

Covid-19 Testing Methods Bulletin No 9 – 27 July 2020

Dear Colleague

We have seen further contributions on the Testing Methods [crowdsourcing platform](#). We are pleased to share four we believe have potential. As always, we are grateful for you to, where suitable, adopt these and carry out local validation. These solutions cover our challenges on multiplexing, end to end efficiency and speed of testing, and RNA extraction.

We also have a request for all staff across the whole testing pathway: we continue to be ambitious in meeting the country's testing needs. We want to ensure we do so sustainably and bear in mind our carbon footprint. To help us identify opportunities to manage the environmental impact of testing, we would be grateful for a moment of your time **to answer one question**. This is available to Crowdicity platform users [here](#), and you can first register on Crowdicity [here](#).

Thank you for your help,

Sue Hill
Chief Scientific Officer, NHS England

Jo Martin
President, Royal College of Pathologists

On behalf of the moderators' group.

NEW SOLUTIONS: COVID Plus: Multiplexing with other pathogens



As we move towards the winter flu season, we must consider how to include COVID 19 viral detection into wider testing regimes.

We asked for testing kits that will deliver multiplexed or syndromic respiratory and / or gastrointestinal viral detection and that will operate on either existing rapid turnaround laboratory platforms, existing near patient care platforms or new technologies that can be deployed into NHS and PHE testing laboratories within 4-6 weeks.

1. [QIAstat-Dx - Rapid Multiplex Syndromic Testing from QIAGEN](#)
2. [Direct-to-PCR COVID-19 Testing from PrimerDesign \(part of Novacyt\) - Exsig Direct](#)

NEW SOLUTIONS: Increasing end-to-end efficiency and speed of testing

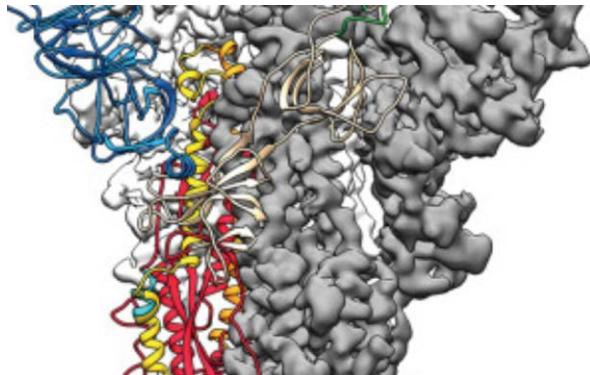


Following reaching the target of delivering 100,000 tests per day by the end of April we need to continue to increase our capacity for testing.

We are looking for new methods for viral detection and identification that are high throughput and that will increase end to end efficiency and speed of testing and can be implemented and adopted quickly.

3. [High Throughput SARS-CoV-2 PCR beads - Faster end to end testing, no reagent prep, high throughput stability](#)

NEW SOLUTIONS: RNA Extraction: New Methods



RNA extraction capacities are currently challenged even with automated platforms.

New methods of extracting viral RNA or enabling viral detection without an extraction step would help remove this bottleneck, as long as they are “ready to go” and can be integrated into existing or optimised PCR testing chains.

4. [RT-primers bound to streptavidin beads: No RNA extraction and No commercial kits are required; the whole testing procedure in one tube; compatible with almost any storage/transport solution](#)