

SynLoop™ v3.5 -- White Paper

Closed-Loop RNA Therapy Enhancement Platform

Executive Summary

SynLoop™ v3.5 is a next-generation, closed-loop therapeutic enhancement platform designed to optimize existing RNA therapies in real-time through continuous monitoring, analysis, and adaptive delivery protocols. Rather than competing with current RNA therapeutics, SynLoop™ leverages advancements in nanopore sequencing, computational anomaly recognition, microfluidic synthesis, and enhanced delivery systems to make proven RNA therapies more effective. The platform integrates with existing FDA/EMA-approved therapies including mRNA vaccines (Pfizer-BioNTech, Moderna), siRNA treatments (Onpattro, Givlaari), antisense oligonucleotides (Spinraza, Eteplirsen), and CRISPR-based systems (Casgevy), creating the first modular, automated blood-interfacing system capable of personalized therapy optimization.

Core Innovation: The first platform designed to enhance ANY existing RNA therapy through closed-loop real-time optimization, making proven therapies more effective rather than replacing them.

Background & Rationale

The RNA therapeutics market has achieved remarkable breakthroughs, with proven therapies now treating rare diseases, COVID-19, and various genetic conditions. However, these established approaches face optimization opportunities:

- **Static Dosing:** Current therapies use fixed dosing without real-time patient response monitoring
- **Limited Personalization:** Approved therapies cannot adapt to individual patient variations in real-time
- **Efficacy Gaps:** Even successful therapies like mRNA vaccines show variable effectiveness across populations
- **Delivery Limitations:** Existing LNP formulations have room for enhancement

SynLoop™ addresses these gaps by enhancing existing proven therapies through:

- Continuous therapy effectiveness monitoring
- Dynamic computational-based therapy optimization
- Onboard enhancement of existing therapeutic formulations
- A feedback-validated therapeutic enhancement mechanism

Market Opportunity: Rather than competing in the \$2.85 billion RNA therapy market, SynLoop™ creates a new \$4+ billion therapy enhancement market by making all existing RNA therapies more effective.

System Architecture Overview

SynLoop™ v3.5 integrates seven core modules designed to enhance existing RNA therapies, exactly as specified in the Engineering Specifications:

1. Blood Extraction & Circulation Module

- **Method:** Dual-lumen catheter or 18-20 gauge IV
- **Flow Rate:** 5-15 mL/min (adjustable)
- **Sensors:** Flow, pressure, and anticoagulant sensors
- **Pump Type:** Peristaltic, sterile single-use cassette

2. Plasma & cfDNA/cfRNA Isolation Unit

- **Technology:** Centrifugal microfluidics or plasma filtration
- **Output:** RNA-rich and cfDNA-enriched sample line
- **Temperature Range:** Maintained at 4-8°C for integrity

3. Molecular Profiling Engine

- **Sequencing:** Nanopore sequencer or hybrid chip
- **Detection:** Single-nucleotide variant (SNV) resolution
- **Input:** cfDNA and cfRNA streams
- **Turnaround:** ~10 min per 2 mL sample

4. Bioinformatics & Computational Diagnosis Module

- **Processing Engine:** Real-time classification, severity scoring
- **Databases:** ClinVar, RefSeq, internal therapeutic libraries
- **Decision Logic:** Triage by pathogenicity, treatability, and existing therapy optimization potential

5. Correction Strategy Selection Engine

- **Capabilities:** Algorithm-driven match between anomaly and existing therapy enhancement:
 - siRNA / miRNA modulator optimization
 - mRNA therapy enhancement
 - CRISPR base editor + gRNA combination improvement
- **Therapy Integration Database:** Direct interfaces with existing pharmaceutical therapy protocols
- **Enhancement Code Generator:** Maps patient-specific optimizations to proven FDA/EMA-approved therapies

6. On-Demand Synthesis Unit

- **Synthesis Capabilities:**
 - Enhanced siRNA, miRNA mimics, therapeutic mRNA
 - Optimized CRISPR guide RNA (gRNA)
- **Editor mRNA:** Pre-loaded batch or synthesized with microfluidics
- **Encapsulation:** Enhanced LNP (lipid nanoparticles) or exosome-based
- **Cycle:** 1-3 enhanced therapy payloads per round

7. Smart Reinfusion & Monitoring Hub

- **Delivery:** 2-5 min per enhanced payload, IV slow drip
- **Monitoring:**
 - Vital signs, inflammatory markers, cfDNA scan
 - Efficacy feedback loop for adaptive therapy enhancement

8. Sterilization & Post-Cycle Cleanup

- **Method:** Saline flush + UV or chemical (per user SOP)
- **Cycle Time:** 20 min
- **Prompt:** "Sterilization complete. Ready for next protocol."

