



amoéba

AXPERA

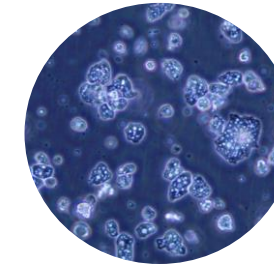
A new biofungicide based on a lysate of amoebic cells

Annabelle GILGEN- Technical development manager biocontrol

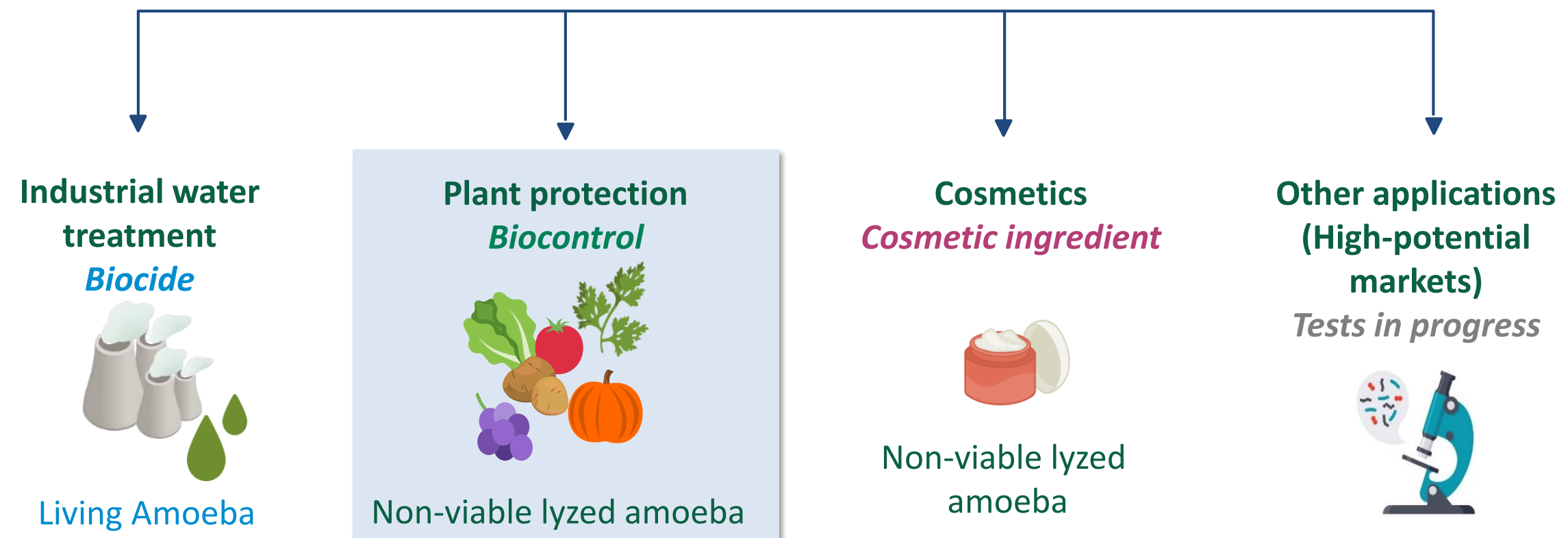
22 October 2024



One microorganism, many applications



WILLAERTIA MAGNA C2C MAKY



25 M€

R&D Investments

39

Patents

1

R&D centre in
Chassieu-Lyon

19

Employees

Willaertia magna C2c Maky

- An environmental non-pathogenic amoeba
- Isolated from the thermal waters of Aix-Les-Bains (France)



A biological active substance

- *Willaertia magna* cells are grown in bioreactors then mechanically lysed. The lysate is the biofungicidal active substance.

