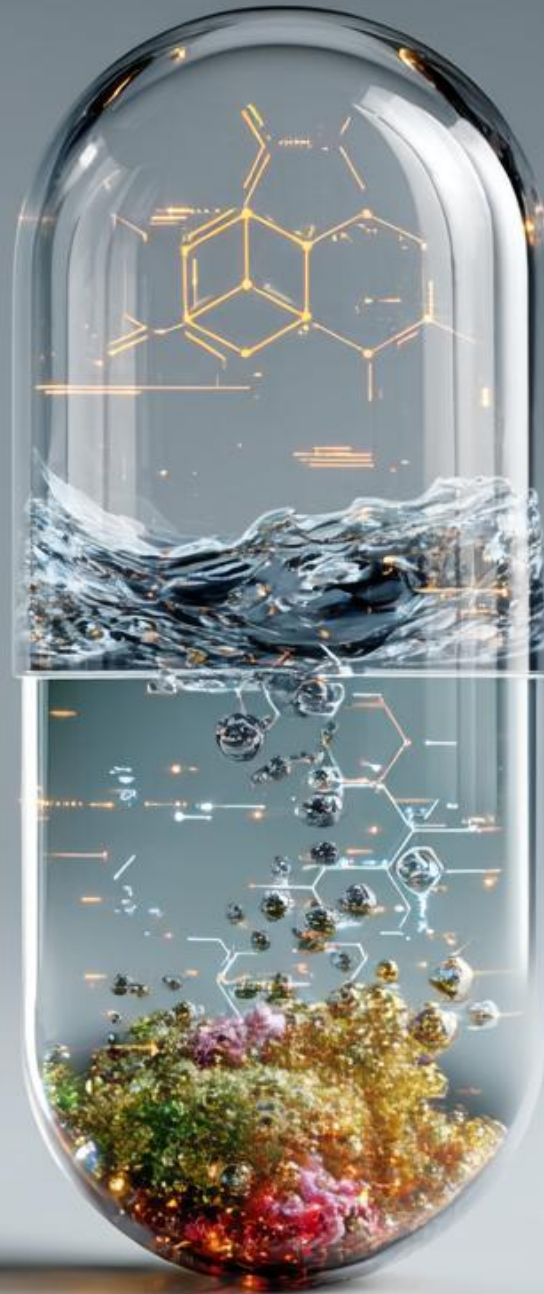




evogene
REAL-WORLD INNOVATION



REAL-WORLD INNOVATION

AI-first driven discovery platform for
multi-parameter small-molecule
design

April 28, 2026

FORWARD LOOKING STATEMENT

This presentation contains "forward-looking statements" relating to future events, and Evogene Ltd. (the "Company"), may from time to time make other statements, regarding our outlook or expectations for future financial or operating results and/or other matters regarding or affecting us that are considered "forward-looking statements" as defined in the U.S. Private Securities Litigation Reform Act of 1995 (the "PSLRA") and other securities laws, as amended. Statements that are not statements of historical fact may be deemed to be forward-looking statements. Such forward-looking statements may be identified by the use of such words as "believe", "expect", "anticipate", "should", "planned", "estimated", "intend" and "potential" or words of similar meaning. We are using forward-looking statements in this presentation when we discuss our value drivers, commercialization efforts and timing, product development and launches, estimated market sizes and milestones, pipeline, as well as our capabilities and technology.

Such statements are based on current expectations, estimates, projections and assumptions, describe opinions about future events, involve certain risks and uncertainties which are difficult to predict and are not guarantees of future performance. Readers are cautioned that certain important factors may affect the Company's actual results and could cause such results to differ materially from any forward-looking statements that may be made in this presentation. Therefore, actual future results, performance or achievements, and trends in the future may differ materially from what is expressed or implied by such forward-looking statements due to a variety of factors, many of which are beyond our control, including, without limitation, the aftermath of the recent war between Israel and each of (i) the terrorist groups, Hamas and Hezbollah, (ii) Iran, and (iii) other regional terrorist groups supported by Iran, and any destabilizations in Israel, neighboring territories or the Middle East region, and those described in greater detail in Evogene's Annual Report on Form 20-F and in other information Evogene files and furnishes with the Israel Securities Authority and the U.S. Securities and Exchange Commission, including those factors under the heading "Risk Factors".

