Healx using artificial intelligence to find combination drug treatments for COVID-19

- *Healx's AI is being used to discover drug combinations to target the virus and improve immune response to COVID-19*
- *Healx is using its powerful AI platform to support vulnerable rare disease patients by applying drug repurposing expertise to target COVID-19*
- *Combination therapy candidates will be available in May for external testing in collaboration with partners*

Cambridge, UK - 6 April 2020 - Healx, the AI-powered, patient-inspired biotech specialising in rare diseases, today announces it is using its AI platform to develop drug combinations from approved drugs to contribute towards global efforts to find treatments for COVID-19. This focus on combination therapies, where two or more drugs simultaneously target different aspects of the disease pathology, has the potential to ensure a more effective treatment.

Combination therapies are particularly difficult to discover. To uncover potential combination treatments for COVID-19 requires detailed analysis of the eight million possible pairs and 10.5 billion drug triples stemming from the 4,000 approved drugs already on the market. Healx's AI platform, Healnet, overcomes this challenge by integrating and analysing biomedical data from multiple sources to predict those combination therapies most likely to succeed in the clinic. Healnet is widely regarded as the world's most efficient and comprehensive AI platform for rare diseases.

The development of combination therapies is one of Healx's core strengths and is the leading approach for finding effective treatments for people severely affected by COVID-19 and associated co-morbidities. Combination therapy candidates will be available in May for preclinical testing.

Healx is primarily dedicated to accelerating the discovery and development of therapies for the 95% of 7,000 rare diseases currently without treatment options. Many patients in this demographic - such as those living with Alström syndrome or cystic fibrosis - suffer from pre-existing conditions relating to the heart and respiratory system which have been associated with the highest mortality rates amongst COVID-19 patients. Given this increased vulnerability to COVID-19, and the acute need for treatments, Healx are dedicating their time, knowledge, experience and technology to fighting the viral infection. The treatments Healx intends to develop are also likely to have wide use amongst other patients identified as vulnerable.

The Company's efforts to find therapeutic combinations for COVID-19 are led by Dr David Brown, Healx's Co-founder and Chairman of the Board. Dr Brown has over 30 years of experience in leadership roles in the pharmaceutical industry and he is the co-inventor of Viagra and a number of other medicines.

Dr David Brown, Healx Chairman and Co-founder, said:

"The recent spread of COVID-19 is risking the lives of millions of rare disease patients across the world. The company's AI technology is perfectly positioned to support the efforts to find treatments for COVID-19. Healx's data-driven AI platform is able to predict, within weeks, which known drugs can be repurposed to treat other conditions such as COVID-19. This approach significantly shortens discovery-to-clinic timelines. Our AI is able to combine 2-3 existing drugs to formulate the most effective treatment. This approach ensures that any potential treatments we identify can be used by clinicians to help patients very quickly."

Dr Rick Thompson, CEO of UK rare disease patient advocacy group, Findacure, said:
"Rare disease patients - especially those with respiratory or immune conditions - are feeling particularly vulnerable to serious complications of infection. Efforts like Healx's to find viable treatments for COVID-19 will have a huge impact on the world's rare disease communities, whose quest for support and treatments can be all too easy to overlook."

Collaboration is key in the fight against COVID-19 which is why Healx is welcoming partners in their endeavour to discover viable treatments. To partner with Healx and drive patient access to treatments for COVID-19, please contact covid19@healx.io

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Notes to editors:

About Healx
Healx is an AI-powered and patient-inspired technology company, accelerating the discovery and development of rare disease treatments. Their AI drug discovery platform leverages public and proprietary biomedical data and features the world's leading knowledge graph for rare diseases. Combining their technology with patient insights and drug discovery expertise, Healx is well-positioned to make a unique contribution to the global effort to combat COVID-19.

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