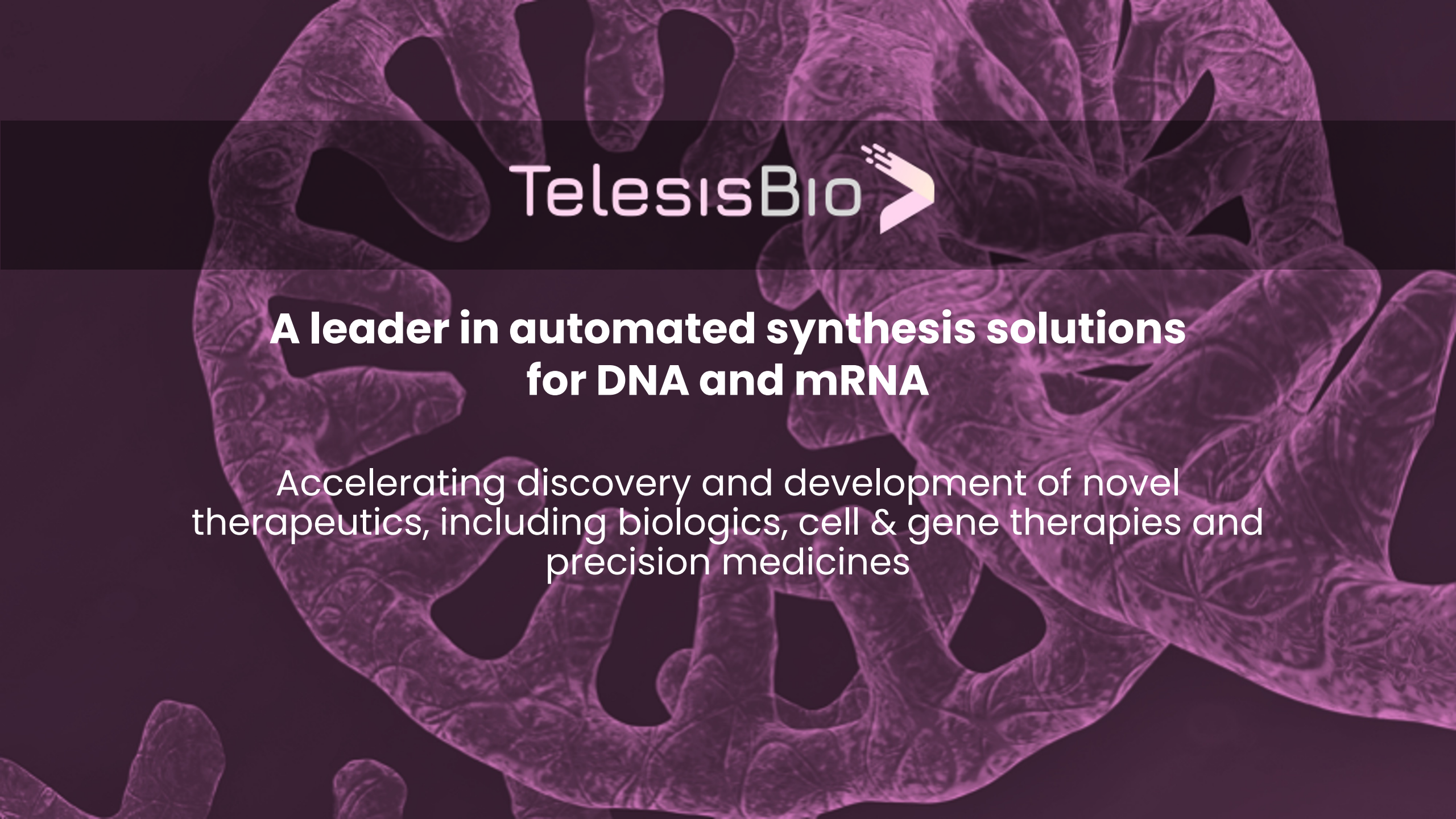

A leader in automated synthesis solutions for DNA and mRNA

Accelerating discovery and development of novel therapeutics, including biologics, cell & gene therapies and precision medicines

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Company snapshot

Gibson SOLA Enzymatic DNA Synthesis (EDS)
The 1st modular biomanufacturing reagent platform for high throughput, on-demand automated synthesis of DNA, mRNA and protein*

BioXp turn-key benchtop solutions for mRNA and protein*

Uniquely positioned to unlock large, rapidly growing multi-billion-dollar TAMs

Large IP portfolio

Robust product pipeline, technology stack and high-value collaborations

Enhancing the Pace of Breakthroughs and Advancing Clinical Outcomes in:

- Cutting-edge Biologics
- Vaccines & Cancer Therapies
- Cellular & Gene therapy
- Precision medicine

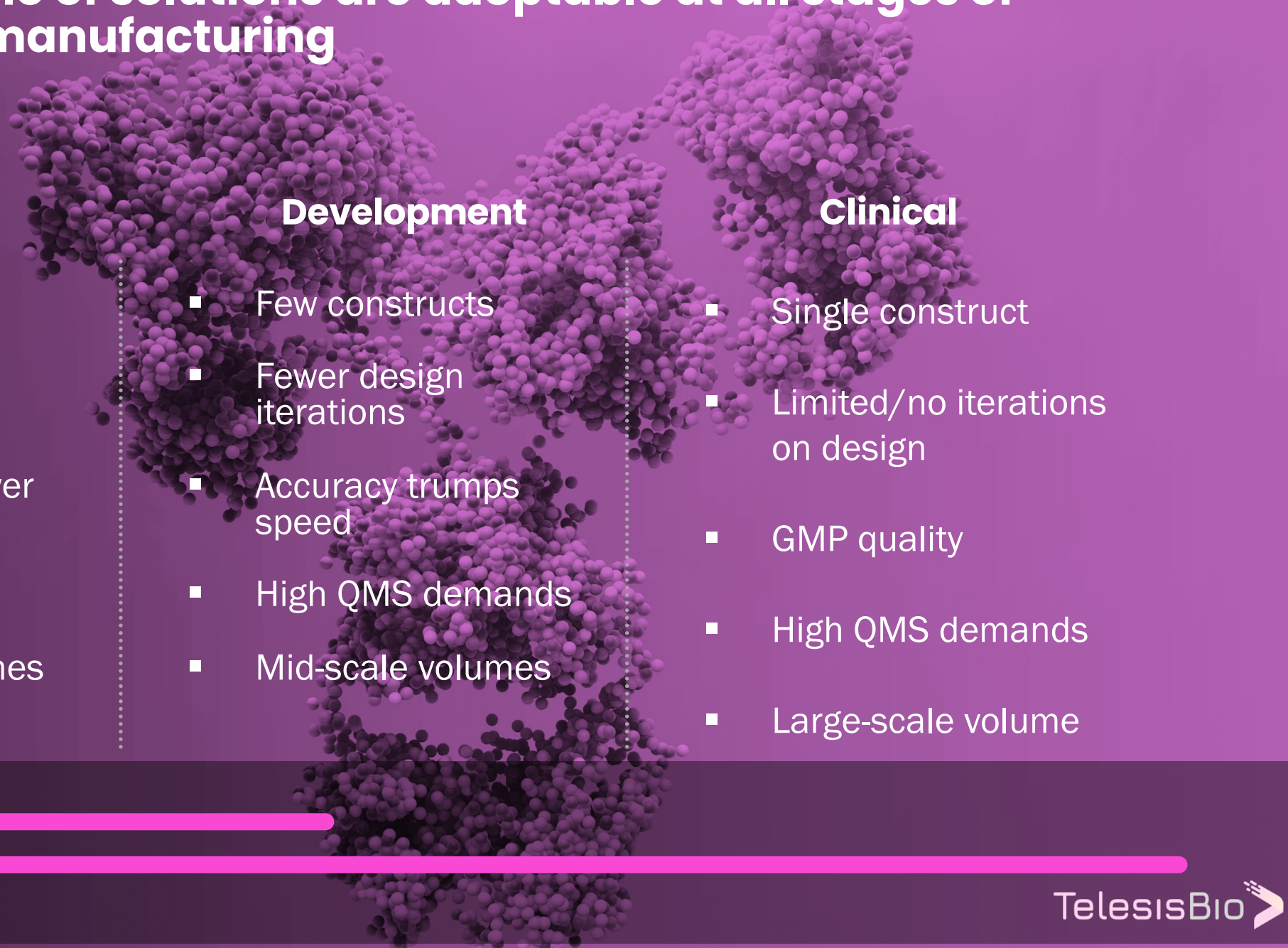
* Future product

TelesisBio

Telesis Bio products accelerate time to discovery

TelesisBio

Telesis bio's portfolio of solutions are adoptable at all stages of development and manufacturing



