



JUNE 2024

Writing the Future

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Scalable, Profitable Growth

Defined path to profitability

New products, growth for margin expansion

Consistent operational excellence

Strong commercial execution in growing markets

Continued revenue and market share growth

Twist Today

PROTEINS

DNA

RNA

One chip

Unprecedented scale,
many opportunities for
cost efficient expansion



MORE
Products

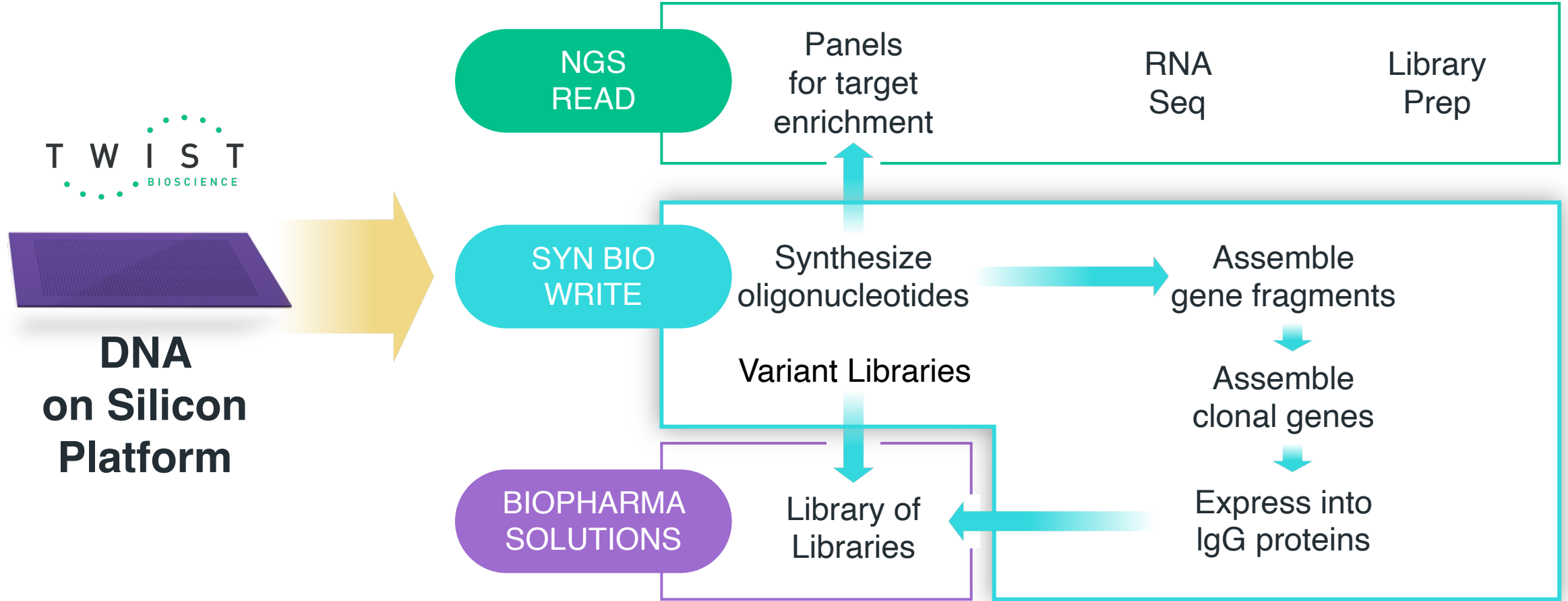
MORE
Applications

MORE
Customers

MORE
Markets

DNA on Silicon Platform

Interconnected Product Groups Leverage the Same Chip



A Differentiated and Innovative Business

Compelling **BUSINESS MODEL**

- **Low variable costs** enable rapid margins ramp
- **High fixed costs** deter new entrants into market

Exceptional **USER EXPERIENCE**

- Integrated **eCommerce** platform
- **Fast and easy** ordering, high NPS

Scalable **INFRASTRUCTURE**

- Delivering **>280,000 genes** per month + **RNA, Protein**
- Expanding through **additional products**

