

## BRAIN Biotech and Bonumose collaborate on enzymes for the production of rare monosaccharides

**Zwingenberg, Germany and Charlottesville, VA, USA, 25 October 2022** – BRAIN Biotech AG, a leading European industrial biotechnology specialist, and rare sugars expert Bonumose, announced today that they have reached initial project milestones as part of their strategic collaboration. The companies aim to improve the performance of several enzymes that catalyze cascade reactions in the continuous production of low-calorie, ultra low-glycemic, naturally occurring sweeteners.

Bonumose has developed a patented process for producing tagatose and allulose which eliminates several processing steps and significantly increases yields during the production process. The company uses multiple enzymes within the synthesis cascades and BRAIN Biotech is optimizing several of these enzymes using enzyme engineering.

**Patrick Lorenz**, Vice President, Strategic Initiatives BioScience at BRAIN Biotech says: “BRAIN Biotech’s enzyme technology suite has proven once again to deliver on a customer’s challenging protein engineering targets. Based on rational structure- and sequence-guided design we improved individual enzymes and their cumulative performance in cascades to better match production process requirements. The ultimate aim is making production of Bonumose’s beneficial rare sugars even more cost efficient.”

**Ed Rogers**, Co-founder and CEO at Bonumose, states: “Tagatose and allulose have 92 % and 70 % the sweetness of sucrose but only 38 % and 10 % of the calories. Our mission is to produce them in a low cost production process from commodity carbohydrates. Our development collaborator BRAIN Biotech has passed the third milestone in the collaboration and thanks to their enzyme engineering, analytics and enzyme assay expertise we are on track and confident to meet our developmental objectives“.

**About BRAIN**

BRAIN Biotech AG (“BRAIN”) is a leading European industrial biotechnology specialist with a focus on nutrition, health and the environment. As a technology and solutions provider the company supports the biologization of industries with bio-based products and processes. From contract R&D with industrial partners to advancing own disruptive incubator projects and customized enzyme products, BRAIN’s broad cutting-edge biotech expertise and its agile teams are key to success.

BRAIN Biotech AG, Germany, is the parent company of the international BRAIN Group, distributing specialty B2B products like enzymes or bioactive natural products. The BRAIN Group has its own fermentation or production facilities in Continental Europe, UK and the US, which together with the associated biotechnological solution competency complete the value chain within the group.

As a Participant of the United Nations Global Compact, BRAIN Biotech AG is committed to aligning strategies and operations with universal principles on human rights, labour, environment and anti-corruption and to actively advance common societal goals. BRAIN Biotech’s products and services target at least five of the UN SDGs directly.

Since its IPO in 2016, BRAIN Biotech AG is listed in the Prime Standard of the Frankfurt Stock Exchange (ISIN DE0005203947 / WKN 520394).

**About Bonumose**

Bonumose is a growth-stage startup food ingredient and enzyme innovation company based near Charlottesville, Virginia. Bonumose is supported by global strategic investors and “food for health”-focused institutional investors, and an expanding network of global collaboration partners across the value chain. Bonumose developed and patented the methods for continuous production of high-purity tagatose from low-cost, plant-based starch. Bonumose’s process includes upcycling by-product/sidestream starch left over from its supply chain partners’ food production. Beyond food ingredients, Bonumose also is developing enzyme solutions for dietary supplements, crop protection, animal nutrition, and other globally-significant industries. Due to the global public health significance of Bonumose’s innovations, the World Economic Forum recently designated Bonumose as a “Technology Pioneer” for 2022. Bonumose operates with a philosophy of *Business as a Moral Imperative*.

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Forward-looking statements are no guarantees of future performance, and entail both known and unknown risks as well as uncertainties that could cause actual results, performance or events to differ materially from those expressed or implied in such statements. Numerous factors exist that could influence the future

performance by, and future developments at, BRAIN Biotech AG and the BRAIN Group. Such factors include, but are not limited to, changes in the general economic and competitive environment, risks associated with capital markets, currency exchange rate fluctuations, changes in international and national laws and regulations, in particular with respect to tax laws and regulations, as well as other factors.

BRAIN Biotech AG does not undertake any obligation to update or revise any forward-looking statements.