**Published January 2016**

**MarketVIEW: Shigella vaccines (CAT: VAMV067)**

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**Background**

*Shigella* are a highly infectious Gram-negative, non-sporulating, facultative anaerobic bacteria. They produce toxins, which cause a clinical presentation known as Shigellosis. Shigellosis comprises of systemic symptoms such as fever, headache, malaise, anorexia and occasional vomiting. Although shigellosis in otherwise healthy individuals is generally self-limiting, persistent diarrhoea in young children can be serious with the additional risk of seizures, haemolytic uraemic syndrome and other rare complications, which include encephalopathy. Most importantly, Shigella is the fifth most common known cause of diarrhoeal death in children aged <5 years, mostly in the developing world. In 1999, there were estimated to be 164.7 million cases of shigellosis annually globally in 1999, with 1.1 million deaths (WHO Figures).

A Shigella vaccine that can protect against all strains that produce clinically important disease is needed (i.e. a multivalent vaccine). International agencies such as PATH, WHO, and major national agencies such as the NIH are co-funding vaccine development to speed the development of safe, effective and affordable vaccines against Shigella. Some candidates e.g. WRAIR, GSK and PATH are in active clinical development.

The *MarketVIEW* product is a comprehensive MS Excel-based model + summary presentation that forecasts the potential commercial value of Shigella vaccines across endemic and travelers markets to 2035. Each model contains value ($ m) and volume (mio doses) predictions along with launch timeframe, TPP, pricing and penetration estimates. LO/BASE/Hi forecast scenarios are included based upon a risk classification of countries in terms of Shigella spp. disease incidence. An up to date review is also given for latest disease background and epidemiology, along with current R&D status.
Methodology

VacZine Analytics has closely monitored all significant source material pertaining to Shigella spp, pediatric diarrhea, shigellosis and related indications. 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 novel bacterial vaccines has also been utilised.

PRODUCT CONTENTS:

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****This product is composed of one forecast model (.xls)\(^1\) and a summary presentation (.pdf)

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Pathophysiology of shigellosis
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Clinical presentation of shigellosis
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Epidemiology of Shigella spp.
Seroepidemiology of S. flexneri
Morbidity and mortality associated with shigellosis
Risk factors for shigellosis - developing regions
Risk factors for shigellosis - industrialised regions
Risk factors for shigellosis in travellers
Economic burden of shigellosis
Treatment of shigellosis: Current approaches
Antimicrobial therapy for shigellosis
Antibiotic resistance in Shigella

\(^1\) Model contents available upon application
Continued........

Vaccination against Shigella spp. Rationale and approaches
Rationale for vaccination against Shigella
Approaches to a Shigella vaccine
Choice of serotypes for a vaccine
History of Shigella vaccine development
Shigella spp. vaccines in development: overview of current R&D
History of Shigella vaccine development
Vaccines in development (1) - live attenuated vaccines
Vaccines in development (2) - inactivated and other vaccines
Clinical trial data - live attenuated vaccines
Clinical trial data - subunit and conjugate vaccines
Potential lead candidates for licensure
Shigella spp. vaccines: target product profiles
Shigella spp. vaccines: modelling the potential market
Modelling assumptions: endemic countries
Modelling assumptions: countries of traveler origin
Case data: hepatitis A vaccine uptake rate in international travellers
Bibliography
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* Indicative rate only. Prevailing rate applied to date of transaction.
* A region is North America, Europe or ROW
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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.

For more information please visit our website www.vacZine-analytics.com

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