Discovery

- Many constructs
- Many design iterations
- Speed to an answer matters
- Limited QMS demands
- Small-scale volumes

Development

- Few constructs
- Fewer design iterations
- Accuracy trumps speed
- High QMS demands
- Mid-scale volumes

Clinical

- Single construct
- Limited/no iterations on design
- GMP quality
- High QMS demands
- Large-scale volume

Telesis BioXp

Gibson SOLA EDS Platform

TelesisBio

Delivering transformative workflows for drug discovery

Telesis Bio comprehensive solution

Gibson SOLA DNA and mRNA solutions

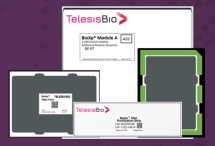
Modular biomanufacturing reagent technology for *on-demand, high-throughput, discovery-GMP scale mRNA and DNA production*

+

Partner's Automation platform

Gibson SOLA kits are amenable to integration into a wide range of automation platforms for customized discovery pipelines

▶ CROs & large pharma/biotech



BioXp® De novo and Select mRNA kits

All the necessary BioXp reagents to enable the synthesis of mRNA in a simple hands-free overnight run

+

BioXp® 3250 & 9600 automation platforms

Fully integrated automation solution including locked scripts enabling push-button, end-to-end solution for the rapid production of synthetic mRNA

▶ Academia & small biotech

TelesisBio


Biologics discovery
Cell and gene therapy
Vaccine discovery
NGS / MRD
TelesisBio

Gibson SOLA Modular Biomanufacturing Technology

TelesisBio

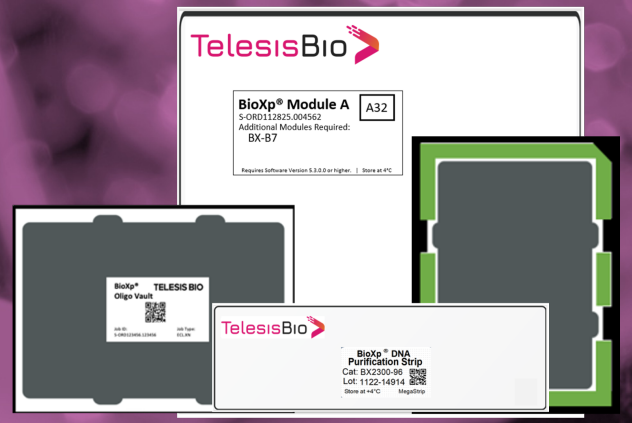
What is Gibson SOLA?

Short Oligo Ligation Assembly is our proprietary EDS technology

Gibson SOLA represents a pioneering ready-to-use platform that facilitates the immediate synthesis of DNA, mRNA, and proteins without the need for dangerous chemicals or specialized environmental management.

Capable of on-demand synthesis of:

- CRISPR-Cas9 guide RNAs
- NGS Probes
- PCR primers
- DNA oligos
- Genes
- mRNA
- Protein



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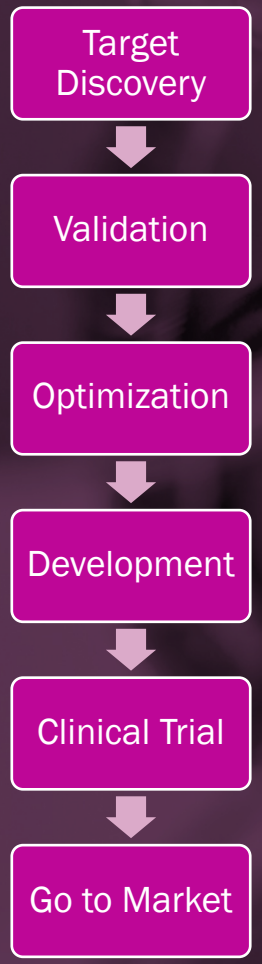
Gibson SOLA unlocks high value capabilities impacting every stage of development



- **Accelerate traditional synthetic biology workflows** while controlling IP, Supply Chain Transparency, and customizing pipelines to achieve goals.
- **Scalability and Adaptability:** With in-house operations, scaling up or down based on the project demand is more manageable. Also, integrating new technologies or methods into the process is easier as you are not limited by service provider capabilities
- **Mitigate supply-chain risk** by controlling the largest bottle-neck in nucleic acid manufacturing by building the in-house competency
- **Mirrored Discovery and GMP processes** is a proactive approach that can give a competitive edge by ensuring safety, efficacy, and quality from the earliest stages of product development.

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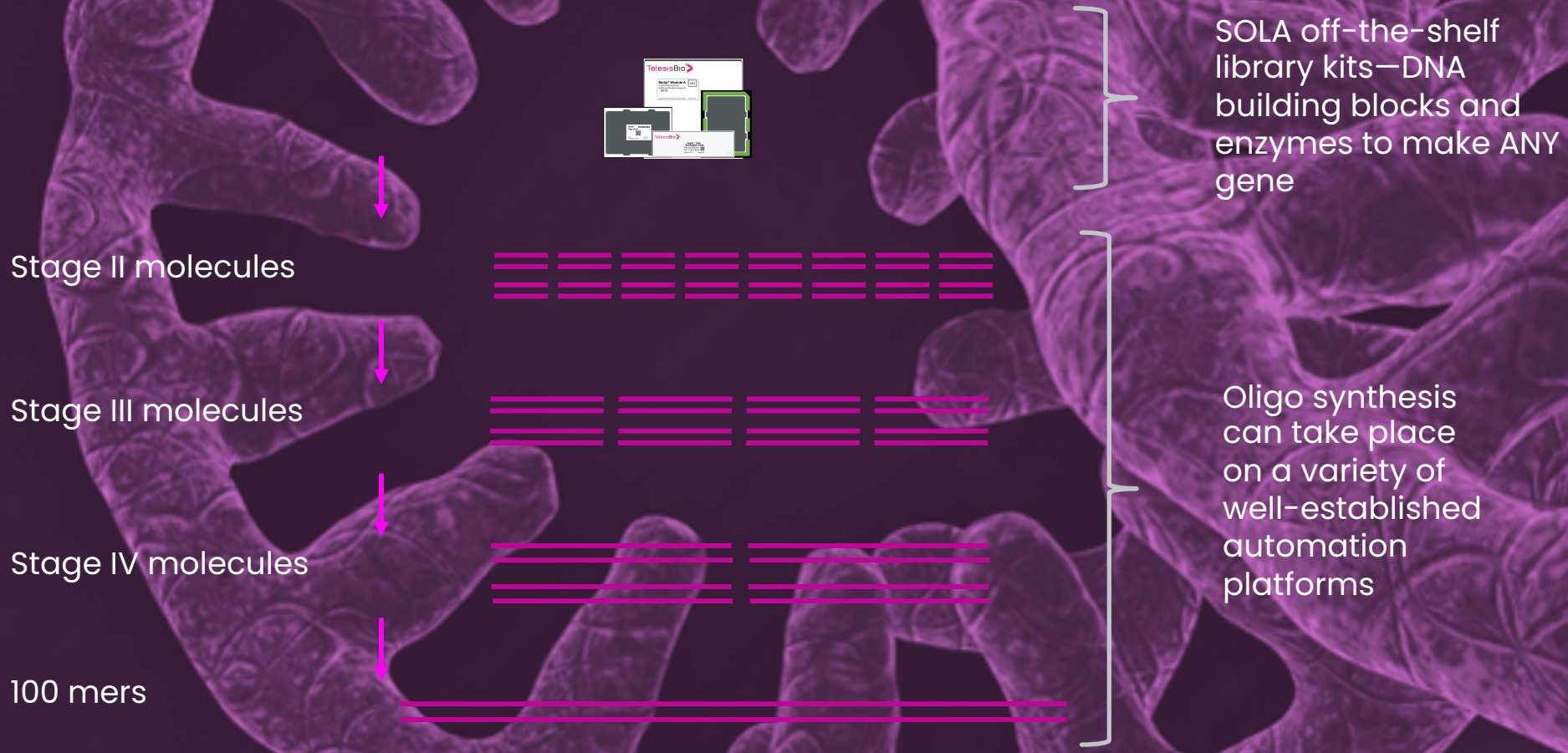
Gibson SOLA modular biomanufacturing system results in near perfect oligos

