Detectability evaluation of virus used in

rotavirus vaccines by the Coris diagnostic kits

Introduction:

One of the questions of our end-users about our Rota-Strip, Combi-Strip and GastroVir kits is the possibility to detect virus strains from vaccines in stool specimens of recently vaccinated individuals.

Please find below the summary of results obtained to address this concern:

Objective:

To determine the possible rotavirus vaccine-induced interference with our rotavirus diagnostic test

Method:

Two multivalent vaccines, i.e. Rotarix® vaccine from GlaxoSmithKline and RotaTeq® from Merck, containing modified-live virus are diluted in the dilution buffer solution and tested for rotavirus antigens immediately by using three Coris kits rotavirus-specific named Rota-Strip (c-1001), Combi-Strip (C-1004) and GastroVir (C-1016).

Results:

Our diagnostic kits can recognize the strains used in both vaccines. The minimum quantity of virus present in the vaccines and which is detectable by our kits ranges between 1,100 and 2,000 viral particles depending on the vaccine used.

Conclusion:

Given that the Rotarix® and RotaTeq® vaccines are attenuated vaccines, viral replication should be considered after the oral vaccination and therefore the virus could be present in stool specimens and detected by our rotavirus-specific kits. This possibility of test interference after vaccination should be kept in mind due to the impact on diagnostic test accuracy.