

SPIN-OUT CASE STUDY 2:

RENEWVAX



Next-generation vaccines tackle bacterial infectious diseases

- Sector: Vaccines
- Nearly £300K seed funding from Innovate UK matched by £300K University funding*

Bacterial infectious diseases are an ongoing global issue and are extremely serious. *Streptococcus pneumoniae*, commonly known as pneumococcus, is the cause of life-threatening diseases such as pneumonia, meningitis and sepsis that lead to over 1.9 million deaths every year. There are a hundred distinct variants of the bacterium, and they can be spread asymptotically. Current vaccines, such as Appexnar®, are only effective against 20% of the existing variants. A universal vaccine that can treat all variants is required to lower infection rates and will also contribute to minimising the development of antimicrobial resistance.

ReNewVax is a University of Liverpool spin-out established in 2022 with a new vaccine development platform with the potential to produce next-generation vaccines for a variety of diseases, beginning with a pneumococcal vaccine, for use around the world. The pneumococcal vaccine market was the largest pre-pandemic vaccine market and had an estimated value of £9.5 billion in 2022. The team are developing a novel protein-based vaccine formulation

that will provide a safe, easy-to-manufacture and affordable solution. In addition, their vaccine is effective against all types of the pneumococcal bacterium creating a more universal product compared to those already on the market, which target only specific strains.

ReNewVax was co-founded by Dr Marie Yang and Professor Aras Kadioglu, both from the Institute of Infection, Veterinary and Ecological Sciences. The company was awarded £299,578 in seed funding from Innovate UK's, Innovation to Commercialisation of University Research (ICURE), which was matched by £300,000 in funding from the University of Liverpool's Enterprise Investment Fund*. Their pneumococcal vaccine is expected to enter early phase clinical trials in 2025, and their contribution to the rising challenge of antimicrobial resistance is a key focus for the University of Liverpool and a strength for the Liverpool City Region. The company is expected to create at least five full time posts during its first 12 months.

“With the tremendous support of the IP Commercialisation team at the University of Liverpool (UoL) and seed funding from Innovate UK and UoL Enterprise board, we are now in a position to take our vaccine research beyond the bench and into the real world. ReNewVax represents an opportunity for us to foster innovation and make a difference. We have a very strong management and scientific team, and I cannot wait to see how far we will take this venture”.

Dr Marie Yang
Co-founder of ReNewVax