



Turn on
the sound

Alagene - SynBio Biofoundry

Innovation on demand



Alagene

SynBio Biofoundry

Synthetic biology biofoundry CRO delivering modular R&D
solutions that turn bold ideas into industry-ready
applications with precision & speed.

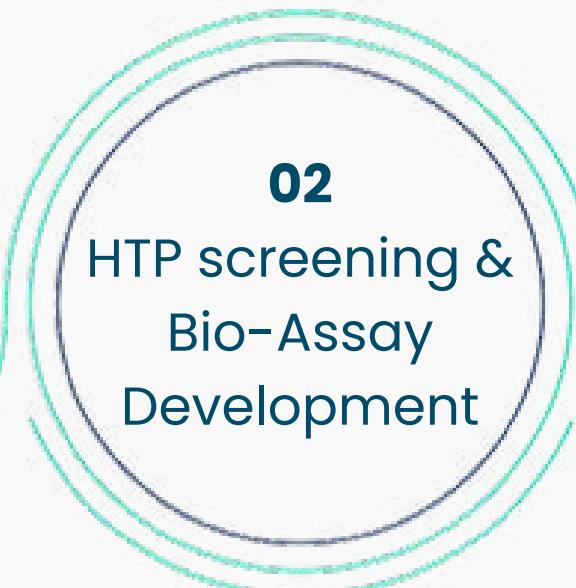
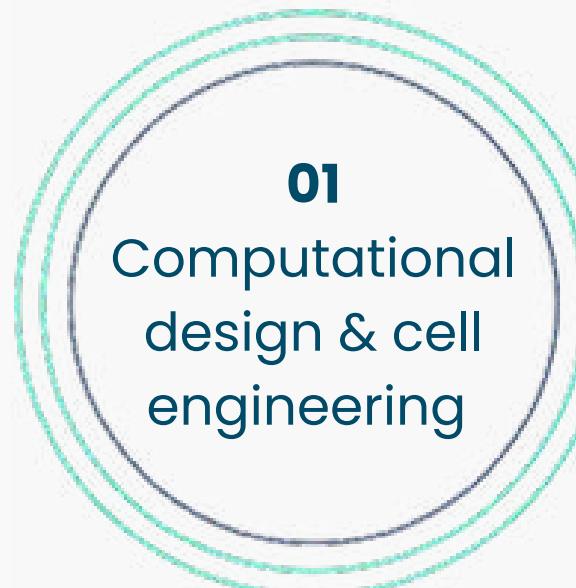
Alagene is a national initiative backed by our parent
company HyLabs, bringing **over 50 years of excellence in
biotechnology services**



Our Structure

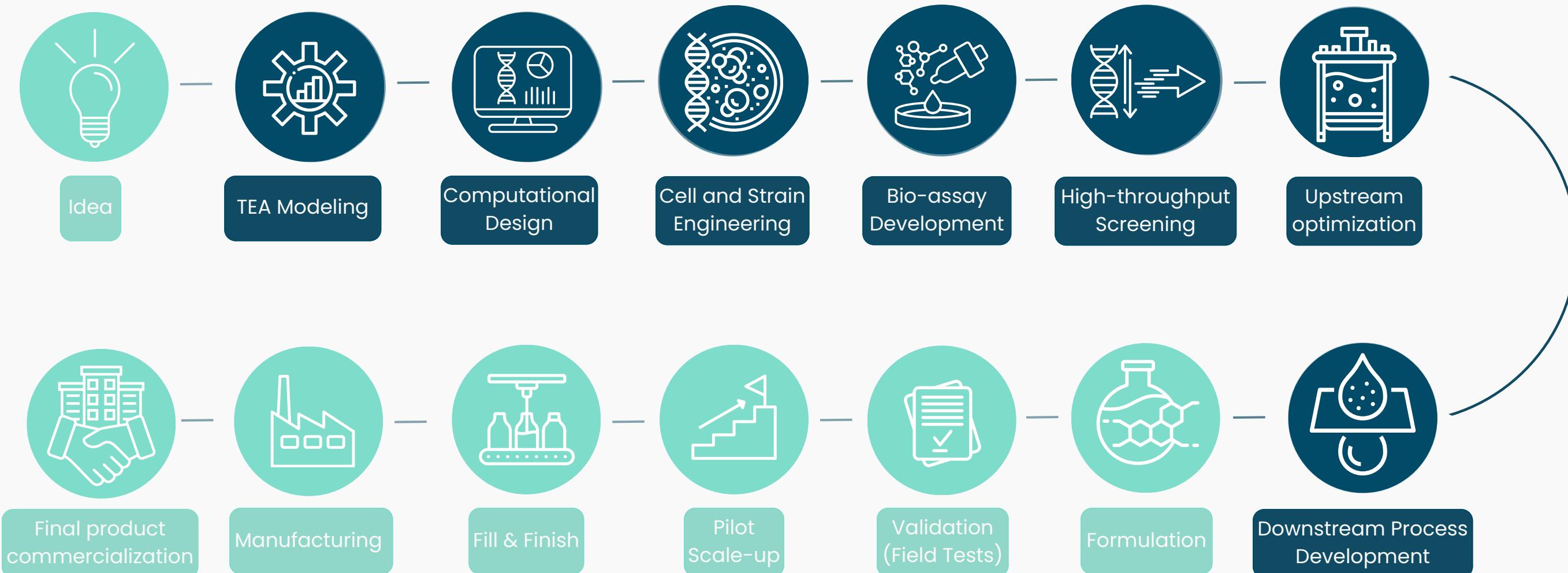
Multidisciplinary Approach

We bridge **biology, chemistry, and engineering** to deliver **end-to-end R&D services** Led by **four department heads**, our team brings **over 100 years of combined experience**



