

\*\*\*\*New release March 2009\*\*\*\*

## MarketVIEW: pre-pandemic vaccines (CAT: VAMV004)

<b>Proposal No/#PO</b>	:	<b>[Enter client specific #PO]</b>
<b>Product Name</b>	:	Comprehensive review/analysis of pre-pandemic H5N1 vaccines/companies
<b>Project Initiation Date</b>	:	n/a
<b>Billable days</b>	:	n/a
<b>Initiator(s)</b>	:	[Enter client name, function and address]
<b>Therapeutic Area</b>	:	<i>Pandemic influenza, H5N1</i>
<b>Product (if applicable)</b>	:	<b>CAT No:</b> VAMV004, published March 2009

## Background

Experts commonly believe that the next influenza pandemic is imminent. They are particularly concerned about the current avian influenza strain H5N1 (and subclades) which has spread rapidly in bird populations in SE Asia. H5N1 has caused high mortality in poultry and occasionally infects humans in close contact with around 60% of cases (408) so far being fatal<sup>1</sup>. As of December 3<sup>rd</sup> 2008, 67 cumulative countries have experienced H5N1 avian influenza in animals which is an alarming increase on the 11 countries counted in 2004<sup>2</sup>. As of February 27<sup>th</sup> confirmed H5N1 Avian influenza deaths in humans have reached 256, again a significant increase upon 2004. A simultaneous infection of a human influenza virus and H5N1 could cause genetic reassortment forming a new virus that can be spread more rapidly between humans initiating a pandemic. To date H5N1 has not been reported in the Western Hemisphere.

Many governments around the world have drawn up detailed plans specifying how they would deal with an influenza pandemic once its emergence was detected. A large focus is placed on ensuring mechanisms can ensure the swift and efficient production of pandemic specific influenza vaccines using both egg-based and cell-based systems. Other government measures have included the stockpiling of H5N1 pre-pandemic vaccines with the assumption that vaccine could provide cross-protective priming immunity to the eventual pandemic strain. For example, The US government (HHS) has procured 12.2 million treatment courses

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<sup>1</sup> World Health Organization (WHO). Website. Available at:

[http://www.who.int/csr/disease/avian\\_influenza/country/cases\\_table\\_2009\\_02\\_27/en/index.html](http://www.who.int/csr/disease/avian_influenza/country/cases_table_2009_02_27/en/index.html). Accessed: March 2009.

<sup>2</sup> Pandemic Planning Update VI. A report from Secretary Michael O. Leavitt. US Department of Health and Human Services, January 8, 2009. Accessed: March 2009.

of H5N1 vaccine mainly allocated to support clinical trials and protect “front-line” healthcare workers, first responders and other critical tier 1 workers<sup>2</sup>

This expert report provides a comprehensive up-to-date review of the current status of H5N1 pre-pandemic vaccines and investigates all of the critical issues with regard to their licensure, technology, safety and eventual use/deployment. The report captures the viewpoints of 5 recognised global opinion leaders, FDA VRBPAC and assesses the strengths/weaknesses of each commercial manufacturer’s progress to date. An emphasis is placed on current expert perceptions with regard to adjuvantation, cell-based systems and the optimal immune response required to provide protection should a pandemic occur.

## **PRODUCT CONTENTS:**

**Published March 2009 (CAT No: VAMV004)**

- Foreword
- Contents
- Executive summary
- Experts interviewed as part of this research
- H5N1 avian influenza: background and current status
- H5N1: countries affected in animals (cumulative)\*
- H5N1: confirmed H5N1 Avian influenza human deaths (cumulative)\*
- H5N1: human cases by age
- Expert viewpoints: concern level regarding H5N1
- Expert viewpoints: potential for H5N1 pandemic
- Expert viewpoints: other influenza subtypes/pandemic potential
- Broad assumptions for next pandemic
- Pandemic severity index (PSI)
- The need for early detection and surveillance
- Expert viewpoints: early detection and surveillance
- Comparisons of pharmaceutical/human interventions for a pandemic
- Likely impact of containment measures
- Expert viewpoints: pandemic interventions/likely impact
- Role of vaccines in pandemic influenza
- Pandemic vaccine definition is determined by time of use
- Pandemic specific vaccines – manufacturing timelines
- Expert viewpoints: pre-pandemic vaccines
- Types of H5N1 pre-pandemic vaccines
- Pre-pandemic vaccines – challenges to manufacturers
- Pre-pandemic vaccines – ideal characteristics
- Pre-pandemic vaccines – expert views on immune response
- Pre-pandemic vaccines – data needed to support licensure
- Pre-pandemic vaccines – expert views: licensing criteria
- Pre-pandemic vaccines – the need for adjuvantation
- Expert viewpoint: adjuvantation
- H5N1 pre-pandemic vaccines: VRBPAC meetings/issues raised
- Expert viewpoints: safety considerations
- Pre-pandemic vaccines: studies in children
- H5N1 pre-pandemic vaccines: current studies in children
- Expert viewpoints: studies in children

Pre-pandemic vaccines: expert views on industry progress/response  
H5N1 pre-pandemic vaccines: current R&D pipeline  
Sanofi Pasteur: pre-pandemic vaccine highlights  
Expert viewpoints: Sanofi's progress  
GSK Biologicals: pre-pandemic vaccine highlights  
Expert viewpoints: GSK Biologicals progress  
Novartis Vaccines: pre-pandemic vaccine highlights  
Expert viewpoints: Novartis progress  
Baxter Vaccines: pre-pandemic vaccine highlights  
Expert viewpoints: Baxter progress  
Solvay Vaccines: pre-pandemic vaccine highlights  
Iomai (Intercell AG): pre-pandemic vaccine highlights  
Pandemic vaccines: summary of company milestones  
Pandemic vaccines: major production facilities  
Other pre-pandemic vaccines e.g. Sinovac  
Expert viewpoints: cell-based systems  
Expert viewpoints: new technologies  
Appendix I – Bibliography  
Appendix II – About VacZine Analytics  
Disclaimer

**PAGES: ~85 MS PowerPoint slides, fully referenced/sourced. Available in .pdf form**

#### **PROJECT METHODOLOGY:**

**VacZine Analytics** has conducted a comprehensive secondary research to review all available information regarding pre-pandemic and pandemic specific vaccines in major EU/Canada and US markets. Source materials used are literature articles, government websites, medical bodies and associations, conference proceedings etc.

Published research from **VacZine Analytics** has also been utilised.

**\*\*NOTE\*\*** 5 International global opinion leaders/experts in pandemic influenza were interviewed as part of this research. Their contribution is anonymous.

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## About VacZine Analytics:

**VacZine Analytics** is a new strategic research agency based in the United Kingdom. Its aim is to provide disease and commercial analysis for the vaccine industry and help build the case for developing new vaccines and biologics.

For more information please visit our website [www.vacZine-analytics.com](http://www.vacZine-analytics.com)

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