



## **Nasus Pharma announces data demonstrating in vitro efficacy of Taffix intranasal antiviral spray against the new highly infectious Omicron variant of SARS-CoV-2**

**Taffix® blocks the Omicron Variant of SARS-CoV-2 in addition to the Alpha (UK) and Beta (South African) and Delta Variants**

Tel Aviv , Israel January 19 2022 – [Nasus Pharma](#), a privately held clinical-stage biopharmaceutical company developing a powder-based intranasal (PBI) product portfolio to address acute medical conditions and public health threats, today announced data from a collaborative in vitro study with the Central Virology Laboratory, Ministry of Health, Public Health Services, Sheba Medical Center, Tel Hashomer, Ramat Gan, Israel, which demonstrated that the gel layer produced by Taffix® powder after administration of a tissue culture infectious dose of the virus at a concentration found in nasal samples taken from COVID19 patients (CT 22.1 at RT-PCR test), effectively blocked 100% of the new highly infective Omicron variant of SARS-CoV-2 virus. This in addition to recently announced efficacy of Taffix under the same conditions against three additional variants: Alpha, Beta and Delta variants as demonstrated by quantitative RT-PCR testing of cells incubated with Taffix inoculated with the viruses<sup>1</sup>.

The Omicron variant is now the dominant strain of SARS-CoV-2 in over 100 countries. It was found to be significantly more infectious, transmissible at earlier phases of the diseases and replicates more quickly. Viral load found in patient with Omicron and Delta strain was 1000 higher than the first strains identified at



the outbreak of the pandemic<sup>2,3</sup>.

“These important results conform with prior in vitro studies performed by Nasus Pharma in collaboration with other Universities and research laboratories, with Taffix where 99.99% of SARS-CoV-2 viruses were blocked by Taffix<sup>4</sup>, 100% blockage of Alpha and Beta variants and Delta, as well as other viruses known to cause upper respiratory infections. Importantly these results are consistent with real life clinical experience with Taffix where the risk of contracting COVID19 was reduced by 78% following a “super spreader event” in September 2020 during the first wave<sup>5</sup> and recently published top line results of a double blind placebo controlled study showing reduction in the risk of infection with COVID19 (odds ratio ~ 60%) and highly statistically significant reduction in the symptoms of upper respiratory infection<sup>6</sup>. Our recent in vitro study results are yet another proof of the robust non-specific activity against the transmission of multiple respiratory viruses, found in prior studies” said Dr. Dalia Megiddo, Chief Executive Officer of Nasus Pharma. “The study’s results reconfirm the versatility of our technology against various respiratory viruses including SARS-CoV-2 and its new variants and Taffix’s potential as an important additional layer of protection against infection.”

Udi Gilboa, Chairman of the Board of Nasus Pharma, added, “As new variants are causing a renewed surge of infections world wide, there is an urgent need for solutions that enable resuming of economic and social activities safely. The changing dynamics of the virus and the continued appearance of additional mutations present a challenge to public health. Our new data demonstrates that Taffix can be helpful in preventing the spread of these new variants in addition to all other recommended safety measures. With the global growing use of Taffix, we have learned how important additional layer of protection is to facilitate a return to safer normalcy.”



Taffix<sup>®</sup>, currently sold in over 25 countries across Europe, Latin America, Asia and Middle East, was developed to create a hostile microenvironment in the nose which is proven to prevent viruses from entering and infecting nasal cells. It is now well established that the nose is the main gateway to the body of airborne droplet viral infection including SARS-CoV-2 common cold viruses and Influenza. Taffix<sup>®</sup> powder creates a unique thin acidified gel above the nasal mucosa that lasts 5 hours, significantly shielding the nasal cells from inhaled viruses through both mechanical and chemical protection. As such Taffix<sup>®</sup> may be an important new protective tool in addition to the multiple preventive measures taken today for preventing SARS-CoV-2 new variants from spreading further as well as viruses causing common cold and influenza.

#### **About Nasus Pharma:**

Based on its unique microsphere technology, Nasus Pharma is developing a number of intranasal powder products aimed at assisting patients in several acute emergency situations such as opioid overdose and anaphylactic shock.

Intranasal administration is most suitable for those situations in which rapid drug delivery is required and offers multiple advantages such as rapid drug delivery, ease of use, non-invasiveness, and safety. Nasus portfolio comprises a number of programs: Intranasal Naloxone (completed pivotal study) and Intranasal Epinephrine (completed phase 2) as well as a number of preclinical POC programs.

[www.taffixprotect.com](http://www.taffixprotect.com)

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<sup>1</sup> Michal Mandelboim, Ella Mendelson, Yaron Drori, Nofar Atari, Tair Lapidot, Dalia Megiddo, Micha Gladnikoff. Taffix® Nasal Powder Spray Forms an Effective Barrier Against Infectious New Variants of SARS-Cov-2 (Alpha, Beta and Delta). Archives of Clinical and Biomedical Research 5 (2021): 794-802.

<sup>2</sup> Li et al. <https://virological.org/t/viral-infection-and-transmission-in-a-large-well-traced-outbreak-caused-by-the-delta-sars-cov-2-variant/724>

<sup>3</sup>Olha Puhach, Kenneth Adea, Nicolas Hulo, Pascale Sattonnet, Camille Genecand, Anne Iten, Frédérique Jacquéroz Bausch, Laurent Kaiser, Pauline Vetter, Isabella Eckerle, Benjamin Meyer Infectious viral load in unvaccinated and vaccinated patients infected with SARS-CoV-2 WT, Delta and Omicron  
medRxiv 2022.01.10.22269010; doi: <https://doi.org/10.1101/2022.01.10.22269010>

<sup>4</sup> Mann, Barbara J., et al. "Taffix® Nasal Powder forms an Effective Barrier against SARS-CoV-2." Biomedical Journal of Scientific & Technical Research 33.3 (2021): 25843-25845.

<sup>5</sup> Klang Shmuel, Megiddo Dalia, Lapidot Tair & Naparstek Yaakov (2021) Low pH Hypromellose (Taffix) nasal powder spray could reduce SARS-CoV-2 infection rate post mass-gathering event at a highly endemic community: an observational prospective open label user survey, Expert Review of Anti-infective Therapy, DOI: [10.1080/14787210.2021.1908127](https://doi.org/10.1080/14787210.2021.1908127)

<sup>6</sup> <https://www.nasuspharma.com/nasus-pharma-announces-clinical-data-demonstrating-efficacy-of-taffix-intranasal-antiviral-protection-against-common-cold-and-upper-respiratory-infection/>