Our Services

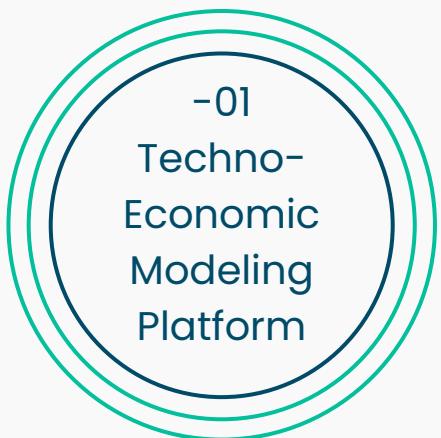
Alagene in your value chain



- In-house
- 3rd Party

Alagene's Techno-Economic Modeling Platform

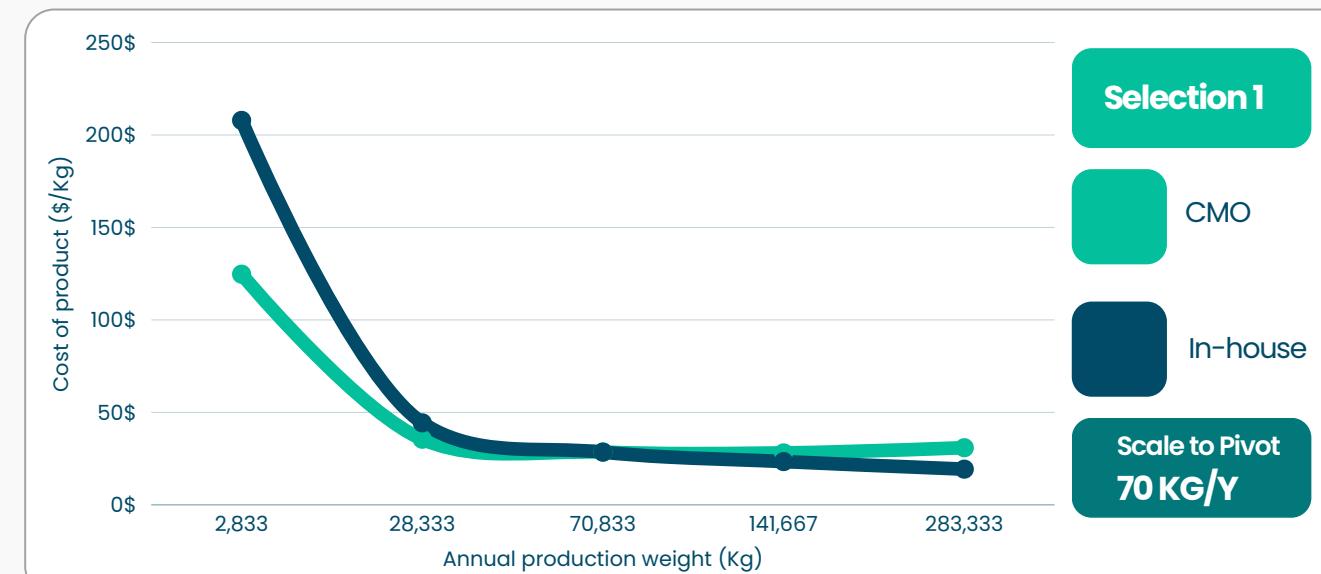
Designing R&D strategies for \$/kg



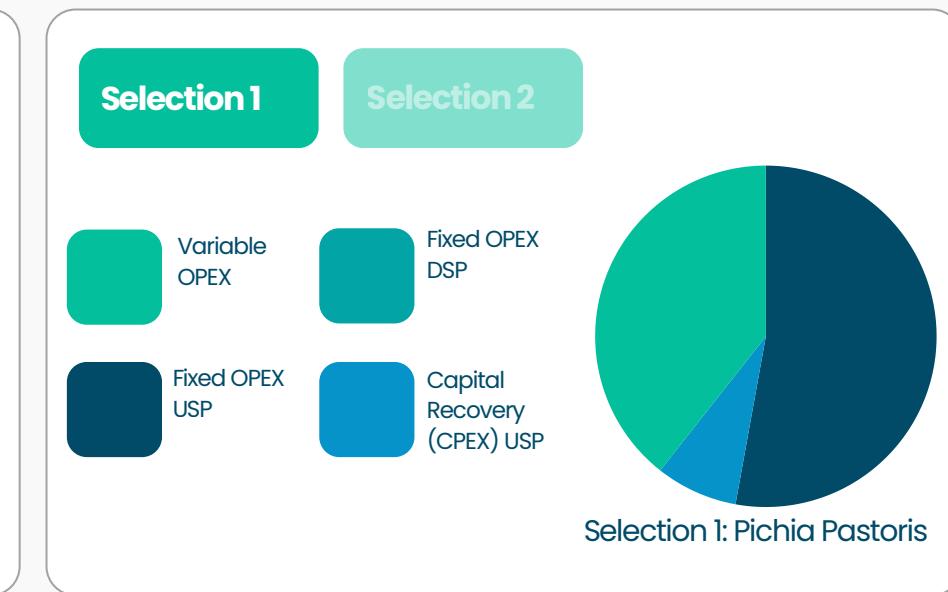
Inputs

	Selection 1	Selection 2
Organism	Pichia Pastoris	<input checked="" type="checkbox"/>
Carbon Srouch	Methanol	<input checked="" type="checkbox"/>
Average feed rate (g/hL)	1.5	
Titer (g/L)	0.014	
	<input checked="" type="checkbox"/>	

