

Detecting: Multiple antigens

Issue: Control and Test lines can be misinterpreted and faint lines are easy for users to overlook. Digital optical density readers can help to provide some certainty over results, but push up costs and consequently, prices. Where possible, we aim to make lateral flow technology more intuitive, provide clearer results that are easy to interpret – and keep costs down.

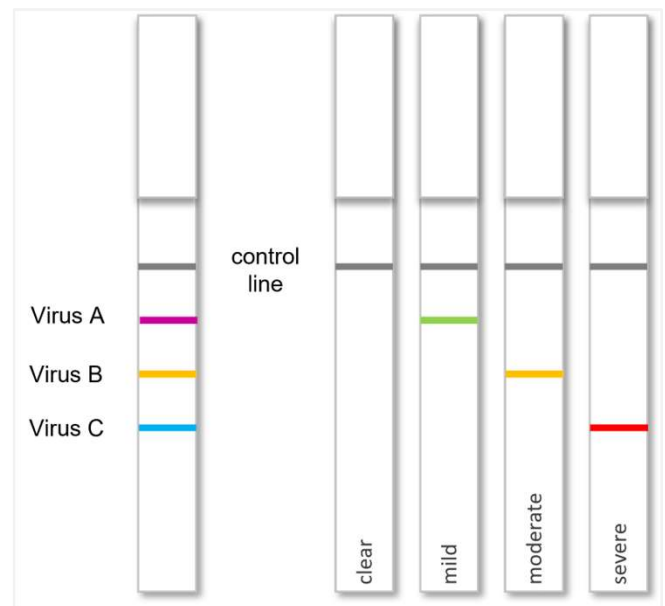
Objective: Improve accuracy and convenience by producing clear assays that are easy to interpret.

Sample: Saliva, urine, nasal mucus.

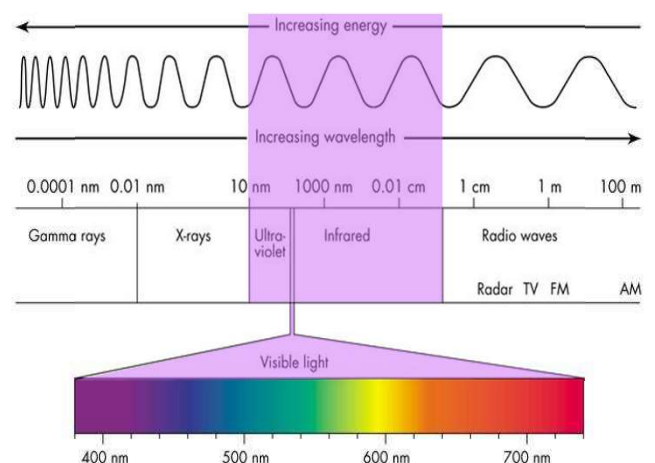
Result: By replacing gold nanoparticles with new, coloured conjugated polymer nanoparticles (CPNs), we can include colour (as well as optical density) as a test variable.

This has multiple uses.

For example, it can enable multiplex testing (for multiple conditions on one strip) without compromising the ability to interpret results. It can also be used to indicate the severity of a condition through a traffic light system.



The use of CPNs that fluoresce can enable extremely high levels of sensitivity, with positive results showing in the visible spectrum, ultra violet and infra red.



Applications: Medical, domestic, industrial, security services, military