Enhanced Treatment Strategy

Phase 1: Therapy Assessment & Enhancement Design

- Patient blood is extracted and analyzed
- Current therapy effectiveness is evaluated
- Enhancement opportunities are identified and optimized
- Enhanced therapy formulations are prepared

Phase 2: Enhanced Therapy Delivery & Monitoring

- Patient receives optimized version of their current therapy
- Real-time monitoring of enhancement effectiveness
- Continuous adaptation based on patient response
- Confirmation of improved outcomes vs. standard therapy

This approach bridges the gap between current static therapy delivery and the future of adaptive, personalized medicine enhancement.

Partnership Integration Strategy

Pharmaceutical Company Integration

Direct Collaboration with Existing RNA Therapy Companies:

mRNA Vaccine Enhancement Partners

- **Pfizer-BioNTech:** COVID-19 vaccine efficacy optimization
- **Moderna:** mRNA platform enhancement for improved duration and effectiveness
- **CureVac:** Self-amplifying RNA vaccine optimization

siRNA Therapy Enhancement Partners

- **Alnylam Pharmaceuticals:** Onpattro, Givlaari, Oxlumo optimization
- **Arrowhead Pharmaceuticals:** Enhanced delivery of existing siRNA platforms
- **Dicerna/Novo Nordisk:** Optimization of rare disease siRNA therapies

Antisense Oligonucleotide Enhancement Partners

- **Biogen:** Spinraza enhancement for spinal muscular atrophy
- **Sarepta Therapeutics:** Eteplirsen optimization for Duchenne muscular dystrophy
- **Ionis Pharmaceuticals:** ASO platform enhancement across multiple indications

CRISPR Enhancement Partners

- **Vertex Pharmaceuticals:** Casgevy optimization for sickle cell disease
- **CRISPR Therapeutics:** Enhanced guide RNA precision for existing programs
- **Editas Medicine:** Improved delivery and targeting for approved therapies

Innovation Highlights

Existing Therapy Enhancement Capabilities

- **COVID-19 Vaccine Optimization:** Real-time enhancement of Pfizer-BioNTech and Moderna vaccines for improved efficacy and duration
- **Rare Disease Therapy Enhancement:** Optimization of approved treatments like Spinraza and Eteplirsen
- **Metabolic Disease Improvement:** Enhanced delivery for Onpattro and other approved siRNA therapies

Technical Innovations

- **Adaptive Enhancement Engine:** Predicts optimization opportunities and adapts formulations in response to live biomarker data
- **Therapy Integration APIs:** Direct interfaces with existing pharmaceutical protocols
- **Enhancement Audit Trail:** Every optimization step logged in HIPAA/GDPR-compliant systems
- **Plug-and-Enhance Architecture:** Mobile platform compatible with existing clinical workflows

Clinical & Regulatory Strategy

Regulatory Pathway Advantages

- **Enhanced Therapy Approval:** Optimizing approved therapies vs. developing new ones
- **Expedited Review:** Building on proven safety profiles of existing therapies
- **Partnership Integration:** Working within existing pharmaceutical regulatory frameworks

Trial Focus Areas

- **COVID-19 vaccine enhancement studies** showing improved efficacy and duration
- **Rare genetic disorders** with approved RNA therapies requiring optimization
- **Oncology applications** enhancing existing RNA-based cancer treatments

Regional Regulatory Roadmaps

- **USA:** FDA Device Enhancement pathway + collaboration with existing therapy manufacturers
- **EU:** CE marking under MDR + partnership with EMA-approved therapy companies
- **Spain:** AEMPS collaboration for therapy enhancement protocols

Commercialization Vision

Business Model: Platform Partnership

Revenue Streams:

1. **Pharmaceutical Partnership Licenses:** Revenue sharing with RNA therapy companies
2. **Enhancement-as-a-Service:** Per-treatment optimization fees
3. **Technology Platform Licensing:** APIs and integration protocols for pharma companies
4. **Consumables & Equipment:** SynLoop™ systems, enhancement cartridges, integration kits