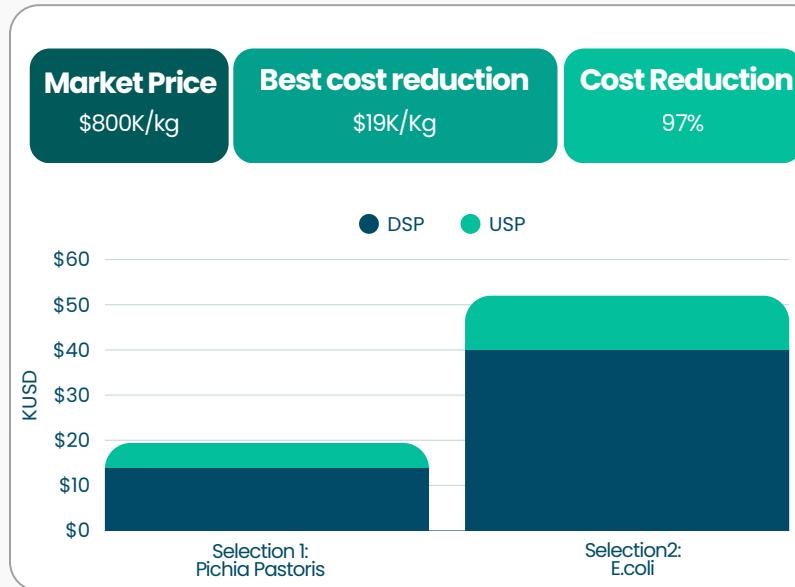
Contract Manufacturing VS In-house



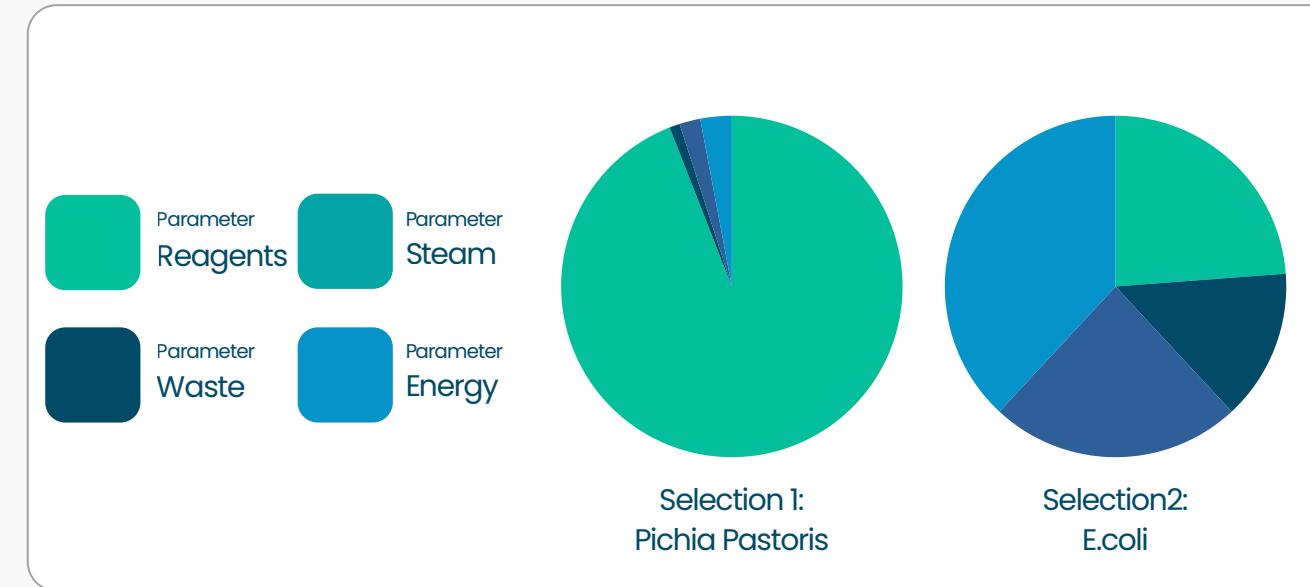
Cost Of Product (\$/Kg)



Total Cost Of Product (\$/Kg)



Opex cost (\$/Kg)

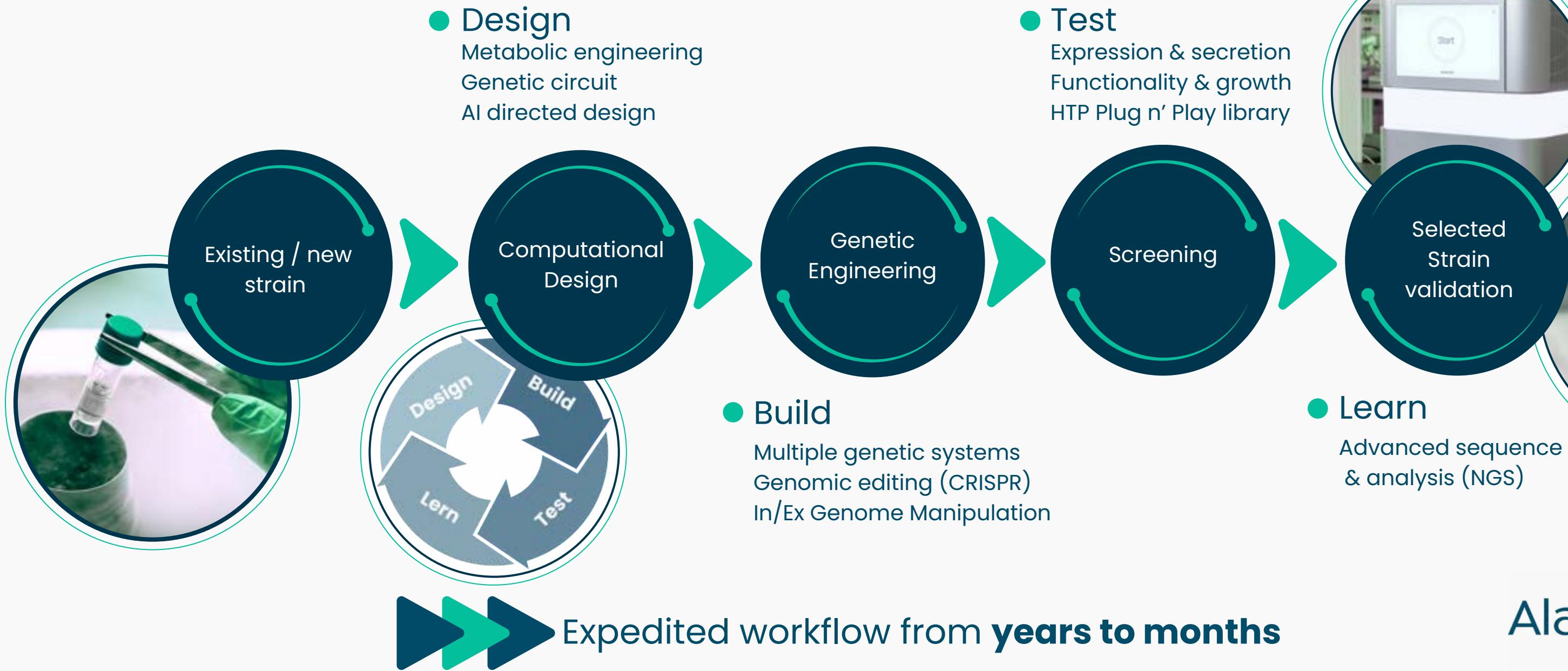
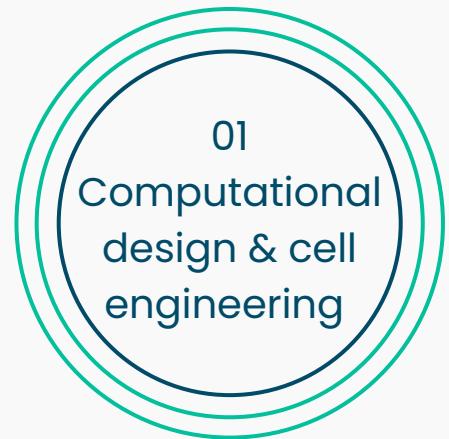


