DestinyPharma

XF-73 prevents bacterial invasion of bloodstream

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Destiny Pharma plc
("Destiny Pharma" or "the Company")

XF-73 treatment of MRSA burn wound infection prevents bacterial invasion of the bloodstream

Data to be presented at the Infection Prevention Society conference

Brighton, United Kingdom - 5 August 2024 - Destiny Pharma (AIM: DEST), a clinical stage biotechnology company focused on the development and commercialisation of novel medicines to prevent and cure life threatening infections, today announced that new data on its lead drug, Exeporfinium chloride(XF-73)*, has been accepted for presentation at the Infection Prevention Society conference on the 23-25 September 2024 in Birmingham, UK.

The title of the presentation is, '*Inhibition of MRSA Infection by Exeporfinium Chloride (XF-73) in an In Vivo Burn Wound Model.*'

The data was generated from a study in which XF-73 was applied directly onto a methicillin resistant *Staphylococcus aureus* (MRSA) infected burn wound with subsequent monitoring of the spread of the MRSA into the bloodstream. When bacteria such as MRSA enter the bloodstream it can cause a life-threatening infection condition called sepsis which has a high mortality rate. The study also included a control placebo treatment arm.

The headline results which will be presented at the Infection Prevention Society conference include:

- Following a single topical application of 25, 50 or 100 µg of XF-73, MRSA infection within the burn wound tissue was significantly reduced by up to 99.99% compared to the placebo treatment, ($p<0.05$)
- The appearance of MRSA within the bloodstream (i.e. sepsis) was measured by monitoring the number of MRSA bacteria within the spleen and results from the three XF-73 dosed groups (each n=8) showed a significant 99.9% reduction of MRSA reaching the bloodstream, ($p<0.05$)
- In one of the XF-73 treatment groups, (50 µg), it was observed that no MRSA had reached the bloodstream resulting in the complete prevention of sepsis

Globally, it is estimated that there are approximately 9 million burn cases per year[1]. Burn injuries contribute to >250,000 fatalities[2] with infections identified as the cause of 61% of post-burn deaths[3]. Recent reports show the incidence of sepsis in burn patients ranges from 8% to 42% with related mortality from 28-65%[4]. *Staphylococcus aureus*, (including MRSA), is a common cause of post-burn infection, with reports that patients with burns had a prevalence of *S. aureus* of 57.8%[5].

Dr Bill Love, Chief Scientific Officer Destiny Pharma, said: *"These results from an in vivo burn wound infection model provide clear evidence that XF-73 can significantly reduce the risk, or even eliminate MRSA from reaching the bloodstream and causing sepsis. It is seen as a significant result for the continued development of our XF-73 dermal product."*

* XF-73, is a di-cationic porphyrin derivative with known rapid and potent bactericidal properties (MICs 0.25-4mg/L for all Gram positive bacteria tested to date) with a low propensity for engendering bacterial resistance. XF-73 has recently completed Phase 2 clinical study as an intranasal gel for decolonization of *S. aureus*, (including MRSA), to prevent post-surgical infections.

References:

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About Destiny Pharma

Destiny Pharma is an innovative, clinical-stage biotechnology company focused on the development and commercialisation of novel medicines that can prevent life-threatening infections. The Company's drug development pipeline includes two late-stage assets XF-73 Nasal gel, a proprietary drug targeting the prevention of post-surgical staphylococcal hospital infections including MRSA and NTCD-M3, a microbiome-based biotherapeutic for the prevention of C. difficile infection (CDI) recurrence which is the leading cause of hospital acquired infection in the US.

For further information on the company, please visit www.destinypharma.com.

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