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EVOGENE PIONEERS REAL-WORLD INNOVATION

Using a proprietary generative AI engine, we design highly potent and novel small molecules, optimized across multiple-parameters, for the pharmaceutical and ag-chemical industries



OUR STORY

PIONEERING IN PHARMA

Growing number of collaborations for diverse drug targets



GEN AI ENGINE

ChemPass AI™ – computational engine for the design & optimization of small molecules



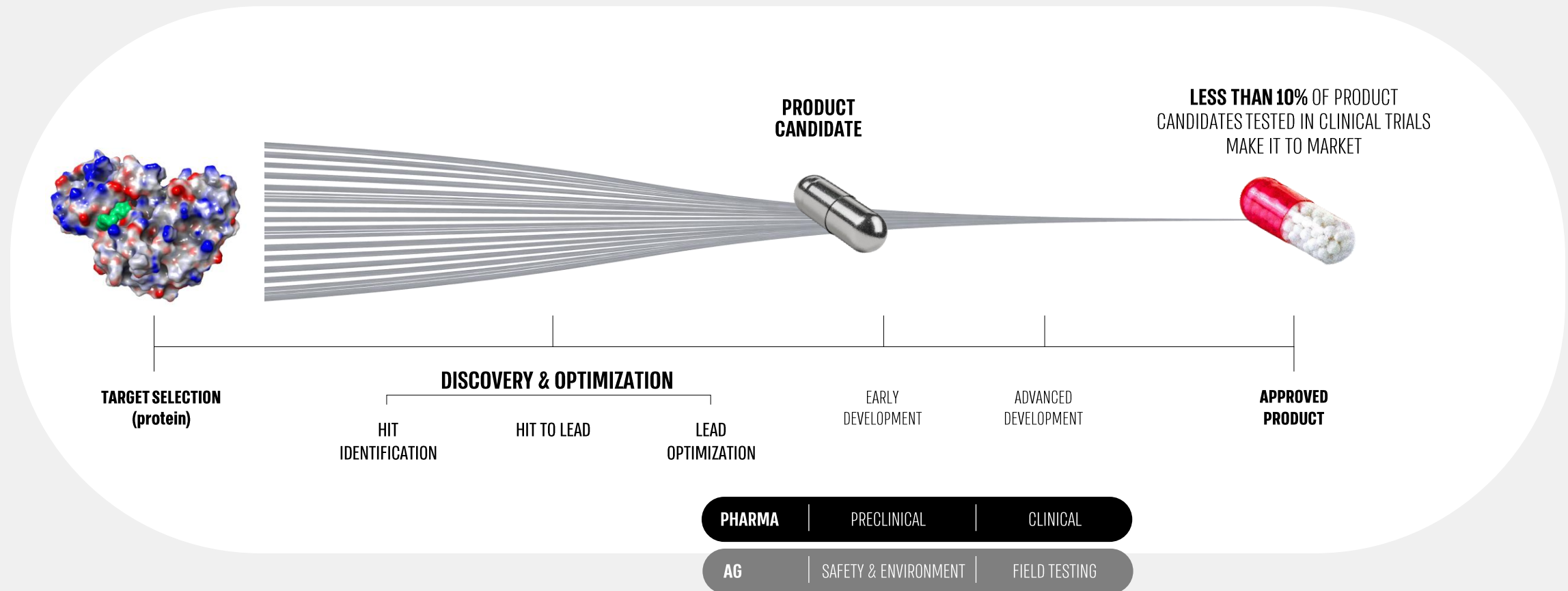
REVOLUTIONIZING AG

Strategic collaborations for ag-chemical development with proven results



THE DISCOVERY & OPTIMIZATION CHALLENGE

DESIGN THE RIGHT CANDIDATES TO REACH THE MARKET



NOVEL CHEMICAL STRUCTURE & MULTI-PARAMETER CHALLENGE

Generating a small molecule with a novel chemical structure that satisfies all required parameters defining the desired product, while proactively balancing multiple, often competing, criteria.

TRADITIONAL METHODS APPROACH:

- Confined to a limited chemical space
- Optimization typically limited to a small number of parameters
- Lacks capability to perform multi-parameter optimization simultaneously
- Requires lengthy, resource-intensive iterative cycles



INTRODUCING CHEMPASS AI™:
**BREAKING CHEMICAL
SPACE LIMITATION &
MULTI-PARAMETER DESIGN**



NOVELTY - VAST CHEMICAL TERRITORIES

based on a 38B-molecule chemical library, the engine designs novel compounds that are synthesizable and active, while accessing unexplored chemical space and creating new IP opportunities