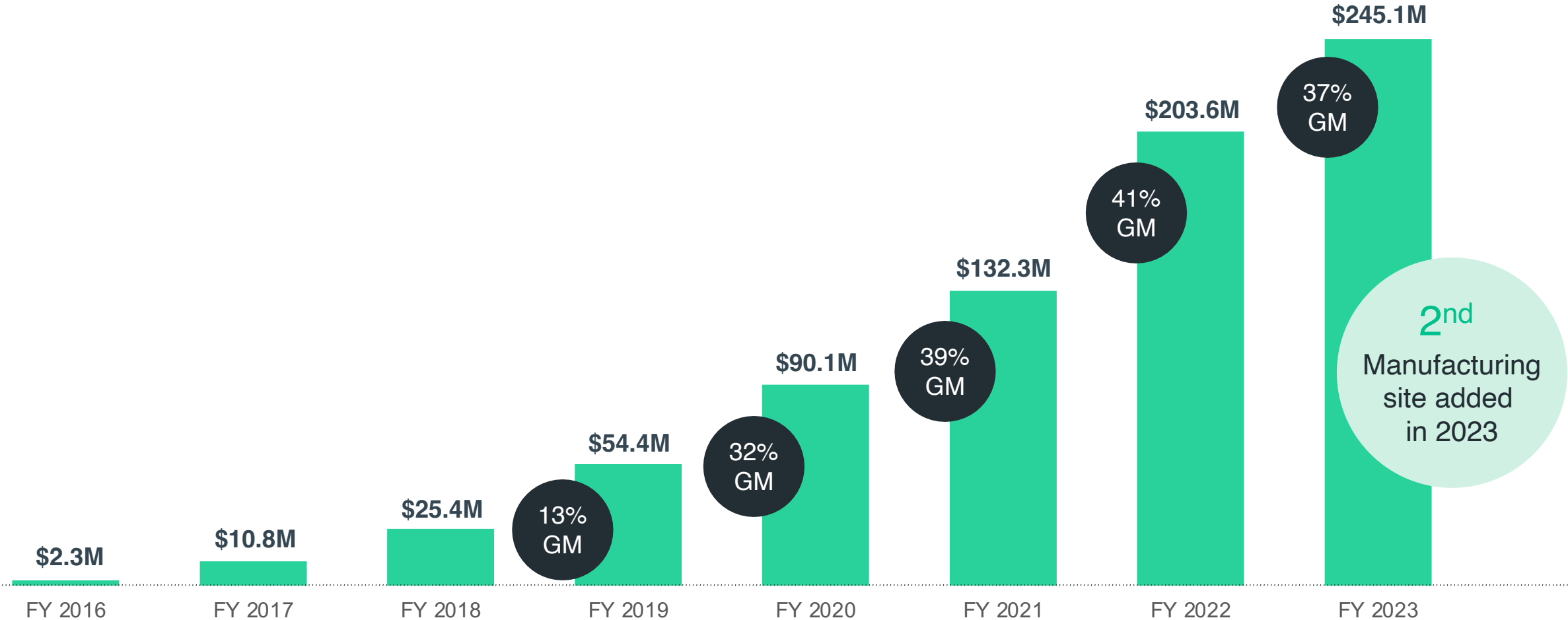
Powerful **PRODUCTION**

- **16 million+** oligo/day capacity
- Up to **10,000x** greater scale and throughput than 96 well plate-based approach

Proven Silicon **PLATFORM**

- **10+ years** of development, increasingly complementary product lines
- Proprietary **DNA writer, software**

