Proposal serology EQA SARS-CoV-2

Panel composition – pos. samples	 Serum only (no saliva) 2-3 samples with medium / high titers from severely ill cases 2-3 samples with medium / high titers from mild cases All pos. samples should be confirmed PCR-positive and from otherwise healthy individuals (i.e. not immunocompromised) All pos. samples should be tested in as many tests as possible by INMI and RIVM: IF, Wantai, ELISA (?), automated system (?), VNT, other tests (?) -> IgG, IgM and IgA -> samples will always contain all subtypes or at least IgG and IgM (?)
Panel composition – neg. samples	 2 x negative control samples -> serum collected before 2019 If available serum with high beta-coronavirus titer -> RIVM has to check if possible EBV infection serum CMV infection serum
Panel properties	 12 ml needed / sample 9-11 samples / panel 2 options for composition: 50 panels à 200 ul / sample 66 panels à 150 ul / sample All sera have to be tested in PCR for Hepatitis A, B, C, E (?), HIV, SARS-CoV-2 transport and storage conditions depend on lyophilization
Budget	• (10)(2b) for panel production and shipment • (10)(2b) for administrative costs
Open questions	 Can samples be lyophilized in time? Which laboratories can participate – ECDC selection based on country (?) How to proceed with heat inactivation?