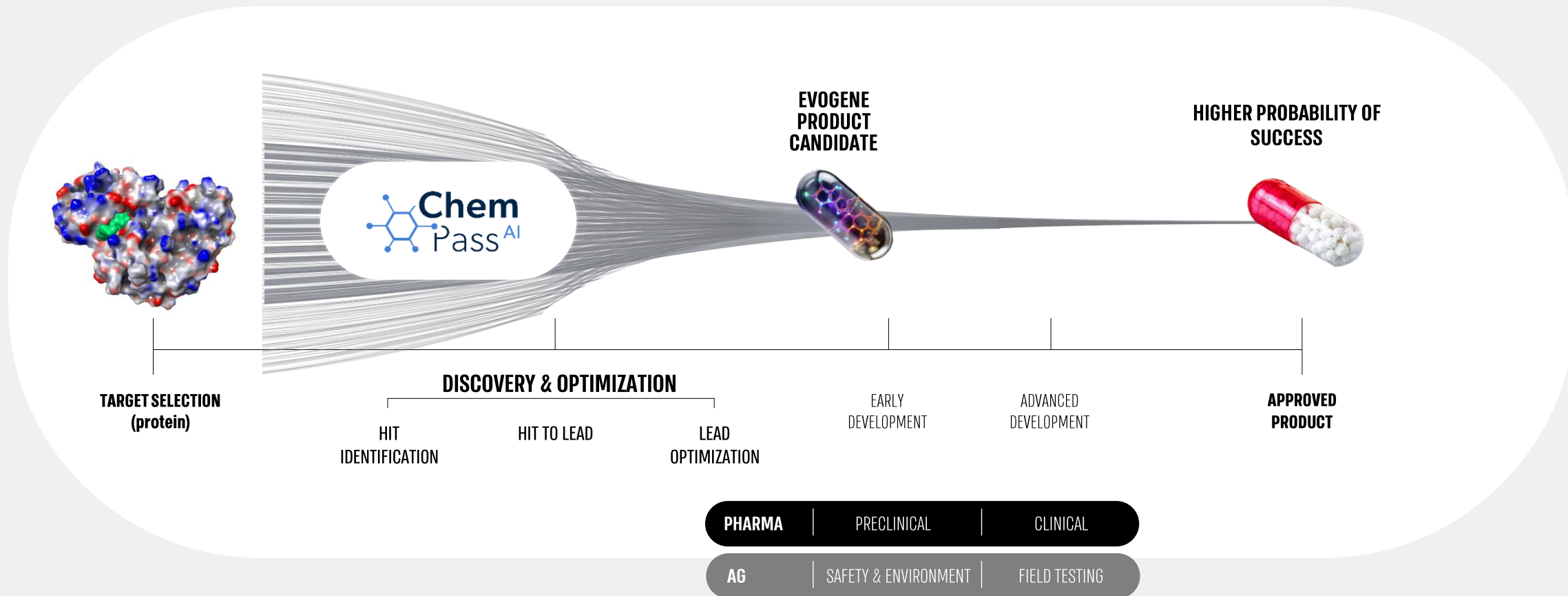
MULTI-PARAMETER OPTIMIZATION

multiple-parameters optimized simultaneously, tailored to project-specific chemical, biological, and physical constraints, increasing probability of success

HIGH-POTENCY - CHEMISTRY THAT PERFORMS

AI-first designed molecules optimized through targeted experimental validation

CHEMPASS AI™ - DESIGN CANDIDATES FOR COMMERCIAL SUCCESS



EVOGENE'S UNIQUE OFFERING – PROPRIETARY MOLECULAR DESIGN

A POWERFUL COMBINATION OF CAPABILITIES :

- Novel molecules are generated based on vast and diverse chemical territories
- Simultaneously optimized for multi-parameter requirements from day one
- Highly potent molecules optimized through targeted experimental validation



