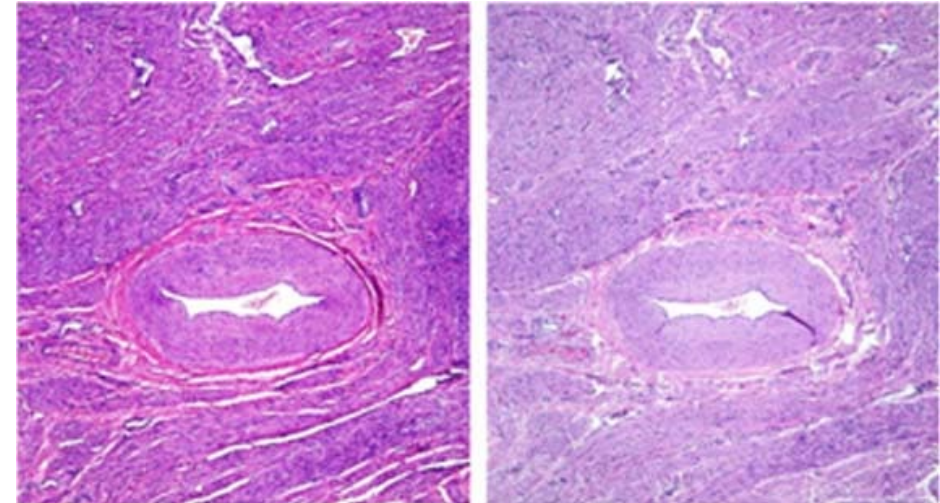


8. Staining

Quality of staining is also checked microscopically.

This helps to further confirm that the stainer is working correctly.

Failure to notice staining issues early could impact a large volume of slides.



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