



Development of a First Vaccine for Melioidosis

- No vaccine currently available for this tropical disease



Opportunity:

Melioidosis, also known as Whitmore’s disease, is a tropical disease caused by the gram-negative bacteria *Burkholderia pseudomallei*. It can be transmitted through contaminated water and soil via skin abrasions, ingestion and inhalation.

Studies suggest that melioidosis is present in over 80 countries, mainly in South-east Asia and sub-Saharan Africa, but also in Australia and that the disease is the cause of up to 100,000 deaths annually.

There are currently no vaccines on the market for melioidosis. The mortality rate for the disease is relatively high as patients often present with advanced disease. Symptoms include a lung infection, which can be extremely severe and which can often lead to septicemia, chest pains, high fever and muscle pain. People with diabetes have a 12-fold higher risk of infection.

Researchers at University College Dublin funded by the Wellcome Trust have developed a vaccine for melioidosis and are looking for clinical partners to bring this to the market.

Key Features/Advantages:

- A key antigen against *B. pseudomallei* has been identified and expressed, purified and characterised. Do you want to say that scale up has been achieved?
- T-cell epitopes against this antigen have been identified.
- The manufacture of the vaccine has been successfully scaled up.

Value Proposition:

A vaccine for melioidosis, also known as Whitmore’s disease.

Market:

A recent study indicated that with a base case of 80% efficacy and a 5-year protective duration the market could be worth \$268 million (Luangasanatip *et al.*, 2019).

Lead Inventor:

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IP Status/Publication:

Regional applications pending.



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