Acne vulgaris: time for something new…..

LONDON, UK----20th March 20225----ExpertREACT. Acne vulgaris is a highly prevalent condition and treatments haven't altered significantly in decades. Sanofi is betting acne vaccines can change the status quo….

Acne vulgaris is a multifactorial chronic inflammatory disease among the most common dermatological conditions worldwide (~9% prevalence, all ages) (Global Burden of Disease figures). A 2022 analysis suggested there were **231.2m** prevalent cases of acne in 2019 across 204 countries, with incident cases at **117.4m** (Chen H *et al* 2022) (1). The authors stated that age-standardized incidence rates had increased over the previous 3 decades although the reasons for the increase were stated to be 'unclear'.

Acne affects mainly adolescents, (**~90%** prevalence), and importantly persistent acne can have a profound effect on an individual's self-esteem and confidence thus resulting in significant morbidity. Around **20-35%** of acne cases are classed as **moderate-to-severe** for which current topical and oral treatments have many pitfalls including skin irritation and antibiotic resistance concerns. For severe acne (**1-3%** of cases), the recommended oral treatment, isotretinoin, although effective, is tightly controlled due to a range of side effects including teratogenicity which necessitates the strict adherence to contraceptives in females. Acne vulgaris can also last into adulthood (>25 yrs), especially for women.

Because of the need for new options in acne vulgaris management, the vaccine industry is now turning its attention to acne vaccines. A new mRNA-based *Cutibacterium acnes (C.acnes)* approach is now in Phase 1/2 testing (Sanofi Pasteur, **SP0268**) leveraging from antigens gained in the previous acquisition of **Origimm Bio GmbH** in 2021. A therapeutic acne vulgaris vaccine could have utility as a monotherapy or an adjunct to existing therapies. It should significantly reduce inflammatory and non-inflammatory acne lesions by targeting relevant antigens on pathogenic strains of *Cutibacterium acnes*, a known contributor to clinical disease.

For 2025, **VacZine Analytics** has published a brand-new analysis: **MarketVIEW – acne vulgaris vaccines (CAT No: VAMV034)**. This is a comprehensive Executive Presentation (>200 slides, .pdf) and interactive MS-Excel forecast model (>120 worksheets, .xls) which forecasts the commercial potential and expanded demand of an acne vulgaris therapeutic vaccine across 10 developed markets (split by age/gender) to 2045. The interactive model allows changes to product administration, uptake, coverage, pricing and acne severity. The analysis also contains a thorough up-to-date review of acne epidemiology, current treatments/guidelines and the potential positioning of a new acne vaccine. Potential pricing strategies of the putative acne vulgaris vaccine are also explored.

VacZine Analytics is a strategic research publisher based in the United Kingdom since 2007. We aim 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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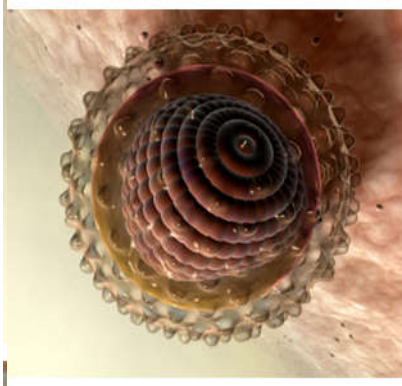
1) Chen H et al. Magnitude and temporal trend of acne vulgaris burden in 204 countries and territories from 1990 to 2019: an analysis from the Global Burden of Disease Study 2019, British Journal of Dermatology, Volume 186, Issue 4, 1 April 2022, Pages 673–683, https://doi.org/10.1111/bjd.2



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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