FORM BIO™

FORMsight^{AI}

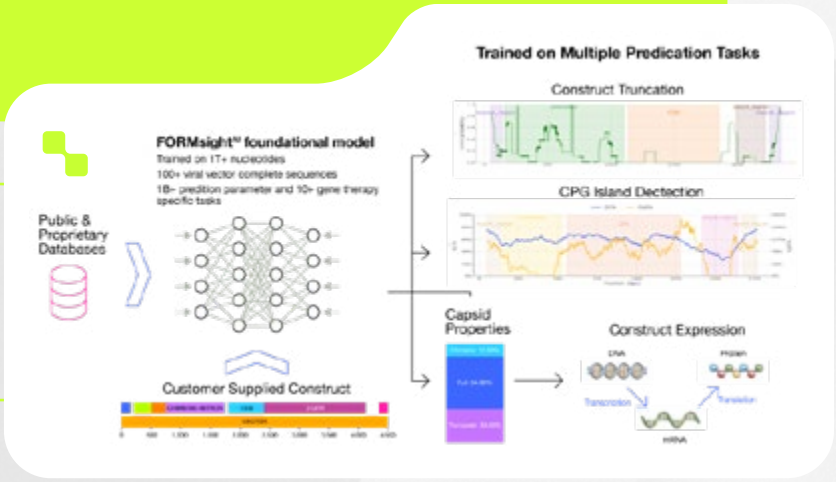
Accelerating gene therapy development with AI

Discover how FORMsight^{AI} helps gene therapy companies rapidly optimize AAV vector designs for safety, yield and efficacy.

FORMsight[AI] Overview

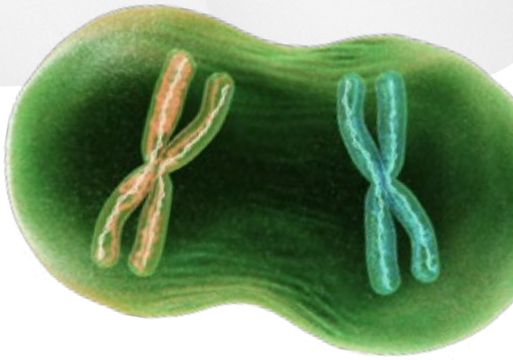
The 1B+ parameter FORMsight[AI] large-language model (LLM) has been trained on more than 3 trillion nucleotides of public and proprietary data. Our AI models can predict outputs based on primary tasks including DNA quality and expression, sub-tasks such as truncations, CpG islands, partial/empty/full capsid proportions, promoter tissue specificity and vector production.

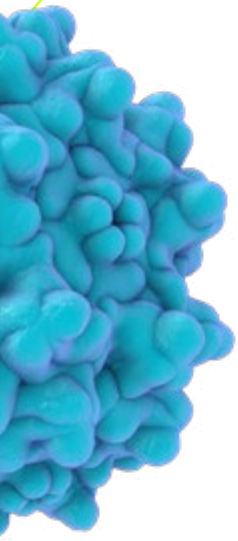
In addition to predicting outcomes, the same models can design an optimal vector sequence based on desired outputs.



EXAMPLE PROGRAM ELEMENTS

HERE ARE A FEW EXAMPLES OF FORM BIO'S AAV GENE THERAPY PROGRAM CAPABILITIES, FOR A COMPLETE LIST REACH OUT TO OUR TEAM TO LEARN MORE.





AAV GENOME CHARACTERIZATION

Critical Insights into the Impact of Vector Design on Manufacturability

Detailed analysis of truncation propensity, location and description of secondary and tertiary structures.

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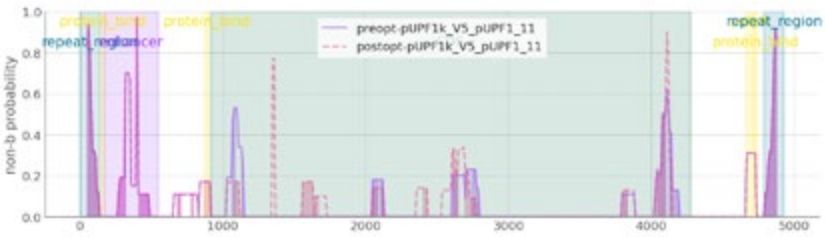
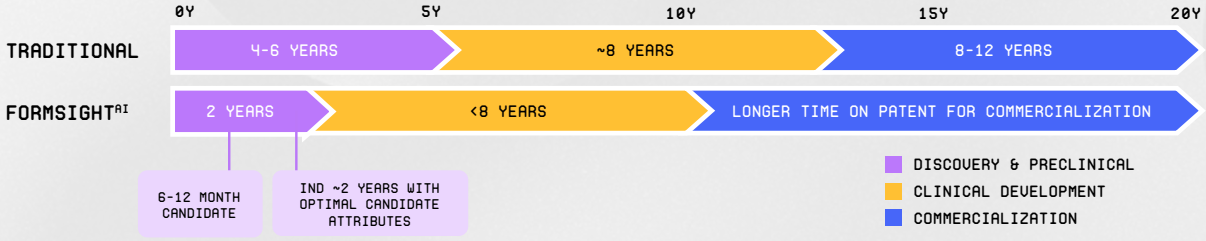
- Assess the manufacturability of vector designs early in the discovery process
- Gain actionable insights on vector elements that increase the risk of genome truncations
- Simulate the impact of different regulatory elements on vector production