Various formulations

- AXPERA[®] – SC 215 g/l
- Other formulations under development

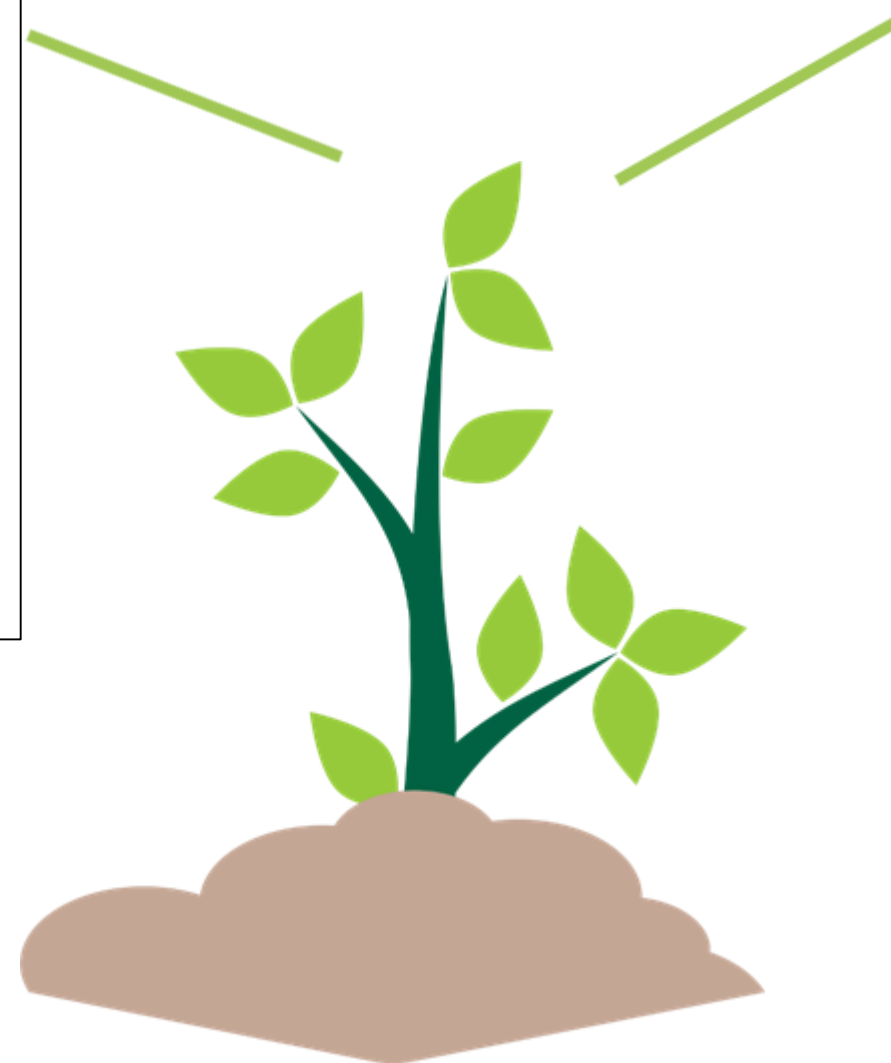
AXPERA

A DUAL MODE OF ACTION

DIRECT FUNGICIDAL ACTIVITY

ANTI-GERMINATIVE EFFECT

- **Oomycetes** (*Plasmopara viticola*)
- **Rusts** (*Phakopsara pachyrhizi*)
- **Black Sigatoka** (*M. fijiensis*)
- Some *Fusarium sp.* strains



PLANT DEFENSE ELICITOR

The active substance stimulates some defense genes and particularly **PR proteins genes**.

Demonstrated with RT- qPCR tests on :

- Grape
- Tomato
- Potato
- Wheat

Demonstrated EFFICACY

A wide spectrum of activity



GRAPES AND VEGETABLES

Downy and Powdery mildew



TOMATO

Late Blight (*Phytophthora infestans*)



CEREALS

Wheat : Yellow rust / Septoria



BANANA

Black Sigatoka (*Mycosphaerella fijiensis*)



SOYBEAN

Asian rust (*Phakopsora pachyrhizi*)



TURF

Fusarium patch (*Microdochium nivale*)