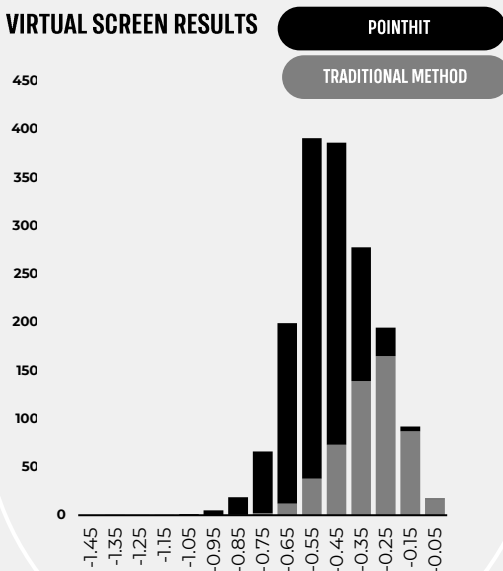
CHEMPASS AI™ - DRIVING DEVELOPMENT SUCCESS

Step 1

HIT SCREENING WITH *POINTHIT™*

Utilizing deep learning to enhance rapid screening of ultra-large databases

VIRTUAL SCREEN RESULTS



Step 2

HIT TO LEAD WITH *ACTIVESHARCH™*

DMTA* coupled with upgraded analog search using proprietary algorithms

ACTIVESHARCH RESULTS **1,800**

SELECTED & PURCHASED **41**

ACTIVE **16**

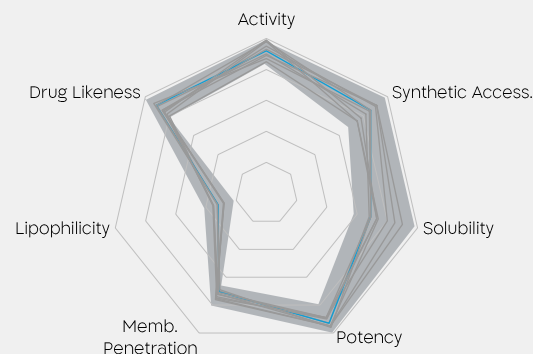
SUB MICROMOLAR POTENCY **7**

UP TO 400-FOLD IMPROVEMENT

Step 3

LEAD OPTIMIZATION WITH *LEADOP GPT™*

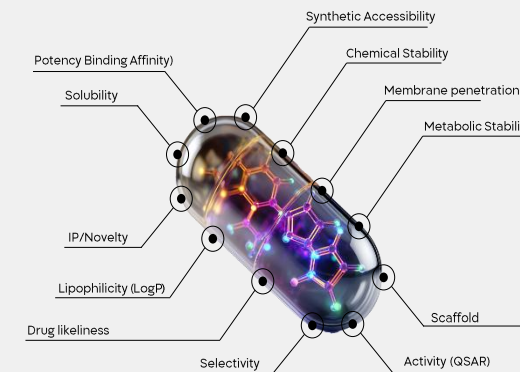
Simultaneous optimization of multiple parameters using generative AI



REACHED MULTI-PARAMETER OPTIMIZED nMol ACTIVE NOVEL COMPOUNDS

Result

EVOGENE PRODUCT CANDIDATE



TECHNOLOGICAL COLLABORATIONS WITH GOOGLE CLOUD

FROM GENERATIVE MODELS TO AUTONOMOUS DISCOVERY



Google Cloud

FIRST COLLABORATION – FIRST-IN-CLASS FOUNDATION MODEL

Successful completion of a proprietary generative AI model for novel molecular product candidates addressing multiple parameters, based on **38 billion** molecular structures, delivered **90% precision** compared to approx. 30% in traditional GPT models.

SECOND COLLABORATION – ADVANCED AI AGENTS INTEGRATION

Integration of AI agents into ChemPass AI™ using Google Cloud Vertex AI to decrease manual errors, accelerate design-make-test-analyze cycles, and enable scalable discovery of patentable small molecules with improved probability of commercial success for pharmaceutical and agricultural pipelines.