Yield to Cost



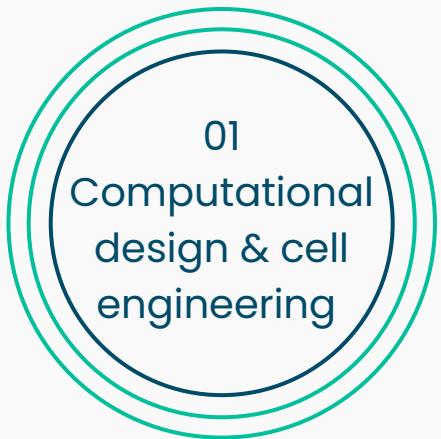
Microbial Strain Design and Optimization

Fully integrated, accelerated DBTL workflow



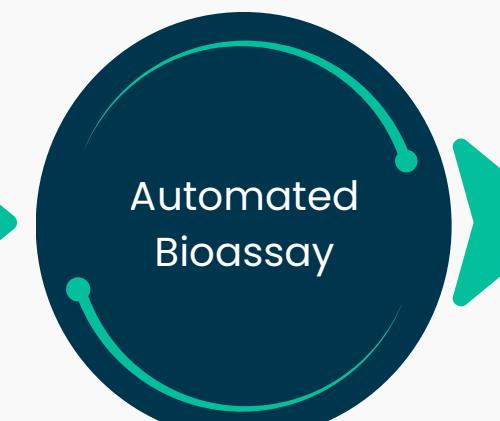
Non-GMO Microbial Strain Improvement

Rapid Improvement Through Adaptive Evolution



● Bioassay

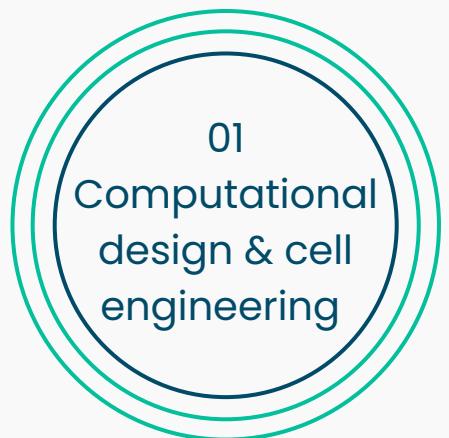
Directed evolution & Mutagenesis (UV, Heat)
Consortia composition
Enrichment experiments
Population Characterization
Selection assay & adaptive resistance



Expedited workflow from **months to weeks**

In-house

Ultra Productive Strain Menu



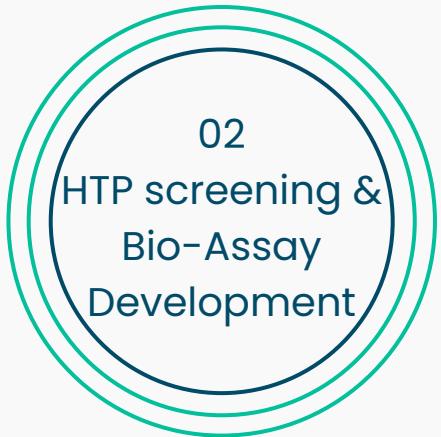
	Strains		E. Coli DH5a, BL21-DE3		Bacillus PY79, 168		Pichia pastoris GS115		S. Cerevisiae S288C, CEN-PK		Trichoderma RUT-C30
	Genetic modifications				No protease No sporulation		No protease				
Genetic Toolkits											
	Inducer (Promotor)		IPTG (pT7)		IPTG (Phs, Pgrac)		Methanol (pAOX1)		Galactose (pGAL1/10)		Cellulose (Pcbh1/2)
	Non-Induced		X		V		V		V		X
	In/Ex-genome		Ex		In & Ex		In & Ex		In & Ex		In

