November 2024

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The Next Generation of Nature

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TSX: WLLW

OTCQB: CANSF

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The forward-looking statements contained in this presentation are based on certain key expectations and assumptions made by the Company, including, but not limited to, expectations and assumptions concerning: the future operations of, and transactions completed by, the Company; the Company’s ability to implement corporate strategies; the potential for strategic partnerships to open new and larger markets (including nonpharmaceutical markets); the Company’s ability to generate higher quality cannabinoids at lower costs; cost synergies created by its strategic partnerships and the successful implementation thereof; the adequacy of current capital; the availability of and access to qualified personnel; the results of scientific research; the Company's ability to protect its intellectual property; the Company’s ability to successfully create and launch brands and further create, launch, and scale products; the expected growth in the biosynthetic market.

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Willow's Mission

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To be a global leader in developing and commercializing biomanufacturing processes for producing high value ingredients

Need

- Chemical methods for manufacturing ingredients can be expensive, toxic, and unsustainable
- Extraction from nature can be exploitive and often rely on animal-derived ingredients

Solution

- Willow has developed an AI-driven bioengineering platform that can replace toxic chemistry and unsustainable extraction routes
- The result **can lower manufacturing costs by 90%** and enable production of ingredients with higher purity

Team

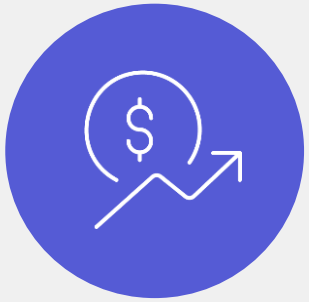
- Willow's experienced leadership team has long history of developing biobased solutions
- Supported by a seasoned Board of Directors and advisors who provide unparalleled access into top tier global pharma, food, and consumer ingredient companies

Investment Highlights

To be a global leader in developing and commercializing biomanufacturing processes for producing high value ingredients

Full pipeline of partnerships for existing and new markets

First mover advantage with proprietary BioOxi™ platform and multiple patents filed to date



Near term R&D and milestone revenue with high upside from royalty and supply revenue

Low regulatory risk due to focus on established markets

Large universe of targets with highly transferable platform

Willow's Core Technology

Industry leading AI-driven technology platform to rapidly develop practical biomanufacturing processes for ingredients in pharmaceutical, food & beverage, consumer, and other markets

FutureGrown™	BioOxi™
Proprietary AI-enabled technology platform to identify, optimize, and commercialize enzymes and strains for industrial processes	Proprietary biobased selective oxidation platform that performs "impossible" chemistry to reduce manufacturing costs by up to 90%

Over 15 patents filed on developed enzymes, strains, and processes with additional 4-5 patents filed each year

Business Model

Willow is building out a pipeline of partnerships that fund near-term R&D and enable medium and long-term upside!

R&D Revenue

- Lower-risk, near-term R&D revenue earned to offset costs
- Designed to cover direct costs of R&D and to ensure partners have “skin in the game”

Estimate >$4 million in 2024 with continued significant growth into 2025
(>400% increase over 2023)

Milestone Revenue

- Medium-risk, medium-term revenue as programs achieve agreed performance targets
- Designed to cover indirect costs associated with program

1-3 X R&D Revenue

Royalty or Supply Revenue

- Multi-year, success-based commercial revenue
- Allows for capital recycling to finance next stage of growth

10-40 X R&D Revenue
(over term of contract)

R&D revenue today enables large commercial revenue growth tomorrow

Targeted Opportunities

Existing Ingredient Markets

Large volume ingredient opportunities that can be improved with biology

- Hydrocortisone (Laurus)
- Generic APIs (Laurus)
- Ursodeoxycholic acid
- Food ingredients
- Agrichemicals

Innovator Driven Ingredients

Novel ingredient opportunities that can be enabled with biology

- Natural food ingredient (Kalsec)
- Biopesticides
- Development drugs (Biopharma)
- Launched innovator drugs

Multi-Million-Dollar Steroid API Manufacturing Deal With Laurus Labs

Who is Laurus Labs?

LAURUS Labs
Knowledge . Innovation . Excellence

Laurus Labs is a research-driven pharmaceutical and biotechnology company with an aim to improve the quality of life for millions of people around the world.