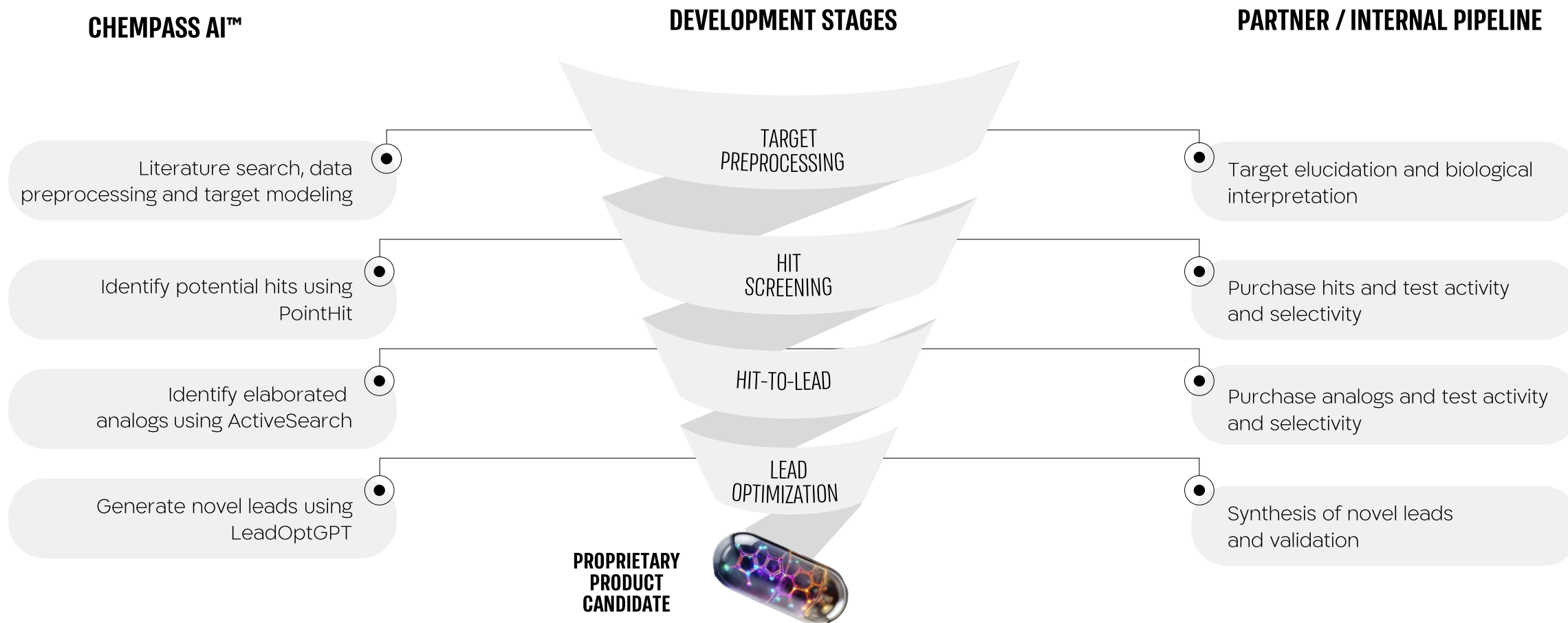
Initiated Feb. 2026



"This expanded collaboration with Evogene demonstrates the power of integrating cutting-edge artificial intelligence into scientific research. By leveraging our technology to deploy advanced AI agents, we are enabling Evogene to automate and scale their complex discovery workflows. This foundation accelerates the speed and precision of identifying small molecules, further cementing Evogene's role as a leader in next-generation molecular design for the pharmaceutical and agricultural industries"

BOAZ MAOZ, MANAGING DIRECTOR, GOOGLE CLOUD ISRAEL (10.02.2026)

CAPTURING THE BUSINESS VALUE OF CHEMPASS AI™ THROUGH COLLABORATIONS & IN-HOUSE DEVELOPMENT



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Growing number of collaborations for diverse drug targets



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GROWING OPPORTUNITY IN AI-DRUG DISCOVERY



**SMALL
MOLECULES**

Account for
58%
of total pharmaceutical market (\$1,344B)

AI-based candidates in pipeline
>60
150% CAGR in last 3 years

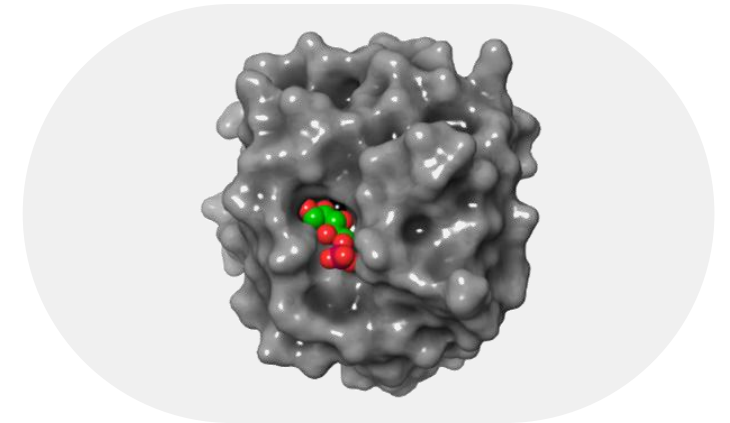
Discovery market expected to reach
\$190.68B
by 2034



COLLABORATION WITH SYSTASY BIOSCIENCE, LUDWIG MAXIMILIAM UNIVERSITY HOSPITAL, MUNICH, GERMANY

NOVEL THERAPIES FOR NEUTROPHIL-DERIVED INFLAMMATORY DISEASES

- Target: novel mechanism addressing large unmet needs in hyperinflammatory diseases such as inflammatory bowel disease (IBD).
- Addressable IBD market: valued at USD 19 billion in 2023, with projections approximately USD 30 billion by 2030*.
- Combines ChemPass AI™, Systasy's patient-derived functional validation systems, and LMU's leading clinical expertise.
- Funded by the prestigious EUREKA bi-national grant.



