

From: Fauci, Anthony (NIH/NIAID) [E]
Sent: Sun, 1 Mar 2020 19:31:54 +0000
To: Jeffrey V. Ravetch
Cc: Stelios Bournazos
Subject: RE: Fc modifications for protective anti-COVID-19 antibodies

Jeff:

Thanks for the note and the slide. Very interesting. Please send me the preprint when it becomes available.

Best,
Tony

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From: Jeffrey V. Ravetch (b) (6)
Sent: Sunday, March 1, 2020 12:43 PM
To: Fauci, Anthony (NIH/NIAID) [E] (b) (6)
Cc: Stelios Bournazos (b) (6)
Subject: Fc modifications for protective anti-COVID-19 antibodies

Dear Tony,

I wanted to share a very recent and surprising result we've obtained on the mechanism of antibody protection for anti-viral antibodies. We've previously shown that bNAbs to flu and HIV require FcR engagement for their in vivo potency.

Enhancing activating FcR engagement increases the potency of these antibodies by an order of magnitude, on average, and thus are significant contributors to anti-viral protection.