- ✓ **Market Cap:** market capitalization of $3 billion[1]
- ✓ **Global presence:** Collaborates with top innovator and generics pharma companies, distributing APIs in 56 countries
- ✓ **Strong workforce:** Employs 6500+ people, including 1250+ scientists across 11 approved facilities
- ✓ **Patent strength:** Holds 322 filings, owning 203 patents.
- ✓ **Strong Financial performance:** Reported C$982 million in revenue for FY2023[2]
- ✓ **Stock exchange listings:** Listed on BSE and NSE as LAURUSLABS.

1. Data Source: Tradingview on 5/22/2024
2. Data Source: LaurusLabsFinancialResultsQ4FY2024InvestorPresentation

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Why Willow?

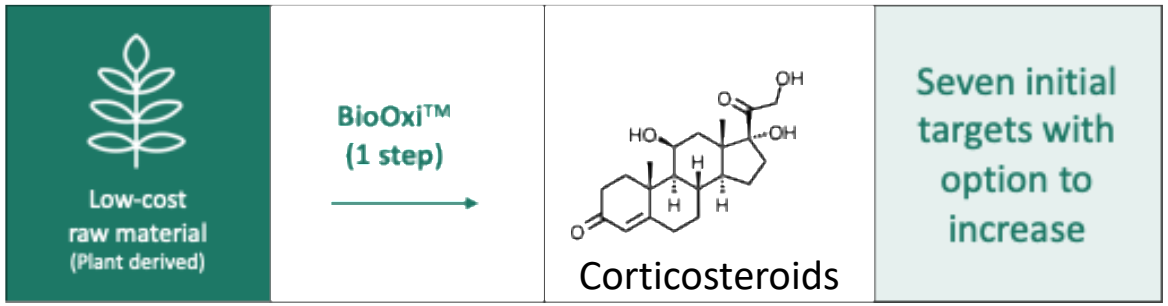
- ➢ Leading bioengineering and BioOxidation platform (BioOxi)
  - ✓ **Benefits**: Estimated savings up to 90% in the cost of goods

Willow's Development for Laurus Labs

- ➢ Innovating bio-based manufacturing for 7 pharmaceutical ingredients
  - ✓ **Result:** Replace traditional chemistry-based manufacturing processes

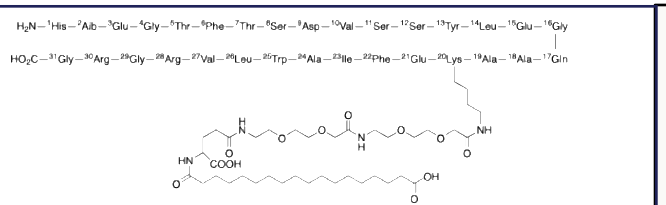
Willow's Revenue Stream

- ➢ $4 million per year in R&D revenue
- ➢ Royalties on Net Sales estimated at **10-20X R&D** (est.) over term, if successful



New Internal Programs for Future Partnering

GLP-1 Receptor Agonists



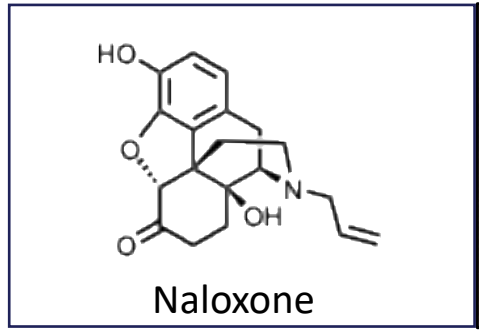
Semaglutide
(Active ingredient in Ozempic®)

- GLP-1 receptor agonists, such as Wegovy®, Ozempic®, and Zepbound®, used to treat Type-2 diabetes and obesity are set to soar to $125 B in sales by 2033[1]
- Current manufacturing routes can produce up to **14,000 kg of waste for every 1 kg of ingredient**[2]
- Willow's engineered enzymes for fragment coupling along with strains for increased peptide production can enable more cost-effective, sustainable manufacturing routes

1. https://www.globaldata.com/media/pharma/glp-1r-agonists-type-2-diabetes-obesity-market-reach-125-billion-7mm-2033-forecasts-globaldata/
2. https://cen.acs.org/pharmaceuticals/pharmaceutical-chemicals/making-weight-loss-drugs-mean/102/i13

Opiate Antagonists

- Key active pharmaceutical ingredients (APIs) in essential medicines for treating overdose and overuse: **Naloxone, Naltrexone, Buprenorphine**
- **Large demand with many APIs in short supply**[3]
- All three APIs rely on expensive intermediate prepared using toxic reagents
- Willow's BioOxi process can provide a more sustainable, cost effective route to these important medicines[4]



