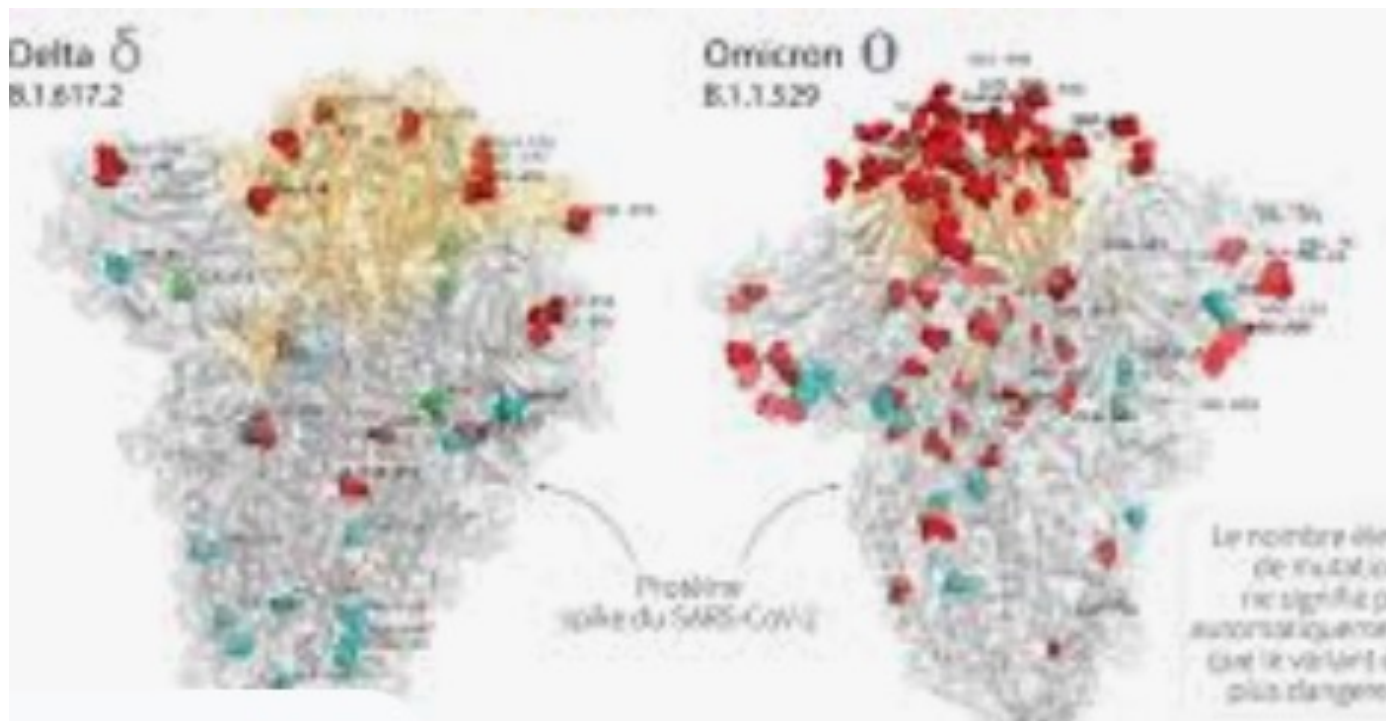




Variant OMICRON

VOC : le variant Omicron



Configuration inquiétante

- Mutations α pour la transmission
- Mutations β pour la vaccination
- + X mutations mal situées
- + insertion d'autres gènes d'autres coronavirus
- Continue d'évoluer : déjà au moins 2 lignées

Les PCR détectant la protéine S peuvent ne pas la retrouver

L'évolution des variants préoccupants n'est peut être pas infinie → Clé et serrure

