

BRAIN Biotech AG

Creating a #BiobasedFuture



Seat11a Elevator Pitch

Michael Schneiders

Head of IR & Sustainability

Zwingenberg, July 2021



Safe Harbor Statement

This document may contain forward-looking statements. These forward-looking statements are subject to risks and uncertainties, as they relate to future events and are based on current assumptions of the Company, which may not occur at all in the future or may not occur as assumed. They do not represent a guarantee for future results or performance of the Company, and the development of economic and legal conditions may materially differ from the information expressed or implied in the forward-looking statements.

The Company assumes no obligation to update or revise any forward-looking statement contained herein or to adapt them to future events or developments. The information contained in this document has not been independently verified. No representation or warranty expressed or implied is made as to, and no reliance should be placed on, the fairness, accuracy, completeness or correctness of the information or opinion contained herein. The Company or any of its shareholders, affiliates, advisors, employees or representatives shall have no liability whatsoever (in negligence or otherwise) for any loss arising from any use of this document or its content or otherwise arising in connection with this document.

By accepting this presentation you acknowledge that you will be solely responsible for your own assessment of the market and the market position of the Company and that you will conduct your own analysis and be solely responsible for forming your own view of the potential future performance of the Company's business.

This presentation speaks as of July, 2021. Neither the delivery of this presentation nor any further discussions of the Company with any of the recipients shall, under any circumstances, create any implication that there has been no change in the affairs of the Company since such date. The term "BRAIN", as used in this presentation means Brain Biotech AG and its affiliates, if not otherwise specified.

BRAIN at a Glance

Creating a #BiobasedFuture

~ **€38m**

'19/'20 Revenues

> **28**

Years of Experience

~ **320**

Employees

> **130**

Specialty B2B Products

> **100**

Industrial Partnerships

2016

Listed, Frankfurt Prime Standard

Creating Breakthrough Bioproducts & Solutions for Nutrition, Health and Environment

**Industrial Biotech
(white)**



**Three
Product Platforms**



Enzymes



Microorganisms



**Bioactive
Natural
Compounds**

From Lab to Production

When Should You #Think BRAIN? in the center of mega-trends

Health & Nutrition

Vegan & Vegetarian Food: Alternative Protein Base
(Precise Fermentation / Microbial Production Hosts)

Healthy & Better Tasting Beverages:
Natural Flavors (like NatBev 1 & 2)

All Natural Preservatives:
Perillic Active from Fermented Orange Oils

Calorie-Free Natural Sweeteners:
Plantbased Sweeteners (Brazzein, Sweet Box)

Healthy Food:
reduction of salt in foods (SALT-1)

Biological Wound Care:
Biological Wound Management (Aurase/SolasCure)

Creating a BiobasedFuture

Genome Engineering:
Novel Non-Cas9 Nucleases (BEC)

Biological Production:
Enzymes & Large Scale Fermentation

Environment

BioMining:
Sustainable Metal Extraction (Urban Mining)

Biological Production:
Enzymes & Large Scale Fermentation

Making Waste Valuable:
Fermented Food from Side Streams
Microbial CO₂ Usage

BRAIN: At the Heart of UN SUSTAINABLE DEVELOPMENT GOALS

Our Products & Solutions address at least five goals directly

WE SUPPORT



Since 2021 we have been committed to the UN Global Compact corporate responsibility initiative and its principles in the areas of human rights, labour, the environment and anti-corruption.

- Natural compounds for food preservation



- Sugar replacement / Sugar taste enhancer
- Salt replacement / Salt taste enhancer
- Natural aromas
- Wound treatment
- Bioactive plant cosmetics