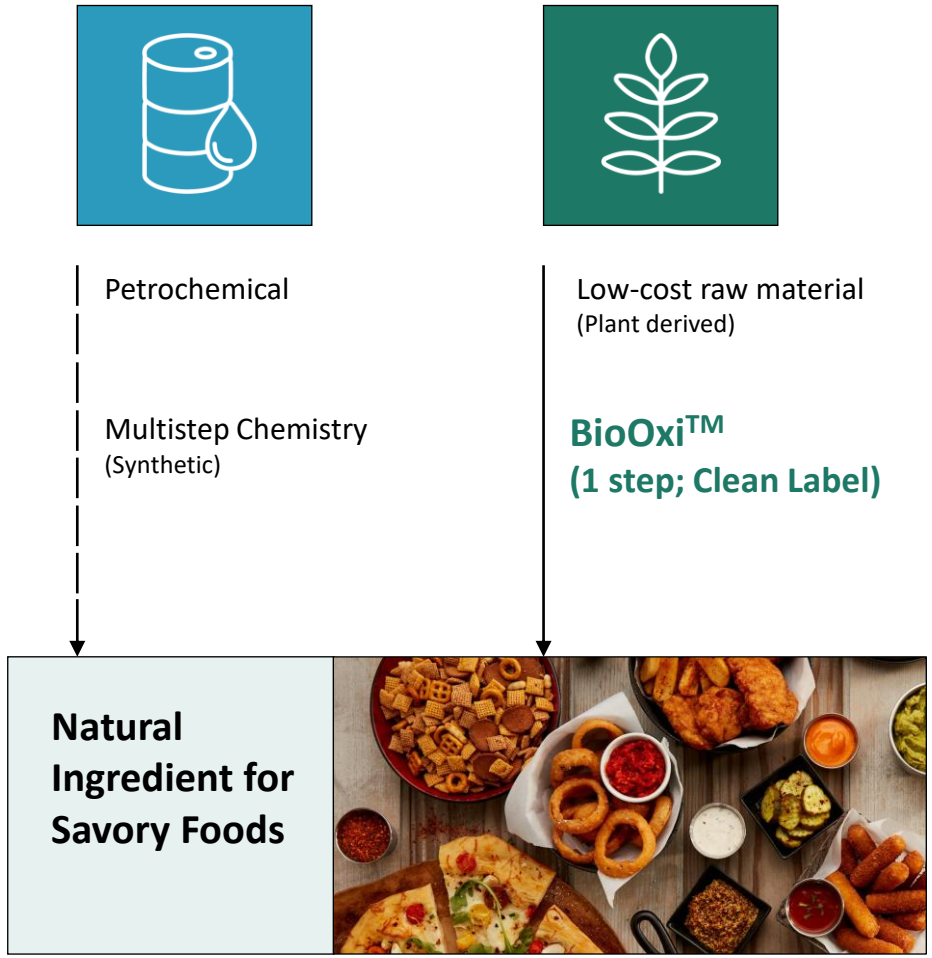
Naloxone

3. https://www.fda.gov/media/143406/download?attachment
4. Further laboratory work pending DEA Researcher license approval

Large Volume Natural Food Ingredient Partnership With Kalsec

- Bulk ingredient for use in savory food applications, currently chemically synthesized
- R&D expected to finish late-2024 with commercial scale up and safety work starting in early-2025
- Commercial agreement includes:
  - Milestones **1X R&D Revenue**
  - Royalties on Net Sales **30X R&D Revenue** est.
- As a leader in sustainable technologies, Kalsec has also invested in Willow to further drive our innovation