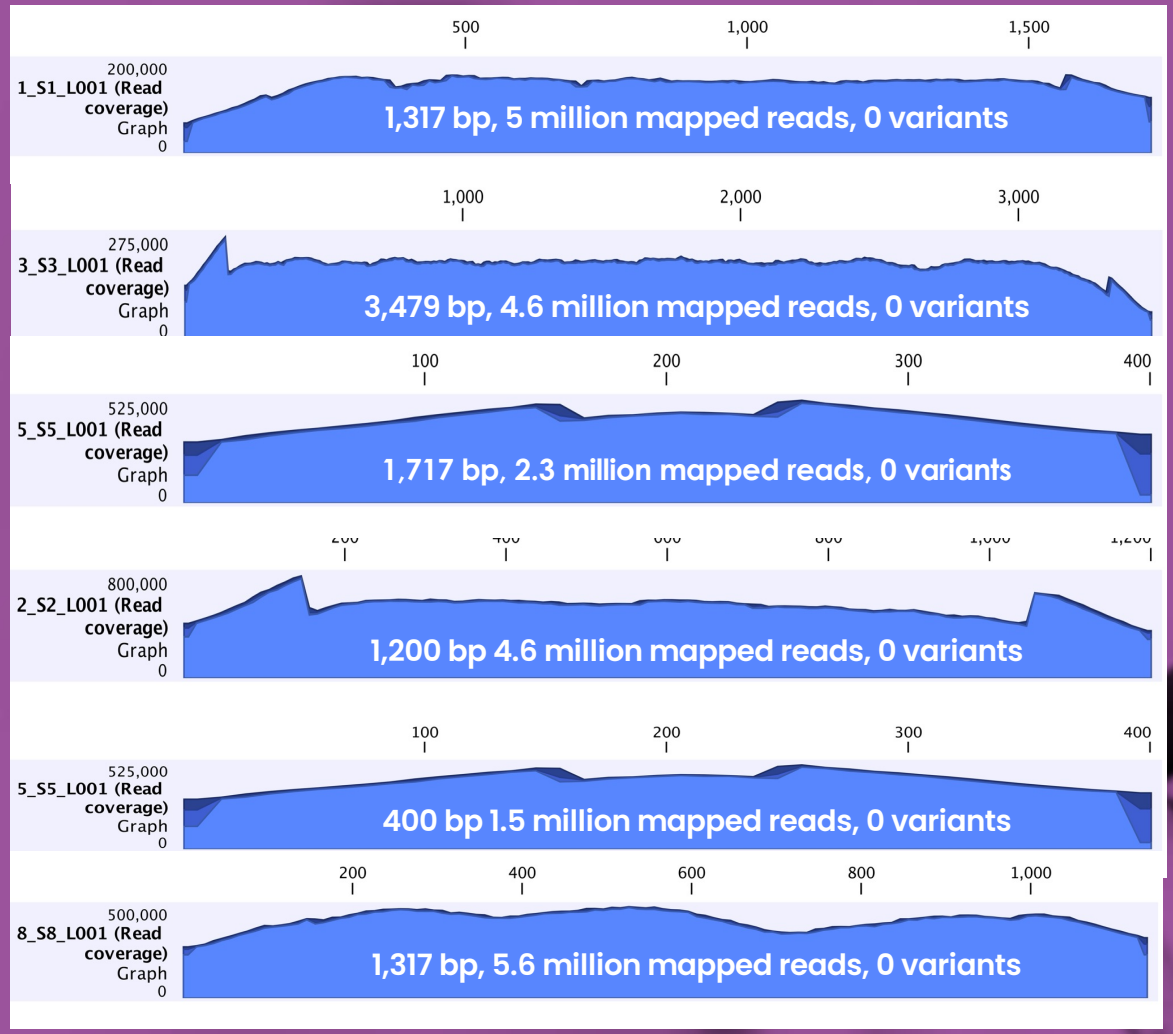
Novel enzymatic ligation- and amplification-based approach to EDS



Generates superior oligos in unprecedented amount of time leading to significant improvements in throughput and quality

TelesisBio

Nearly perfect constructs drive down cost and time invested in downstream workflows



- >99% of individual DNA fragments within a pool are the expected sequence (>99.9% confidence)
- Coverage: >1000x avg. depth
- No variants detected

TelesisBio

Drug substance test article testing in 1 day

Simplified 3-step process plugs into nearly any automation platform

HANDS-FREE AUTOMATION

Design → Assembly → Assay ready substance

(8-12 hours)

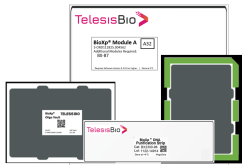
As little as an hour

- DNA
- mRNA
- protein*

Ready for use in many downstream applications

- Biologics
- mRNA vaccines
- Cell & gene therapy

SIMPLE TO USE



Take SOLA kits off shelf (nothing to order before you start)

START

Load SOLA kits onto desired automation platform

Runtime 8–48 hrs

Product ready for use

* Future product offering.

