

28 July 2021

PCR Threshold cycle

The cycle threshold you are currently using for PCR tests?

There are many assays and platforms in use in Belfast Trust for molecular testing of SARS CoV2. Standard PCRs, which mostly employ Taqman chemistry, including SARS CoV2 assays are either 40 or 45 cycles of PCR. The cycle threshold is individually determined through the validation process for each SARS CoV2 workstream and will range from Ct35-40.

If the cycle threshold has been changed in the last 12 months: if so when, and from what level?

The total number of PCR cycles for each of these assays are set by manufacturers and there is no deviation from that. However a threshold Ct value is set for each individual SARS CoV2 testing workstream at validation stage. These have not changed. It is important to note that Ct values are only one of a number of criteria used to assess positivity and result calling. Fluorescence, sigmoidal curves and number of genes targets positive are also key.