

## Epstein-barr virus vaccines – preventing downstream risk

**LONDON, UK----19<sup>th</sup> November 2021----ExpertREACT.** ModernaTX's intention to start clinical development of a EBV prophylatic vaccine program (mRNA-1189) will be the first major industrial activity in the field for over a decade. Will EBV vaccine development undergo a new renaissance?

This month **VacZine Analytics**, a UK-based strategic research publisher exclusively focused on vaccines and infectious diseases, releases a new forecast and global demand analysis for prophylatic and therapeutic **Epstein-barr virus (EBV) vaccines**.

**Epstein-barr virus (EBV)**, a herpesvirus family member, exclusively infects humans usually via oral transmission. The age of primary EBV infection varies widely according to socioeconomic conditions with those in the developing world infected during early childhood. In the West, EBV primary infections, which occur in adolescence or early adulthood often result in **infectious mononucleosis (IM)** or “mono” and the “kissing disease”. IM is usually benign and characterized by pharyngitis, cervical lymph node enlargement, fatigue and fever. However, complications can occur in around 1% of patients. Importantly, Infectious mononucleosis has been associated with an increased risk of **Hodgkin lymphoma** (estimated 1 in 1000).

**EBV** is also associated with a variety of other malignancies, including **gastric carcinoma**, **nasopharyngeal carcinoma** and **Burkitt lymphoma**. Overall, EBV is estimated to have caused ~1-2% of all global cancers in 2021 and is responsible for 140-200,000 deaths per year (latest estimates). EBV also causes Post-transplant lymphoproliferative disorder (PTLD), a potentially fatal complication affecting allogeneic hematologic stem cell transplant (HSCT) recipients and to a less extent, solid organ transplants (SOT). EBV is also involved with a heightened risk for multiple sclerosis (MS) and now possibly linked to **long COVID-19**.

Due to its many disease associations, an **EBV prophylatic** and **EBV therapeutic** vaccines are attractive targets for vaccine research and development. A GSK sponsored recombinant gp350 vaccine for infectious mononucleosis previously was shown to reduce the rate of disease in seronegative volunteers but not infection (Sokal EM et al 2007) indicating proof of concept (POC). No major industrial activity has occurred in the field since GSK ceased internal development of gp350. Recently, **ModernaTX** have announced their intention to pursue clinically both prophylatic (mRNA-1189) and therapeutic (mRNA-1195) EBV vaccine programs which should re-ignite interest in the field.

This **MarketVIEW** product contains a comprehensive MS Excel-based model + Executive presentation that forecasts the potential commercial value of Epstein-barr virus (EBV) vaccines across Western economies until 2040. The model contains value (\$ m) and volume (mio doses) predictions per identified vaccine target segment along with timeframe, pricing and penetration estimates for three target product profiles (TPPs) including prophylatic [PX] and therapeutic approaches [TX]. The product also includes an in-depth review of the latest EBV epidemiological trends, treatments/guidelines, comparative pricing assessments and latest developments in vaccinology and R&D including Moderna Therapeutics mRNA-1189, prophylatic vaccine and mRNA-1195, therapeutic vaccine which are soon to enter clinical development.

This MarketVIEW product consists of a detailed Executive presentation (>175 .pdf slides) and a comprehensive MS-Excel workbook (.xls) *\*10 countries are rolled up*

## 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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