TelesisBio

SOLA is the highest quality and most robust EDS platform available

Telesis Bio's revolutionary SOLA technology enables on-demand high throughput automated production of RNA drug substance test articles at unprecedented speed

QUALITY

Superior to traditional synthesis platforms

Process starts with pristine, fully-QC'd DNA building blocks

CONTROL

Stockable, off-the-shelf kits provide everything needed for on-demand synthesis of DNA and mRNA

BUILDABILITY

Builds through wide range of size (up to 11 kb) and complexity (70% GC content)

FIDELITY

Near error-free fidelity because only perfect oligos can assemble

SPEED + THROUGHPUT

DNA and mRNA in hours

COST

Targeting < $0.35 per bp

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Telesis Bio solutions rapidly synthesize mRNA drug substances that can easily be advanced into formulation and manufacturing

SOLA's role in the rapid identification of mRNA-based flu vaccine candidates

Secure supply / IP chain coupled to rapid vaccine candidate iteration is of significant value to our partners

TelesisBio

Strong validation from industry leaders

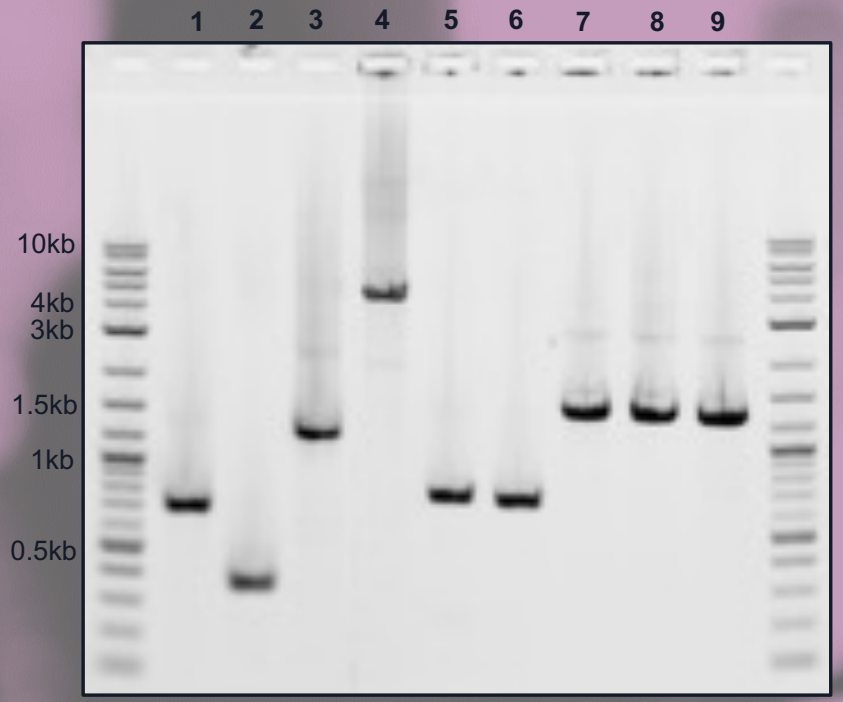
"We have signed a strategic collaboration and licensing agreement with Telesis Bio for the enzymatic assembly of DNA at the front-end of the mRNA production process."

This could possibly reduce the time to produce a new vaccine from **3 months down to 2 months.**

If successful, this would be an important differentiator when developing a vaccine for the flu, for example, as it would allow us to select a strain much closer to the start of any flu season." - Dr. Albert Bourla, Pfizer Chairman and CEO

Pfizer collaboration is potentially worth up to $500m to Telesis Bio

Gibson SOLA oligos build high fidelity genes and mRNA across a wide range of sizes and complexity



Lane #	Gene Name	# of 100mers	Expected product size (bp)
1	Tbio_1	13	716
2	Tbio_2	6	377
3	Tbio_3	23	1250
4	Tbio_4	66	3710
5	Tbio_5	12	665
6	Tbio_6	11	662
7	Tbio_7	24	1322
8	Tbio_8	24	1316
9	Tbio_9	22	1265

Error-free clones easily identified for each of these sequences
Builds through 70% GC-rich DNA templates

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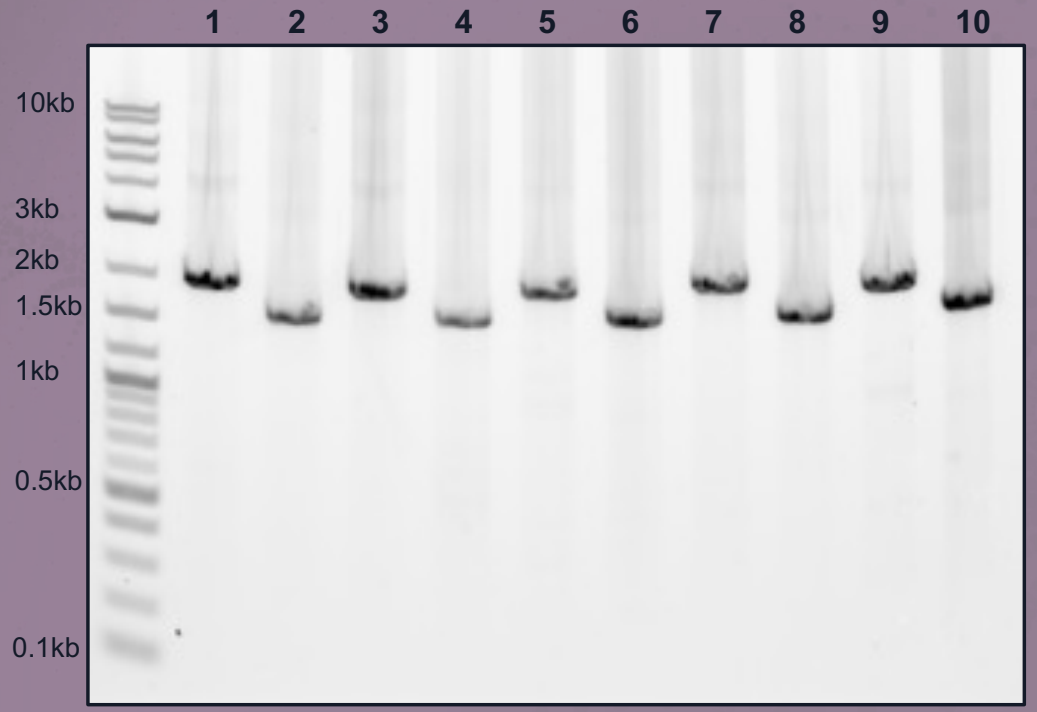
Gibson SOLA oligos used to build flu genes with 100% fidelity



5 pairs of HA/NA

Gene Name	Number of Reads Analyzed	Number of Bases Analyzed	Number of Correct Bases	% Fidelity	Consensus Match
Bv/Aus HA	64,996	1884	115,857,789	99.918	100%
Bv/Aus NA	65,480	1536	93,748,133	99.701	100%
A/Cam HA	44,891	1836	77,223,671	99.0926	100%
A/Cam NA	24,638	1545	35,236,909	98.9748	100%
A/Syd H1	41,507	1836	71,999,604	99.9215	100%
A/Syd N1	40,153	1545	57,909,204	99.8072	100%
B/Wash HA	71,054	1884	126,646,637	99.9103	100%
B/Wash NA	93,175	1536	133,530,090	99.7988	100%
A/Wisc HA	67,833	1836	117,702,167	99.9525	100%
A/Wisc NA	26,269	1545	37,789,686	99.5547	100%

Owning the entire supply chain allows ultimate scalability and adaptability to market demands

Minimal Residual Disease (MRD) Testing (Primers for multiplex PCR)

- Time to results is critical as delays in effective intervention can increase mortality by as much as 8% for each 4-week delay[1]
- Variability in lead-times negatively impact patient's health and company's reputation with providers
- Due to the consolidation of the market owning staying ahead of the market will differentiate company's offerings