Strong Annual Revenue Growth and Gross Margin

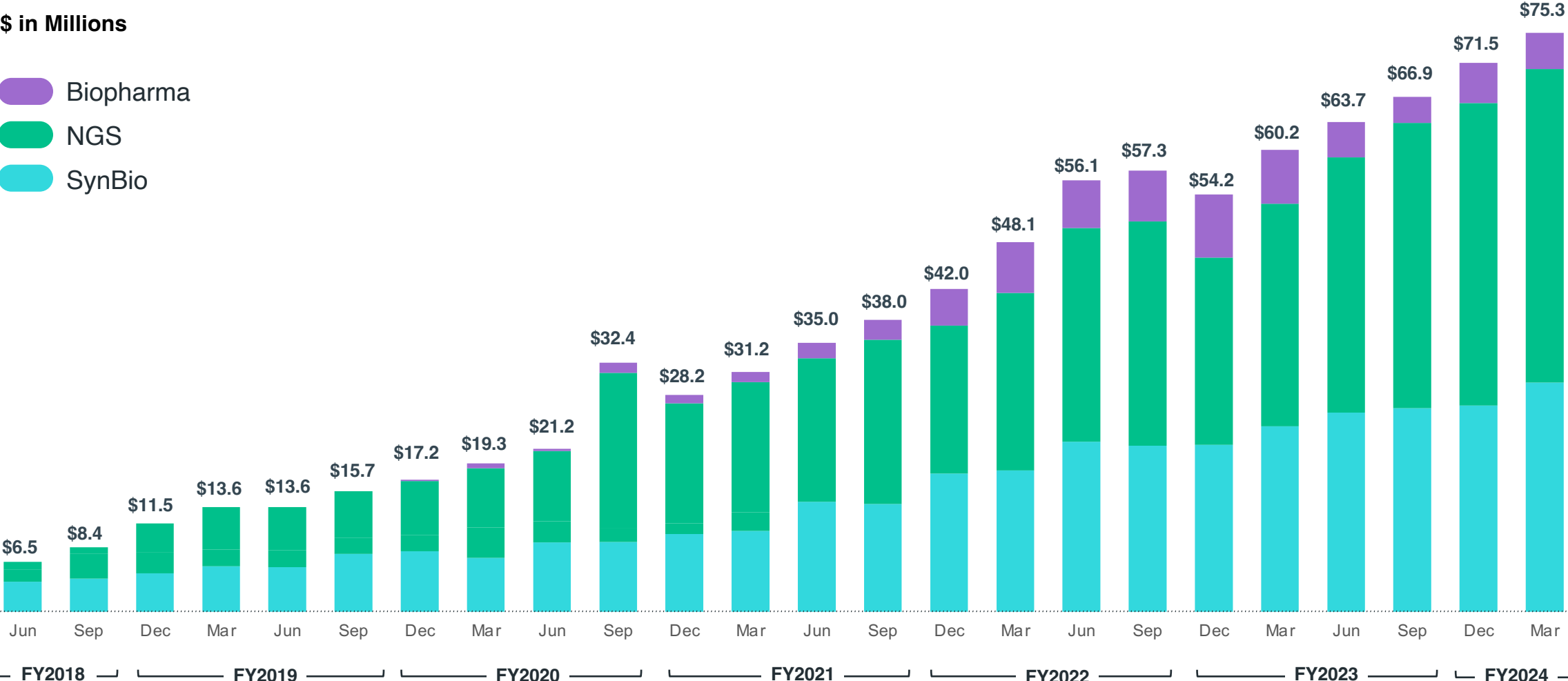


2nd
Manufacturing site added
in 2023

Strong Quarterly Revenue Growth

\$ in Millions

- Biopharma
- NGS
- SynBio



TWIST BIOSCIENCE PROPRIETARY and CONFIDENTIAL

Clear Path to Profitability Across Product Groups

Life Sciences Tools

1 SYN BIO
WRITE

2 NGS
READ

Applied Markets

3 BIOPHARMA
SOLUTIONS

4 DNA DATA
STORAGE

Large End Markets



Pharma



Agriculture



Biotech



Academic labs



Industrial chemicals

Diverse Applications

- Target discovery and validation
- Antigen production
- Antibody discovery, screening and production
- Enzyme, protein, and cellular engineering
- Protein expression
- CRISPR applications

Innovative Products



Clonal genes
Express genes
Gene fragments



Oligo pools



Variant
Libraries



IgG proteins

T W I S T
BIOSCIENCE



DNA on Silicon Platform

Why We Win

SPEED

Cost

Scale

Quality

Customer experience

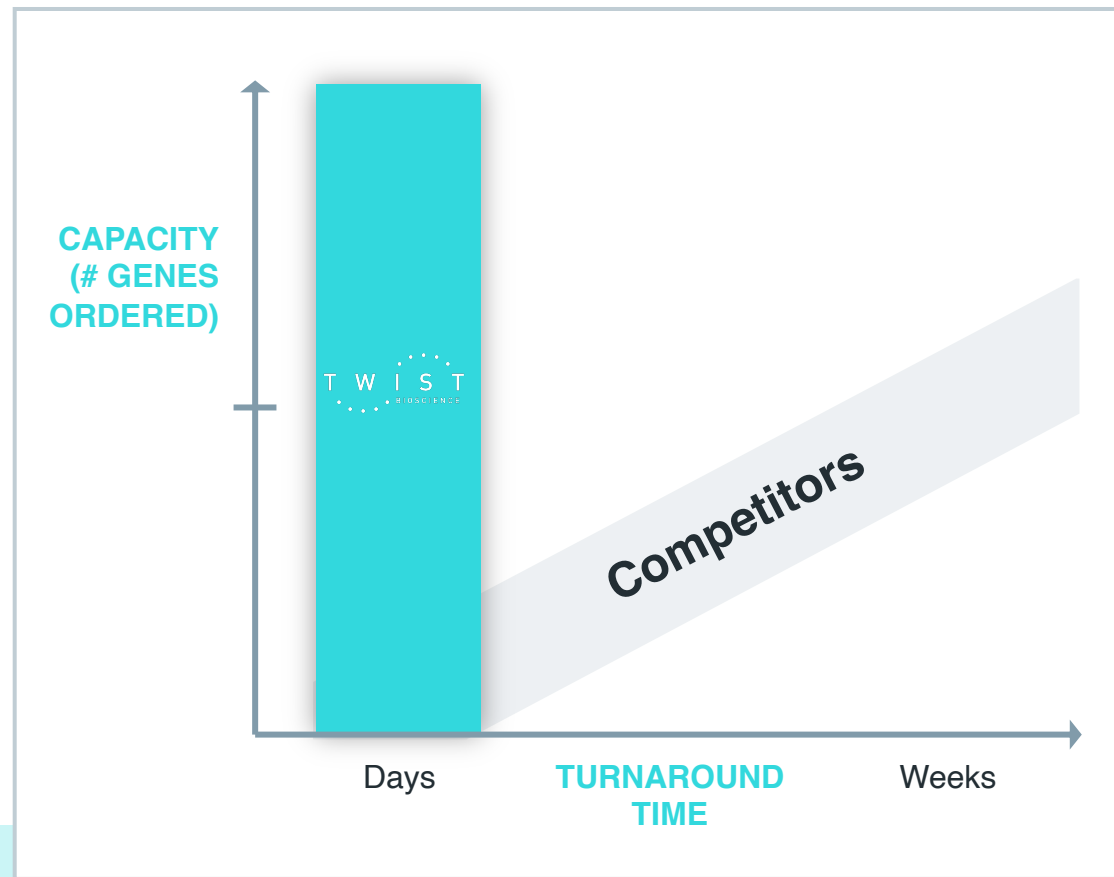
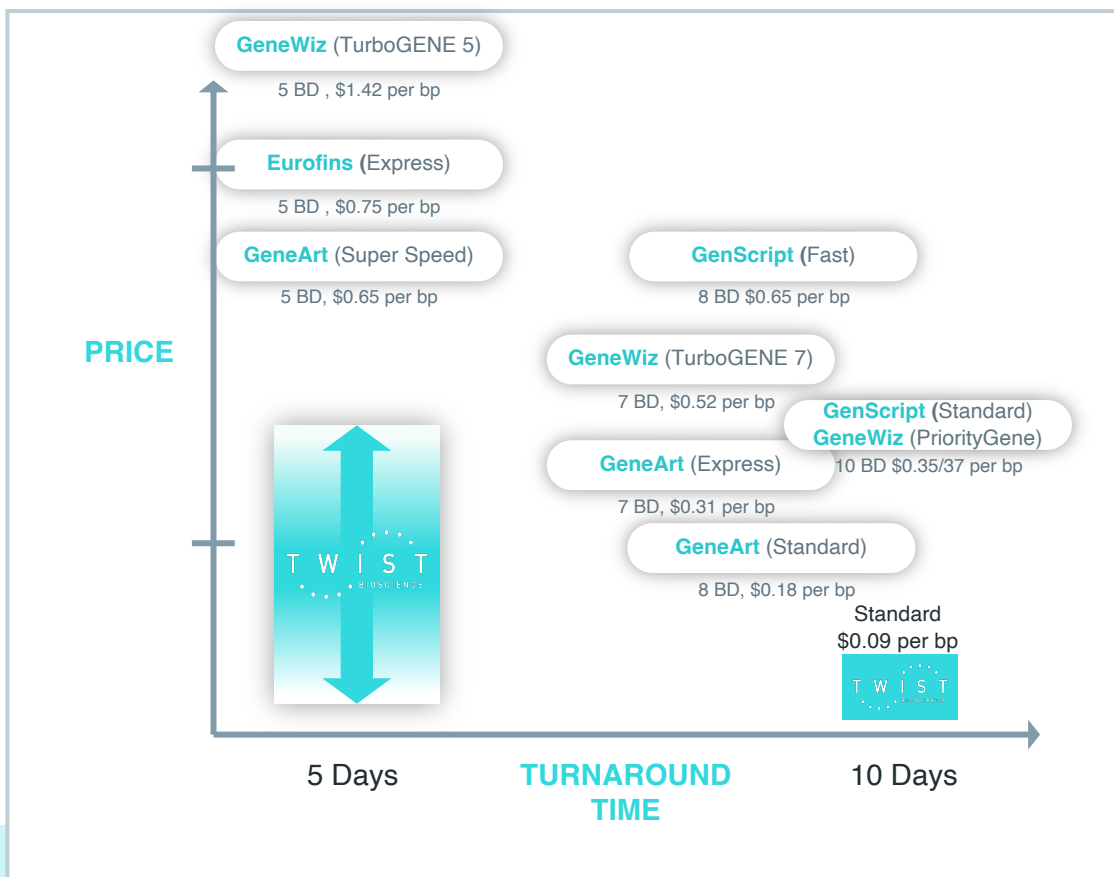
Innovative products and solutions

