

\*\*\*\*New release Feb 2012\*\*\*\*

## MarketVIEW: Enterovirus-71 vaccines (CAT: VAMV032)

<b>Product Name</b>	:	<b>MarketVIEW: Enterovirus-71 vaccines</b>
<b>Description</b>	:	Global vaccine commercial opportunity assessment
<b>Contents</b>	:	Executive presentation + 2 forecast models
<b>Therapeutic Area</b>	:	Novel pediatric/endemic vaccines
<b>Publication date</b>	:	February 2012
<b>Catalogue No</b>	:	VAMV032

## Background

Enterovirus-71 (EV-71), a small member of the *picornaviridae* virus family, is a major causative agent of “hand foot and mouth” HFMD disease in South East Asia. In some countries EV-71 related HFMD outbreaks appear to be increasing in magnitude and frequency and are responsible for significant childhood mortality (905 deaths in China 2010) (est CFR 0.03%). Like Japanese encephalitis (JEV), an inactivated EV-71 vaccine has high likelihood of region specific national adoption in the SE Asia. Four such vaccines appear to be in late stage clinical trials in China with the first launch expected 2014.

This **MarketVIEW**<sup>1</sup> product is a comprehensive commercial opportunity assessment which forecasts the potential of EV-71 vaccines to 2030 in the SE Asia region. The product examines different scenarios of successive country based vaccine deployment in the <1 yrs and 1-5 yrs age groups. Detailed coverage of latest EV-71 epidemiology (outbreaks) is included, also a focus on development history/approaches to date and coverage of latest cost effectiveness issues. Expected revenues per competitor (public) sector are included for the late stage Phase III programs operated by Sinovac and China National Biotech Group (Beijing Vigoo Biological Co Ltd). This product is an ideal starting point for any manufacturer wishing to assess this emerging market in the SE Asia region.

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<sup>1</sup> This product supercedes the previous **VacZine Analytics** publication **DiseaseINFOPACK: Enterovirus-71** (CAT No:VADIP014), published August 2009

## Methodology

**VacZine Analytics** has closely monitored all significant source material pertaining to Enterovirus-71 disease epidemiology/vaccines. Example, secondary source materials used are literature articles, government websites/databases, medical bodies and associations, conference proceedings and previously analyses (where publically available). Previously published research by **VacZine Analytics** in field of pediatric/endemic vaccines has also been utilised. **\*\*\*See Bibliography for exact sources.**

### PRODUCT CONTENTS:

**Published February 2012 (CAT No: VAMV032)**

\*\*\*\*This product is composed of three models and an Executive presentation

#### Contents – Executive presentation (MS PowerPoint based)

- Author's note
- Executive summary
- Commercial model – key outputs
- EV-71 vaccine(s): scenario definitions
- Total available global market to 2030: EV-71 vaccine(s)
- EV-71 vaccine: available market (0-5 yrs) to 2030
- EV-71 vaccine: total predicted volume (0-5 yrs) to 2030
- EV-71 vaccine: available market (<1 yrs) to 2030
- EV-71 vaccine: available market (1-5 yrs) to 2030
- EV-71 vaccine: China market to 2030 (0-5 yrs) to 2030
- Total available global market to 2030: EV-71 vaccine(s) (public/private)
- SE Asia: cumulative first 5 year spend (public)
- Revenues per competitor to 2030: EV-71 vaccine(s) 0-5 yrs (CHINA)
- EV-71: epidemiology overview
- EV-71: the pathogen
- Comparing endemic diseases
- EV-71: timeline
- Epidemiology: latest outbreaks in Asia
- Epidemiology: incidence rates by country
- Epidemiology: China
- HFMD incidence rate, by province, January-May 2011, China
- HFMD incidence rate, by province, January-May 9, 2008, China
- Distribution of HFMD cases by province, January-May 2011, China
- Distribution of severe HFMD cases (A) and deaths (B) by province, January-May 2011, China
- Epidemiology: Taiwan
- Epidemiology: Thailand
- Epidemiology: Vietnam
- Epidemiology: Malaysia
- Epidemiology: South Korea
- Epidemiology: Japan
- HFMD annual and weekly cases, sentinel-reports, Japan
- Percentage of HFMD cases by age group, sentinel-reports, 2000-2011
- Virus isolation/detection from aseptic meningitis cases, 2008-2012, Japan
- Epidemiology: Singapore
- Epidemiology: US

**Continued.....**

Epidemiology: Europe  
Epidemiology: Other  
EV-71: mortality  
EV-71: morbidity  
EV-71 vaccine: modeling commercial potential  
EV-71 vaccine opportunity: ideal target product profile  
Modeling strategy: country/region inclusion  
EV-71 vaccine commercial model: countries included/scenarios  
Modeling strategy: target populations (endemic)  
EV-71 vaccine: estimated order of vaccine use in target age groups  
Modeling strategy: launch sequence/roll-out (endemic)  
SE Asian countries: estimated launch dates per segment  
Other countries: estimated launch dates per segment  
EV-71: vaccine stockpile in Western countries?  
EV-71: vaccine: cost effectiveness analysis  
EV-71: prices used in model  
EV-71: vaccinology, summary of competitor programs  
EV-71: vaccine: immunological aspects  
EV-71: summary of vaccine approaches to date  
EV-71: vaccine: need for cross protection  
Evidence for the possibility of single genotype vaccine for EV-71  
Evidence against the possibility of single genotype vaccine for EV-71  
EV-71 vaccine: cross protection – other points to note  
Other Coxsackieviruses and HFMD  
Vaccine pipeline  
Estimating market share (CHINA)  
Opportunity for new treatments  
Bibliography  
Disclaimer  
About **VacZine Analytics**

**PAGES: ~90 MS PowerPoint slides, fully referenced/sourced. Available in .pdf form**

**Contents – Vaccine demand model(s) (MS Excel-based)**

**Note: two models are included with differing vaccine price scenarios**

Title sheet  
Notes  
CHARTS – VALUE  
CHARTS VAL VOL  
CHART – COMP  
Competitors (0-5 yrs)  
Value summary (0-5 yrs)  
Volume summary (0-5 yrs)  
Global price summary  
**LO SCENARIO**  
Public + private  
Country 1 – <1 yrs + 1-5 yrs  
Country 2 – <1 yrs + 1-5 yrs  
Country 3 – <1 yrs + 1-5 yrs  
etc  
**BASE SCENARIO**  
Public + private  
Country 4 – <1 yrs + 1-5 yrs



**Continued.....**

Country 5 – <1 yrs + 1-5 yrs

**HI SCENARIO**

Public + private

Country 4 – <1 yrs + 1-5 yrs

Country 5 – <1 yrs + 1-5 yrs

Populations =>>

Birth cohorts

Epidemiology =>>

% pub/priv

% Urban population

Total populations

Back page

**Worksheets = 35 per model**

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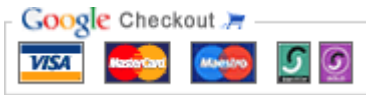
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## About VacZine Analytics:

**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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