1. *BMJ* 2020;371:m4087

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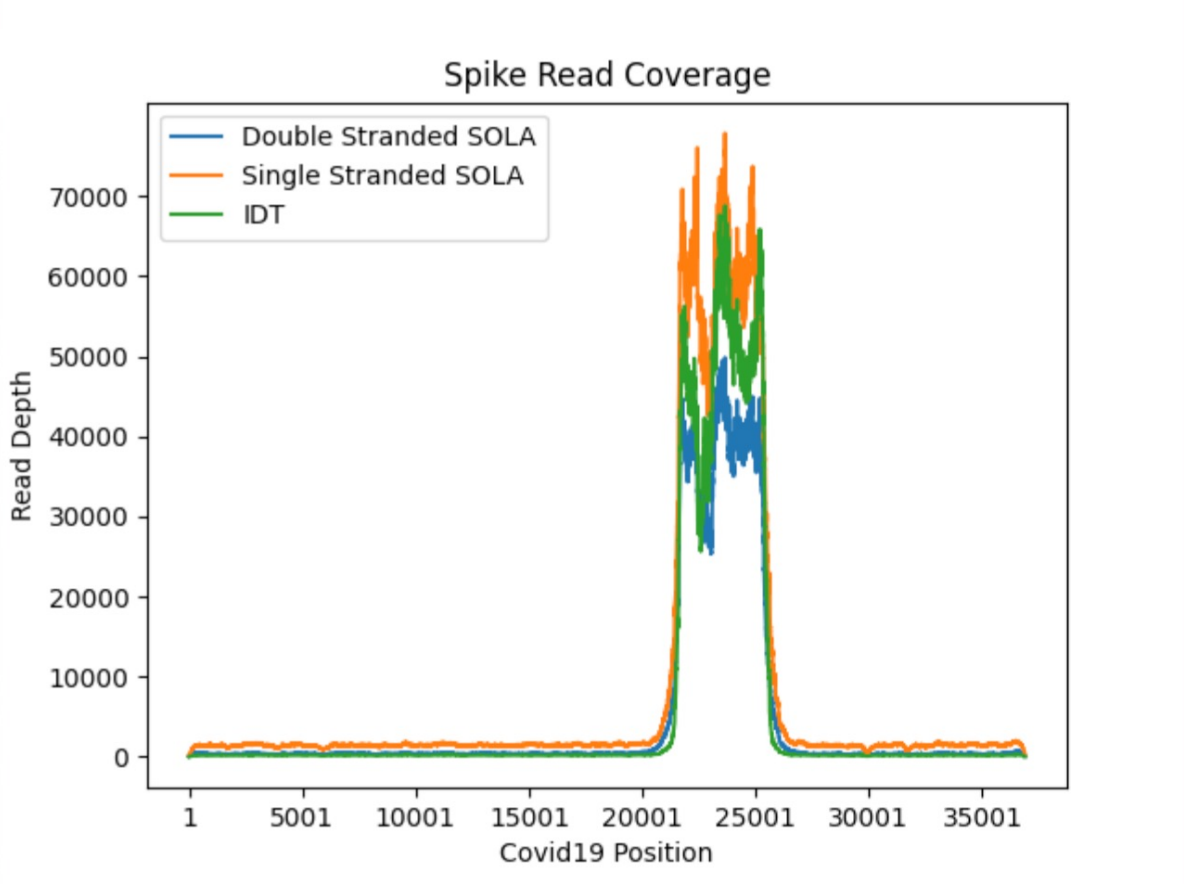
Minimal Residual Disease: Where time matters Gibson SOLA delivers scalable custom NGS enrichment probes in hours



- Standard, non-optimized target enrichment chemistry with 36 probes tiled across a 4kb region
- Avg ~1.6 million reads per sample
- Gibson SOLA shows similar performance to IDT probes in both DS & SS designs

TelesisBio

Gibson SOLA Modular Biomanufacturing System offers scalability to meet market demands assuring your supply chain

+

Echo + manual

+

Integrated Echo & Liquid Handler

Work-cell

Throughput

TelesisBio

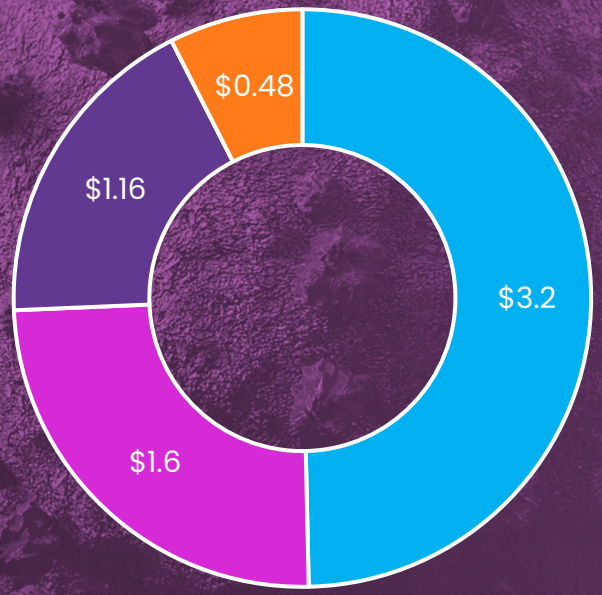
BioXp automation solutions for the mRNA market

TelesisBio

The demand for RNA-based products has evolved rapidly and there is no standardized solution for the small-scale synthesis to meet the needs of discovery customers

Telesis Bio BioXp products directly target **43%** of the TAM and a **$2.7bn** opportunity*

mRNA Synthesis Market in $bn



Rapidly growing **$6.4bn** TAM* with no emerging leader or gold standard for mRNA production

* Coherent Market Insights 2023

TelesisBio

Our comprehensive automation solution for mRNA enables and accelerates innovation by our customers

Telesis Bio comprehensive mRNA synthesis solution

BioXp portal

Online portal that offers an intuitive guided workflow and design tools for building new DNA sequences

BioXp system

Push-button, walkaway, end-to-end automated synthetic biology workstation

BioXp kits

All the necessary building blocks and reagents to allow BioXp systems to produce synthetic DNA + mRNA