Target-Ligand complex

"This EUREKA-funded collaboration marks a pivotal step for Systasy in extending our PathwayProfiler platform to neutrophil biology. Partnering with Evogene's AI innovation, LMU's clinical expertise, and Weizmann's validation strengths positions us to deliver breakthrough therapies addressing unmet needs in hyper-inflammatory diseases. Our hyper-multiplexed, patient-derived assays will provide the high-quality functional data essential for accelerating discovery and ensuring translational success."

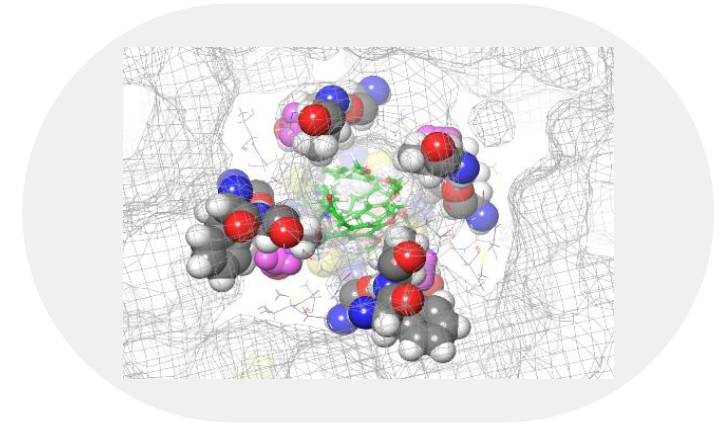
DR. SVEN WICHERT, CEO OF SYSTASY BIOSCIENCE (11.02.26)

COLLABORATION WITH UNRAVEL BIOSCIENCES, BOSTON, USA

NOVEL THERAPIES FOR DEMYELINATION DISORDERS



- Target: novel mechanism underlying neurodegenerative diseases.
- Focused on demyelinating diseases such as MS, representing a global market exceeding \$26B*.
- Combines ChemPass AI™ with Unravel's patient-derived predictive biology technology to develop multi-parameter optimized therapies to improve neurological function.



Molecular modelling of putative modulator (green) in its target (surface in grey and interacting protein residues in colored spheres)

"We are thrilled to partner with Evogene to design an optimized new therapeutic candidates to promote remyelination for MS and other neurodegenerative disorders. The synergistic combination of Evogene's ChemPass AI™ platform and generative chemistry together with Unravel's patient RNA-derived Living Molecular Twins™ demonstrates the acceleration of drug development driven by novel data and advanced algorithms since patients cannot wait."

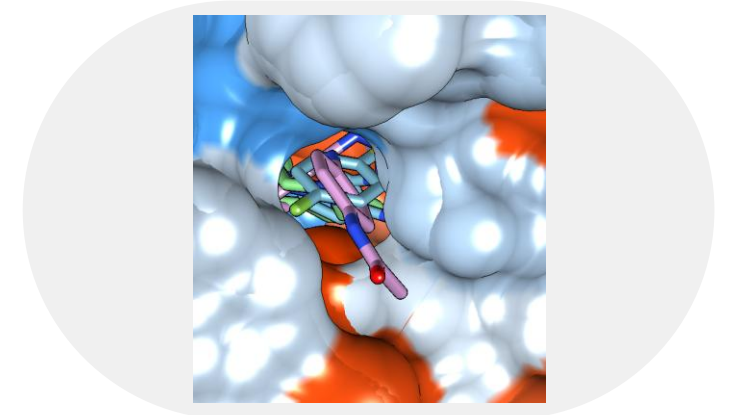
DR. RICHARD NOVAK, CEO OF UNRAVEL BIOSCIENCES (07.01.26)

COLLABORATION WITH DR. MARK ADAMS, QUT, BRISBANE, AUSTRALIA

NOVEL THERAPIES FOR CHEMOTHERAPY RESISTANCE IN CANCER TREATMENT



- Target: cellular mechanism responsible for resistance to cancer treatments.
- Global cancer drug resistance market is estimated at \$5.4B in 2025*.
- Combines ChemPass AI™ with cutting edge cancer genomics to restore treatment sensitivity in resistant tumors.
- Designed to generate novel, brain-penetrant, small-molecule candidates addressing a major unmet need in oncology.



Different ligands interact with distinct residues and occupy the pocket with diverse orientations

"Partnering with Evogene is an exciting opportunity not only from a cell and molecular biology perspective, but also for its translational potential. Leveraging Evogene's AI-driven technology allows us to accelerate a path from research to real-world outcomes. By working together, I look forward to seeing our collective innovation one day make a meaningful difference for people living with cancer."

