Message

From: Stephen Hoge [Stephen.Hoge@modernatx.com]
Sent: 26/11/2021 22:38:57
To: Vallance, Patrick (GO-Science) [p.vallance1@go-science.gov.uk]
Subject: FW: Omicron update
Attachments: Moderna_Omicron Variant_Final.pdf

Patrick,

Just wanted to provide brief update below. We will coordinate our activities through the VTF if that makes sense.

I am available to speak anytime to explain our thinking/plans if helpful. Working all weekend.

Best regards,
Stephen

From: Stephen Hoge
Sent: Friday, November 26, 2021 5:34 PM
To: Richard.Sykes@beis.gov.uk; Madelaine.McTernan@beis.gov.uk
Cc: Melanie Ivarsson (Melanie.Ivarsson@modernatx.com) <Melanie.Ivarsson@modernatx.com>; Said Francis <Said.Francis@modernatx.com>; James, Matt (BEIS) <Matt.James@beis.gov.uk>
Subject: Omicron update

Richard, Maddie,

I just wanted to provide an update on our plans for the Omicron variant. Attached is a recent announcement.

As you may recall, we have had a three part strategy for addressing new VOC. We have already developed extensive clinical data across these strategies and are preparing to move quickly.

First, we have data on a high dose (100 mcg) of mRNA-1273 as a booster. We are testing these samples quickly. If the prototype vaccines are close to the edge, a higher dose may be all that is needed. This has benefit of using current supplies.

Second, we have already tested 2 multivalent candidates that have a good chance of closing any immune gap because they contain 4 and 8 (respectively) of the key S protein mutations in Omicron. We are racing to develop assays to confirm activity against this VOC asap. If high dose (100 mcg) of the prototype vaccine is insufficient we think the multivalent candidates might close much of the titer gap.

Third, on Tuesday we started an Omicron-specific booster (B.1.1.529). We expect to have that in clinical testing as soon as early January. This is the "worst case" scenario because it will take 2-3 months. We have done this twice before (Beta and Delta), so we know we can do it if necessary.

We would be happy to discuss any of the above and also be keen to collaborate with VTF/NIHR if it can accelerate answers to the above.

Best regards,
Stephen