Omicron SARS-CoV-2 variant: a new chapter in the COVID-19 pandemic

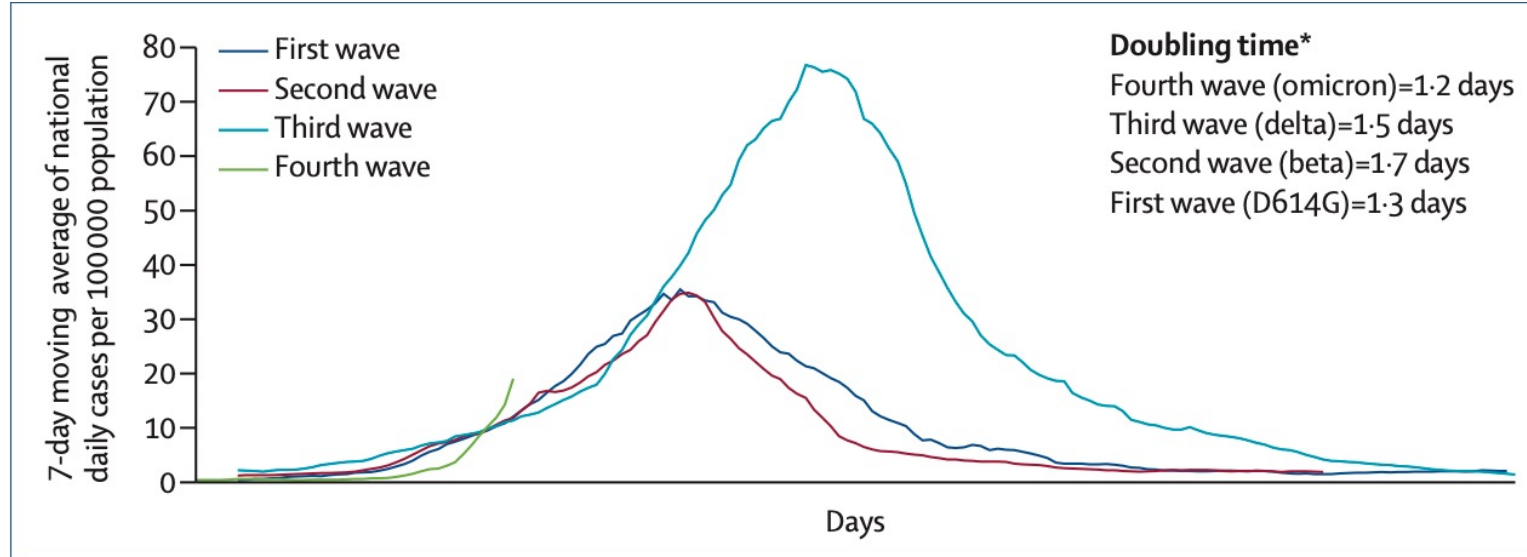


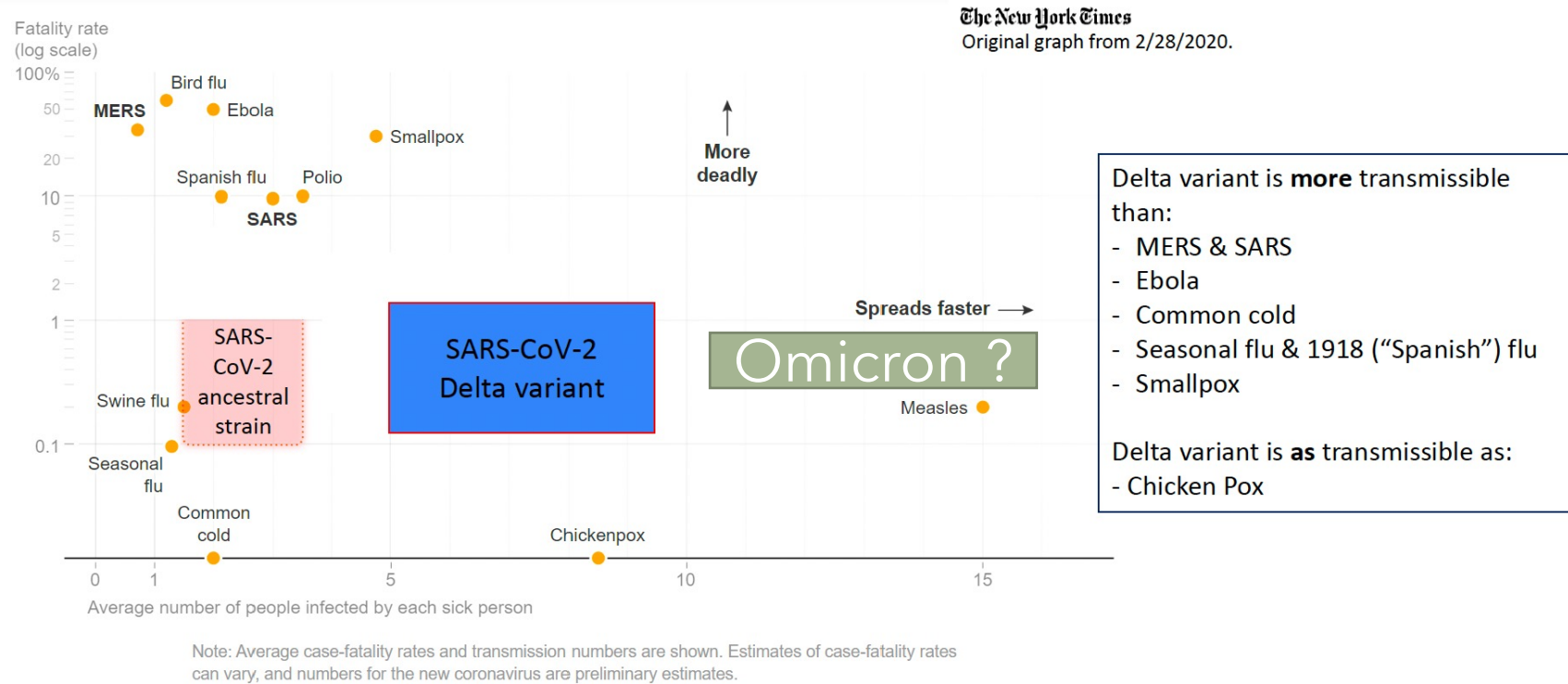
Figure: SARS-CoV-2 cases in first, second, third, and fourth waves, Gauteng Province of South Africa

Omicron/Delta

- Plus contagieux (3 fois ???)
- Plus souvent à l'origine de 2^{ème} infections
- Plus résistant aux vaccins
- Les PCR détectant la protéine S peuvent ne pas la retrouver
- Moins sévère ?