Numerous field trials since 2019

400

own trials



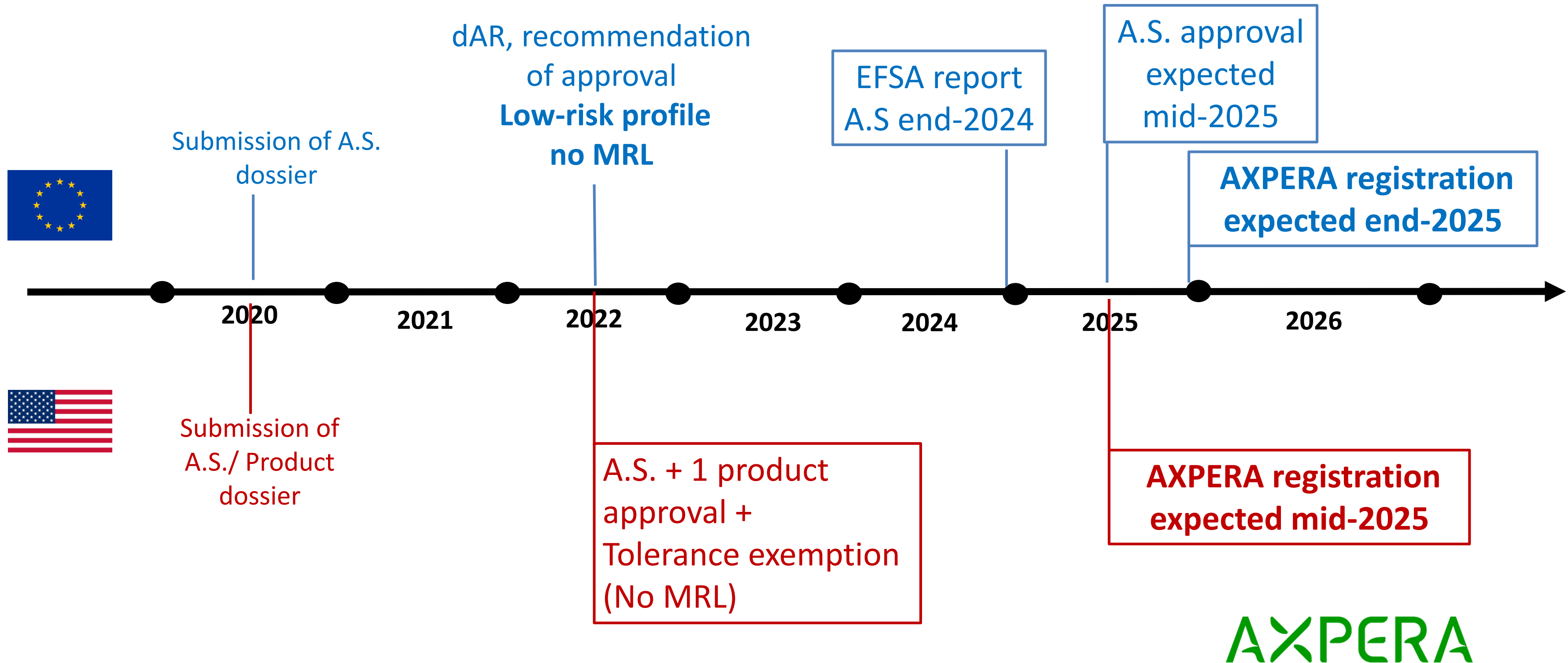
200

partner-led

79

countries across
4 continents

Regulatory calendar - Active substance and product



First wave of registration of AXP ERA uses



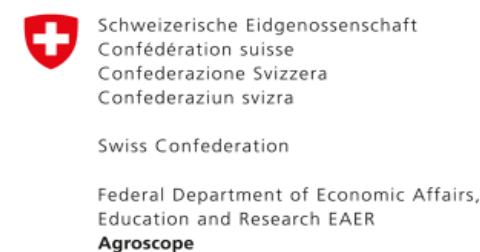
			SOUTH EU (FR, ES, PT, IT, GR)	CENTRAL EU (DE, BE, NL)	USA except California
Lettuce	Downy mildew	Field	2025	2026	2025
Cucurbits with edible peel and non-edible peel	Downy mildew	Field	2025	2026	2025
Cucurbits with edible peel and non-edible peel	Powdery mildew	Field / Tunnel / Greenhouse	2025	2025 (greenhouse)	2025
Basil	Downy mildew	Field	2025	2026	2025
Tomato Aubergine	Late blight	Field / Tunnel / Greenhouse	2025	2025 (greenhouse)	2025
Tomato Aubergine	Powdery mildew	Greenhouse	2025	2025	2025
Grapevine and Table grape	Downy mildew	Field	2025		2025
Grapevine and Table grape	Powdery mildew	Field	2025		2025
Tomato	Cladosporium leaf mold	Tunnel / Greenhouse	2026	2025 (greenhouse)	2025
Strawberry	Powdery mildew	Tunnel / Greenhouse	2026	2026	2025
Turf	Fusarium patch	Field	2026		2025
Banana	Black sigatoka	Field	2026		2025

AXPERA use in Project Consortium SAGROPIA



SUSTAINABLE AGRICULTURE THROUGH NOVEL PESTICIDES USING AN INTEGRATED APPROACH (2024 – 2028)

- ❖ 10 partners from 5 EU Countries (Austria, Germany, France, Switzerland, Portugal) and USA.
- ❖ SAGROPIA aims to introduce **thirteen biological and low-risk pesticides**, which shall replace "candidates for substitution" and active substances that are currently in use.
- ❖ Specifically targeting **potato** and **sugar beet crops**.
- ❖ Through a multi-actor approach along with farm trials, develop a comprehensive **grower's guide on best practices**, on sustainable IMP strategies.



Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or EUROPEAN RESEARCH EXECUTIVE AGENCY (REA). Neither the European Union nor the granting authority can be held responsible for them.

TAKE-HOME MESSAGE

AXPERA



- **Contact & preventive product – Foliar application**
- **Dual mode of action:** Biofungicide & Elicitor
- **Formulation** : Suspension concentrate (SC at 215 g/L)
- **Storage condition:** Ambient temperature (15-25°C)
- **Application uses** : Field, Tunnel and Greenhouses
- **Compatibility** with copper, sulfur-based products and chemical products



A wide spectrum of activity for a biocontrol product.
On both downy and powdery mildew and other fungal diseases.



No hazard for human health, animal health and the environment. No maximum residue level.



Safe for beneficial insects.



A new tool to fight diseases in program or in mixture and to manage resistance risks.

Thank you for your attention



@AmoebaNature



amoeba-nature.com
sagropia.eu



a.gilgen@amoeba-nature.com

DISCLAIMER

References herein to this presentation (the “Presentation”) shall mean and include this document, any oral presentation accompanying this document provided by Amoeba SA (the “Company”), any question and answer session following that oral presentation and any further information that may be made available in connection with the subject matter contained herein.

This Presentation has been prepared by the Company and is for information only. This document does not purport to contain comprehensive or complete information about the Company and is qualified in its entirety by the business, financial and other information that the Company is required to publish in accordance with the rules, regulations and practices applicable to companies listed on the multilateral trading facility of Euronext Growth, including, in particular, the risk factors set out in the universal registration document (the “URD”) filed with the French Financial Markets Authority (Autorité des marchés financiers) (the “AMF”) on April 18, 2023 under number D.23-0296, and in any other periodic report, which are available free of charge on the websites of the Company (<https://amoeba-nature.com>) and the AMF (www.amf-france.org). Information and other data appearing in such publications, and certain figures and numbers appearing in this document have been rounded. Consequently, the total amounts and percentages appearing in tables and elsewhere may not necessarily equal the sum of the individually rounded figures, amounts or percentages.

No representation, warranty or undertaking, express or implied, is made as to the accuracy, completeness or appropriateness of the information and opinions contained in this Presentation, or its use for any purpose, and no reliance should be placed on any information or opinions contained herein. The Company, its subsidiaries, its advisors and representatives accept no responsibility for and shall not, under any circumstance, be held liable for any loss or damage that may arise from the use of this document or the information or opinions contained in it. In particular, this document contains information on the Company’s markets and competitive position, and more specifically, on the size of its markets. This information has been drawn from various sources or from the Company’s own estimates which may not be accurate and thus no reliance should be placed on such information. Any prospective investors must make their own investigation and assessments and consult with their own advisors concerning any evaluation of the Company and its prospects, and this document, or any part of it, may not form the basis of or be relied on in connection with any investment decision.

The information and opinions contained in this document are provided as of the date of this document only and may be updated, supplemented, revised or amended, and thus such information is subject to change at any time. Neither the Company, its subsidiaries, directors, officers, employees, agents, affiliates nor its advisors, nor any other person is under any obligation to update the information, statements or opinions contained in this Presentation. Nothing contained in this Presentation is or should be relied upon as a promise or representation as to the future.

All statements in the Presentation other than statements of historical fact are or may be deemed to be forward-looking statements. These forward-looking statements are not guarantees of future performance and involve a number of known and unknown risks and uncertainties. These risks and uncertainties, and other factors, could adversely affect the outcome of the forward looking statements, and actual results could differ materially from those contemplated in the statements. As a result, you are cautioned not to rely on such forward-looking statements. Forward-looking statements speak only as of the date of this document and the Company expressly disclaims any obligation or undertaking to update or re-issue any forward-looking statements contained in this Presentation.

This Presentation does not constitute or form any part of any offer to sell, or the solicitation of an offer to buy or subscribe for, any shares or securities in the Company, in the United States or in any other jurisdiction.

All persons accessing this document are deemed to agree and comply with all the limitations and restrictions set out above.