*****Published October 2022****

MarketVIEW: Seasonal influenza vaccines (CAT: VAMV036)

Product Name	:	MarketVIEW: Seasonal influenza vaccines
Description	:	Global vaccine commercial opportunity assessment
Contents	:	Executive presentation (~412 slides.pdf) + forecast model(s) (.xls) + MS-Excel Workbook
Therapeutic Area	:	Seasonal influenza vaccines
Publication date	:	October 2022 (first iteration)
Catalogue No	:	VAMV036

Background

Annual **seasonal influenza** epidemics typically affect **5-15%** of the population with mainly upper respiratory tract infections. On a global basis around 3-5 million cases of severe illness are estimated each year with an associated 290,000 - 650,000 deaths (WHO figures). Annual influenza vaccination is the most effective method for preventing influenza virus infection and its complications, now more so during the **COVID-19 pandemic**. Recommended groups for influenza vaccination are usually those most vulnerable and include the elderly, very young and those with underlying chronic diseases. In the US, influenza vaccination recommendations now include every person >6 mos. Globally, many influenza vaccines are still of the trivalent inactivated format (TIV) although now the US market has 99% switched to **Quadrivalent (QIV) vaccines** with high dose (HD), cell and adjuvanted formats. New US ACIP recommendations have now taken a preferential stance for differentiated vaccines in the >65 yrs segment.

This **MarketVIEW** product is a comprehensive MS Excel-based model + summary presentation (.pdf) which forecasts the potential commercial volume and value of seasonal influenza vaccines across 13 major individual Western and 37 emerging or rest of world (ROW) markets to 2035. The model contains validated volume (mio doses) estimates for all recommended target groups per country based on a thorough investigation of national recommendations and policy and detailed country-specific vaccine coverage rates. Country market values are ascertained by a pricing methodology based upon public/private sector prices for TIVs, QIVs, high dose (HD), LAIV and other forms where the impact of discount/return is explored. The analysis contains a detailed US forecast by product type and individual competitor including Seqirus' QIV (Flucelvax), MF-59 adjuvanted FLUAD and the Sanofi HD (now QIV) portfolio (Fluzone + Flublok). An updated methodology is introduced to estimate the adoption of QIV products outside of the key US market looking at >10 ROW suppliers and EU potential for new Sanofi differentiated products Supemtek and Efluelda entering the European market to challenge Seqirus An updated analysis of the UK expanded program is included with a brand new demand by vaccine type analysis across the EU28 region. Key late stage R&D programs are also assessed for market entry along with the **new mRNA threat** (ModernaTX mRNA-1010, 1011, 1012, 1020, 1030) and Pfizer (PF-07252220, PF-07852352) that have clear implications for future

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product strategy. **MarketVIEW**: Seasonal influenza vaccines is the ultimate up-to-date guide for this significant vaccine marketplace.

Methodology

VacZine Analytics has closely monitored all significant source material pertaining to seasonal influenza vaccines in each respective market. Source materials used are academic literature articles, government websites, medical bodies and associations, conference proceedings etc. Previously published research by **VacZine Analytics** in the field of viral respiratory pathogens has also been utilised.

PRODUCT CONTENTS:

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****This product is a summary presentation (.pdf), an MS-forecast model (.xls) and an information workbook(s) (.xls)¹

Contents – Summary presentation (.pdf)²

Contents Author's notes **Executive summary** [SECTION 1] Seasonal influenza vaccines: key commercial model outputs [SECTION 2] Season influenza - burden of disease/review of global season 2021/22 - 2022/23 [SECTION 3] Review of US season 2021/22 – looking towards 2022/23 [SECTION 4] Review of UK & EU28 season 2021/22 – looking towards 2022/23 [SECTION 5] Review of latest UK & EU28 influenza vaccine recommendations 2021/22-23 [SECTION 6] UK & EU28 influenza vaccine coverage levels per target group [SECTION 7] Review of EU28 supply, demand volumes and vaccine types across EU [SECTION 8] Review of Southern Hemisphere: Australia and Brazil seasons 2021/22 [SECTION 9] Review of latest 2021/22-23 ROW influenza vaccine recommendations & uptake [SECTION 10] Review of 2021/22-23 ROW supply and demand volumes [SECTION 11] Update on major competitor activity 2021/22 and commercial forecasts [SECTION 12] Review of key R&D programs (incl mRNA) and potential new threats/competitors [SECTION 13] Modelling global potential demand/commercial value 2014-2035 References/bibliography About VacZine Analytics Disclaimer