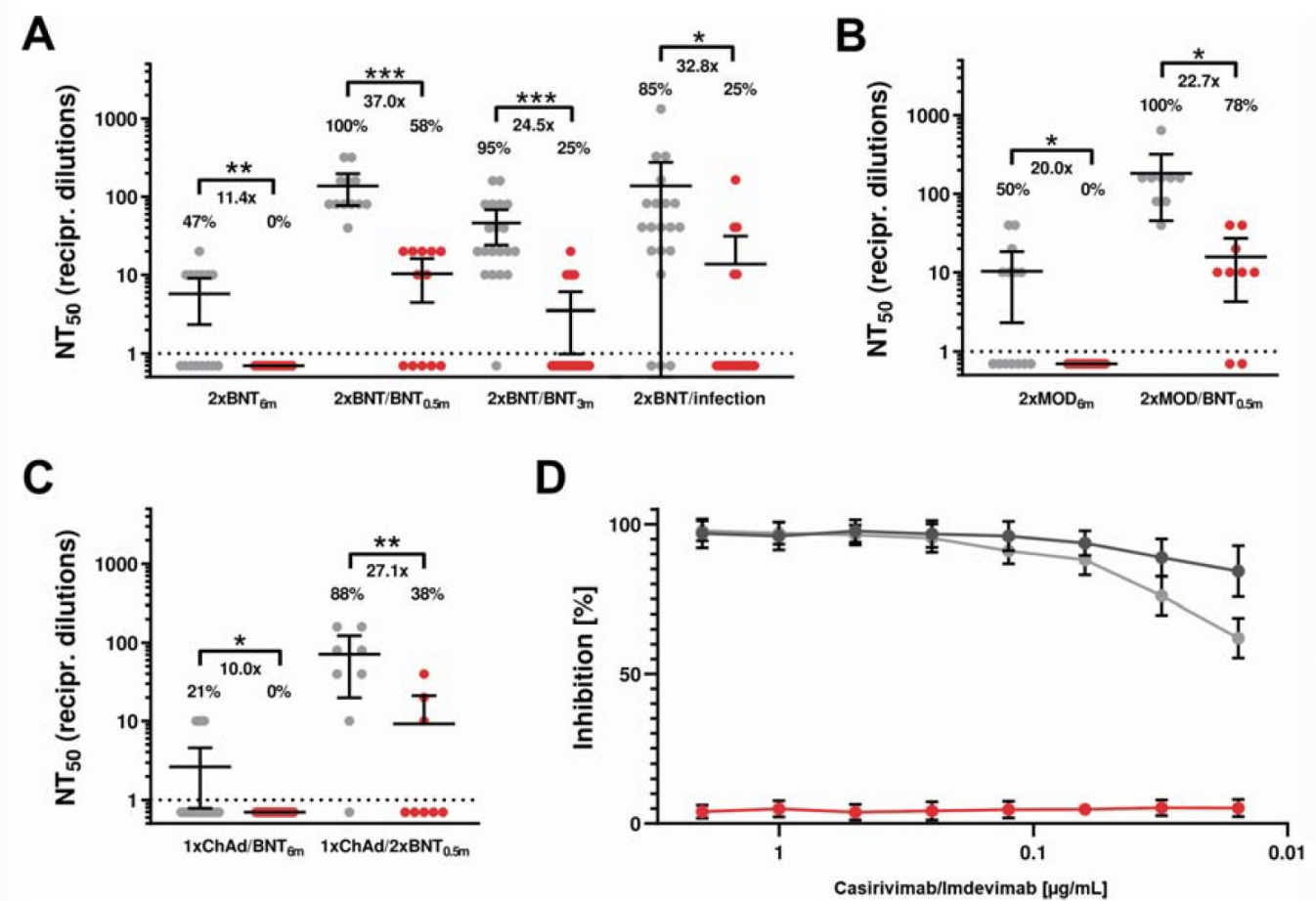
Les autorités anglaises estiment que Omicron représentera > 50% des cas d'ici 1 mois au Royaume Uni

Transmission of Delta variant vs. ancestral strain and other infectious diseases



Reduced Neutralization of SARS-CoV-2 Omicron Variant by Vaccine Sera and monoclonal antibodies