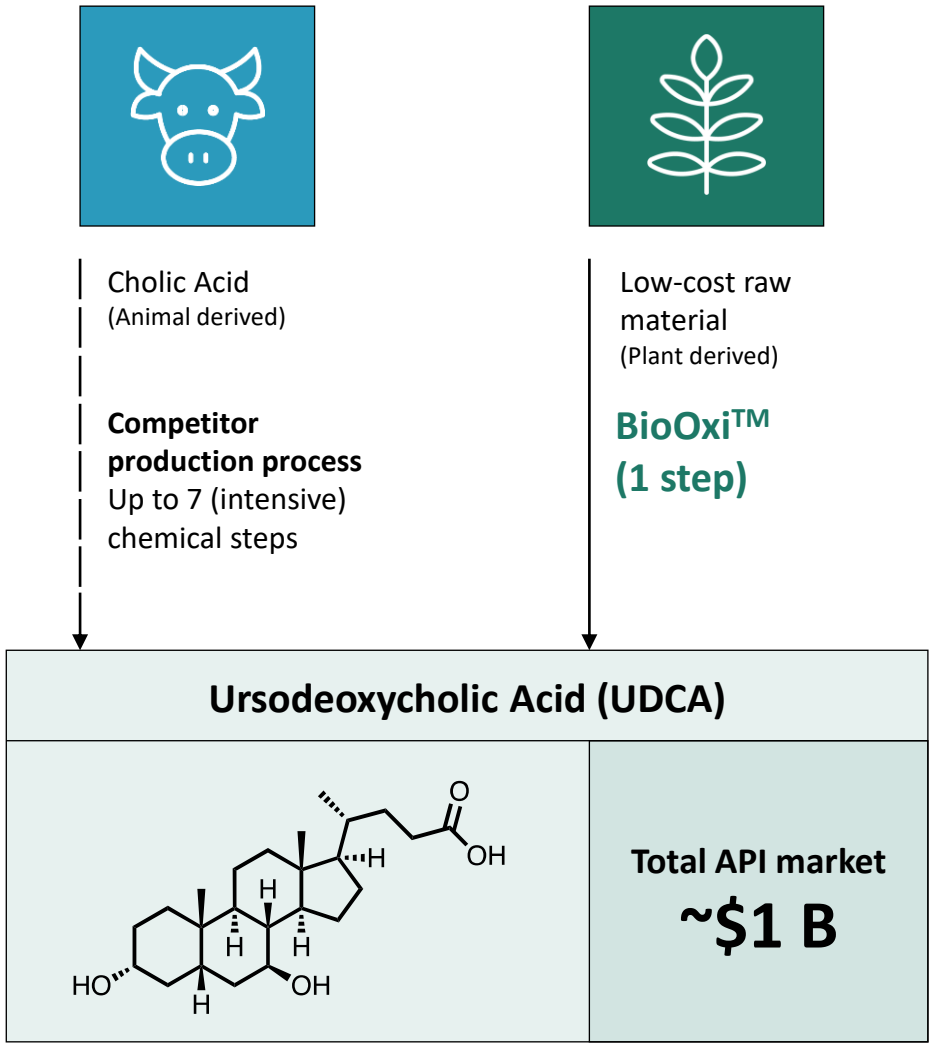
kalsec®



Ursodeoxycholic Acid (UDCA) Partnership with Global API Producer

- Large volume API (>1,000 tons) for treatment of cholestatic liver disease and gallstone conditions
- BioOxi process replaces multiple chemistry steps and eliminates reliance on animal-derived raw materials
- In collaboration with Sandhill One, R&D completed in 2023 with commercial scale up in progress
- Multi-year deal with global API producer that includes milestones and profit split payments potentially starting in 2024

Partnership with a Confidential Global API Manufacturer

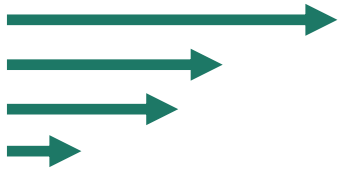


Undisclosed High Value Ingredient With Global Manufacturing Partner

- High value ingredient with large, addressable ingredient market approaching $1 B[1]
- Majority is produced chemically, but cost-competitive “natural” product is in high demand
- Leverages both our BioOxi and FutureGrown technology platforms to enable a production via precision fermentation
- Started as Willow funded internal program that was partnered with undisclosed global ingredient manufacturer in Q4-2024
  - Up to $1.3 million in R&D revenue in 2025
  - Profit split for 15 years upon commercialization

1. Willow-commissioned independent third-party market research report

Willow's Full (and Growing) Pipeline of Commercial Opportunities

Partnership	R&D	Anticipated First Commercial Revenue	R&D Revenue	Potential Commercial Upside*
API Manufacturing Deal (Laurus Labs) Multi-million-dollar R&D and royalties		**2025**	**$4 million/year**	**10-20X**
Food ingredient (Kalsec) Multi-million-dollar milestones & royalty		**2025**	**undisclosed**	**30X**
Biopesticides Multi-million-dollar R&D/milestones		**2026**	**$2 million/year**	**1-2X**
High value ingredient Multi-million-dollar R&D and profit split		**2026**	**$1.3 million**	**>40X**
Multiple product specific partnerships UDCA, Generic APIs, Innovator		**2025**	**undisclosed**	**varies**

