

June 03, 2025

The Manager, Listing Department The National Stock Exchange of India Ltd. Exchange Plaza, Bandra Kurla Complex, Bandra (E), Mumbai – 400 051

NSE Symbol: PANACEABIO

BSE Limited Corporate Relationship Department, Phiroze Jeejeebhoy Towers, Dalal Street, Mumbai – 400 001 BSE Scrip Code: 531349

Re.:Press Release - Inclusion of EmulsiPan adjuvant in the CEPI Adjuvant Library and its foray into commercialisation of its indigenously developed adjuvants

Dear Sir/Madam,

This is to inform you that the Company is proud to announce the listing of EmulsiPan in the CEPI (Coalition for Epidemic Preparedness Innovations) Library of adjuvants to support the scientific community in advancing vaccine and biotherapeutic development. EmulsiPan has been recognized for its potential in enhancing the efficacy and dose-sparing effects.

A copy of the Press Release titled "Panacea Biotec is proud to announce the inclusion of EmulsiPan adjuvant in the CEPI Adjuvant Library and its foray into commercialisation of its indigenously developed adjuvants" being issued to the media, etc. in this regard is enclosed for your kind reference and record please.

Kindly acknowledge the receipt.

Thanking you,

Sincerely yours,

for Panacea Biotec Limited

Vinod Goel Group CFO and Head Legal & Company Secretary

Encl. As Above



3rd June 2025 New Delhi

Panacea Biotec is proud to announce the inclusion of EmulsiPan adjuvant in the CEPI Adjuvant Library and its foray into commercialisation of its indigenously developed adjuvants



Panacea Biotec Limited is proud to announce the listing of EmulsiPan in the CEPI (Coalition for Epidemic Preparedness Innovations) Library of adjuvants to support the scientific community in advancing vaccine and biotherapeutic development. EmulsiPan has been recognized for its potential in enhancing the efficacy and dose-sparing effects.

EmulsiPan is an oil-in-water emulsion adjuvant and is produced by nano-emulsification of squalene along with surfactants and buffers. Squalene is a naturally occurring biodegradable and biocompatible triterpene hydrocarbon found in many plants as well as in humans. EmulsiPan is a ready-to-use sterile emulsion, supplied in a 10 mL USP Type I glass vial for research purposes. It is designed for storage at 2-8°C and maintains stability for over 2-years under recommended conditions.

On the occasion, the **Chairman and Managing Director**, Panacea Biotec, **Dr. Rajesh Jain** said, "It is with great pride that we announce the availability of EmulsiPan, a ready-to-use dose-sparing adjuvant designed to enhance vaccine efficacy and support global public health initiatives. Such investments showcase our commitment to research and development investments that provide us the edge to not just meet ongoing challenges but also create a future-ready company that is prepared for every possibility and opportunity."

The global market for adjuvants is expected to reach over \$4.8 billion¹ by 2028 with applications across vaccines and biological therapies including oncology. Oil-in-water emulsion adjuvants like EmulsiPan are used in multiple commercial vaccines like the flu vaccines. EmulsiPan's open access and affordability signal Panacea Biotec's entry into commercialisation of adjuvants. The increasing prevalence of communicable diseases and the need for effective vaccines are driving the demand for oil-in-water emulsions. It is also used in animal vaccines.

EmulsiPan has been utilized in several high-impact preclinical studies and collaborative research programs, demonstrating its versatility and potential to enhance vaccine efficacy. Notably, it has been employed in non-human primate (NHP) challenge studies for Sarbecoronavirus candidate vaccine development at California Institute of Technology

¹ DelveInsight. 2025. Link.

(Caltech), and in the Betacoronavirus candidate vaccine development program in collaboration with BRIC-Translational Health Science and Technology Institute (THSTI) and funded by CEPI. These collaborations highlight EmulsiPan as a reliable and adaptable adjuvant platform across a diverse range of vaccine development efforts.

EmulsiPan was developed in 2009 and commercialised as part of *PandyFlu* (Panacea Biotec's H1N1 vaccine). EmulsiPan has since evolved into a trusted platform adjuvant, enabling vaccine development across multiple disease areas. At that time, Panacea Biotec successfully developed the adjuvant, established a cGMP manufacturing facility, developed the vaccine, including the adjuvant, on a fast-track basis to respond to the pandemic situation. EmulsiPan does not require any licensing fees - ensuring affordability and providing open access for vaccine developers. Research institutes and companies that are looking for adjuvants can now contact us for commercial or research programs.

Inclusion in the prestigious CEPI Adjuvant Library is testimony that EmulsiPan has undergone rigorous review and meets the necessary standards for supporting human vaccine development, increasing its credibility within the scientific and pharmaceutical communities. With its user-friendly formulation, regulatory preparedness, and robust scientific validation, EmulsiPan® stands as a catalyst for advancing global vaccine innovation.

By removing access barriers and providing a stable, cGMP manufacturing, ready-to-use formulation, Panacea Biotec reaffirms its dedication to equitable healthcare and strengthened global preparedness against pandemics.

About Panacea Biotec

Panacea Biotec is an innovation-led integrated biopharmaceutical group committed to the discovery, development, and commercialization of high-quality pharmaceuticals, vaccines, nutrition, and wellness products. We integrate cutting-edge science with our mission to address unmet medical needs through affordable solutions. Panacea Biotec has filed over 1,500 patents globally. Panacea Biotec is a recipient of Thomson Reuters Top 50 Innovator of the Year awards in 2015 and 2016.

Panacea Biotec has played a vital role in Polio eradication in India by delivering >10 billion doses of oral polio vaccines. Anticipating stagnancy in Polio cases in early 2000s, Panacea Biotec developed and launched the world's first monovalent and bivalent oral polio vaccines that finally helped India to reach zero cases in 2011. Our journey has been marked by Polio eradication leading to a bigger impact across infectious diseases.

Panacea Biotec is the first company to have developed a fully liquid Pentavalent vaccine (DTwP+HepB+Hib) EasyFive-TT in 2005. Panacea Biotec is also the first company to have introduced the World's first fully-liquid wP-IPV based Hexavalent vaccine, EasySix (DTwP+HepB+Hib+IPV) in 2017. We have supplied >200 million doses of innovative fully-liquid combination vaccines across the world.

Our other key vaccines in the portfolio are EasyFour-TT (DTwP+Hib), EasyFour®-Pol (DTwP+IPV), Bivalent oral polio vaccine (type-1 and type-3) and thiomersal-free Td (tetanus

reduced diphtheria). Our pipeline products include NucoVac-11 (Pneumococcal Conjugate Vaccine) and DengiALL (Recombinant Tetravalent Dengue Candidate Vaccine). Our Nutritional products include ChilRun Full, ChilRun Full No Sucrose, and ChilRun 7+ that support a child's total growth and development requirements. We have launched NikoMom, to meet the needs of mothers and newborn babies through natural, safe, and non-toxic products. Under this brand, we have launched NikoMom baby diapers and NikoMom 99.9% water based wet wipes.

We have commercialised our first NCE under the brand name *Sitcom* (euphorbia prostate extract) for the treatment of Piles as per ICH guidelines and nanotechnology based world's first bioequivalent generic, *PacliAll* (to generic to Abraxane). We have a robust R&D pipeline including high-barrier generics, leveraging advanced drug delivery platforms such as nanoparticles, liposomes, gastro-retentive systems, vaccines, and wellness focused products. Panacea Biotec remains focused on merging cutting-edge science and technology with an unwavering commitment towards unmet medical needs while ensuring affordability.

For queries, please contact:

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