Frictionless ecommerce

Next Up

- ✓ **Factory of the Future launch**
- ✓ **FoF-enabled new product introduction**
- ✓ **Express Genes**
- ✓ **500bp oligo synthesis**
- Additional Express products
- RNA
- GMP

We Have Significant Speed, Price, and Scale Advantages



Express Genes: Fast Turnaround Time AT SCALE

Fast turnaround time at scale makes **Fast** the New Standard

Expanding Family of Products With Many Use Cases in Massive Markets

	Fragments	Clonal	Express Clonal	Express MidiPrep	Express MaxiPrep	(FUTURE) Express IgG
SPEED	3+ days	10-11 days	5-7 days	8-12 days	8-12 days	TBD
QUALITY	Highest	Perfect				
PRICING	\$0.07 per base pair	\$0.09 per base pair	Premium Pricing			

Express Genes: Fast Genes at Scale

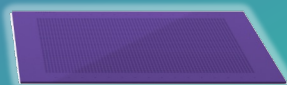
A higher margin, full-featured product that we expect to take market share

Limited launch November 2023, full launch early 2024

We're Able to Produce Genes Much More Efficiently

- ✓ **99.8% REDUCTION*** in reagent volume
- ✓ **LESS** carbon emitted

TWIST
BIOSCIENCE



DNA Production in a Silicon Chip

Manufacturing **one gene** is equivalent to **driving...**



.092 miles
TWIST BIOSCIENCE

59 miles
STANDARD
96 WELL-PLATE



*Compared to 96 well plate-based methods

From the EPA Greenhouse Gas Equivalencies Calculator EPA 2023.

Large End Markets



Diagnostics



Basic and translational research



AgBio

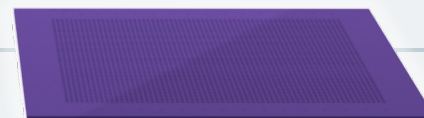
Diverse Applications

- Liquid biopsy
- Clinical, population, and cognitive genomics
- Oncology research
- Minimal residual disease
- Rare disease
- HTP single cell analysis
- Variant detection
- Biomarker identification
- Trait selection

