

COVID-19 vaccines

Pfizer/BioNTech vaccine positive interim result

- Pfizer/BioNTech anti-COVID-19 vaccine BNT161b2: positive interim phase III result with apparent 90%+ protection
- In our view, emergency approvals will follow in multiple countries to try to attenuate rapidly growing infection rates
- But logistical hurdles suggest that widespread availability could take late into 2021 or beyond

Pfizer and BioNTech COVID-19 vaccine – over 90% protection. Pfizer and BioNTech announced that their investigational anti-COVID-19 vaccine BNT162b2 provided over 90% protection against COVID-19 infection based on an interim analysis of the ongoing phase III study which included 94 clinical study participants (assumedly in the non-vaccine group) who became infected with COVID-19. No details on efficacy or safety have been published as yet (other than most patients were protected 7 days after the second dose of the vaccine – 28 days after the first dose), but the headlines are clearly positive. The study will continue and patients will be assessed for safety and efficacy of BNT161b2 over longer periods of time.

Likely emergency approval – rapidly. Given that COVID-19 infections continue to accelerate globally (infections now in excess of 50m, with nearly 1.3m deaths) but particularly in the US and Europe, in our view it is likely that BNT162b2 will gain emergency approvals rapidly in multiple jurisdictions. Pfizer estimates that it will be able to manufacture 50m doses of BNT162b2 by the end of 2020 and 1.3bn doses by the end of 2021.

Lots of outstanding questions. While the headlines are unequivocally positive, lots of questions on the vaccine remain, including: 1. Safety profile – acute and chronic; 2. Duration of protection and whether further – or annual – vaccinations will be needed; 3. Eventual efficacy (protection) rate; 4. Whether the vaccine is equally effective in all ethnic groups and age groups.

Logistics are not straightforward; late 2021or beyond for widespread availability. As we noted in our recent report, logistics are not straightforward for large scale vaccine distribution which will require end-to-end cold chain distribution on a scale and at temperatures not seen before and from some companies that have never had to distribute on that scale or in that manner. Even assuming the first vaccines are safe and provide durable protection, our view remains that widespread availability of a COVID-19 vaccine (whether the Pfizer/BioNTech vaccine or one of the others in development) will not occur until late 2021 or beyond.

This is a redacted version of the report published on 10-Nov-20. Please contact your HSBC representative or email <u>AskResearch@hsbc.com</u> for information.

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