

June 10, 2020

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,
PhirozeJeejeebhoy Towers,
Dalal Street, Mumbai – 400 001
BSE Scrip Code: 531349

Re.: Press Release - Landmark Collaboration between Panacea Biotec and Refana for Covid-19 vaccine

Dear Sir,

Panacea Biotec Ltd. (“PBL”) is delighted to announce the landmark collaboration with Refana Inc. USA for Covid-19 vaccine which will enable global development, manufacturing and distribution of the Covid-19 vaccine.

Under the collaboration, Panacea Biotec is advancing its response to address the unprecedented challenges of COVID-19 by collaborating with Refana Inc. USA to make Covid-19 vaccine widely accessible around the world in an equitable manner through a Joint Venture company to be based in Ireland.

The collaboration aims to bring to patients a whole inactivated virus-based vaccine for Covid-19. Under the collaboration, Panacea Biotec will be responsible for product development and commercial manufacturing, with the Joint Venture Company undertaking clinical development and regulatory submissions across the World. Both Panacea and Refana will undertake sales and distribution of the vaccine in their respective territories.

A copy of the Press Release titled “Panacea Biotec and Refana announce landmark collaboration for Covid-19 vaccine” 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 Ltd.**


Vinod Goel
Group CFO and Head Legal
& Company Secretary



Encl. As Above

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Panacea Biotec Ltd.

CIN: L33117PB1984PLC022350

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June 10, 2020 | New Delhi, India

Panacea Biotec and Refana announce landmark collaboration for Covid-19 vaccine

Collaboration will enable global development, manufacturing and distribution of the Candidate Covid-19 vaccine

Panacea Biotec is advancing its response to address the unprecedented challenges of COVID-19 by collaborating with Refana Inc. USA to make Covid-19 vaccine widely accessible around the world in an equitable manner through a Joint Venture company to be based in Ireland.

The collaboration aims to bring to patients a whole inactivated virus-based vaccine for Covid-19. Under the collaboration, Panacea Biotec will be responsible for product development and commercial manufacturing, with the Joint Venture undertaking clinical development and regulatory submissions across the World. Both Panacea and Refana will undertake sales and distribution of the vaccine in their respective territories.

Dr. Rajesh Jain, Managing Director, Panacea Biotec, said, "The world needs a vaccine that is safe, effective, and scalable in a cGMP compliant manufacturing facility that has sizeable capacity and capability to cater to global demand. Our collaboration with Refana aims to manufacture over 500 million doses of our Covid-19 candidate vaccine, with over 40 million doses expected to be available for delivery early next year. Whole inactivated viral vaccines have a higher probability of being safe and efficacious, given their long history and better understanding of their mechanism of action, which has been elucidated over many decades. This vaccine has the potential to become the **Vaccine of Choice** for the global fight against Covid-19. We believe and hope that our vaccine will enable the world to get back to work fearlessly as soon as possible."



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Dr Phillip Schwartz stated "Refana and its international network of scientific researchers and practitioners are dedicated to finding practical solutions to complex and urgent global medical problems. We are grateful for the input we have obtained from dozens of medical scientists and epidemiologists in more than a dozen countries in this unprecedented worldwide collaboration to end Covid-19. Our partnership with Panacea Biotec brings this dream to a practical realization with the ability to manufacture 500 million Covid-19 vaccines over 12 months. Utilizing proven models of viral pathogenesis and parallel conduct of multiple pre-clinical and clinical studies, Refana believes it can significantly accelerate the vaccine development and approval process for its tried and true whole inactivated viral vaccine approach. We are very excited to combine this approach with Panacea Biotec's world class technology, development and production capabilities."

About Panacea Biotec

Panacea Biotec is an innovation-led biotechnology group that focuses on discovery, development, and commercialisation of prescription medicines. Its facilities are WHO Prequalified, US FDA approved and cGMP compliant. It is also undertaking development of a novel Tetravalent Dengue Vaccine, Pneumococcal Conjugate vaccine among other differentiated drug development programs.

In April 2019, India Resurgence Fund (IndiaRF), a leading India-focused investment platform, promoted by Piramal Enterprises Limited and Bain Capital Credit, announced an investment of up to INR 992 Crores / US\$ 144 Million in Panacea Biotec.

For more information, visit: www.panaceabiotec.com



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About Refana

Dr Schwartz is the Chief Scientific and Medical advisor to Refana Inc., and the founder and president of NASDAQ listed EnteraBio. Refana Inc., is United States registered private corporation dedicated to finding practical and innovative solutions to the world's medical problems. By utilizing a highly collaborative open source system of research and development Refana has been able to attract world leaders in their respective scientific and medical fields to work on these problems. Through this model Refana hopes to greatly accelerate the vaccine development process for Covid-19 and help protect not only the health of the world, but also the economies and stability of nations at risk.

For more information regarding Refana and this announcement, please contact Debbie Fuller. Tel: +44 7494 636015. info@refana.com and pr@refana.com

For more information:

For Investors:	For Media:
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