Innovative Products

Fixed panels
Custom panels
Alliance panels

Library prep kits
Reagents
Controls and standards



DNA on Silicon Platform

Why We Win

Quality

Uniformity

Lower sequencing cost

Rapid customization

Fast throughput

Sequencer agnostic

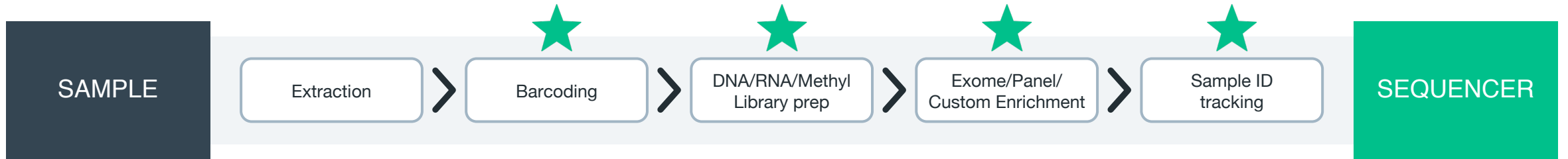
Next Up

- ✓ RNA sequencing workflow
- ✓ Liquid biopsy growth (ongoing)
- ✓ MRD growth (ongoing)
- ✓ Regulated products
- ✓ Advanced library prep
- SNP microarray conversion

We Sell Products Across Multiple Spectrums

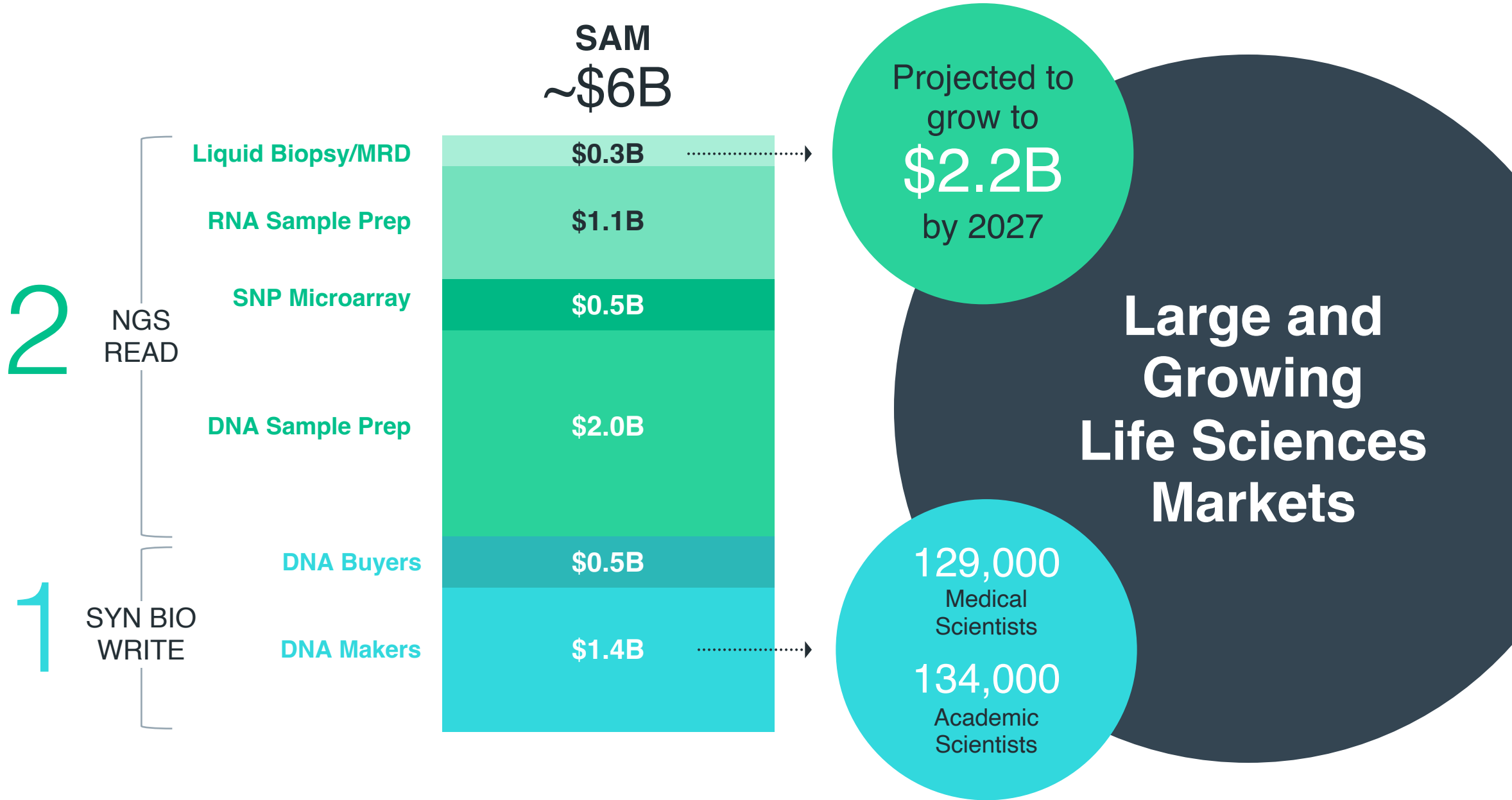
  Twist Products

SEQUENCING WORKFLOW



PROGRESSION OF DISEASE



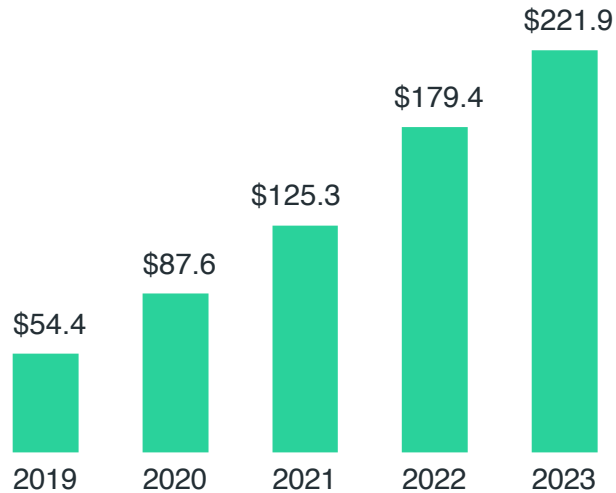


Sources: DeciBio, BCC, Markets & Markets, Bureau of Labor Statistics 2022 (<https://www.bls.gov/emp/tables/emp-by-detailed-occupation.htm>)