Market Entry Strategy

- **Initial Partnerships:** Direct collaboration with established RNA therapy companies
- **Pilot Programs:** Enhancement trials with existing approved therapies
- **Academic Validation:** University partnerships demonstrating enhancement efficacy

Competitive Advantages

- **Partnership vs. Competition:** Makes existing therapies better instead of replacing them
- **Proven Therapy Foundation:** Builds on established safety and efficacy profiles
- **Regulatory Efficiency:** Enhancement approval faster than new therapy development

- **Market Validation:** \$2.85B RNA therapy market validates demand for enhancement

Technology Readiness & Development Path

Current Technology Status

Proven Components:

- Nanopore sequencing technology (commercially available)
- Microfluidic synthesis platforms (established technology)
- LNP formulation enhancement (active research area)
- Computational therapy optimization (machine learning applications)

Development Priorities:

1. **Pharmaceutical Integration Protocols:** APIs for existing therapy enhancement
2. **Therapy-Specific Enhancement Algorithms:** Customized optimization for each therapy class
3. **Real-time Enhancement Synthesis:** GMP-compliant optimization capabilities
4. **Clinical Validation Platforms:** Demonstrating enhancement efficacy vs. standard therapy

Partnership Development Timeline

- **Year 1:** Establish partnerships with 2-3 major RNA therapy companies
- **Year 2:** Pilot enhancement programs with existing approved therapies
- **Year 3:** Clinical validation studies demonstrating enhanced efficacy
- **Year 4-5:** Regulatory approval for therapy enhancement protocols

Conclusion

SynLoop™ v3.5 represents a paradigm shift from therapy competition to therapy enhancement. By creating a platform that makes all existing RNA therapies more effective, SynLoop™ offers unprecedented value to pharmaceutical companies, healthcare providers, and patients.

For Pharmaceutical Companies: Enhanced efficacy of existing approved therapies without new development costs
For Healthcare Providers: Improved patient outcomes with proven therapies
For Patients: Personalized optimization of safe, approved treatments

The platform approach transforms SynLoop™ from a single therapy competitor into an enhancement partner for the entire RNA therapeutics industry, creating a new market category: **Therapeutic Enhancement Platforms.**

This technology promises to revolutionize how we approach personalized medicine - not by replacing proven therapies, but by making them work better for every individual patient.

White Paper: SynLoop™ v3.5 Revolutionizing RNA Therapeutics: Real-Time Enhancement of Proven Therapies

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Extended Executive Summary

The RNA therapeutics revolution has delivered breakthrough treatments including COVID-19 vaccines, rare disease therapies, and innovative cancer treatments. However, these proven therapies face a critical challenge: they operate as static, one-size-fits-all solutions that cannot adapt to individual patient responses or optimize themselves based on real-time effectiveness data.

SynLoop™ v3.5 introduces a groundbreaking solution: the first **closed-loop RNA therapy enhancement platform** designed to make existing proven therapies more effective through real-time monitoring, analysis, and adaptive optimization.

Rather than competing with established RNA therapies, SynLoop™ partners with pharmaceutical companies to enhance their approved treatments, creating a new market category: **Therapeutic Enhancement Platforms**.

1. The RNA Therapy Enhancement Opportunity

Current RNA Therapy Market Landscape

The global RNA therapeutics market, valued at \$2.85 billion in 2024 and growing to \$4.16 billion by 2034, includes:

Established mRNA Therapies:

- Pfizer-BioNTech COVID-19 vaccine (Comirnaty)
- Moderna COVID-19 vaccine (Spikevax)
- Emerging mRNA cancer vaccines

Proven siRNA Treatments:

- Onpattro (patisiran) - hereditary transthyretin amyloidosis
- Givlaari (givosiran) - acute hepatic porphyria
- Oxlumo (lumasiran) - primary hyperoxaluria

Approved Antisense Oligonucleotides:

- Spinraza (nusinersen) - spinal muscular atrophy
- Eteplirsen (Exondys 51) - Duchenne muscular dystrophy
- Inotersen (Tegsedi) - hereditary transthyretin amyloidosis

CRISPR-Based Systems:

- Casgevy (exagamglogene autotemcel) - sickle cell disease
- Lyfgenia (eteplirsen) - hemophilia B

The Enhancement Opportunity

Current Limitations of Proven RNA Therapies:

1. **Static Dosing:** Fixed doses regardless of individual patient response
2. **Variable Efficacy:** COVID-19 vaccines show 60-95% effectiveness across populations
3. **Delivery Challenges:** LNP targeting primarily limited to liver cells
4. **No Real-time Adaptation:** Therapies cannot adjust based on patient response

SynLoop™ Enhancement Solution:

- **Dynamic Optimization:** Real-time adaptation based on patient response
- **Personalized Dosing:** Individual-specific therapy optimization
- **Enhanced Delivery:** Improved LNP formulations for better targeting
- **Continuous Monitoring:** Real-time efficacy assessment and adjustment

2. SynLoop™ v3.5: Partnership-Driven Enhancement Platform

Core Platform Philosophy

"We don't replace RNA therapies - we make them better"

SynLoop™ operates as a therapeutic enhancement platform that:

- Partners with existing RNA therapy companies
- Enhances proven, approved therapies
- Creates value for pharmaceutical companies and patients
- Builds on established safety profiles

How Enhancement Works

Traditional RNA Therapy Delivery:

Therapy Manufacturing → Fixed Dosing → Patient Administration → Hope for Best Outcome

SynLoop™ Enhanced Delivery:

Existing Therapy → Real-time Optimization → Enhanced Formulation → Adaptive Delivery → Continuous Monitoring → Outcome Optimization

Platform Integration Capabilities

mRNA Vaccine Enhancement:

- **Pfizer-BioNTech Integration:** Real-time optimization for improved antibody response
- **Moderna Platform Enhancement:** Extended duration and efficacy improvement
- **Personalized Dosing:** Individual-specific vaccine optimization

siRNA Therapy Enhancement:

- **Alnylam Partnership Integration:** Onpattro, Givlaari, Oxlumo optimization
- **Enhanced Tissue Targeting:** Improved delivery beyond liver cells
- **Reduced Off-target Effects:** Precision enhancement for existing siRNA sequences

ASO Therapy Enhancement:

- **Biogen Spinraza Optimization:** Enhanced CNS delivery and efficacy
- **Sarepta Eteplirsan Enhancement:** Improved muscle targeting and stability
- **Personalized ASO Modifications:** Patient-specific sequence optimizations

3. Technical Architecture: Enhancement Platform

Real-Time Enhancement Cycle

Phase 1: Therapy Effectiveness Assessment

1. **Blood Extraction:** Continuous monitoring of current therapy levels
2. **Molecular Profiling:** cfRNA/cfDNA analysis for therapy effectiveness
3. **Computational Analysis:** Assessment of current therapy performance vs. optimal levels

Phase 2: Enhancement Strategy Selection 4. **Optimization Identification:** Algorithmic detection of enhancement opportunities 5. **Enhancement Design:** Personalized modifications to existing therapy formulations 6. **Safety Validation:** Ensuring enhanced formulations maintain safety profiles

Phase 3: Enhanced Therapy Synthesis 7. **Microfluidic Enhancement:** Real-time optimization of existing therapy formulations 8. **Enhanced LNP Formation:** Improved delivery vehicle creation 9. **Quality Control:** Validation of enhanced therapy specifications

Phase 4: Adaptive Delivery & Monitoring 10. **Enhanced Therapy Delivery:** Optimized formulation administration 11. **Real-time Monitoring:** Continuous efficacy assessment 12. **Adaptive Optimization:** Further enhancement based on patient response

Computational Enhancement Engine (Engineering Specs Alignment)

Key Technologies Utilized (Per Engineering Specifications):

- **Microfluidics:** Precise fluid control and therapy enhancement synthesis
- **Nanopore Sequencing:** Real-time therapy effectiveness assessment
- **Machine Learning & Pattern Recognition:** Therapy optimization and efficacy prediction
- **Enhanced LNP Technology:** Improved delivery of optimized RNA therapies
- **Automated Apheresis:** Continuous, safe blood processing for therapy enhancement

Data Flow and Processing (Engineering Specifications):

- **Sensors:** Blood flow, pressure, temperature, chemical composition, UV intensity
- **Sequencing Data:** Raw electrical signals from nanopores → Basecalling → Aligned reads → Variant calling
- **Computational Input:** Variant calls, patient history, physiological data
- **Computational Output:** Therapy effectiveness assessment, enhancement opportunities, recommended optimization strategy
- **Feedback Loops:** Molecular efficacy data from monitoring hub feeds back to computational systems for adaptive therapy planning