DR. MARK ADAMS, PI, QUEENSLAND UNIVERSITY OF TECHNOLOGY (17.02.26)

COLLABORATION WITH PROF. EHUD GAZIT, TAU, TEL-AVIV, ISRAEL

NOVEL THERAPEUTIC MODALITY FOR METABOLIC DISEASES

- Target: molecular self-assembly metabolites that underlie metabolic conditions.
- Addressable Gout therapeutics market is evaluated at ~\$3B*.
- Combines ChemPass AI™ with unique biological research in molecular self-assembly biology.
- Creates opportunities for novel therapeutics addressing the cause of disease rather than symptomatic treatment.



Scanning electron microscopy of crystals formed by the self-assembly of a metabolite

* Costa-Bauza, A., & Grases, F. (2023). *Biomolecules*, 13(12), 1769.

"We are excited to join forces with Evogene in this groundbreaking endeavor. By integrating our fundamental understanding of molecular self-assembly with Evogene's cutting-edge AI-driven drug design platform, we have a unique opportunity to develop novel therapeutics that specifically target these pathological processes and ultimately improve treatment for patients.

PROF. EHUD GAZIT, TEL-AVIV UNIVERSITY (12.08.25)

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REVOLUTIONIZING AG

Strategic collaborations for ag-chemical development with proven results



~\$88B GROWING MARKET WITH PLENTY OF ROOM FOR INNOVATION

- 1** Increase of pest resistance & regulatory requirements
- 2** Urgent need for new Modes of Action (MoAs)
- 3** Decreased rate in discovery of new pesticides due to lack of innovation



\$43.3B
BROAD SPECTRUM
HERBICIDES¹

\$22.2B
FUNGICIDES FOR
MAJOR DISEASES²

\$22.3B
BROAD SPECTRUM
INSECTICIDES³

With rising pest
resistance, tighter
regulation, and
laggard
development

 agPlenus

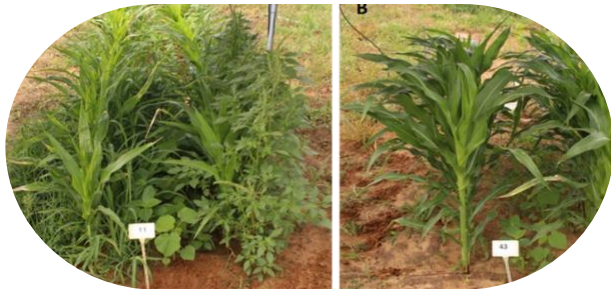
**COMPUTATIONAL
CHEMISTRY CAN
CREATE REAL-WORLD
IMPACT IN
AGRICULTURE**

STRATEGIC COLLABORATIONS



"Bringing together AgPlenus' expertise with Bayer's CropKey approach to crop protection innovation will help accelerate the delivery of essential, sustainable, and affordable solutions to farmers and set a new benchmark in the industry."

Rachel Rama, Head of Small Molecules, Crop Science division



Nontreated

Treated

Development of new sustainable Mode-of-Action broad spectrum, herbicide

Demonstrated high weed control efficacy and good tolerance in corn



"The collaboration with AgPlenus has accelerated the identification of a class of herbicide chemistry that targets a new mode-of-action for weed control, something the industry has been lacking for decades."

Vid Hegde, Former VP of Crop Protection Discovery and Development



Treated

nontreated

Development of novel herbicides

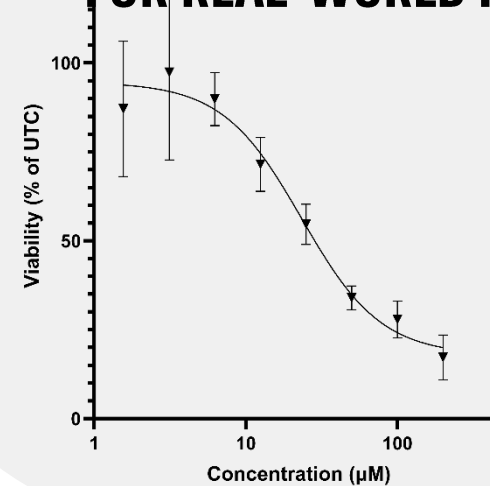
Demonstrated weed growth reduction in post emergence application

INTERNAL PIPELINE WHEAT BLOTCH

DISRUPTING A \$1.2B PROBLEM AT RECORD SPEED

- 70% of EU fungicide usage in wheat is for Wheat Blotch¹
- EU market alone >\$1.2B annually¹
- Widespread resistance to current top products ('Strobilurins') with 2024 sales of \$4.59B²