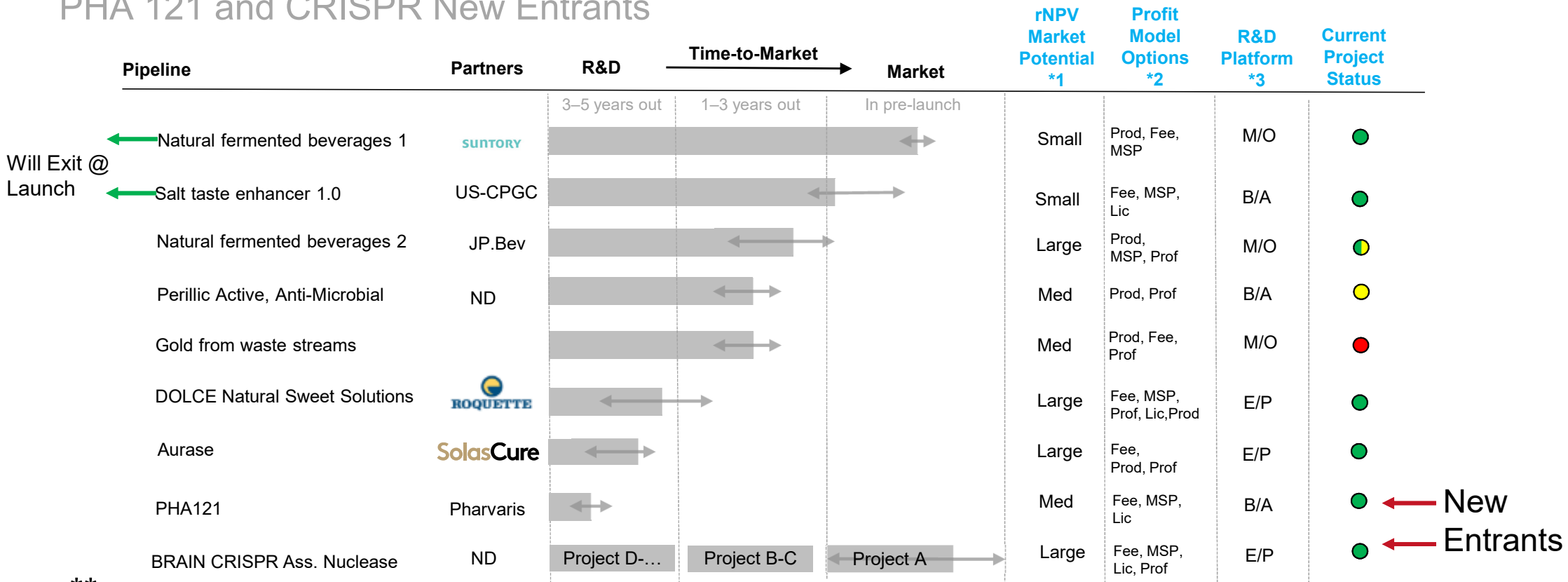
- Green mining

- Green Mining
- Urban Mining

- Biological production
- Improving production efficiencies
- Fermented food from sidestreams
- Microbial CO₂ Usage

Our Incubator: Focused New Business Pipeline**

PHA 121 and CRISPR New Entrants



**

- Projects Green Metal Mining, Sweet Taste Enhancer and CO₂ moved to TMS business, fully funded programs
- Projects Salt-E, Fresco shelved, searching for partners
- New enzymes now part of BioIndustrial regular product development, see page 12

- Programs without contractually bound partners are marked red by default
- Contractual, technology or registration hurdles still need attention
- Phase 1 has been successfully completed but contract negotiations for the next development phase are progressing but not yet finalized

*1: BRAIN-Group rNPV FCF+TV: **Small** < €5M, **Medium** €5M - €15M, **Large**: €15M+

*2: **Prod**: Product sales. **Fee**: Research fee income. **MSP**: Milestone payments. **Lic**: License/royalty payments **Tec**: Tech fees **Prof**: Entity formation or profit participation

*3: **B/A**: BioActives, **E/P**: Enzymes and proteins, **M/O**: Microorganisms/starter cultures

