

**00290 Evaluation of Immunochromatographic Norovirus and Rotavirus Combination Kits for the Detection of Norovirus Antigen in Human Stool Samples.**

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**Aims:** To evaluate immunochromatographic norovirus and rotavirus combination kits for the detection of norovirus antigen in human stool samples.

**Methodology:** Five Norovirus-positive (by enzyme-linked immunosorbent assay; EIA) clinical stool samples were obtained from Singapore General Hospital, Virology Laboratory, for testing with the 3 kits, Operon, Vitassay and Bionexia. Ten-fold dilutions were prepared from each stool sample, from 1:10 to 1:10000. Each kit was used according to manufacturers' specifications, and each dilution was tested in duplicate.

**Result:** Positive results with all three kits were only obtained for 2 of 5 stool samples. One stool sample was negative with all three kits. The Vitassay and Bionexia kits detected Norovirus in 4 of 5 undiluted samples, whereas the Operon kit detected Norovirus only in 2 of 5 undiluted samples. The Vitassay kit generally achieved positive detection in the highest stool sample dilutions (lowest sample concentrations) among the three kits, and thus had the best analytical sensitivity among the kits.

**Conclusion:** The Vitassay kit was the most sensitive among the 3 kits for the detection of Norovirus antigen, followed by Bionexia and then Operon.