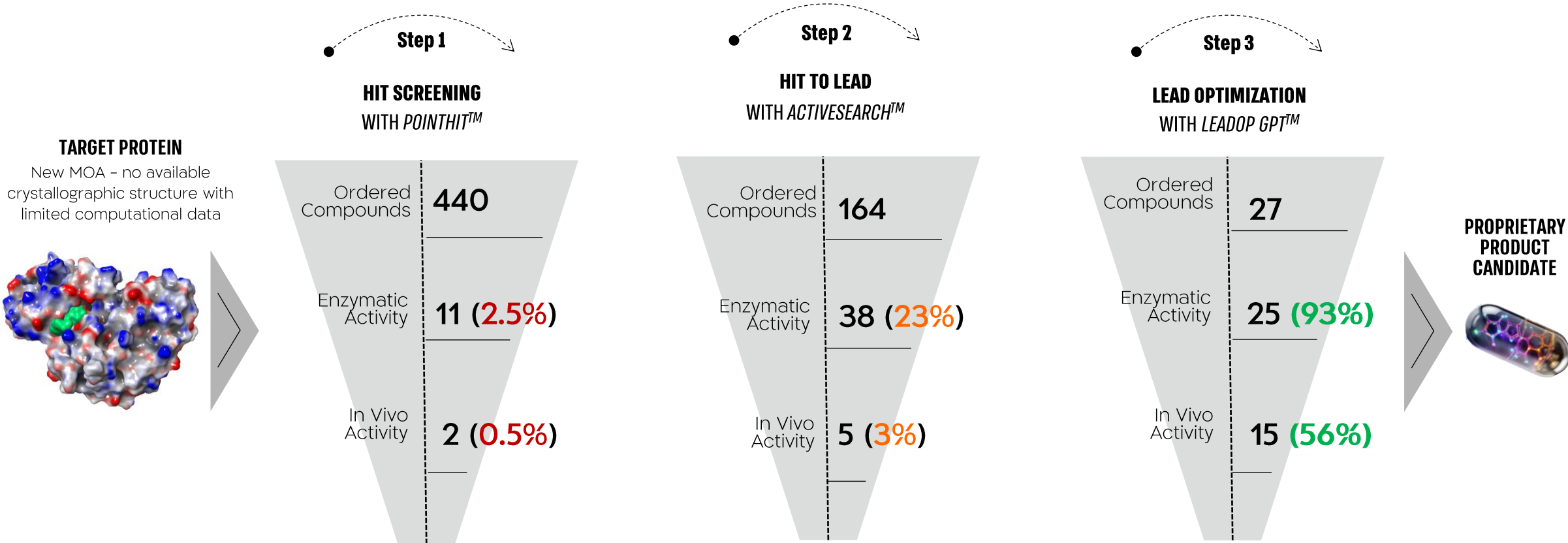
APTF-1 PRESENTS STRONG POTENTIAL FOR REAL-WORLD INNOVATION



- Shows clear concentration-dependent antifungal efficacy
- Ongoing optimization to enhance potency
- 18 months from target to optimized hit

INTERNAL PIPELINE END-TO-END PROCESS – ACTUAL RESULTS

WHEAT BLOTCH PROJECT BY AGPLENUS



EVOGENE – REAL-WORLD INNOVATION

PHARMA DIVISION – Drugs



AG DIVISION* – Ag-Chemicals

COLLABORATIONS



Neutrophil-Derived
Inflammatory Diseases



Demyelination Disorders



Lung Cancer



Metabolic Disease



COLLABORATIONS



Herbicides



Herbicides

INTERNAL PIPELINE

Wheat Blotch

AG DIVISION* – Operations in this field are conducted through our subsidiary, AgPlenus.



HIGH-POTENCY MOLECULES

AI-first designed molecules optimized through targeted experimental validation

NOVEL CHEMICAL SPACE & IP

Based on a 38B-molecules chemical library, the platform designs active novel compounds

MULTI-PARAMETER OPTIMIZATION

Simultaneously optimizes chemical & biological parameters

We design highly potent and novel small molecules, optimized across multiple-parameters, for the pharmaceutical and ag-chemical industries.

evogene
Real-world innovation



PIONEERING IN PHARMA

Growing number of collaborations addressing diverse drug targets for the benefit of human health



REVOLUTIONIZING AG

Proven impact in Agriculture. Computational chemistry drives real-world agricultural impact

GENERATING REAL-WORLD INNOVATION

evogene



Creating

**REAL-WORLD
INNOVATION**

for a better future