Development of vaccine against SARS-CoV2

The emergence of SARS-Cov2 in late 2019 was followed by recognition of the syndrome now known as COVID19. The pandemic caused by this virus has caused huge pressure on health systems around the world and substantial loss of life, with devastating consequences on the economic situation for families around the world and a troubling macro-economic situation. While lockdown and social distancing has been effective as a means to reduce transmission, return to normal life will not be possible until the majority of the population are immune, either following natural infection or vaccination. Vaccine development has been undertaken at an unprecedented pace with 30 candidates in clinical development already and over 130 vaccines still in preclinical development. Data from preclinical studies indicate that neutralizing antibodies directed against spike protein of the virus may be required for protection against respiratory disease and encouraging data from several phase I clinical trials indicate that the first trials in humans appear to result in production of this type of response, though the level required for protection in humans remains unknown. Further clinical evaluation in phase III trials is essential to establish the safety profile and potential efficacy of these novel vaccines candidates. Success could lead to a rapid end to the pandemic.