Benefits of FORMsight[AI]

- Enables researchers to utilize AI for optimizing vector sequences for improved yield and reduced immunogenicity risk
- Saves significant time and enables screening of larger vector libraries designed around optimal sequences

EXAMPLE DRUG DEVELOPMENT TIMELINE COMPARISON



MULTI-CONSTRUCT ANALYSIS

Hone in on the Vector Most Likely to Succeed

Rapidly evaluate hundreds of millions of construct combinations *in silico*, comparing the safety, yield and expression of multiple candidates with different regulatory elements.

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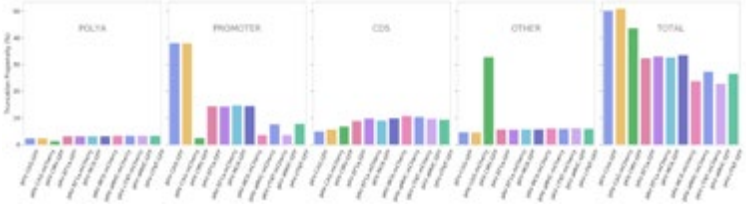
- Compare millions of combinations of promoters, ITRs, introns, backbones, RepCap, polyA elements and more
- Rank vectors for triple transfection, CpG islands, GC content, transcription, translation and manufacturability
- Design for improved safety, efficacy and manufacturability and assess the impact of substituting regulatory elements

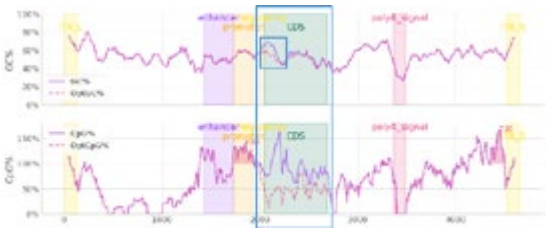


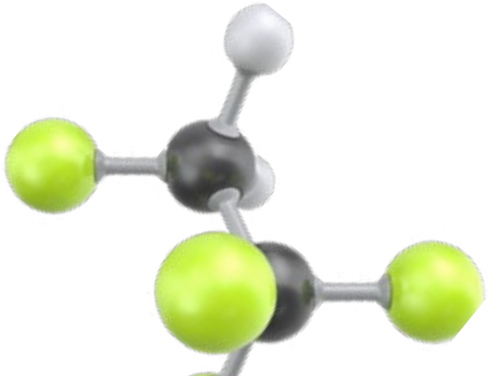
AI-POWERED CANDIDATE OPTIMIZATION

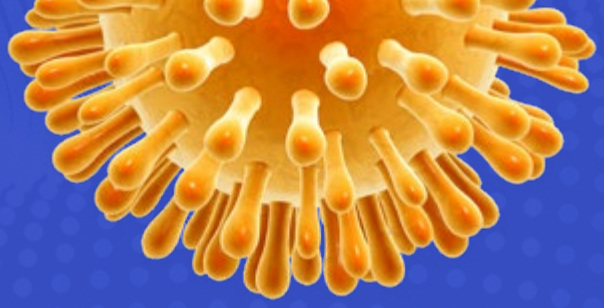
Enhance AAV Vectors for Ideal Production Yield, Safety & Cost

Leverage AI to optimize vectors with improved properties, faster time to IND and reduced internal R&D costs.

- Optimize your vector genome sequence for lowest truncation propensity and highest manufacturability
- Optimize your GOI for gene expression and immunogenicity
- Create derivative IP with our generative LLM/AI models for identifying optimal versions of your starting construct







BIOLOGICAL VALIDATION STUDIES

FORMsight[AI] Predicts & Optimizes AAV Vector Design Outcomes

Explore our initial biological data and performance metrics demonstrating the accuracy of FORMsight[AI] in predicting and optimizing crucial outcomes of AAV vector designs compared to benchmarks.

Key insights from the biological studies show how *in silico* techniques can:

- Improve full reads by 28% and minimize truncated genomes
- Optimize vectors to produce biologically active drug substance and increase potency by >20%
- Predict vector design problems accurately and reduce truncation risk by 40%

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Get Your Therapeutic Candidate to Market Faster

TALK TO OUR EXPERTS

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