*And many more...
yours is next*

Alagene
Trusted Partner

Automated Biofoundry for HTP Screening & Bioassay Development

Analyze 1000's of variants identifying top-performers

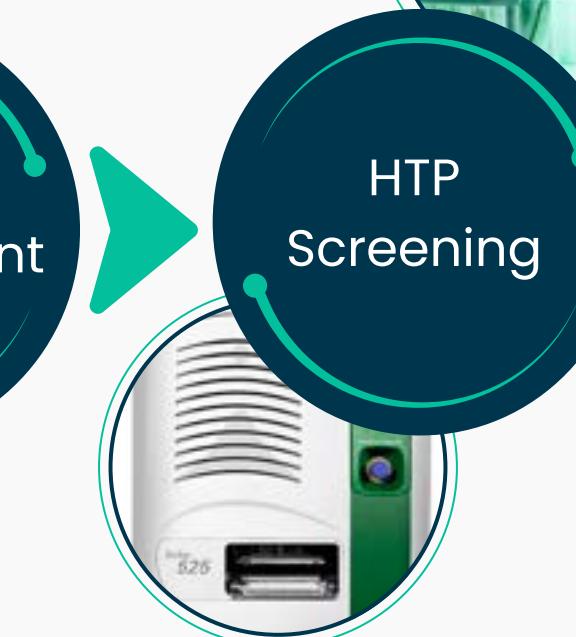


● Applications

Yield
Biological activity
Purity level
Consortia screen
Media composition optimization



Variants
Screening



Bio-Assay
Development



HTP
Screening



Advanced
data
analysis



Selected
High-
Performance
Variant

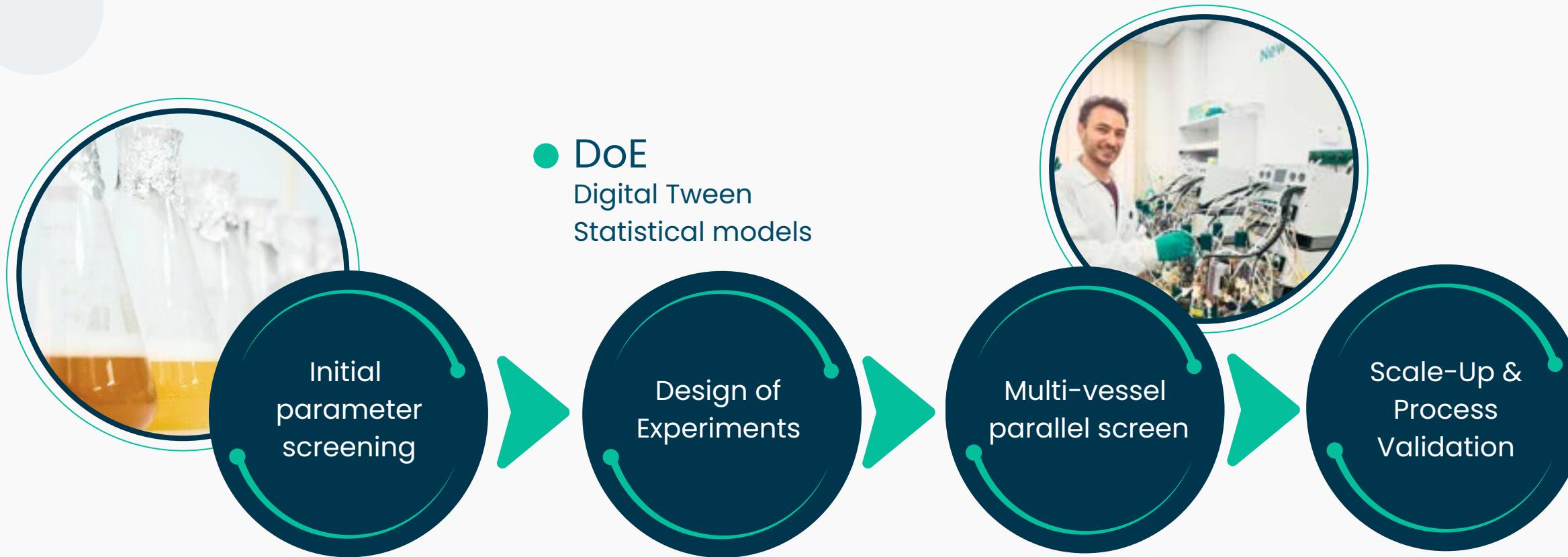


End-to-end HTP workflows and **custom bioassay design**

Alagene
Trusted Partner

Industry-Ready Fermentation Development

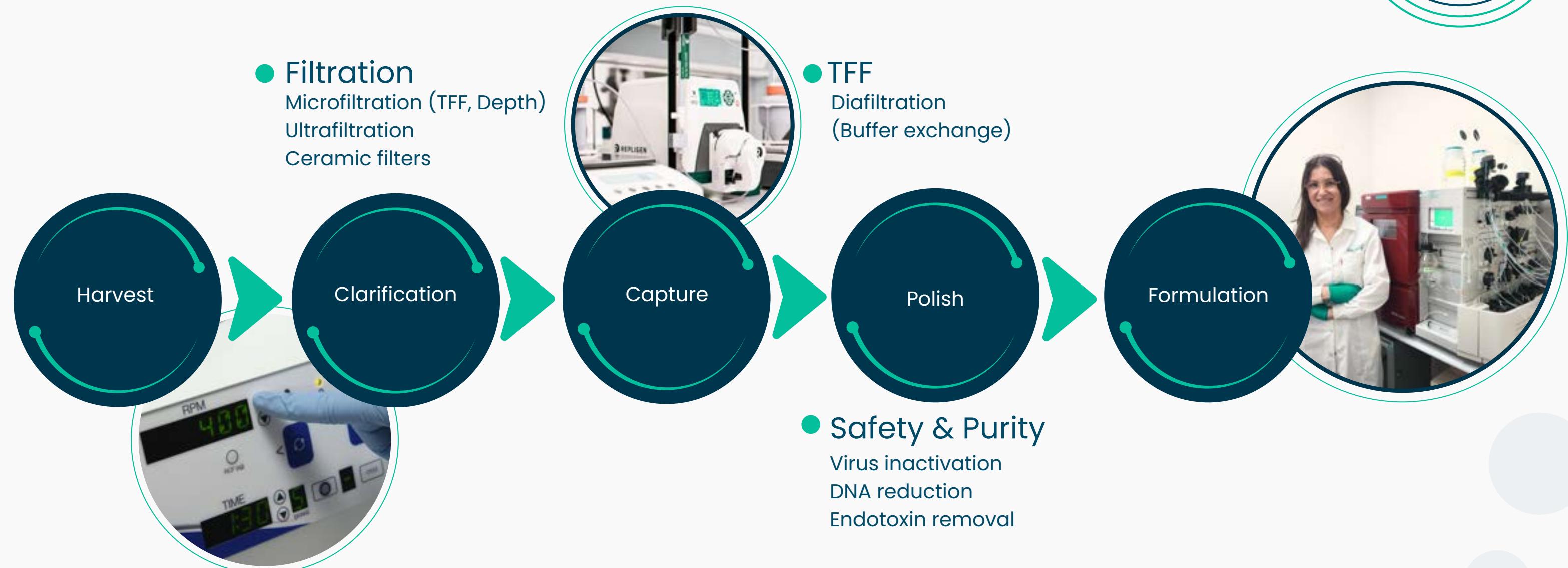
Process design, optimization, and scale-up