*Note: estimated royalties over term of contract expressed as multiple of total R&D revenue per program

Anticipated Key 2024 & 2025 Milestones

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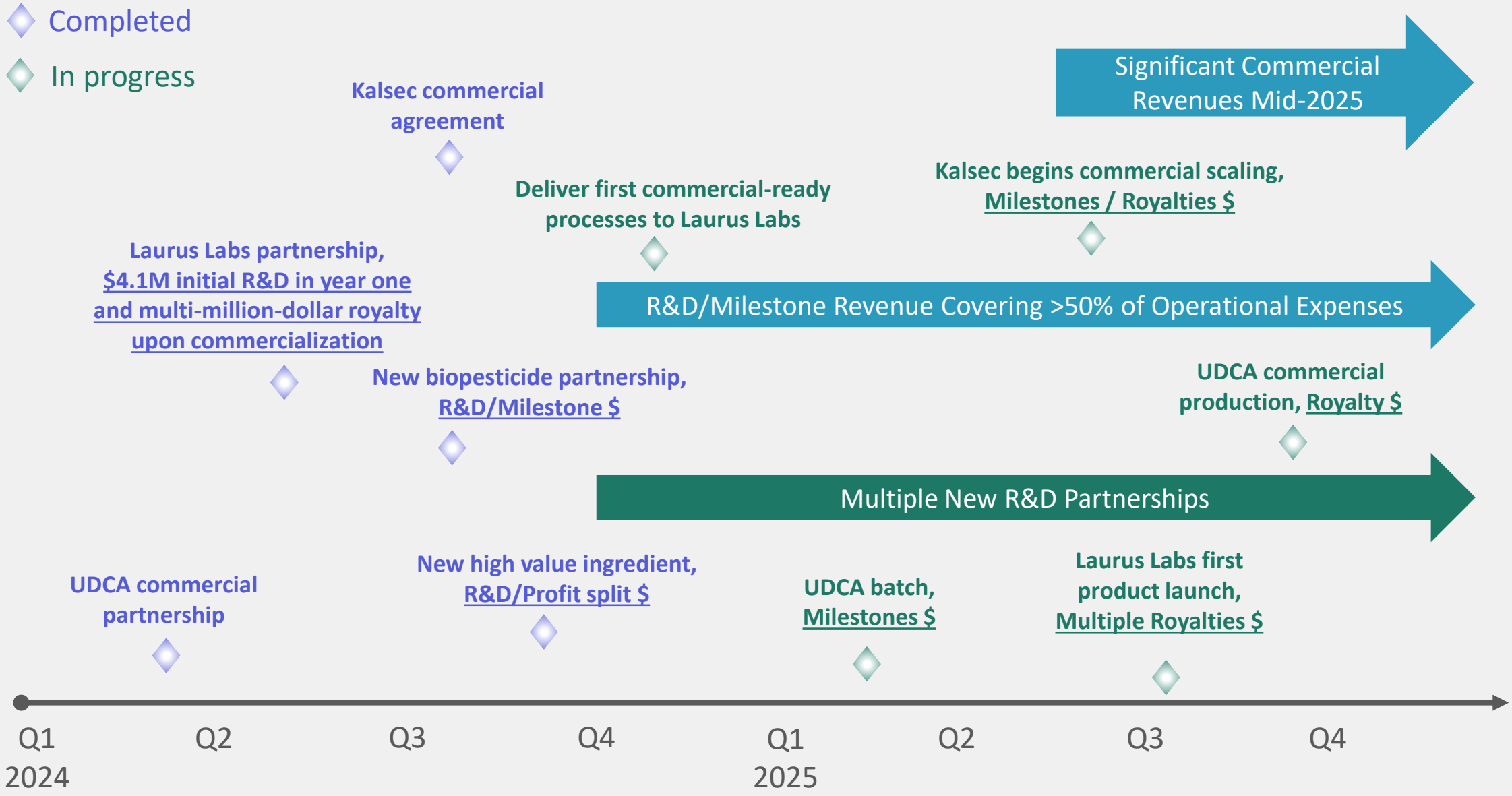

Experienced and Accomplished Leadership

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Chris Savile, Ph.D.
President and CEO

20 years of experience in scientific and business roles focused on commercialization of biobased processes

