

*Weekly thoughts on the healthcare sector from finnCap's life sciences analysts: Mark Brewer and Arshad Ahad*

## COVID-19 News Alert

### Implications of Early Vaccine Data

Pfizer and BioNTech announced the first interim analysis from the Phase III study of its COVID-19 vaccine candidate, which was found to be >90% effective in preventing COVID-19. While the results are very promising, we believe there was a large over-reaction in the market in response to the news. It should not have been unexpected - we hoped for positive results from vaccine manufacturers this month, and we hope there is more to come, as AstraZeneca-Oxford University and Moderna are also due to announce initial results this month, and overall there are 11 vaccines in Phase III testing. However, these early results do not diminish the urgent need for COVID-19 treatments and testing, which will still be required for years to come, and we outline why. We consider the price falls to stocks such as Synairgen (-39%), Avacta (-36%), genedrive (-38%), Omega Diagnostics (-25%) and Open Orphan (-9%) to offer good buying opportunities.

- ▶ **News and Next steps.** Pfizer and BioNTech announced the first interim analysis from its Phase III COVID-19 mRNA-based vaccine candidate, BNT162b2, which was found to be >90% effective in preventing COVID-19. The placebo-controlled study included 43,538 participants in 6 countries. 94 participants went onto develop COVID-19, and of those, 90% had received placebo. Thus, the case split between vaccinated individuals and those who received the placebo indicates a highly promising vaccine efficacy rate above 90%. No serious safety concerns have been observed thus far. The companies hope to have enough safety data in order to file for emergency approvals by the third week of November. If approved, Pfizer expects to produce 50m doses globally in 2020. The UK is due to receive 10m doses (enough for 5m people) by the end of the year, but the first distribution of a vaccine is unlikely until 2021. A further 30m doses are expected next year.
- ▶ **Unknowns.** Full results have not been released or peer-reviewed. Multiple unknowns remain, e.g. its efficacy in certain demographics – such as the elderly who react less well to immunisation. While the vaccine may prevent illness in response to SARS-CoV-2, it is unknown whether it will prevent asymptomatic infection – whether it will prevent virus shedding, and therefore have an effect on community transmission. Duration of protection is also unknown, as are long term safety implications.
- ▶ **Challenges.** Vaccine manufacturing is complex, and every batch has to be quality assured before release. This vaccine requires two doses, three weeks apart before it can be effective. It must be stored at ultra-cold storage, below -80°C. A roll-out campaign is likely to be slow, and will require many months to cover a significant proportion of the population. Anti-vaccination movements, and general public concerns over the rapid speed of COVID-19 vaccine development also pose challenges for vaccine uptake.
- ▶ **Not a silver bullet.** Herd immunity would require 60-70% of the global population to be immune (billions of people). Even if a vaccine is perfectly effective, this will take years. Until then, the vast majority of the population will need to rely on treatments and testing for COVID-19. A vaccine is a major tool in the fight against this disease, but it cannot be the only one. Demand for effective treatments and convenient testing strips supply and should continue to do so into 2021 and beyond. Overall: a vaccine roll-out will take many months, while cases, hospitalisations and deaths continue to surge and, as such, little has changed with regards to the COVID-19 opportunity, despite this very positive news.
- ▶ **Stock implications.** We consider the price falls to stocks such as Synairgen (-39%), Avacta (-36%), Genedrive (-38%), Omega Diagnostics (-25%) and Open Orphan (-9%) to offer good buying opportunities. Synairgen (TP 420p): countries will still want to stockpile SNG001 as there is currently no broad spectrum

antiviral and there is no data on how effective this vaccine is on elderly or sick people. Avacta (TP 310p) and genedrive (TP U/R): there is a continued need for rapid and convenient tests. Omega Diagnostics (TP U/R): antibody tests could be used to confirm immunity. Open Orphan (TP 28p): challenge studies could be used to perform head-to-head clinical trials between first generation and the eventual second generation COVID-19 vaccines.

[Register for our Research Portal to read more.](#)