Data-driven process design

Downstream design and optimization

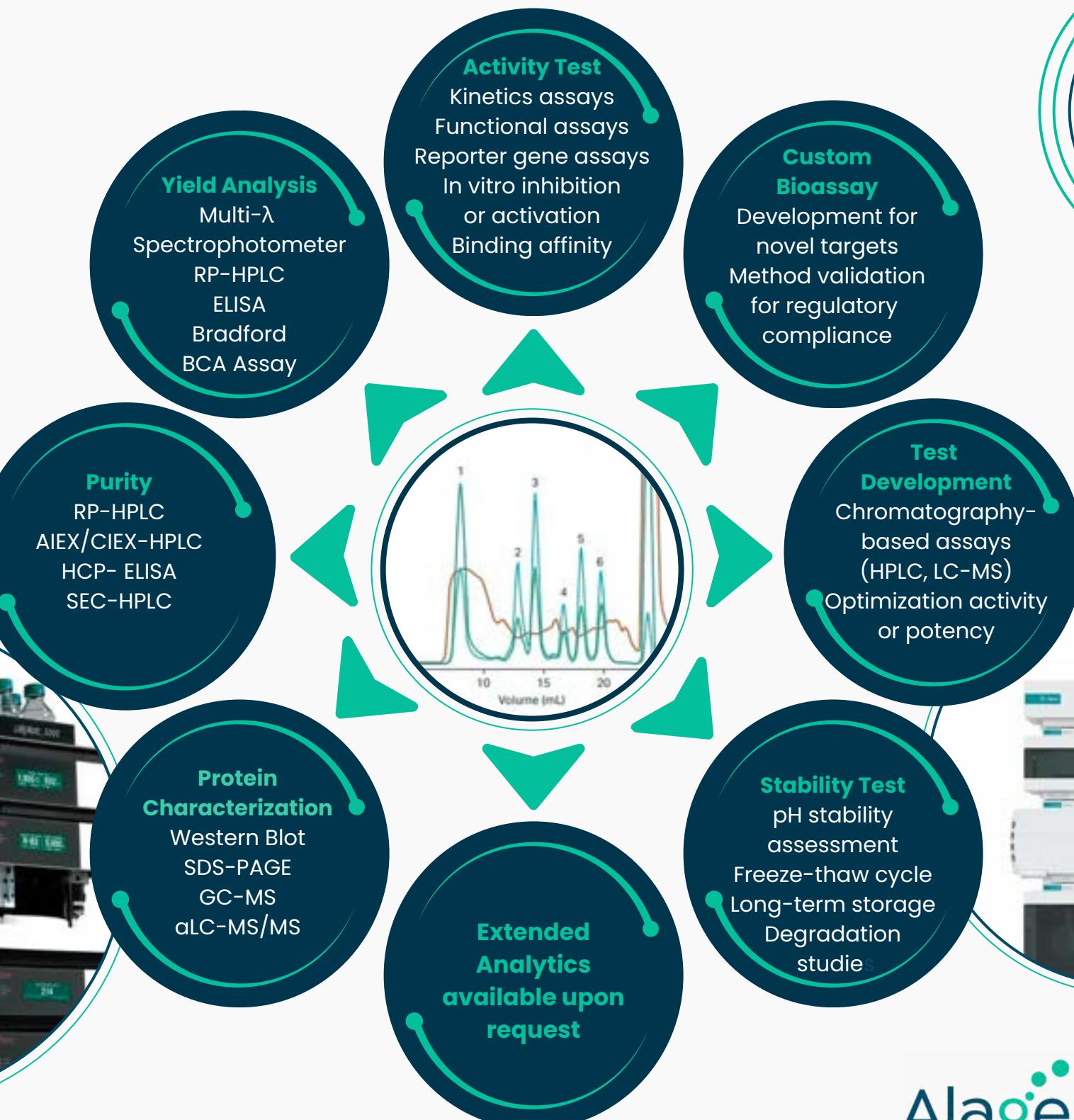
Designing separation & purification workflows