Travis Doupe, CPA, CA
CFO

20+ years of experience in financial, corporate, and investment leadership roles

Trish Choudhary, Ph.D.
SVP – R&D

20 years of experience in various technical roles focused on rapid engineering of biological systems

James Lalonde, Ph.D.
Chairman

30+ years of experience leading R&D teams that have commercialized more than 25 biobased processes

Willow's team draws its experience from top bioengineering companies:

CODEXIS® intrexon INSCRIPTA®

Capital Market Summary

willowbio.com

- Over CAD$66.0 million raised to date with Management and Board investing more than $8.0 million personally into Willow
- Up-listed to the TSX in 2019 (TSX: WLLW) and trade on the OTCQB® Venture Market (OTCQB: CANSF)
- Strong insider ownership at just under 22%, including Tuatara Capital (18%)
- Only debt is convertible debentures of $800,000 due October 10, 2027; 64% held by Directors and Officers of the Company
- Most recent financing was $1.6 million in July 2024 @ $0.10 Unit (share + ½ wt.)
- Closing price as of November 6, 2024: $0.09/share

Willow Share Capitalization (TSX: WLLW) as of November 8, 2024

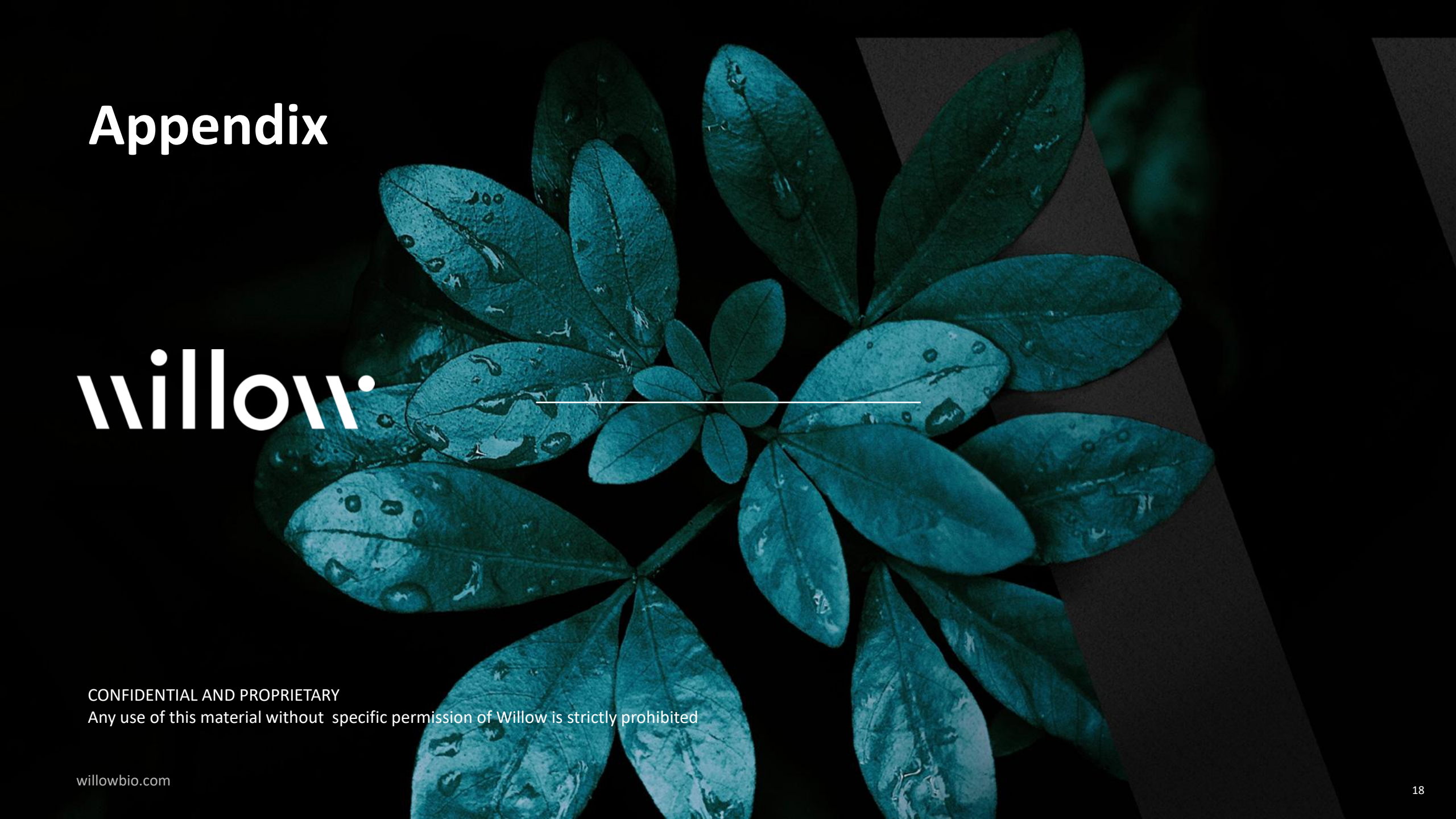
Basic shares outstanding	144,204,193
Employee options [1], RSUs and PSUs	13,874,771
Warrants[2]	3,809,600
Warrants[3]	679,928
Warrants[4]	576,565
Warrants[5]	8,198,682
Warrants[6]	869,921
Convertible debentures[7]	7,619,048
Fully diluted shares outstanding	**179,832,708**

