

Hilleman Laboratories' preclinical trial report on Hib vaccine offers hope to millions of children

~The unique formulation will not only be cost effective but also scalable for commercial manufacturing

New Delhi, June 2015: Global vaccine research and development organisation, Hilleman Laboratories, today announced the publication of an original scientific report in the journal *Vaccine* based on the success of a preclinical trial conducted for *Haemophilus influenzae* type b (Hib) vaccine. The unique formulation derived from the ongoing research will not only bring down the cost of the vaccine, but will also provide a scalable platform for commercial manufacturing. This break-through research is another milestone achievement for Hilleman Laboratories with a vision to bridge the immunization gap.

Speaking on this new development **Dr. Davinder Gill, CEO, Hilleman Laboratories** said, *"Capsular polysaccharide conjugates of Hib are important components of several mono-or multivalent vaccines for children. However, the access to needy people is limited due to the relative high cost of the Hib vaccine. This new formulation will be a step towards developing a cost-effective and a more immunogenic vaccine. It is an encouraging breakthrough in bridging the gap and making Hib vaccine accessible and affordable."*

"A strategic three-step approach was used to identify the efficacy of polysaccharide in preparing a vaccine for Hib. Our original research published in the journal Vaccine shows that when the length of the polysaccharide was optimized, it dramatically improved immunogenicity in preclinical models, thus making it more powerful and effective. It was also found that the new formulation was 4 to 10 times more potent when compared to the existing licensed vaccines," added **Dr. Manoj Kumar Chhikara, Head of the Conjugate Vaccines R&D program at Hilleman Labs.**

Hib is a deadly bacterium that causes severe diseases like pneumonia and meningitis, which are the leading causes of child deaths in India, accounting for nearly 20% of the global death figures. Hib capsular polysaccharides (Hib-PRP) are poorly immunogenic in children less than two years of age and require conjugation to a protein carrier. Moreover the Hib conjugate vaccine, which plays a vital role in national immunization programs and also forms a main part of the pentavalent vaccine, is the costliest component and hence developing countries such as India can benefit from more cost effective formulations.

The new conjugate vaccine developed by Hilleman Laboratories is a more immunogenic preparation of Hib capsular polysaccharide (PRP) – tetanus toxoid (TT) conjugates using optimized PRP chain length and conjugation conditions. This new and unique cost-effective formulation developed by the company will significantly reduce the cost of Hib vaccine, which in turn, will help in reducing the market price of the pentavalent vaccine, thus making it accessible to a larger number of people. This will definitely have a larger economic impact on the public health system and subsequently bring down the expenditure in the system.

“We have already completed the preclinical immunogenicity trial phase which has shown predictive results. Our next step now would be to look at collaboration with like-minded stakeholders who can work together towards cost effective solutions with the aim of bridging existing gaps in a significant way” said **Dr. Gill**.

About Hilleman Laboratories:

Hilleman Laboratories is a first-of-its-kind joint-venture partnership formed between Merck & Co., a global research-driven pharmaceutical organization and Wellcome Trust, a global charitable foundation dedicated to human and animal health by supporting the brightest minds.

Hilleman Laboratories has been named after renowned scientist and father of modern vaccines Dr. Maurice Hilleman. His dedication to making a difference through the practical application of vaccine research and delivering vaccines to people in need forms the core mission of Hilleman Laboratories.

Operating on a not-for-profit principle, Hilleman Laboratories aims to become a preferred partner for Low Cost Vaccine Manufacturers and the ‘global voice’ for vaccine development and usage for public health in the developing world. For further information please visit: www.hillemanlabs.org

Media Contact:

Clayton Dsouza
+91 9930011602

Ann Marie De Souza
+91 9819099110