

\*\*\*\*Published December 2015\*\*\*\*

## MarketVIEW: E.coli (ExPEC) vaccines (CAT: VAMV064)

<b>Product Name</b>	:	<b>MarketVIEW: E.coli (ExPEC) vaccines</b>
<b>Description</b>	:	Global vaccine overview
<b>Contents</b>	:	Executive presentation (.pdf) and forecast model (.xls)
<b>Therapeutic Area</b>	:	Novel vaccines
<b>Publication date</b>	:	November 2015
<b>Catalogue No</b>	:	VAMV064

## Background

**Extra intestinal pathogenic E.coli (ExPEC)** is a member of the *Enterobacteriaceae* bacterial family. It is a leading cause of healthcare-associated (HCA) infections such as bacteraemia, urinary tract infections, neonatal sepsis and meningitis. For bacteraemias, based on a principal diagnosis from US hospital discharge data, there were an 96,560 *E. coli* bacteraemias in 2013 compared to 46,140 in 2000, an increase of 109%<sup>1</sup> Although the number *Streptococcal*, *Staphylococcal* and *Pneumococcal* bacteraemias also increased over the same time period, in 2009, *E. coli* overtook *Staphylococcus* as the **leading cause** of bacteraemia. Importantly, carbapenem-resistant *E. coli* is also considered an “urgent” threat according to the US CDC. *E. coli* is also a common cause of community-acquired, uncomplicated UTIs, which are a common cause of US emergency department and primary care visits. According to NHANES III, around 12% of women reported a UTI in the last 12 months.

Currently there is no vaccine to prevent ExPEC infections. Janssen Pharmaceuticals is co-developing JNJ-860/EcoXyn-4V, a 4-valent “O” antigen conjugate vaccine (the O antigen forms part of the *E. coli* lipopolysaccharide), currently in Phase II development. Other approaches such as subunit or whole vaccines have under investigation but not currently in active development.

The **MarketVIEW** product is a comprehensive MS Excel-based model + summary presentation which forecasts the potential commercial value of ExPEC vaccines across major Western to 2035. Indications considered are prevention of invasive ExPEC disease in >18 yrs (risk and non-risk) and prevention of recurrent UTIs in females 18-64 yrs. The 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 the level of populations targeted by a potential vaccine.

<sup>1</sup> Van der Mee-Marquet NL et al. Marked increase in incidence for bloodstream infections due to *Escherichia coli*, a side effect of previous antibiotic therapy in the elderly.

## Methodology

**VacZine Analytics** has closely monitored all significant source material pertaining to E.coli (extra intestinal pathogenic, ExPEC) and related pathogens e.g. hospital associated infections. 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.

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

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**PAGES: ~67 slides, fully referenced/sourced. Available in .pdf form**

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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](http://www.vacZine-analytics.com)

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