Enabling **cost-efficient, scalable** purification workflow

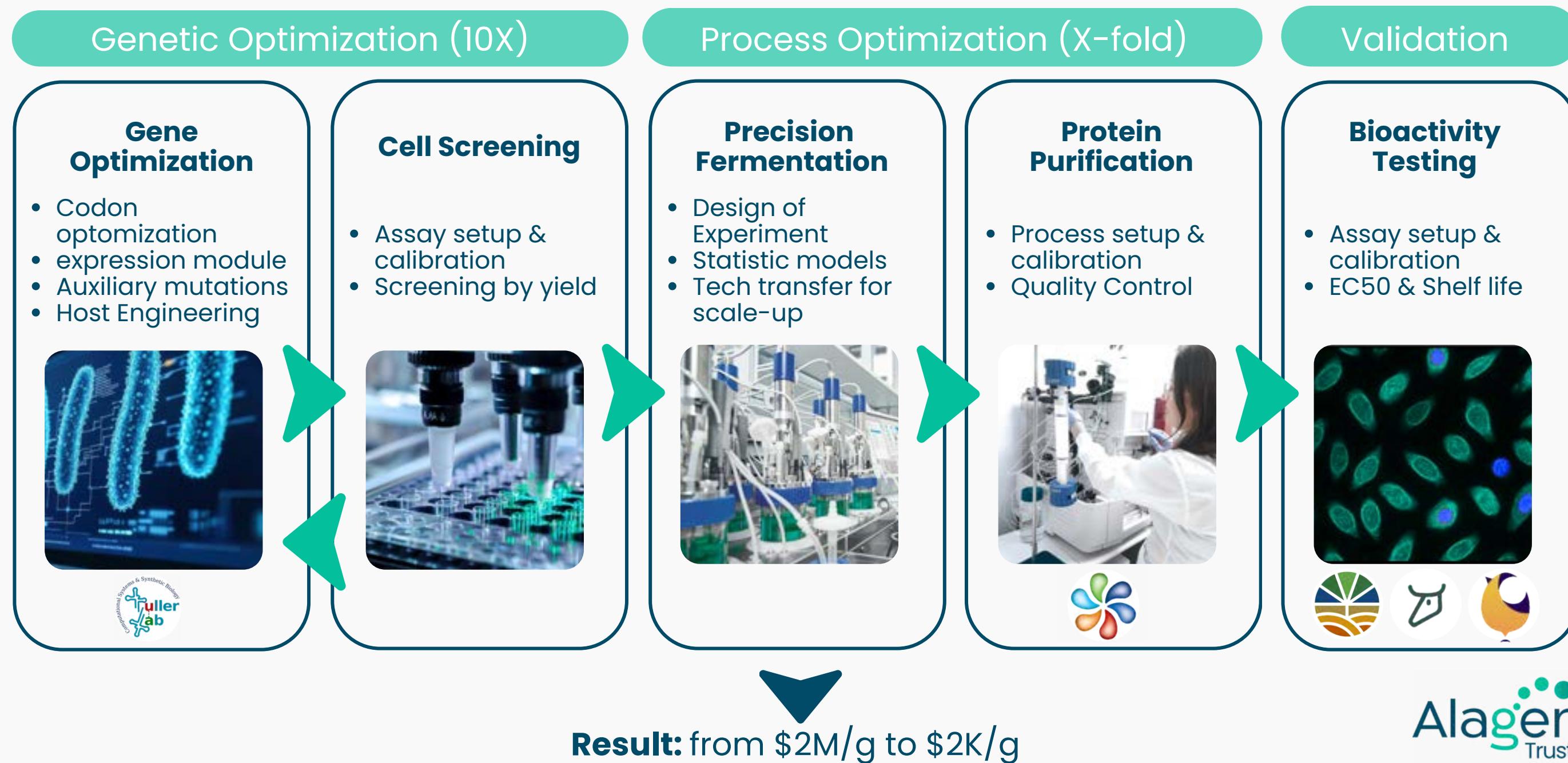
Downstream design and optimization

Analytical Toolbox



Case Study I: Producing Growth Factors (FGF-2)

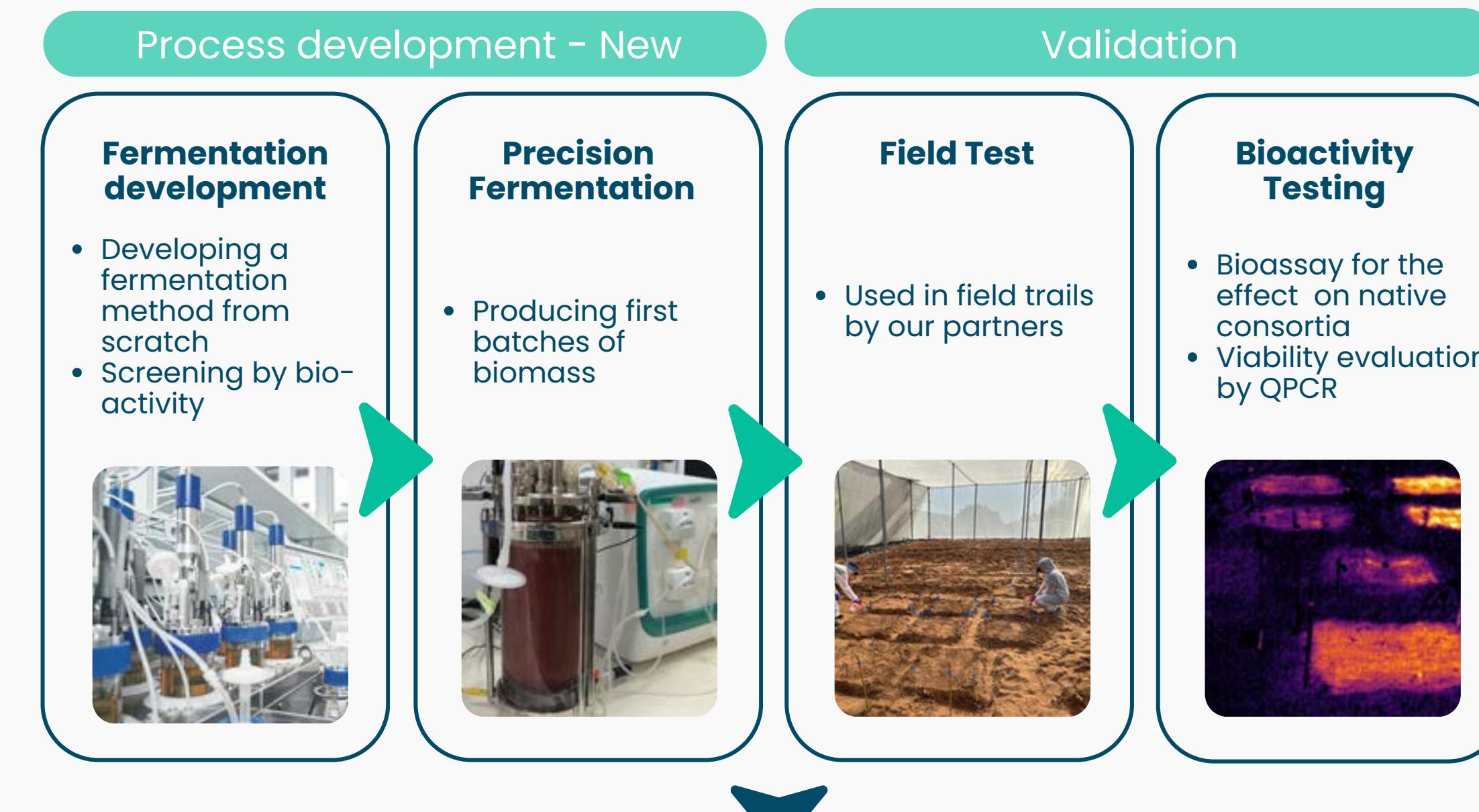
 **X1000 Cost reduction – Soluble & endotoxin free**