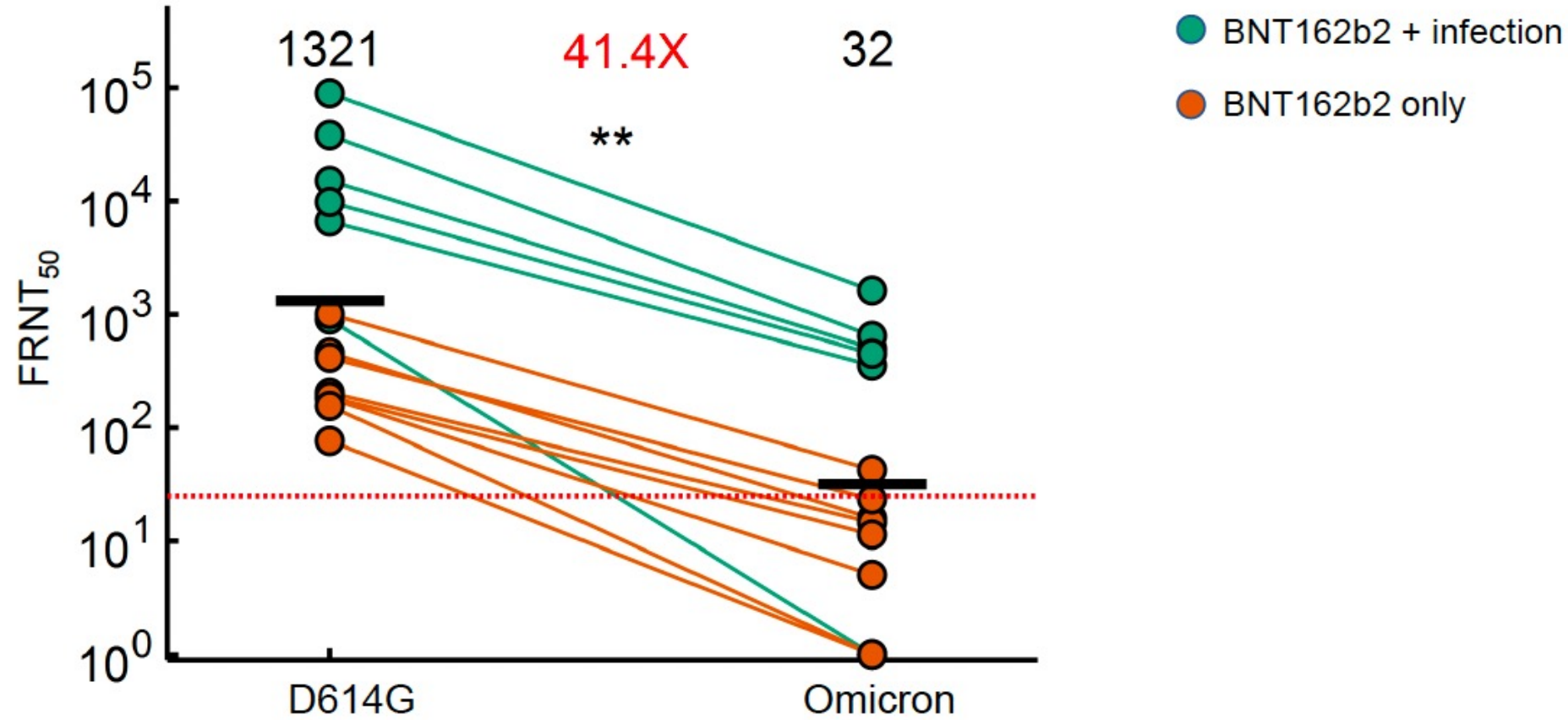
Alexander Wilhelm^{1*}, Marek Widera^{1*}, Katharina Grikscheit¹, Tuna Toptan¹, Barbara Schenk¹, Christiane Pallas¹, Melinda Metzler¹, Niko Kohmer¹, Sebastian Hoehl¹, Fabian A. Helfritz², Timo Wolf³, Udo Goetsch⁴, Sandra Ciesek^{1,5,6#}



SARS-CoV-2 Omicron has extensive but incomplete escape of Pfizer BNT162b2 elicited neutralization and requires ACE2 for infection

Sandile Cele^{1,2}, Laurelle Jackson¹, Khadija Khan^{1,2}, David Khoury³, Thandeka Moyo-Gwete^{4,5},