Downstream Support

Support and assurance your assay will work while adopting new technologies

TelesisBio

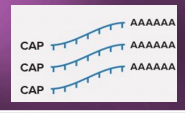
Telesis Bio BioXp Kits + Automation

Digital DNA Sequence

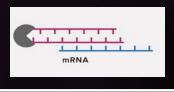
TAATACGACTCACTATAGATCGTAGC
TACGTAGCTATCGATGCATCG

mRNA Template Synthesis

In Vitro Transcription



Dnase Treatment



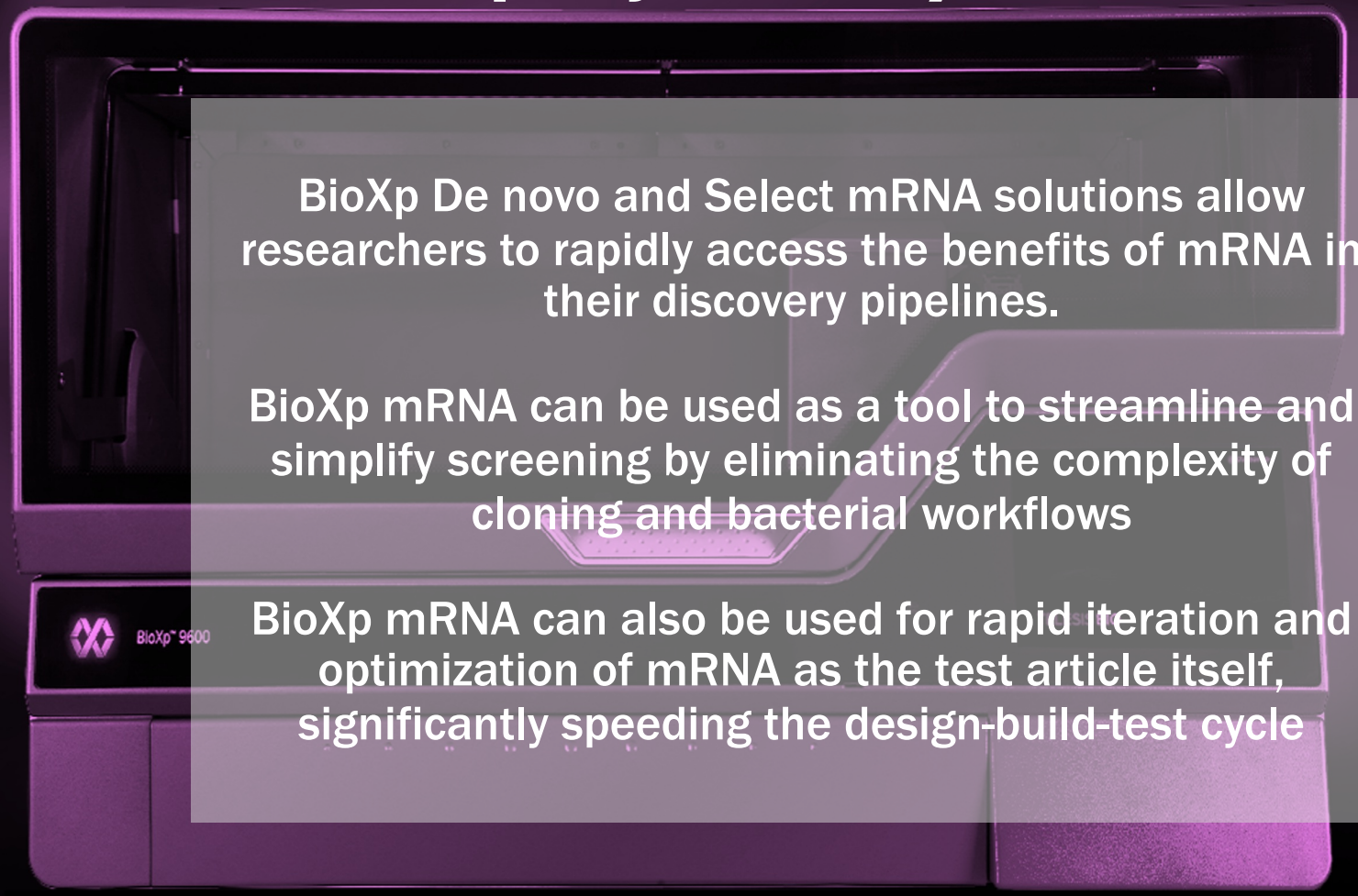
Purification, Capping & Tailing

Purified, capped & tailed synthetic mRNA

CAP

5' UTR——————3' UTR AAAAAA

The BioXp platform synthesizes mRNA at the benchtop in just 7 days*



BioXp De novo and Select mRNA solutions allow researchers to rapidly access the benefits of mRNA in their discovery pipelines.

BioXp mRNA can be used as a tool to streamline and simplify screening by eliminating the complexity of cloning and bacterial workflows

BioXp mRNA can also be used for rapid iteration and optimization of mRNA as the test article itself, significantly speeding the design-build-test cycle

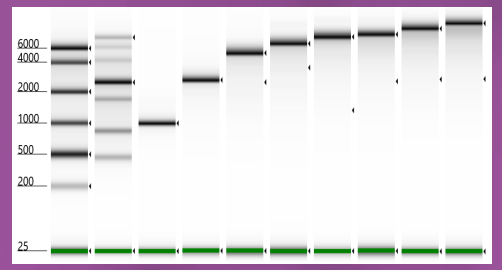
* Includes approximately 5 – 7 days to receive products from Telesis Bio and 1-3 days to generate results

TelesisBio

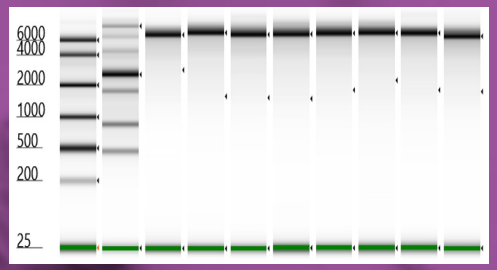
Robust performance for many discovery needs

