



PHICO  
THERAPEUTICS

## Phico Therapeutics raises £7 million investment

- *Funding will support advancement of novel engineered phage technology for next-generation antibiotics to curb antimicrobial resistance (AMR)*
- *£3 million invested by BGF and a further £4 million received from existing investors*

**CAMBRIDGE, UK, 11<sup>th</sup> May 2021:** Phico Therapeutics Ltd ('Phico'), a biotechnology company developing engineered phage technology as the basis of a new generation of antibiotics to overcome antibacterial resistance, today announced £7 million in new investment. The financing was led by the UK's most active growth capital investor, BGF which invested £3 million and was joined by other existing Phico investors. The funds will be used to support the continued development of Phico's SASPject technology platform and in particular the progression of its lead product, PT3.9 towards the clinic.

The funding follows a recent announcement that Phico has been awarded a grant of up to \$18.2 million USD (*circa*. £13.2 million GBP) to support the development of SASPject PT3.9 from Combating Antibiotic Resistant Bacteria Biopharmaceutical Accelerator (CARB-X), a global non-profit partnership dedicated to accelerating antibacterial research to tackle the global rising threat of drug-resistant bacteria.

SASPject PT3.9 is being developed for the intravenous treatment of hospital infections due to the bacterium, *Pseudomonas aeruginosa*. Phico's SASPject platform delivers pan-spectrum anti-bacterial proteins called small acid-soluble spore proteins, or SASPs, to selected bacterial species using engineered bacterial viruses which inactivate the bacteria's DNA leaving them unable to metabolise or reproduce. The Phase I clinical trials will be first-in-man, intravenous studies and will focus on establishing the safety and kinetics of PT3.9 in healthy volunteers and, potentially, patients with ventilated hospital acquired pneumonia and ventilator associated pneumonia.

The increasing multi-drug resistance of *P. aeruginosa* strains has resulted in the U.S. CDC (Centers for Disease Control and Prevention) classifying *P. aeruginosa* as a serious threat to human health, and the [World Health Organisation](#) classifying it in the top three bacteria needing new treatments. With the bacteria being a leading cause of pneumonia in hospital patients, especially those on a ventilator, the SASPject platform could provide a much needed alternative to conventional antibiotic treatments.

**Tim Rea, investor at BGF said:** "This is an extremely exciting time for Phico Therapeutics, and we are delighted to be partnering with this innovative business and expanding our presence in Cambridge and UK life sciences. BGF's long-term approach to patient capital is a good match for this dynamic business, which has been at the forefront of building technological solutions to antibacterial resistance for over 20 years. We are thrilled to be working with Dr Heather Fairhead and the management team in helping them to realise the next great milestone for the company."

**Dr. Heather Fairhead, Phico Founder and CEO said:** "We are delighted that BGF has made this investment alongside many of Phico's existing investor base. Coupled with the recent award from CARB-X, these funds will enable the company to exemplify the technology in first in human intravenous studies. This is a very exciting time for Phico and we're looking forward to great things ahead."

The advisers to the transaction were Goodwin, led by David Mardle, partner in Goodwin's Technology and Life Sciences Group.

For more information, please visit: [www.phicotx.co.uk](http://www.phicotx.co.uk)

View Phico's SASPject technology here: <https://www.youtube.com/watch?v=U27YARVMtkg>

**ENDS**

#### **Note to Editors**



*Dr Heather Fairhead,  
Founder and CEO at Phico*

For high-res images contact Zyme Communications

#### **For further information, please contact:**

Sarah Jeffery  
Zyme Communications  
Tel: +44 (0)7771 730919  
E-mail: [sarah.jeffery@zymecomunications.com](mailto:sarah.jeffery@zymecomunications.com)

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#### **About Phico Therapeutics [www.phicotx.co.uk](http://www.phicotx.co.uk)**

Phico Therapeutics (Phico) is a biotechnology company developing engineered phage technology as the basis of a new generation of antibiotics to overcome antibacterial resistance, particularly those caused by multi-drug resistant bacteria.

Phico's SASPject™ platform technology utilises engineered bacterial viruses, or phages, to deliver a gene encoding a unique antibacterial small acid-soluble spore protein (SASP) that inactivates bacterial DNA. This stops the bacteria from metabolising or reproducing, whilst the SASP remains unaffected by the sequence of the bacterial DNA, including mutations, making resistance unlikely to develop. SASPject can target any chosen bacteria including those that are treatment resistant.

Founded in Cambridge, UK by Dr Heather Fairhead, Phico is building an innovative intravenous antibacterials pipeline focused on serious infections with few existing treatment options and targeting key superbug threats including *Pseudomonas aeruginosa*, *Klebsiella pneumoniae* and *Escherichia coli*. The company has previously received backing from independent investors, the Wellcome Trust and UK Government grants, and has a clear path to take lead intravenous product, *P. aeruginosa* targeted, SASPject PT3.9 through a study in patients. Phico recently announced funding from CARB-X, a global non-profit partnership dedicated to accelerating antibacterial research to tackle the global rising threat of drug-resistant bacteria, led by Boston University.

## **About SASPject™**

SASPject™ is a pan-spectrum antibacterial technology that can target selected bacterial species by using engineered bacteriophages. SASPject™ works by injecting a gene that encodes small acid-soluble spore proteins, or SASPs, directly into the targeted bacteria. The injected gene then produces SASPs, which bind to bacterial DNA and inactivate it. SASPs “turn off” DNA so the targeted bacterial cell cannot metabolise or reproduce. The immune system can then remove the bacteria from the body. SASPs bind to all bacterial DNA, irrespective of the sequence of that DNA. Spontaneous mutations in DNA, or the import of new DNA that gives new characteristics to the bacterial cell, are key ways in which bacteria develop resistance to antibiotics. Neither of these strategies affects the ability of SASP to bind to and inactivate bacterial DNA.

## **About BGF**

BGF was set up in 2011 and has invested £2.5 billion in nearly 400 companies, making it the most active investor in the UK. BGF is a minority, non-controlling equity partner with a patient outlook on investments, based on shared long-term goals with the management teams it backs. BGF invests in growing businesses in the UK and Ireland through its network of 16 offices. In 2018, Canada launched its equivalent – the Canadian Business Growth Fund – and in 2019, Australia did the same, both based on BGF’s funding model. [www.bgf.co.uk](http://www.bgf.co.uk) / Social media: @BGFInvestments

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