



Aeras' TB Vaccine Candidate Pipeline

AERAS-422 (rBCG) Aeras (Phase I)

Recombinant BCG which over-expresses antigens 85A, 85B, 10.4, Rv3407 and 40DosR proteins and performs pro-apoptotic endosome escape

AERAS-402/Crucell Ad35 Aeras, Crucell (Phase II/IIb)

Recombinant adenovirus 35 with antigens 85A, 85B and 10.4 to boost BCG or rBCG

MVA85A Oxford Emergent Tuberculosis Consortium and Aeras (Phase IIb)

Recombinant modified vaccinia vector, expressing high levels of antigen 85A by CD4+ T cells to boost BCG or rBCG

M72 GSK, Aeras (Phase II)

Fusion molecule composed of a protein from the PPE family (Rv1196), combined with an inactive serine protease (Rv0125) to boost BCG or rBCG

SSI/SP H4-IC31® SSI/Sanofi Pasteur/ Intercell/Aeras (Phase I)

Recombinant M.tb antigens 85B and 10.4 combined with adjuvant IC31 to boost BCG or rBCG

SSI H56-IC31® SSI/Intercell/Aeras (Phase 1)

Recombinant fusion protein of Ag85B, ESAT-6 and Rv2660c combined with Intercell's IC31® adjuvant.

Developing New Tuberculosis Vaccines for the World

- Tuberculosis knows no borders, and current tools are not enough to control a pandemic that is becoming increasingly severe and complex due to drug resistant forms of TB and the deadly relationship between TB and HIV. TB is the leading cause of death among people also infected with HIV in Africa.
- A modern, safe and effective vaccine is urgently needed to prevent all forms of tuberculosis, in all age groups, including in people living with HIV.
- Aeras (www.aeras.org) is a non-profit product development organization dedicated to the development of effective tuberculosis (TB) vaccines and biologics to prevent TB across all age groups in an affordable and sustainable manner. Aeras utilizes its broad capabilities and technologies in collaboration with numerous partners and stakeholders to support the development of vaccines and other biopharmaceuticals to address TB and other significant public health needs of underserved populations.
- Since its founding in 2003, Aeras has established itself as a global leader in TB vaccine research with expertise in vaccine discovery, immunology, manufacturing and clinical testing. With its manufacturing facility and partnerships, Aeras can reduce the cost and time to manufacture TB vaccines and produce enough vaccine to meet the worldwide need.
- Aeras' goal is to develop, test, characterize, license, manufacture and distribute a new TB vaccine regimen following a "prime-boost" vaccine strategy that is highly promising for prevention of the disease, and to ensure the regimen's availability to all who need it.
- Aeras has assembled the broadest TB vaccine product pipeline in the world. With its partners in Africa, Asia, Europe and North America, Aeras has invented or supported the development of six TB vaccine candidates. Five TB vaccine candidates are in Phase I/Phase II/IIb human trials.
- Aeras is collaborating with local research partners in Africa and Asia to prepare for and conduct TB vaccine clinical trials, supporting the infrastructure and capacity of researchers and institutions in endemic countries.
- Aeras uses cutting-edge science, drawing on 20 years of basic research in antigen identification and testing, as well as the mapping of the human genome and modern biotechnologies.
 Aeras and its partners around the world work synergistically on vigorous, cutting-edge science, and are pursuing new and innovative approaches to TB vaccine development and delivery, including an improved recombinant BCG and aerosol vaccine delivery.
- Aeras operates on an industrial model that involves making tough decisions while weighing risks, resources and time valuable time while millions are suffering and dying.
- **TB vaccine development is a scientifically complex and expensive process.** We believe that with sufficient resources and positive results from the current clinical trials, we anticipate a new TB vaccine could be available by the end of the decade.

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