Alagene
Trusted Partner

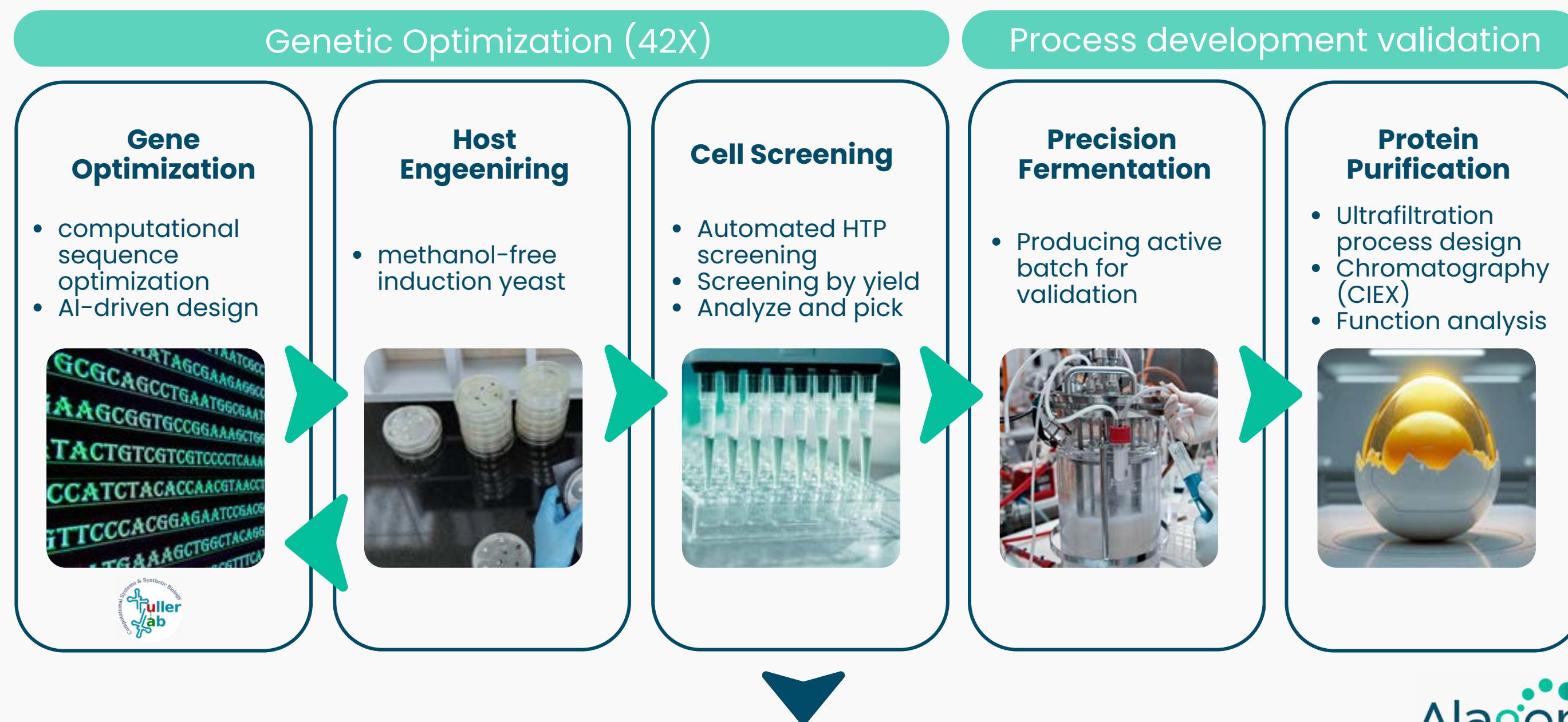
Case Study II: *R. gelatinosus* in soil applications

🎯 Bacterial viability in soil & the effect on native microbial community



Case Study III: 42x Increase in Ovalbumin Production

 **cost-competitive and scalable recombinant protein production**



Result: Methanol-free yeast strain delivered a 42-fold improvement

 **Alagene**
Trusted Partner

Our (Disclosed) Partners

Trusted by industry leaders



"It was a pleasure to work with the experts at Alagene. The team was highly responsive and professional. From experimental design to swift execution of the required experiments and detailed summaries of the results, the collaboration was a great success."

Daniel Taglicht, Ph.D. Department Head Protein Expression & Purification R&D Science & Lab Solutions, Life Science



Your Logo
Here



READY TO REALIZE YOUR NEXT BREAKTHROUGH?



THANK YOU!

 www.alagene.co.il

Alagene