Robust performance across the full range of sizes and complexity

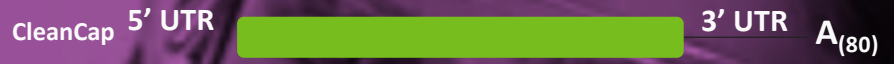
Consistency across lengths

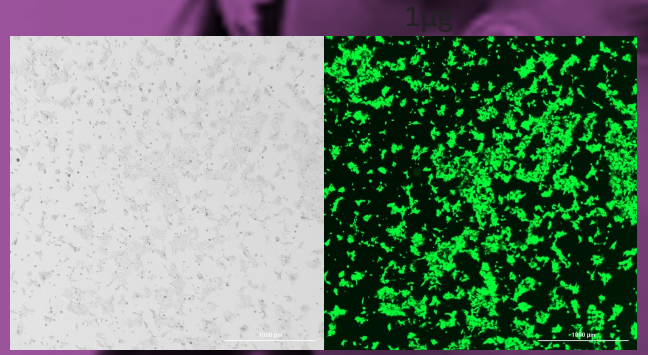


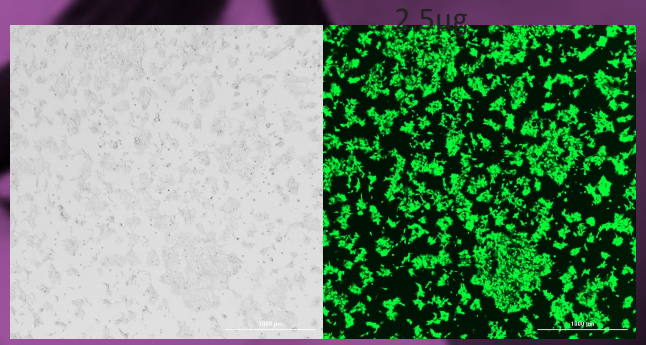
Reproducible performance

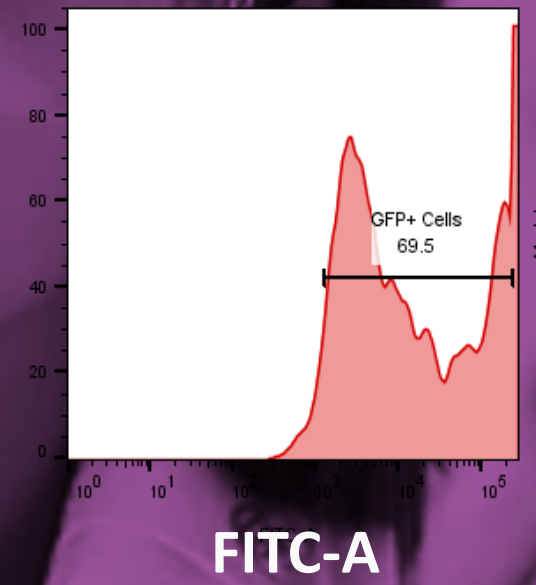


Functional in Assays









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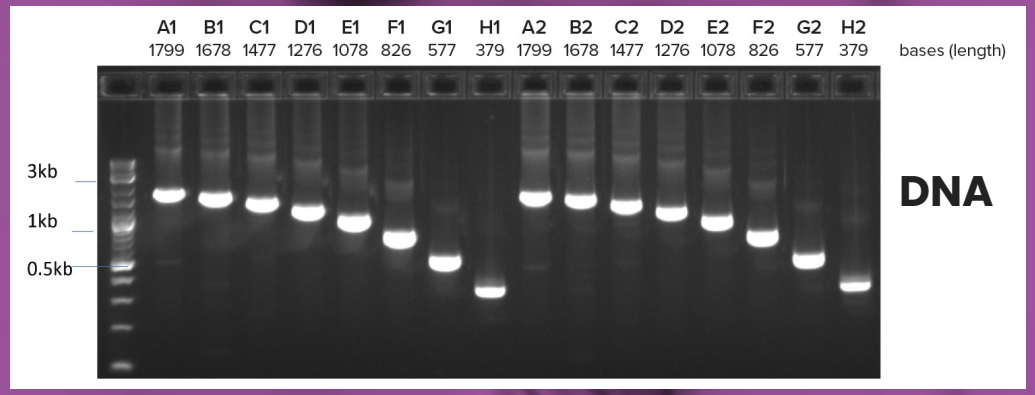
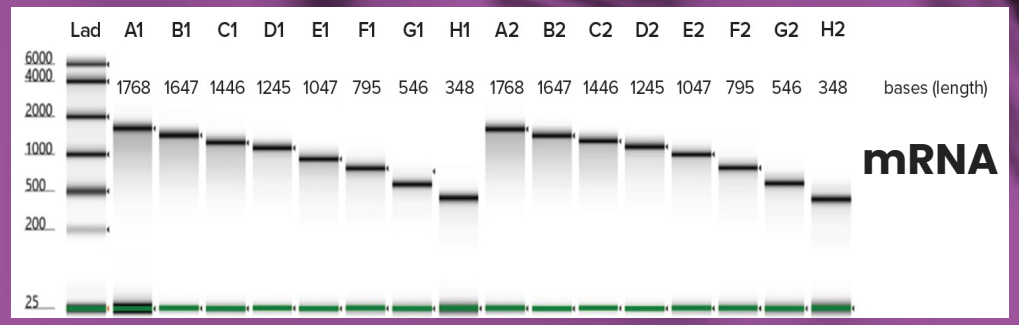
Robust performance

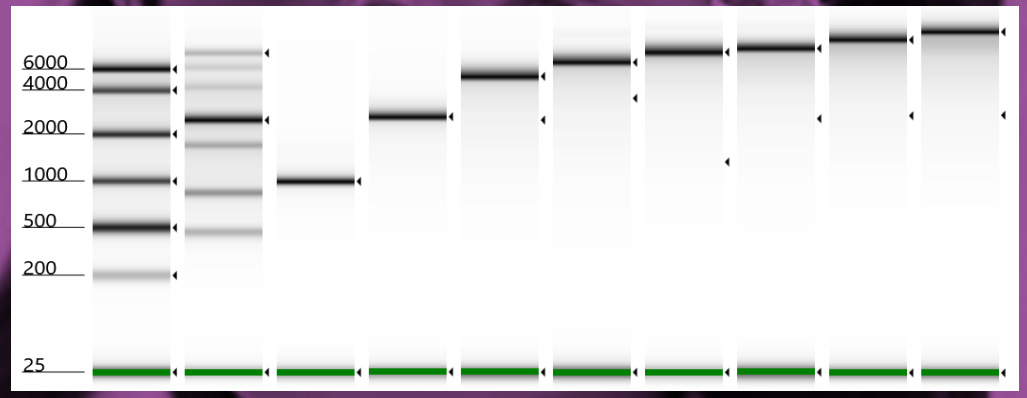
De Novo kits generate 2.0kb mRNA and Select kits can generate up to 12kb

DNA and mRNA synthesis using the BioXP De Novo Kits





mRNA synthesis using the BioXp Select Kits



BioXp Select kits allow customers to use their own plasmid DNA as a starting point for rapid mRNA production

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BioXp mRNA accelerates cell-therapy discovery by enabling T-cell receptor screening in days vs weeks

Current

Order TCR sequences	Transfection-ready DNA	Construct viral particles	Transduce cells with DNA	TCR avidity screening	Results in 45 days
(3 – 10 days)	(3 – 5 weeks)	(1 week)	(1 – day)	(1 – day)	

BioXp

Order BioXp mRNA kits	BioXp mRNA synthesis	Transfect cells	TCR avidity screening	**Results in less than 10 days**
(5 – 6 days)	(1 – day)	(1 – day)	(1 – day)	

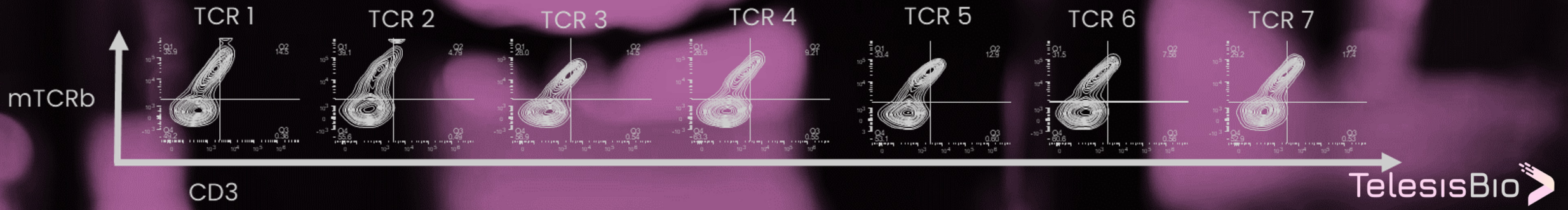
TelesisBio

Transfection-ready mRNA in 7 days

Size of TCRs makes them amenable to synthesis of DNA and mRNAs in a single, hands-free run

Transfection-ready TCR mRNA constructs can be built from scratch in 7 days with ~2 hours of hands-on time

Skipping viral particle & bacterial transformation steps alleviates reagent costs and biosafety/ biocontainment considerations



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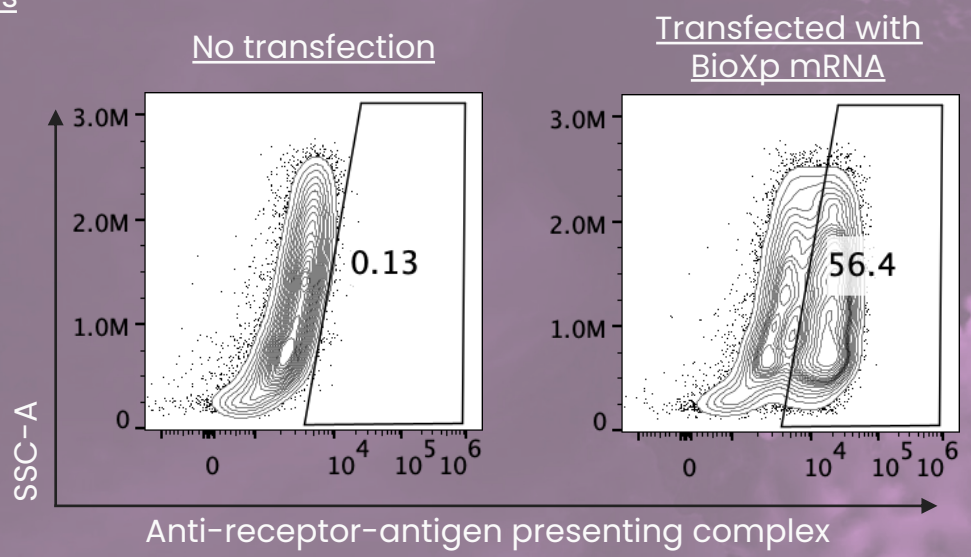
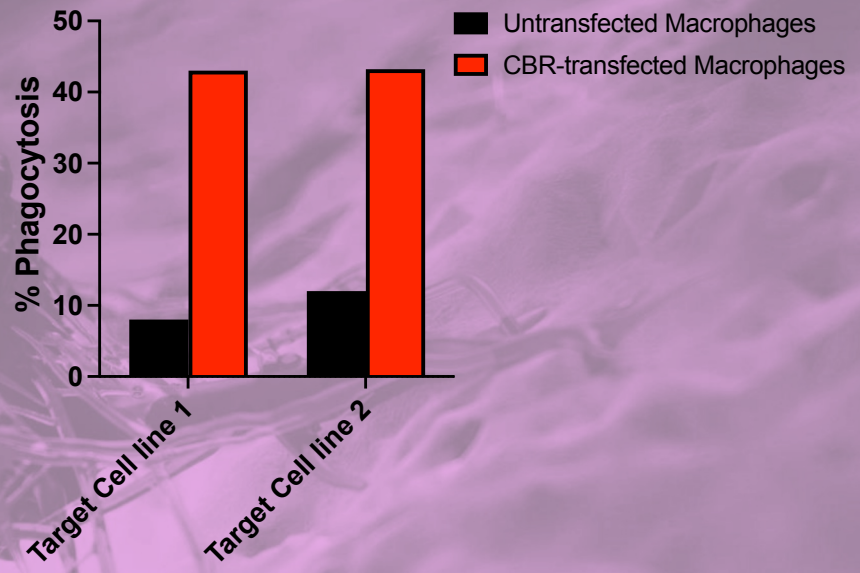
BioXp mRNA streamlines CAR-T screening in challenging cell lines for rapid cancer immunology and cell therapy development