Therapy Enhancement Capabilities:

- **Existing Therapy Integration:** Compatible with approved siRNA, mRNA, antisense oligonucleotides
- **Real-time Optimization:** Adaptive modification of therapy parameters
- **Personalized Enhancement:** Patient-specific therapy optimization
- **Efficacy Monitoring:** Continuous assessment of therapy performance improvements

Interfaces (Per Engineering Specifications):

- **Patient Interface:** Sterile, single-use tubing set connected to patient's vasculature
- **User Interface:** Touchscreen display for system control, status monitoring, alert display, and manual override
- **Data Interface:** Secure network connection for remote monitoring, cloud database interaction, and software updates
- **Reagent Interfaces:** Ports for sterile loading of reagents (anticoagulants, LNPs, pre-made editor mRNA, synthesis precursors, saline)

4. Partnership Business Model

Revenue Model: Platform Enhancement

Partnership Revenue Streams:

1. **Technology Licensing to Pharma Companies**
 - Platform licensing fees to RNA therapy manufacturers
 - Revenue sharing based on enhanced therapy performance
2. **Enhancement-as-a-Service**
 - Per-treatment optimization fees
 - Subscription model for continuous enhancement capabilities
3. **Integration Development**
 - Custom API development for pharmaceutical integration
 - Therapy-specific enhancement algorithm development
4. **Equipment & Consumables**
 - SynLoop™ platform systems for hospitals and clinics
 - Enhancement cartridges and integration kits

Pharmaceutical Partnership Benefits

For mRNA Companies (Pfizer-BioNTech, Moderna):

- **Extended Patent Life:** Enhanced versions of existing therapies
- **Improved Efficacy:** Measurable enhancement in patient outcomes
- **Personalized Medicine:** Individual-specific therapy optimization
- **Competitive Advantage:** Enhanced therapies vs. standard formulations

For siRNA Companies (Alnylam, Arrowhead):

- **Enhanced Targeting:** Improved tissue-specific delivery
- **Reduced Side Effects:** Optimized dosing and targeting
- **Expanded Indications:** Enhanced therapies for broader patient populations
- **Cost Optimization:** Better outcomes with potentially lower doses

For ASO Companies (Biogen, Sarepta):

- **Improved CNS Delivery:** Enhanced brain and spinal cord targeting
- **Increased Stability:** Optimized ASO modifications for longer half-life
- **Personalized Sequences:** Patient-specific ASO optimizations
- **Enhanced Efficacy:** Measurable improvements in clinical outcomes

5. Clinical Validation Strategy

Enhancement Efficacy Studies

COVID-19 Vaccine Enhancement Trials:

- **Primary Endpoint:** Improved antibody titers with enhanced vs. standard vaccines
- **Secondary Endpoints:** Extended duration of protection, reduced side effects
- **Patient Population:** Various age groups and immunocompromised patients

Rare Disease Therapy Enhancement:

- **Spinraza Enhancement Study:** Improved motor function scores with enhanced vs. standard therapy
- **Onpattro Optimization Trial:** Reduced TTR levels with enhanced formulations
- **Eteplirsen Enhancement Study:** Improved dystrophin expression with optimized ASO

Real-World Evidence Generation:

- **Partnership Pilots:** Collaborative studies with pharmaceutical companies
- **Academic Validation:** University medical center partnerships
- **Regulatory Collaboration:** FDA/EMA partnership for enhancement protocols

Safety & Efficacy Validation

Enhanced Therapy Safety Profile:

- Building on proven safety of existing approved therapies
- Additional safety monitoring for enhanced formulations
- Comprehensive pharmacovigilance for optimization protocols

Efficacy Measurement Framework:

- **Real-time Biomarker Monitoring:** Continuous assessment of therapy effectiveness
- **Comparative Effectiveness Studies:** Enhanced vs. standard therapy outcomes
- **Long-term Follow-up:** Extended monitoring of enhancement benefits

6. Regulatory Strategy: Enhancement Pathway

Regulatory Advantages of Enhancement Approach

Faster Approval Timeline:

- **Building on Proven Therapies:** Enhanced versions of approved treatments
- **Established Safety Profiles:** Known safety data for base therapies
- **Incremental Improvements:** Enhancement vs. entirely new therapy development

Regulatory Classification:

- **Medical Device Enhancement:** Platform technology for therapy optimization
- **Software as Medical Device:** Computational enhancement algorithms

- **Partnership Integration:** Working within existing therapy approval frameworks

Global Regulatory Roadmap

United States (FDA):

- **Device Enhancement Pathway:** 510(k) clearance for therapy optimization platform
- **Pharmaceutical Partnerships:** Collaborative development with existing therapy manufacturers
- **Digital Health Integration:** Software as Medical Device (SaMD) classification

European Union (EMA):

- **CE Marking Under MDR:** Medical device registration for enhancement platform
- **ATMP Collaboration:** Partnership with existing Advanced Therapy Medicinal Product manufacturers
- **Therapy Enhancement Protocol:** Streamlined approval for enhanced formulations

Spain (AEMPS):

- **Fast-track Pathway:** Accelerated approval for therapy enhancement technologies
- **Pharmaceutical Partnership Integration:** Collaboration with Spanish RNA therapy companies
- **Clinical Excellence Centers:** Partnership with leading Spanish hospitals

7. Market Impact & Future Vision

Transforming the RNA Therapy Landscape

Current State: Static, one-size-fits-all RNA therapies **SynLoop™ Vision:** Dynamic, personalized, continuously optimized RNA treatments

Market Transformation:

- **From Competition to Collaboration:** Platform partnerships vs. therapy replacement
- **Enhanced Patient Outcomes:** Measurably improved efficacy of proven therapies
- **Accelerated Innovation:** Faster optimization vs. new therapy development
- **Expanded Access:** Enhanced therapies for broader patient populations

Technology Evolution Roadmap

Near-term (1-2 years):

- Pharmaceutical partnerships with major RNA therapy companies
- Pilot enhancement programs with approved therapies

- Clinical validation studies demonstrating enhancement efficacy

Medium-term (3-5 years):

- Regulatory approval for therapy enhancement protocols
- Commercial deployment in major medical centers
- Expanded partnerships across RNA therapy categories

Long-term (5-10 years):

- Global platform adoption for RNA therapy enhancement
- AI-driven predictive enhancement algorithms
- Integration with personalized medicine platforms

Economic Impact

Healthcare Cost Reduction:

- **Improved Outcomes:** Better efficacy reduces need for additional treatments
- **Optimized Dosing:** Personalized therapy reduces waste and side effects
- **Preventive Enhancement:** Early optimization prevents disease progression

Pharmaceutical Industry Value:

- **Extended Therapy Lifecycles:** Enhanced versions of existing approved therapies
- **Competitive Differentiation:** Enhanced vs. standard therapy formulations
- **New Revenue Streams:** Partnership and licensing opportunities
- **Risk Reduction:** Building on proven therapies vs. new development

8. Conclusion: The Future of RNA Therapy Enhancement

SynLoop™ v3.5 represents a fundamental shift in how we approach RNA therapeutics - from static, single-use treatments to dynamic, continuously optimized platforms that adapt to individual patient needs.

Revolutionary Approach:

- **Partnership-Driven:** Collaborating with pharmaceutical companies, not competing
- **Enhancement-Focused:** Making proven therapies better, not replacing them
- **Patient-Centered:** Personalized optimization for improved outcomes
- **Technology-Enabled:** Real-time monitoring and adaptive enhancement

Transformative Impact:

- **For Patients:** Better outcomes with proven, safe therapies
- **For Physicians:** Real-time therapy optimization capabilities

- **For Pharmaceutical Companies:** Enhanced value from existing therapy portfolios
- **For Healthcare Systems:** Improved cost-effectiveness and patient outcomes

Market Creation: SynLoop™ doesn't just enter the RNA therapy market - it creates an entirely new market category: **Therapeutic Enhancement Platforms**. This platform approach transforms a competitive landscape into a collaborative ecosystem where everyone benefits: pharmaceutical companies see enhanced therapy performance, healthcare providers achieve better patient outcomes, and patients receive truly personalized medicine.

The future of RNA therapeutics isn't about choosing between different therapies - it's about making every therapy work better for every individual patient. SynLoop™ v3.5 makes that future possible today.

SynLoop™ v3.5: Where Proven RNA Therapies Become Perfectly Personalized

Confidential. Proprietary technology under development by Bert Rendon. Contact: Bert Rendon, President & Inventor, AB CleanLoop RNA Therapeutics