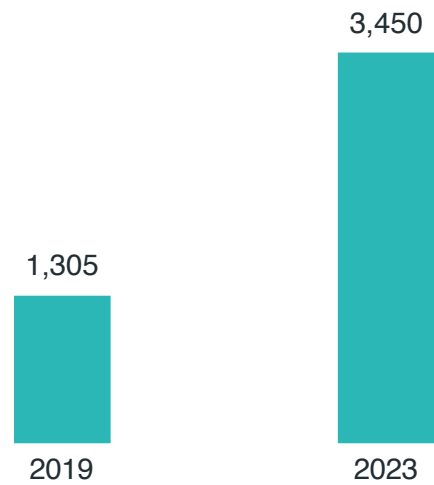
Diversified and Resilient Life Sciences Product Portfolio



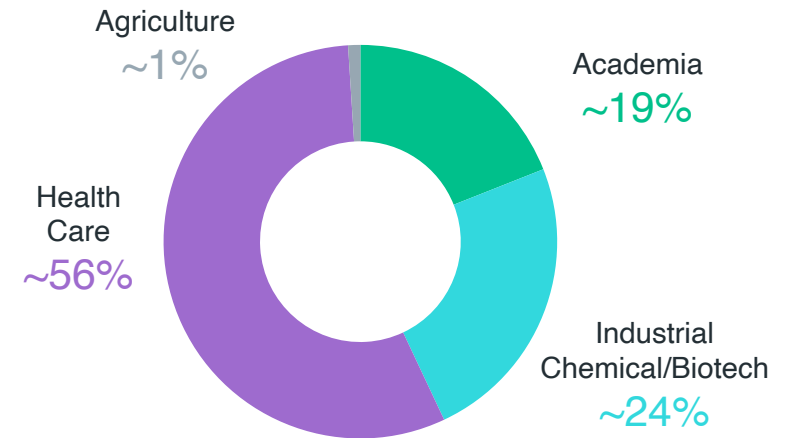
REVENUE*
(In Millions)