1. Weighted average strike price of $0.24 for options
2. Exercise price of $0.105-0.16/share
3. Convertible at $0.105/share until October 10, 2027

Summary

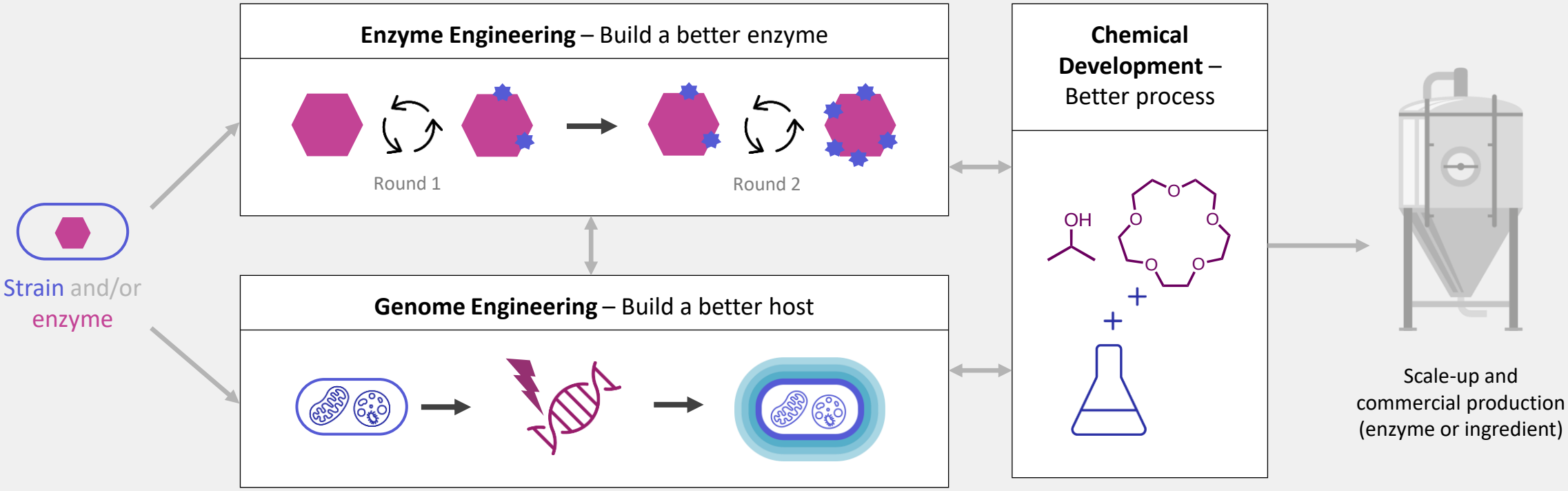
- Leading AI-enabled technology platform rapidly delivers enzymes and strains for biomanufacturing high value ingredients across multiple sectors
- Low-risk partnership model provides near-term R&D revenue that enables future large commercial revenue (>40X multiple R&D revenue in some cases)
- R&D revenue exploded 400% in 2024 (>$4 million est.) with multiple new partnerships
  - Laurus Labs multiple-product deal in Q2
  - Biopesticides in Q3
  - New high value ingredient partnership in Q4
- Continued growth expected into 2025 with new partnerships to be signed and first incoming commercial revenues

Appendix



Willow's Technology & Capabilities

Fully integrated AI-driven technology platform rapidly delivers biomanufacturing processes at scale