B

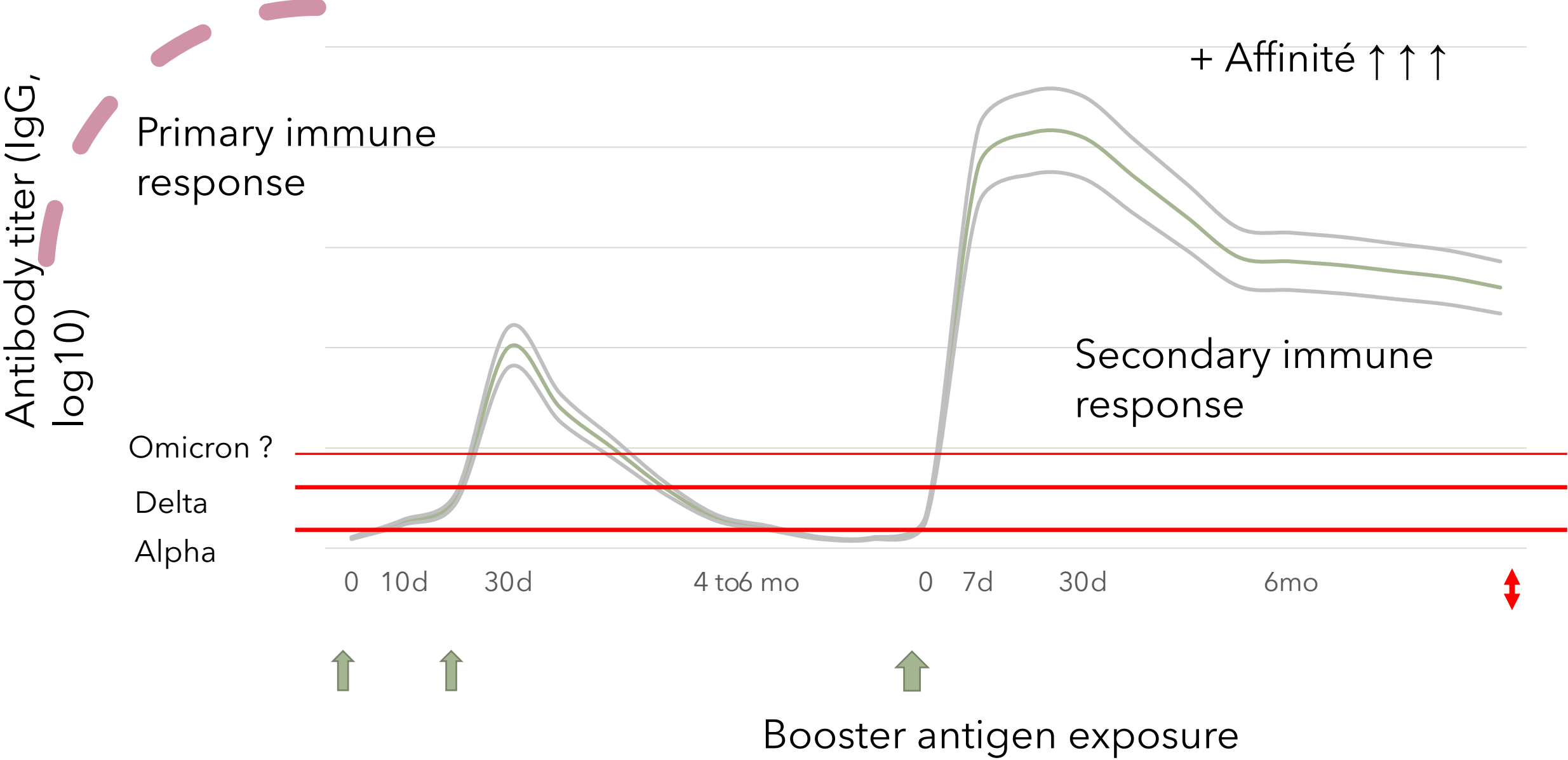


PFIZER AND BIONTECH PROVIDE UPDATE ON OMICRON VARIANT

Wednesday, December 08, 2021 - 06:54am

- Preliminary laboratory studies demonstrate that 3 doses of the Pfizer-BioNTech COVID-19 Vaccine neutralize the Omicron variant while 2 doses show significantly reduced neutralization titers
- Data indicate that a 3 dose of BNT162b2 increases the neutralizing antibody titers by 25-fold compared to two doses against the Omicron variant;
- titers after the booster dose are comparable to titers observed after two doses against the wild-type virus which are associated with high levels of protection
- As 80% of epitopes in the spike protein recognized by CD8+ T cells are not affected by the mutations in the Omicron variant, two doses may still induce protection against severe disease
- The companies continue to advance the development of a variant-specific vaccine for Omicron and expect to have it available by March in the event that an adaption is needed to further increase the level and duration of protection – with no change expected to the companies' four billion dose capacity for 2022

La vaccination des enfants est-elle aujourd'hui la meilleure façon d'aider par la vaccination au contrôle de cette vague épidémique (ou des suivantes) ?





Conclusions

Faite rapidement les doses de Booster
À vous, à vos proches, à vos patients