To: 5.1.2e [5.1.2e @charite.de]; 5.1.2e [5.1.2e @rivm.nl]; 5.1.2e 5.1.2e [5.1.2e @rivm.nl]
From: 5.1.2e
Sent: Mon 8/31/2020 1:02:54 PM
Subject: AW: [ext] eqa manuscript
Received: Mon 8/31/2020 1:04:00 PM
SARS2_EQA_31-08-2020.docx

Dear all,

I talked to 5.1.2e on Friday but he was not involved in the sample quantification.

Please find attached an updated manuscript. For a rapid communication it has to be shortened dramatically.

@ 5.1.2e According to this publication of you and 5.1.2e the LOD of commercial PCR tests is not really better than selected inhouse assays. The LODs are states as cps/mL (e.g., 3.8), I guess this should be µL?!

All the best,
5.1.2e

5.1.2e

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http://virologie-ccm.charite.de/
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Von: 5.1.2e <5.1.2e @charite.de>
Gesendet: Samstag, 29. August 2020 11:23
An: 5.1.2e <5.1.2e @rivm.nl>; 5.1.2e <5.1.2e @charite.de>; 5.1.2e <5.1.2e @rivm.nl>
Betreff: AW: [ext] eqa manuscript

Yes, all of the points can be summarized into 1-2 short sentences. 5.1.2e please also ask 5.1.2e on whether he was involved in the Potentially wrong quantification. Another option is to contact the corr author and inquire on whether he thinks all has been done appropriately. But we do not really have time for this.

Lgf

Professor Jan Felix Drexler, MD
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Von: 5.1.2e [5.1.2e @rivm.nl]
Gesendet: Samstag, 29. August 2020 10:47
An: 5.1.2e; 5.1.2e

Cc: 5.1.2e
Betreff: RE: [ext] eqa manuscript

Hi,

Clear.
Should we spend a sentence on the fact that in the recover paper the labs seem to overperform based on what we know about the LOD of some of the assays.? Seems to me that the quantification was not done right?

The separate analysis for ECDC: lets first finish the manuscript and submit. Then we can do that.

Cheers 5.1.2e

From: 5.1.2e < 5.1.2e @charite.de>
Sent: vrijdag 28 augustus 2020 15:41
To: 5.1.2e < 5.1.2e @rivm.nl>; 5.1.2e < 5.1.2e @rivm.nl>
Cc: 5.1.2e < 5.1.2e @charite.de>
Subject: AW: [ext] eqa manuscript

Dear 5.1.2e

Thank you for the swift proofreading.

To comment your question below:

"My main concern involves the differences between the hospital labs in the RECOVER study and the expert labs in our study. The observation that the expert labs have less sens is not good for our reputation as expert labs. Can it be that their quantification is less sens? Also their panel is smaller. Could it be explained by common use of commercialsettings by the hospital labs vs the expert labs that you use more in house tests?"

I think there might be 3 explanations:

1) The quantification between the RECOVER study and ours is slightly different. In their study, labs performing in-house assays have 96% correct tests. The vast majority of labs must thus have tested the sample with 0.2cps/µL correctly. The reported LODs for published assays are about 2.5cps/rxn (CDC N), 5.2 cps/rxn (Corman E) or 3.8cps/rxn (Corman RdRp). According to standard protocols, it is thus not possible to have so good results. E.g:

Sample: 0.2 cps/µL
Extraction: 200µL->100µL: 0.4 cps/µL
PCR: 5µL/rxn -> 2cps/rxn (below LOD)

2) The RECOVERY labs are indeed mostly using commercial kits (81.7%) while less of our expert labs did (38.3%). Unfortunately, you don't find official LOD for the commercial kits but at least some are using a larger sample volume (8 instead of 5 µL). So commercial kits might work better. But according to this study the LODs in those commercial kits are pretty much the same as in the inhouse kits: https://www.sciencedirect.com/science/article/pii/S1386653220301542

3) I know, we cannot say it like this but the diagnostic labs might simply be better than the expert labs which is not surprising as diagnostics is their only job. What is still surprising me is that within our study those labs with higher RNA concentration during extraction do nor perform better than those with lower RNA concentration.

The separate analyses for ECDC will be no problem.

Best wishes,
5.1.2e

5.1.2e
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Von: 5.1.2e < 5.1.2e @rivm.nl>
Gesendet: Freitag, 28. August 2020 13:58
An: 5.1.2e < 5.1.2e @charite.de>; 5.1.2e < 5.1.2e @rivm.nl>
Cc: 5.1.2e < 5.1.2e @charite.de>
Betreff: [ext] eqa manuscript

Dear all,

Nice work! Very little comments.

My main concern involves the differences between the hospital labs in the RECOVER study and the expert labs in our study. The observation that the expert labs have less sens is not good for our reputation as expert labs. Can it be that their quantification is less sens? Also their panel is smaller. Could it be explained by common use of commercialsettings by the hospital labs vs the expert labs that you use more in house tests?

I just came of the phone with ECDC to manage the following issue: they need separate analysis of EU/EEA vs EU enlargement countries (and not interested in UK and Swiss).
To avoid having to rewrite the manuscript, we agreed on the following:

1. For the manuscript to be submitted to eurosurveillance we analyse all countries (29 EU/EEA, 5 enlargement countries and UK, Switzerland as one. This will be send to ECDC in next few days for comments and approval.
2. To ecdc we submit an additional data sheet excluding UK and Switzerland and separating analysis of labs in EU/EEA vs enlargement countries.

Sorry, part of the contract.

Best wishes 5.1.2e

Dit bericht kan informatie bevatten die niet voor u is bestemd. Indien u niet de geadresseerde bent of dit bericht abusievelijk aan u is verzonden, wordt u verzocht dat aan de afzender te melden en het bericht te verwijderen. Het RIVM aanvaardt geen aansprakelijkheid voor schade, van welke aard ook, die verband houdt met risico's verbonden aan het elektronisch verzenden van berichten.
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