

**Peer-reviewed publication by Marinomed Biotech AG and Friedrich-Alexander-University Erlangen-Nürnberg reconfirms broad virus-blocking effectiveness of iota-carrageenan**

- Joint publication of virologists in the peer-reviewed journal *Nutraceuticals* demonstrates effectiveness of iota-carrageenan (Carragelose) against SARS-CoV-2 Omicron variants BA.1, BA.2 and BA.5
- Results demonstrate superiority of iota-carrageenan compared to other virus-blocking carrageenans in inhibiting the replication of a wide range of respiratory viruses
- Protective barrier provided by iota-carrageenan is applicable as safe prophylaxis and early treatment of viral respiratory infections and might help fight future pandemics

**Korneuburg, Austria, 13 July 2023** – Marinomed Biotech AG (VSE:MARI) and scientists from Friedrich-Alexander University Erlangen-Nürnberg and University Hospital Tuebingen published new data on the virus-blocking effectiveness of iota-carrageenan. The study was published in the international, peer-reviewed journal [Nutraceuticals](#) and showed that iota-carrageenan significantly inhibits viral replication in human lung cells infected with SARS-CoV-2 OM variants of concern (VoC) BA.1, BA.2 and BA.5 isolated from infected patients.

The authors investigated the virus-blocking properties of three different types of carrageenan (iota, kappa and lambda). While all carrageenan types had a virus-blocking effect, iota-carrageenan showed superior inhibition of all tested viral subtypes. These results are in line with previously published [data](#) on the virus-blocking effectiveness of iota-carrageenan against the original SARS-CoV-2 virus strain, its VoCs Alpha, Beta, Gamma and Delta as well as against other respiratory viruses like rhinovirus A and B, influenza A virus or respiratory syncytial virus (RSV). This suggests that therapeutics containing iota-carrageenan can be an effective add-on to vaccinations to protect people from future pandemics caused by respiratory viruses.

**Prof. Dr. Ulrich Schubert, Professor at the Institute of Clinical and Molecular Virology at the Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany,** and principal investigator of the study, commented: “Even though the COVID-19 pandemic has fortunately evolved into an endemic, SARS-CoV-2 remains with us as a new respiratory virus and will likely become part of the usual cold season. From this point of view, broadly active, safe and easy-to-use measures such as the use of nasal sprays, throat sprays or lozenges containing iota-carrageenan are a useful addition to the prevention and early

treatment of viral respiratory infections. The results of this study confirm once more that iota-carrageenan is applicable for prophylaxis and early treatment of SARS-CoV-2 infections, independent of the current and potential future variants.”

**Dr. Eva Prieschl-Grassauer, Chief Scientific Officer of Marinomed and co-author of the study,** added: “The lessons learned from the pandemic moved treatment of viral respiratory infections into the focus of pharmaceutical activity. As severe respiratory viruses remain a public health threat, therapeutics that help prevent both infection and transmission, regardless of the virus type, are essential. Products containing iota-carrageenan can make a valuable contribution to this. This is confirmed by our newly published data that join a growing number of publications proving the virus-blocking effects of iota-carrageenan. Nasal sprays and further products containing iota-carrageenan are available without prescription in numerous countries around the world and approved for the use in children as young as one year.”

#### **About Carragelose®**

Carragelose® is a sulfated polymer from red seaweed and a unique, broadly active virus-blocking compound. It is known as a gentle, effective, and safe prevention and treatment of various viral respiratory infections. Several clinical and preclinical studies have shown that Carragelose® forms a protective layer on the mucosa that prevents viruses from infecting cells. Laboratory and clinical data have demonstrated that Carragelose® can also inhibit the spreading of SARS-CoV-2.<sup>1,2</sup> Marinomed is the holder of the IP rights and has licensed Carragelose® for marketing in Europe, North America, Australia, and parts of Asia and Latin America. Marinomed’s portfolio of Carragelose®-containing nasal sprays and oral products can be accessed at <https://www.carragelose.com/en/portfolio/launched-products>, scientific publications on Carragelose® at <https://www.carragelose.com/en/publications>.

#### **About Marinomed Biotech AG**

Marinomed Biotech AG is an Austrian, science-based biotech company with a growing development pipeline and globally marketed therapeutics. The Company develops innovative patent-protected products in the therapeutic areas immunology and virology based on the platform Marinosolv® and the virus-blocking activity of Carragelose®. The Marinosolv® technology improves the solubility and bioavailability of hardly soluble compounds and is used to develop new therapeutics for autoreactive immune disorders. The virology segment includes Carragelose®-based over-the-counter (OTC) products to prevent and treat respiratory viral infections that are partnered in more than 40 countries. The Company is headquartered in Korneuburg, Austria, and is listed on the prime market of

the Vienna Stock Exchange (VSE:MARI). For further information, please visit: <https://www.marinomed.com>.

---

<sup>1</sup> <https://www.dovepress.com/efficacy-of-a-nasal-spray-containing-iota-carrageenan-in-the-postexpos-peer-reviewed-fulltext-article-IJGM>

<sup>2</sup> <https://www.marinomed.com/en/news/marinomed-biotech-ag-shares-positive-clinical-trial-results-for-iota-carrageenan-nasal-spray-in-the-prevention-of-covid-19-1>

**For further inquiries contact:**

**Marinomed Biotech AG**

**PR: Lucia Ziegler**

T: +43 2262 90300 158

E-Mail: [pr@marinomed.com](mailto:pr@marinomed.com)

**IR: Stephanie Kniep**

T: +43 2262 90300 226

E-Mail: [ir@marinomed.com](mailto:ir@marinomed.com)

**International Media Contact**

**Metrum Communications: Eva Ruppig**

T: +43 664 4065744

E-Mail: [marinomed@metrum.at](mailto:marinomed@metrum.at)

**Disclaimer**

This press release contains forward-looking statements, which are based on current views, expectations and projections of the management of Marinomed Biotech AG about future events. These forward-looking statements are subject to risks, uncertainties and assumptions that could cause actual results, performance or events to differ materially from those described in, or expressed or implied by, such statements. The current views, expectations and projections of the management of Marinomed Biotech AG may be identified by the context of such statements or words such as "anticipate," "believe", "estimate", "expect", "intend", "plan", "project" and "target". Forward-looking statements are only valid as of the date they are made and Marinomed Biotech AG does not assume any obligation to update, review or revise any forward-looking statements contained in this press release whether as a result of new information, future developments or otherwise. Marinomed, Marinosolv® and Carragelose® are registered trademarks of Marinomed Biotech AG. These trademarks may be owned or licensed in select locations only.