First Vaccine Candidate for Malaria is Accepted for EU Regulatory Review

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GSK's RTS,S is the world's first malaria vaccine candidate to undergo regulatory review

Agenus' QS-21 Stimulon® is a component of RTS,S and in 16 additional vaccine candidates undergoing patient studies

Submission triggered regulatory milestone payment; Agenus entitled to royalties on product sales

LEXINGTON, Mass.--(BUSINESS WIRE)--Agenus Inc. (NASDAQ:AGEN), an immuno-oncology company developing a portfolio of checkpoint modulators (CPMs), heat shock protein peptide-based vaccines, and adjuvants, announced that GlaxoSmithKline (NYSE: GSK) has submitted a regulatory application for its malaria vaccine candidate, RTS,S, to the European Medicines Agency (EMA), and it has been accepted for regulatory review. RTS,S contains Agenus' QS-21 Stimulon ® adjuvant, which is part of GSK's AS01 proprietary adjuvant system. Adjuvants can enhance the immune response when used in combination with antigens in vaccines.

"RTS,S has the potential to protect hundreds of thousands of children against malaria in Sub-Saharan Africa each year and we are proud to be part of this important program," said Robert Stein, Chief Scientific Officer of Agenus. "RTS,S represents real progress in the decades of work to develop a malaria vaccine and we are gratified that our adjuvant was a key component."

Malaria claims over 600,000 lives a year, most of which are children in Sub-Saharan Africa (SSA).[1] Around 90 percent of estimated deaths from malaria occur in SSA and 77 percent of these are in children under the age of five. RTS,S is intended exclusively for use against the *Plasmodium falciparum* malaria parasite, which is most prevalent in SSA. To date, there is no vaccine available for the prevention of malaria.

Agenus has received a milestone payment for the regulatory submission of RTS,S, and is entitled to receive an additional milestone payment upon approval as well as royalties on product sales. QS-21 Stimulon is also being evaluated in 16 additional vaccine candidates currently undergoing clinical study and is a potential source of capital to help fund development of the company's checkpoint modulator product candidates.

The Phase 3 RTS,S vaccine program was conducted at 13 African research centers in eight African countries (Burkina Faso, Gabon, Ghana, Kenya, Malawi, Mozambique, Nigeria, and Tanzania) and included over 16,000 infants and young children. These data have been included to support the regulatory filing.

The EMA submission is the first step in the regulatory process toward making the RTS,S vaccine candidate available as an addition to existing tools currently recommended for malaria prevention. An effective vaccine for use alongside other measures, such as bed nets and anti-malarial medicines, would represent an advance in malaria control.

If a positive opinion from the EMA is granted, the WHO indicated that a policy recommendation may be possible by the end of 2015. A policy recommendation is a formal review process by WHO designed to assist in the development of optimal immunization schedules for diseases that have a global public health impact, such as malaria.[2]

A positive opinion from the EMA would also be the basis for marketing authorization applications to National Regulatory Authorities (NRAs) in SSA countries. A review by a European medicines agency is required by the majority of African countries prior to registration of a medicinal product manufactured in Europe. If positive, these regulatory decisions would help pave the way toward the large-scale implementation of the vaccine through African national immunization programs.

Notes to Editors

About RTS,S

- RTS,S is the scientific name given to this malaria vaccine candidate and reflects the composition of this vaccine candidate that also contains the AS01 adjuvant system.[3]
- RTS,S triggers the body's immune system to defend against the *P falciparum* malaria parasite when it first enters the human host's bloodstream and/or when the parasite infects liver cells.
- The vaccine is designed to prevent the parasite from infecting, maturing and multiplying in the liver, after which time the parasite would re-enter the bloodstream and infect red blood cells, leading to disease symptoms. In the Phase 3 efficacy trial, RTS,S was administered in three doses, one month apart.

About QS-21 Stimulon

Agenus' flagship adjuvant, QS-21Stimulon adjuvant, is a saponin extracted from the bark of the *Quillaja saponaria* tree, also known as the soap bark tree, an evergreen tree native to warm temperate central Chile. Agenus' QS-21 Stimulon has become a key component in the development of investigational preventive vaccine formulations across a wide variety of infectious diseases and in several investigational therapeutic vaccines intended to treat cancer and degenerative disorders. QS-21 Stimulon has been widely studied in approximately 50,000 patients. Agenus is generally entitled to receive milestone payments as QS-21 Stimulon containing programs advance, as well as royalties for 10 years after commercial launch, with some exceptions.

About Agenus

Agenus is an immuno-oncology company developing a portfolio of checkpoint modulators (CPMs), heat shock protein vaccines and adjuvants. Agenus' checkpoint modulator programs target GITR, OX40, CTLA-4, LAG-3, TIM-3 and PD-1. The company's proprietary discovery engine Retrocyte Display® is used to generate fully human therapeutic antibody drug candidates. The Retrocyte Display platform uses a high-throughput approach incorporating IgG format human antibody libraries expressed in mammalian B-lineage cells. Agenus' heat shock protein vaccines for cancer and infectious disease are in Phase 2 studies. The company's QS-21 Stimulon ® adjuvant platform is extensively partnered with GlaxoSmithKline and Janssen and includes several candidates in Phase 3 trials. For more information, please visit www.agenusbio.com, or connect with the company on Facebook, LinkedIn, Twitter and Google+.

1. http://www.who.int/malaria/world_malaria_report_2011/en/index.html.
2. WHO policy recommendations overview found at: http://www.who.int/immunization/policy/en/. Accessed May 2014.
3. The GSK proprietary AS01 adjuvant system contains QS-21 Stimulon® adjuvant, MPL and liposomes.

Forward-Looking Statement

This press release contains forward-looking statements, including statements regarding potential regulatory activities and timelines, the potential application product candidates containing the Company's QS-21 Stimulon Adjuvant in the prevention and treatment of diseases, and revenue streams to Agenus in connection therewith. These forward-looking statements are subject to risks and uncertainties that could cause actual results to differ materially. These risks and uncertainties include, among others, the factors described under the Risk Factors section of our Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission for the period ended March 31, 2014. Agenus cautions investors not to place considerable reliance on the forward-looking statements contained in this release. These statements speak only as of the date of this document, and Agenus undertakes no obligation to update or revise the statements. All forward-looking statements are expressly qualified in their entirety by this cautionary statement. Agenus' business is subject to substantial risks and uncertainties, including those identified above. When evaluating Agenus' business and securities, investors should give careful consideration to these risks and uncertainties.

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