Macrophages





mRNA from BioXp generated in days not weeks enables a highly accelerated process for cell engineering even with challenging cell types such as macrophages, and demonstrates robust expression and function

3x higher efficiency after transfection is typical compared to viral particle transduction, allowing screens in a fraction of the time with a greatly simplified workflow, and eliminating the need for downstream cell sorting

A single BioXp mRNA synthesis run yields enough material to perform large screens

TelesisBio

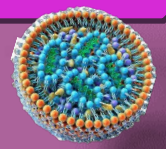
BioXp speeds vaccine development with rapid high-fidelity mRNA synthesis at lower cost and sufficient scale for in-vivo studies

BioXp

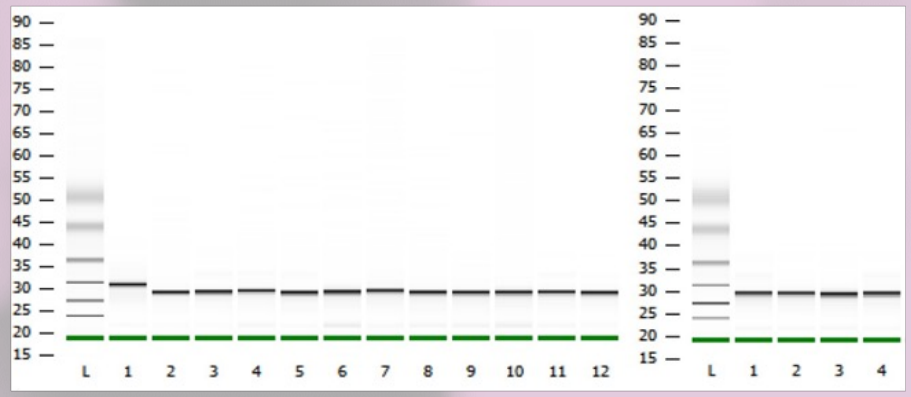
Design → BioXp mRNA synthesis → QC mRNA → LNP packaging → In-vitro study → Immunize → Response screen → Scale-up

Full screen in <u>days</u> not weeks

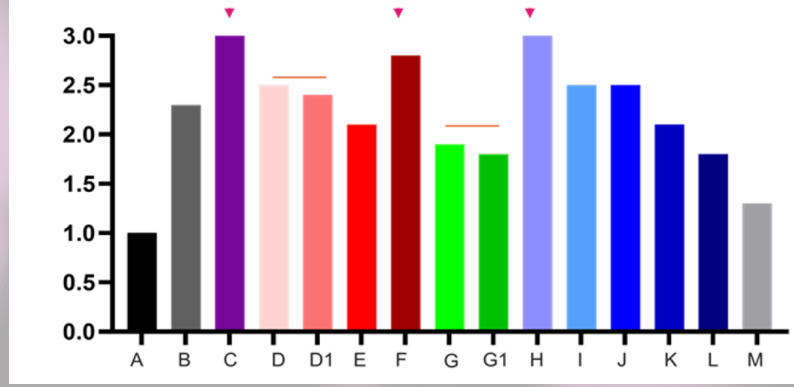
Transfection-ready mRNA in 7 days



mRNA expression templates



mRNA-encoded recombinant proteins



Unprecedented speed from sequence to in-vitro to in-vivo because of the high fidelity and quality of BioXp mRNA

A single BioXp run produces sufficient yield for multiple studies or large large screens

Both the DNA template and mRNA expression templates are produced in a single run, allowing for immediate scale-up using the BioXp cell-free amplification kit or traditional methods after hit identification

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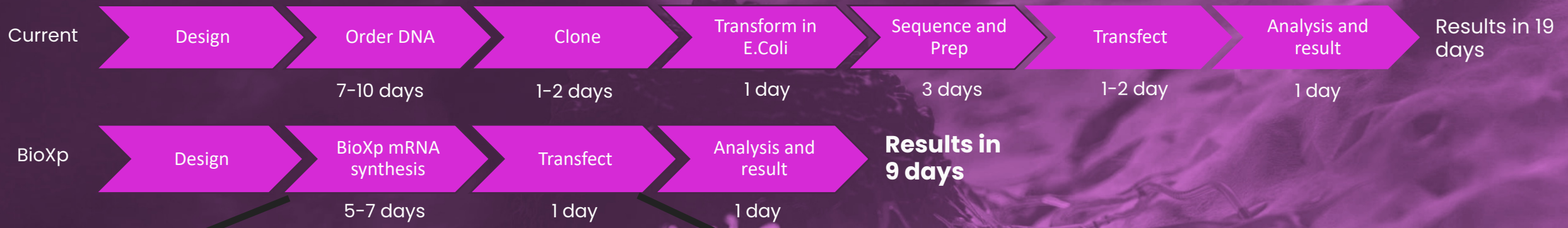
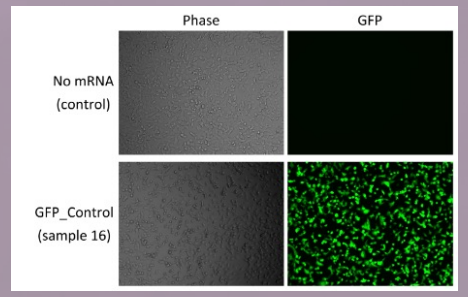
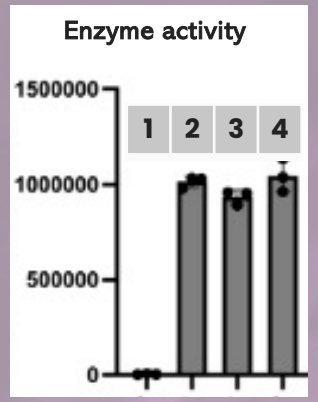
BioXp mRNA radically accelerates and simplifies biologics discovery workflows



BioXp makes transfection-ready biologically active mRNA in less than 7 days





1	No transfection
2	CDS1 (BioXp de novo mRNA)
3	CDS1 (BioXp de novo mRNA)
4	Sequence-confirmed control

Greatly accelerated biologics discovery workflow enabled by direct transfection with BioXp mRNA

Simplify by eliminating the need for cloning and bacterial workflows

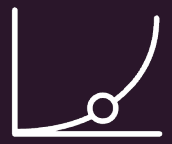
The fastest path from design to result with scale and throughput necessary for large screens, enabling rapid iteration and optimization

TelesisBio

Building a great company and creating value

STEADY HISTORICAL GROWTH

- Growing installed base of more than 300 instruments
- Launch of core portfolio products
- Early stages of adoption



MARKET CHANGING TECHNOLOGY

- New Markets in diagnostics
- New customer types with Gibson SOLA

EXPANDING MARGINS

- Mix shift to higher margin products
- Insource key raw materials

PATH TO PROFITABILITY

- Operating leverage strategy to achieve profitability

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THANK YOU!