****Published February 2013***

MarketVIEW: Hepatitis E Virus (HEV) vaccines (CAT: VAMV040)

Product Name	:	MarketVIEW: Hepatitis E Virus (HEV) vaccines
Description	:	Global vaccine commercial opportunity assessment
Contents	:	Executive presentation + 1 forecast model
Therapeutic Area	:	Hepatitis vaccines
Publication date	:	February 2013
Catalogue No	:	VAMV040

Background

Hepatitis E Virus (HEV) is most common in developing countries with inadequate water supply and environmental sanitation. The virus is enterically transmitted via the faecal-oral route and has been responsible for many large outbreaks. Every year it is estimated to infect about 20 million people, cause 3.3 million incident cases and claim 70,000 lives. Although HEV usually causes a self-limited acute illness in humans the virus disproportionately affects pregnant women with a probability of death estimated at ~20%.

In December 2011 the first HEV vaccine "Hecolin" was approved by China's State Food and Drug Administration (SFDA). The product is marketed by the subsidary company Innovax formed by Yangshengtang Group and Xiamen University in Fujian province. Hecolin is pending the WHO prequalification program so could be used outside of China in the future.

This **MarketVIEW** product contains an executive presentation with an MS Excel-based model which forecasts the potential commercial value of Hepatitis E Virus (HEV) vaccines across the private sector of highly endemic and endemic markets until 2030. The model contains value (\$ m) and volume (mio doses) predictions along with timeframe, pricing and penetration estimates for all adult risk groups (>16 yrs) including immunocompromised, women of child bearing-age and military personnel.

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Methodology

VacZine Analytics has closely monitored all significant source material pertaining Hepatitis E Virus (HEV) epidemiology, disease indications and target groups. Source materials used are literature articles, government websites, medical bodies and associations, conference proceedings etc. Previously published research by **VacZine Analytics** in the field of viral pathogens has also been utilised.

PRODUCT CONTENTS: Published February 2013 (CAT No: VAMV040)

****This product is composed of one forecast model and a summary presentation

Contents **Executive Summary** Author's Note Key model outputs Hepatitis E vaccine: global revenues (\$ 000s) - per scenario Hepatitis E vaccine: global volumes (Doses 000s) - per scenario Hepatitis E vaccine: global revenues (\$ 000s) - region Hepatitis E vaccine: global volumes (Doses 000s)* - per region Hepatitis E virus - Disease background and epidemiology Endemnicity of Hepatitis E Virus (HEV) Endemnicity of Hepatitis E Virus (HEV): list of countries Selected Large Reported Outbreaks of Hepatitis E Virus (HEV) Hepatitis E infection: morbidity & mortality Hepatitis E virus: genetic diversity Geographical distribution of HEV disease pattern Characteristics of HEV infections according to genotype Hepatitis E virus: transmission Routes of Hepatitis E virus infection Time course of Hepatitis E virus infection Hepatitis E virus: risk groups Hepatitis E infection: diagnosis/clinical description Clinical findings in Hepatitis E outbreaks Hepatitis E: age distribution of cases (Hong Kong 2001-2010) Comparison of major characteristics between HAV and HEV Hepatitis E virus: focus on pregnant women Hepatitis E virus: focus on neonates Hepatitis E virus: chronic infection Hepatitis E virus: Solid-organ transplant recipients Hepatitis E infection: treatment/management Hepatitis E virus: summary of vaccine development Hepatitis E vaccines: biological rationale Hepatitis E vaccines: current status Hecolin (Innovax) - HEV239 HEV239: late stage clinical data Hepatitis E vaccine: GlaxoSmithKline/WRAIR GlaxoSmithKline/WRAIR: Phase II clinical data Hepatitis E vaccines: other programs Hepatitis E vaccine: modelling commercial potential Hepatitis E vaccines: modelling methodology

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Continued.....

Countries modelled (private sector) HEV vaccine: modelling scenarios (private sector) Commercial model assumptions: highly endemic countries Commercial model assumptions: endemic countries Hepatitis E vaccines: public sector use Hepatitis E vaccines: model caveats/limitations Bibliography About VacZine Analytics Disclaimer

PAGES: ~60 MS PowerPoint slides, fully referenced/sourced. Available in .pdf form

Contents - Vaccine demand model (MS Excel-based)

Title sheet CHARTS - TOTAL per scenario CHARTS - TOTAL per region Value/ Volume per scenario Val sum (highly endemic) Pricing highly endemic Val sum (endemic) Pricing endemic Vol sum (highly endemic) Vol sum (endemic) Highly endemic markets → LATAM (a) (>16 yrs at risk) AFRICA (a) (>16 yrs at risk) MENA (a) (>16 yrs at risk) ASIA (a) (>16 yrs at risk) INDIA (>16 yrs at risk) CHINA (>16 yrs at risk) Endemic markets -> LATAM (a) (>16 yrs at risk) M5EU (>16 yrs at risk) OTHER EU (a) (>16 yrs at risk) AFRICA (a) (>16 yrs at risk) MENA (a) (>16 yrs at risk) ASIA (a) (>16 yrs at risk) Population sources -> >16 yrs (highly endemic) >16 yrs (endemic) 20-44 yrs Females (highly endemic) 20-44 yrs Females (endemic) Military (highly endemic) Military (endemic) >16 yrs ALL COUNTRIES 20-44 yrs ALL COUNTRIES % PRIVATE SECTOR AT RISK POPULATIONS WORLD MILITARIES

Worksheets = 40 interconnected

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About VacZine Analytics:

VacZine Analytics is an established 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.

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