SYN BIO and NGS
CUSTOMERS*

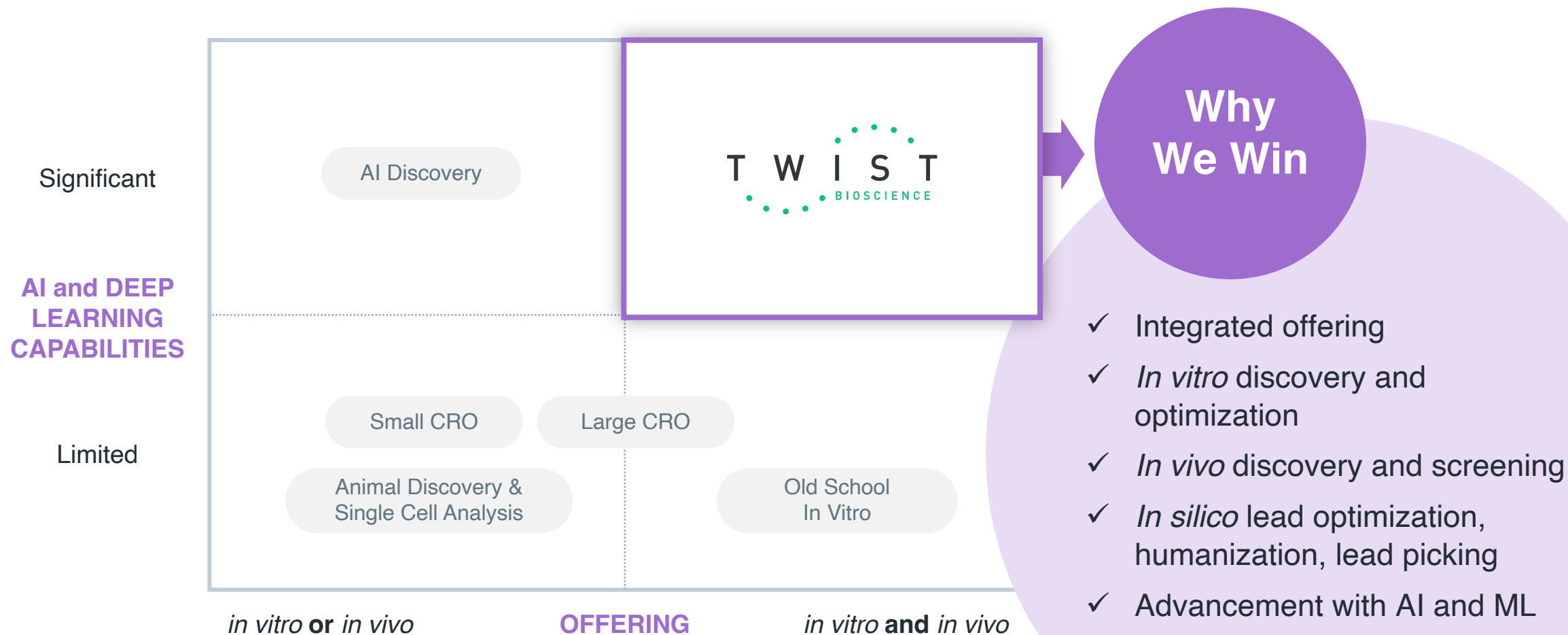


CUSTOMER MIX*

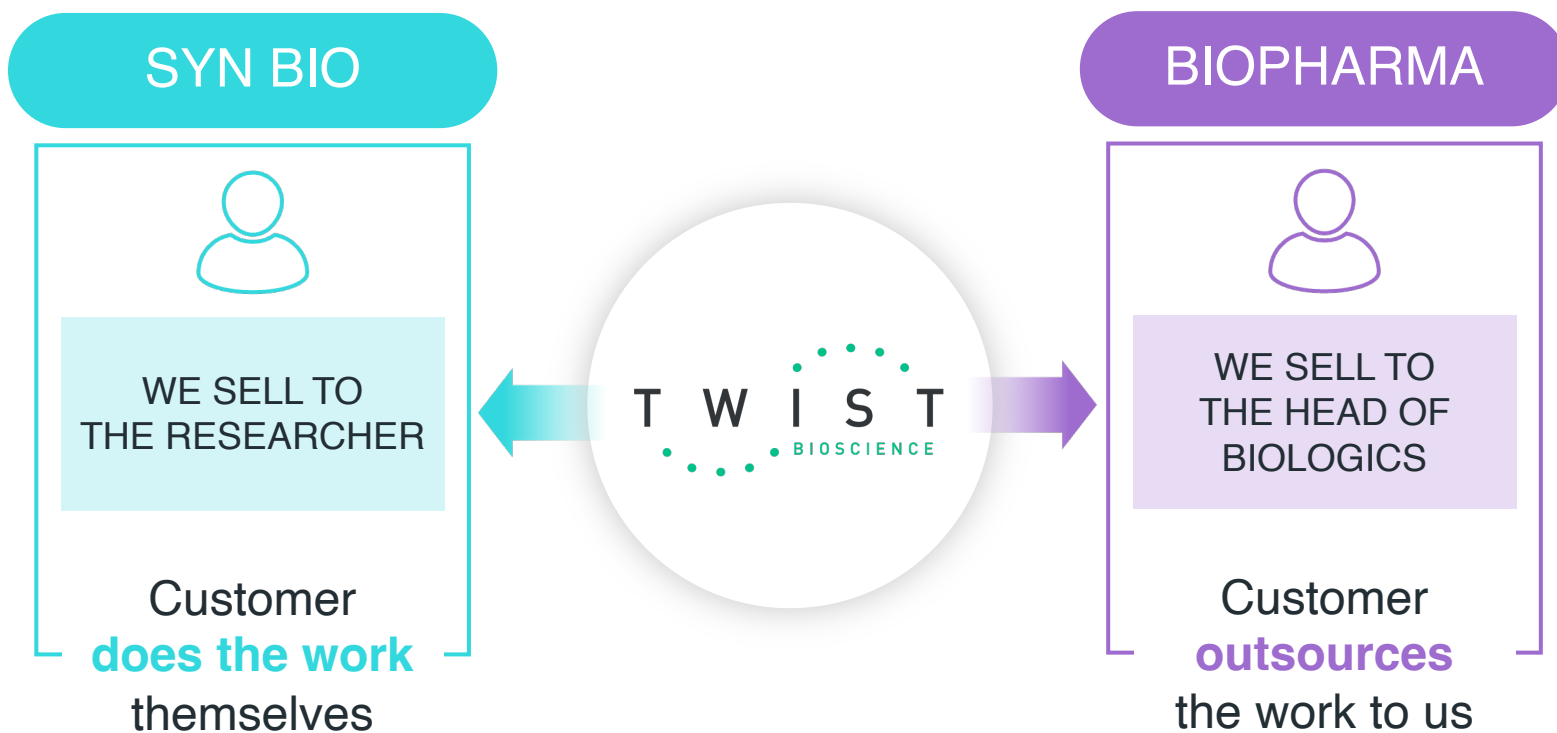


Seamless eCommerce portal and express gene offering position us to efficiently pursue long tail customers

Only One-Stop-Shop with Multiple Antibody Discovery Platforms



Biopharma Solutions Expands Our Strategic Reach



Synergies with SYN BIO

Shared Customer Base

Vast majority of our largest SYN BIO customers are in drug discovery

Sticky Relationships

Partner with pharma at different stages of their discovery journey

Scale Customization

More capacity for making mutants; drives the make-test cycle

Our Products and Services

Accelerate Progress in Human Health

		Target Identification	Target Validation	Drug Discovery	Drug Development	Disease Monitoring
	GENES	✓	✓	✓	✓	
	OLIGO POOLS	✓	✓			
	LIBRARIES			✓	✓	
	NGS	✓				✓
	BIOPHARMA			✓	✓	