PAGES: ~412 slides fully referenced/sourced. Available in .pdf form

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¹ Influenza vaccine coverage rates per country per target group

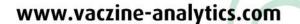
² Full contents i.e. title per slide is available upon request

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Example contents - Vaccine demand model (MS Excel-based)

Title sheet CHARTS -> Global Val/Vol USA Val/Vol West (excl USA) Val/Vol UK Val/Vol ROW Val/Vol QIV adoption Value summaries -> Global (all) val vol West excluding USA + ROW QIV val/vol Hypothetical EU childhood program(s) Demand analyses → Grand value ROW (pub & priv) Grand value WEST (pub & priv) Weighted average pricing 2014, 2017, 2020, 2022 EU WAP Pricing summary – TIV (all types) Pricing summary – QIV (all types) Pricing summary – LAIV Pricing summary – Cell based vaccines Pricing summary – Adjuvanted vaccines Grand volume ROW (pub & priv) Grand volume WEST (pub & priv) Total volume sum (private ROW) Total volume sum (private West) Total volume sum (public ROW) Total volume sum (public West) Volume summary (infant risk) Volume summary (2-19 yrs risk) Volume summary (19-65 yrs risk) - includes all target groups in this age category Volume summary (> 65 yrs) Private sector growth rates Country 'build-up' worksheets (all segments, 4 worksheets per country) USA Canada United Kingdom UK program France Germany Italy Austria Belgium Greece Netherlands Poland Sweden Argentina Australia Brazil China Hong Kong India Indonesia Japan Macau Malaysia Mexico LATAM (LMI) LATAM (UMI) Pakistan

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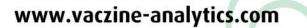


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Philippines Russia South Korea Taiwan Thailand Turkey Vietnam New Zealand Other PAHO Resources =>> Competitor sales and forecasts US vol by age CDC validation US historical production US by format US competitor val vol forecast Sanofi Pasteur sales Sanofi Pasteur graphs GSK & AZMedImmune & Seqirus (graphs) CSL Seqirus capacity forecasts All top suppliers (reported sales/CAGRs) Supplier's unit prices QIV pricing trends (peds and adult) **PAHO RF prices** EU 28 analysis EU doses used 2014-2015 (previous) EU doses used 2014-2017 (previous) Country vol data EU new 2022 New 2022 EU vol scan UK per vaccine type Elderly by TYPE & FLUAD Sanofi Efluelda Supemtek EU EU by competitor FY 19, 21 Country actual vol data (EU) Country recommendations database ROW (2020) Country actual vol data (ROW) WHO schedules - influenza (pediatric and adult) Population databases % private **Risk groups** Back page

Worksheets = >120 interconnected

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BIBLIOGRAPHY

266 references - available upon request



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TERMS and CONDITIONS:

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VacZine Analytics

A division of Assay Advantage Ltd Warren (Carlton) House Bells Hill Bishops Stortford Herts CM23 2NN United Kingdom Tel: +44 (0) 1279 927049 E-mail: info@vacZine-analytics.com

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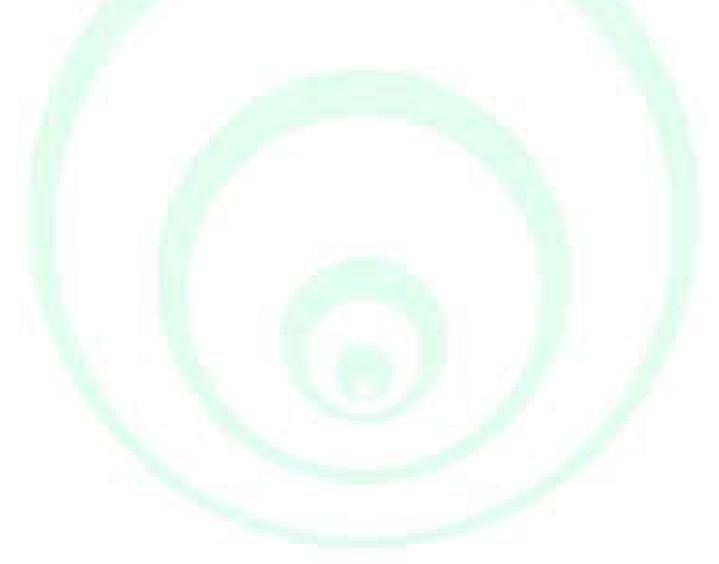


About VacZine Analytics:

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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