ND: not disclosed

Genome Editing – Made Simple & Effective

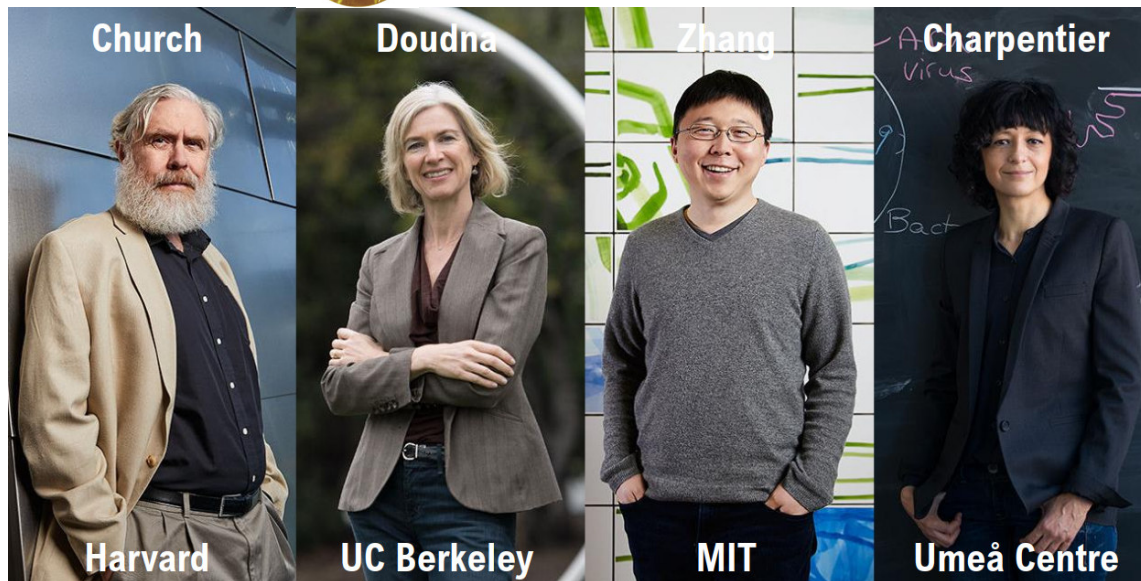
the CRISPR Cas9 Revolution



A simple guide to CRISPR, one of the biggest science stories of the decade

It could revolutionize everything from medicine to agriculture. Better read up now.

By Brad Plumer, Eliza Barclay, Julia Belluz, and Umair Ishaq Updated Dec 27, 2018, 2:45pm EST



Jun 25, 2018, 06:30am EDT

How CRISPR Gene Editing Is Revolutionizing Medicine And The Companies Who Invest In It

nature

NEWS • 07 OCTOBER 2020

Pioneers of revolutionary CRISPR gene editing win chemistry Nobel

Emmanuelle Charpentier and Jennifer Doudna share the award for developing the precise genome-editing technology.



Genome Editing – developed by BRAIN

BRAIN's CRISPR-Cas, Status Quo

Status Quo

- Today validated as a **genome editing tool** in selected bacteria, fungi and yeast
- Activity in **plants** has been achieved but still needs to be validated
- **International Partner** for plant cells involved since the beginning of the program (non disclosed)
- Genome editing activity tests ongoing for additional applications incl. mammalian cell lines
- **First IP application** to protect the BRAIN developed CRISPR associated nuclease (BEC) sequence is already submitted

Genome editing developed by BRAIN has significant economic potential

- Speed up own strain and product development
- Become a TMS partner of choice for genome editing, harvest additional TMS business
- Freedom to operate in genome editing
- Tech access and license potential for TMS business
- Significant license/x-license upside if technology can be validated for further plant and especially in mammalian cell lines

Our Targets

Ambitious Mid-Term Targets

Mid-Term Targets

(issued 09/20, 4-5 year targets)

(excluding CRISPR)

Double group revenue from base '18/19

- Double digit topline product CAGR
- Accretive M&A
- Contract research "TMS" proportionally reduced (excl. milestones)

Group adj. EBITDA margin 15% (+/- 5PP)

- Double digit fermentation production volume of customized novel enzymes
- Mid single digit annual productivity improvements

Proportion of new product sales: ~30% of total revenues

- Continuous innovation pipeline management

Six Strong Reasons to Invest in BRAIN

1. **Mega-trends / UN-SDGs:** our products address the big societal topics – nutrition, health & the environment. We address at least 5 SDGs directly
2. **Incubator products:** big upsides in our breakthrough inventions
3. **BioIndustrial:** BRAIN is very well positioned to capture high-growth and high-margin niches in its products businesses. We will re-shape our BioIndustrial business and move from a purchase for resale model to an own production model, this creates significant margin and therefore value upside
4. **Strong target markets:** solid target markets for our services & products with CAGRs above GDP and strong EBITDA margin levels also allow BRAIN to harvest healthy sales and margin growth
5. **Value accretive M&A:** space for bolt-on acquisition to accelerate growth with the possibility for transformational growth through larger M&A
6. **R&D:** ability to fund research with partners and from governmental grants to de-risks our own R&D effort and preserve valuable cash

Six Major Triggers for strong Revenue and Margin Growth

Thank you for your attention.

BRAIN Biotech AG

Darmstädter Straße 34–36
64673 Zwingenberg, Germany

+49 (0) 6251-9331-0
www.brain-biotech.com

Your contacts:

Michael Schneiders, Head of IR & Sustainability

+49 (0) 6251-9331-86
MiS@brain-biotech.com

Martina Schuster, IR

+49 (0) 6251-9331-69
MS@brain-biotech.com



@BRAINbiotech



BRAIN Biotech AG