Broad opportunities also exist in industrial chemical, ag bio, and academia

We're Reinventing Archive Storage



MEDIA /
ENTERTAINMENT



HEALTHCARE



PRESERVATION
(CULTURAL HERITAGE)



GOVERNMENT



Many Use Cases in Massive Markets

Deep
archive



Enterprise
archive



“Computational
cold storage”

Century Archive Solution

Valuable Optionality at
Multiple Time Points

Internal Development

External Investment

Strategic Partner

A Powerful and Unique Value Proposition

DENSITY

Solutions scaling from data lakes to **data oceans**

LONGEVITY

Enabling **century** and **millennium** scale archive storage

IMMUTABILITY

Stable format – **storage medium is pool of DNA molecules** –
always able to read DNA

SUSTAINABILITY

Lowest **carbon footprint** amongst all storage media

STORE and COMPUTE

Biotechnology tools enabling computing on **massive data sets**


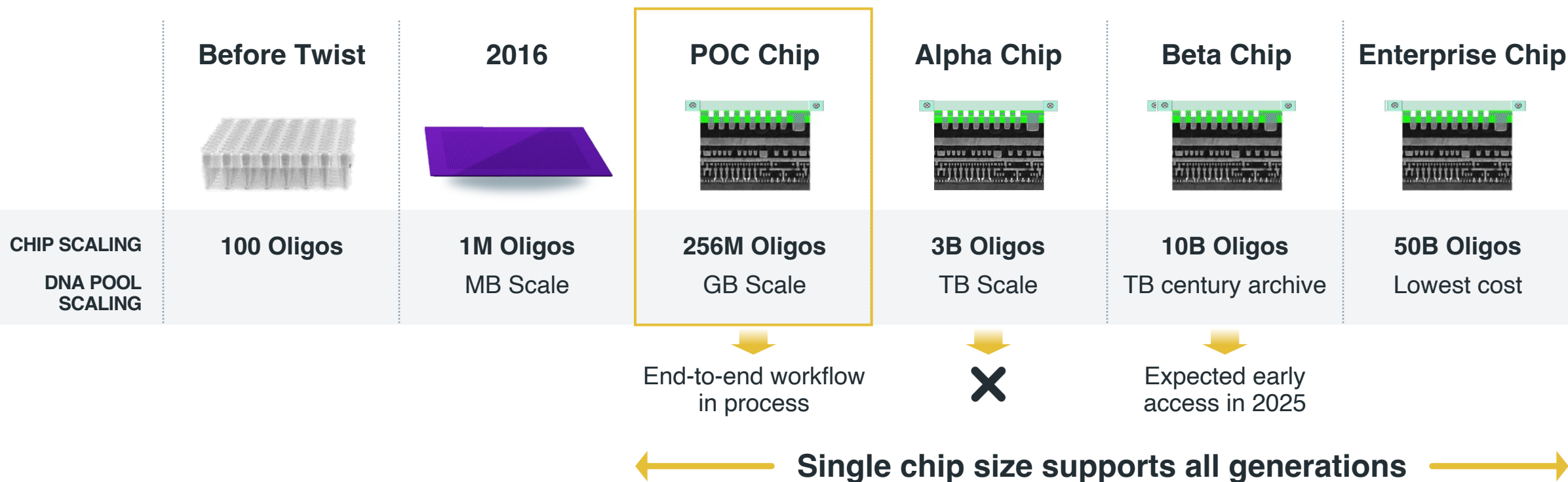
Future Petabyte Archive



On Track to Advance Our Commercial Solution

We're moving from writing DNA at **megabyte** to **gigabyte** to **terabyte level**

More than 8 orders of magnitude of scaling!

Laying Groundwork for Revenue and Gross Margin Expansion in FY2024

1

SYN BIO WRITE

- New opportunities in Maker's Market with Express Genes
- Grow market share
- New product introductions building on Express Genes

2

NGS READ

- Sequencer agnostic
- Large and growing market opportunities
- Continued expansion of customers and revenue in MRD and liquid biopsy, RNASeq
- Launch new products to gain market share

3

BIOPHARMA SOLUTIONS

- Continue to enter into discovery and optimization projects
- Enter into discussions for antibody out licensing

4

DATA STORAGE

- Demonstrate end-to-end Gb Century Archive workflow
- Early access of Terabyte Century Archive solution in 2025

Managing Cash Burn

	Q3 FY2024 Guidance*	Q4 FY2024 Guidance*	FY2024 Guidance*
Revenue	~\$77M ~\$31M SynBio ~\$41M NGS ~\$5M Biopharma	\$77-80M	\$300-304M \$118-120M SynBio \$162-164M NGS ~\$20M Biopharma
GM	41-42%	43-44%	~41.5-42%
Operating Loss Before Taxes			\$183-188M
CapEx			~\$15M
YE Cash Balance**			>\$245M

*Guidance provided as of May 2, 2024

**Projected YE Cash Balance includes Cash, Cash Equivalents and Short-term Investments

Scalable, Profitable Growth

Defined path to profitability

New products, growth for margin expansion

Consistent operational excellence

Strong commercial execution in growing markets

Continued revenue and market share growth

✓ Innovative Platform

✓ Compelling Model

✓ Large, Growing Markets

✓ Scalable Infrastructure

✓ Differentiated Products

✓ Sustainable Production



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