

Alnylam achieves RNAi milestone

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Singapore: Alnylam Pharmaceuticals, a Cambridge-based biotechnology firm, has received a \$3.2 million milestone payment from GlaxoSmithKline (GSK) as part of their ongoing collaboration to utilize Alnylam's RNA interference (RNAi) technology to develop GSK's cell culture-based influenza vaccine. While almost all other viral vaccines (for example, mumps, measles and polio) are currently produced via cell culture, influenza vaccines have been resistant to cell culture-based manufacturing due to insufficient virus yield and quality.

GSK hopes to utilize Alnylam's VaxiRNA platform to overcome these challenges. The proprietary VaxiRNA technology utilizes RNAi to silence genes that limit or prevent the production of vaccine antigens.

As part of the collaboration, which was initiated in the fourth quarter of 2011, Alnylam receives R&D funding and milestone payments from GSK as well as royalties from any commercialized vaccine. GSK hopes to capitalize on Alnylam's expertise to generate a commercially viable cell-culture based influenza vaccine that could be first to market in the United States.

The development of an innovative method to produce influenza vaccines has become a major initiative. Since the 1940s, influenza vaccines have been generated using chicken eggs. This process takes months and is difficult to scale-up. The recent H1N1 influenza pandemic highlighted these inadequacies and resulted in a renewed push for novel influenza vaccine manufacturing methodologies. A novel production process could also generate a vaccine that could be administered to individuals with egg allergies and decrease overall manufacturing costs.