Willow's AI-Driven Multivariate Engineering Accelerates Biomanufacturing

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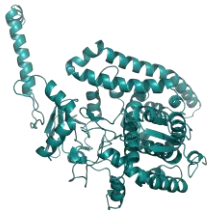
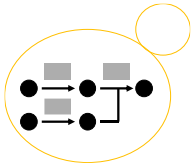
Best-in-Class Tools for Engineering Industrial Enzymes & Strains

Accelerated Development & Time to Market (1/2 the time)

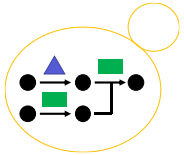
Smaller Teams Executing on Multiple Programs Lowers Costs (1/4 the cost)





Starting Enzyme or Strain

AI-Enabled Technology Platform Accelerates Discovery and Reduces Cycles



Industrial Enzyme or Strain

Lead Generation

AI-driven algorithms to identify top gene candidates

Optimization

ML-guided models for rapid diversity generation and recombination

Industrially Relevant Screening

HTP assays designed to mimic commercial processes

Automated Sequencing

Automated platform for pooled, parallel sequencing and analysis

Improved Predictive Models

Large sets of representative data further enhances AI models and accelerates development

AI-Driven Bioengineering Platform in Action

Hypothesis driven modification

AI-driven modification

Case Study: Engineering a highly challenging enzyme, Cytochrome P450, for commercial manufacturing of an Active Pharmaceutical Ingredient (API)

Identified 6 Key Mutations

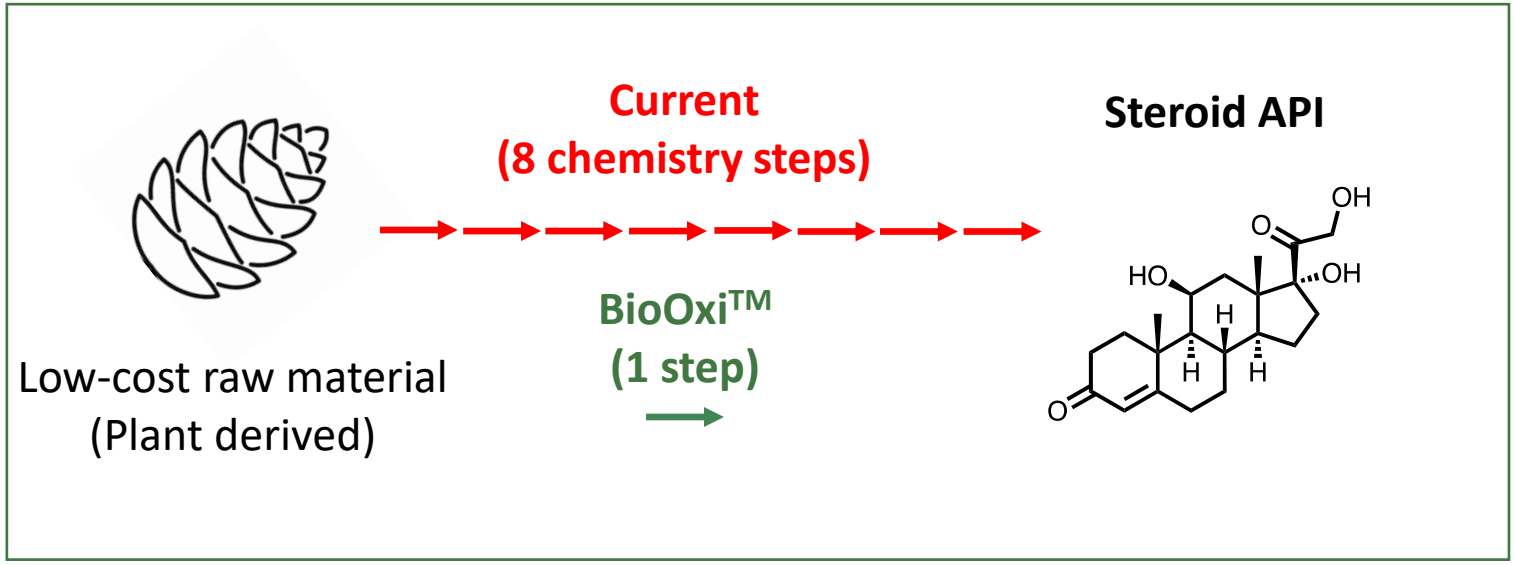
- 1 mutation > **Hypothesis-driven**
- 5 mutations > **Willow's AI-driven platform**

<u>1,800-fold improvement</u> in performance from combined enzyme, strain, and process engineering

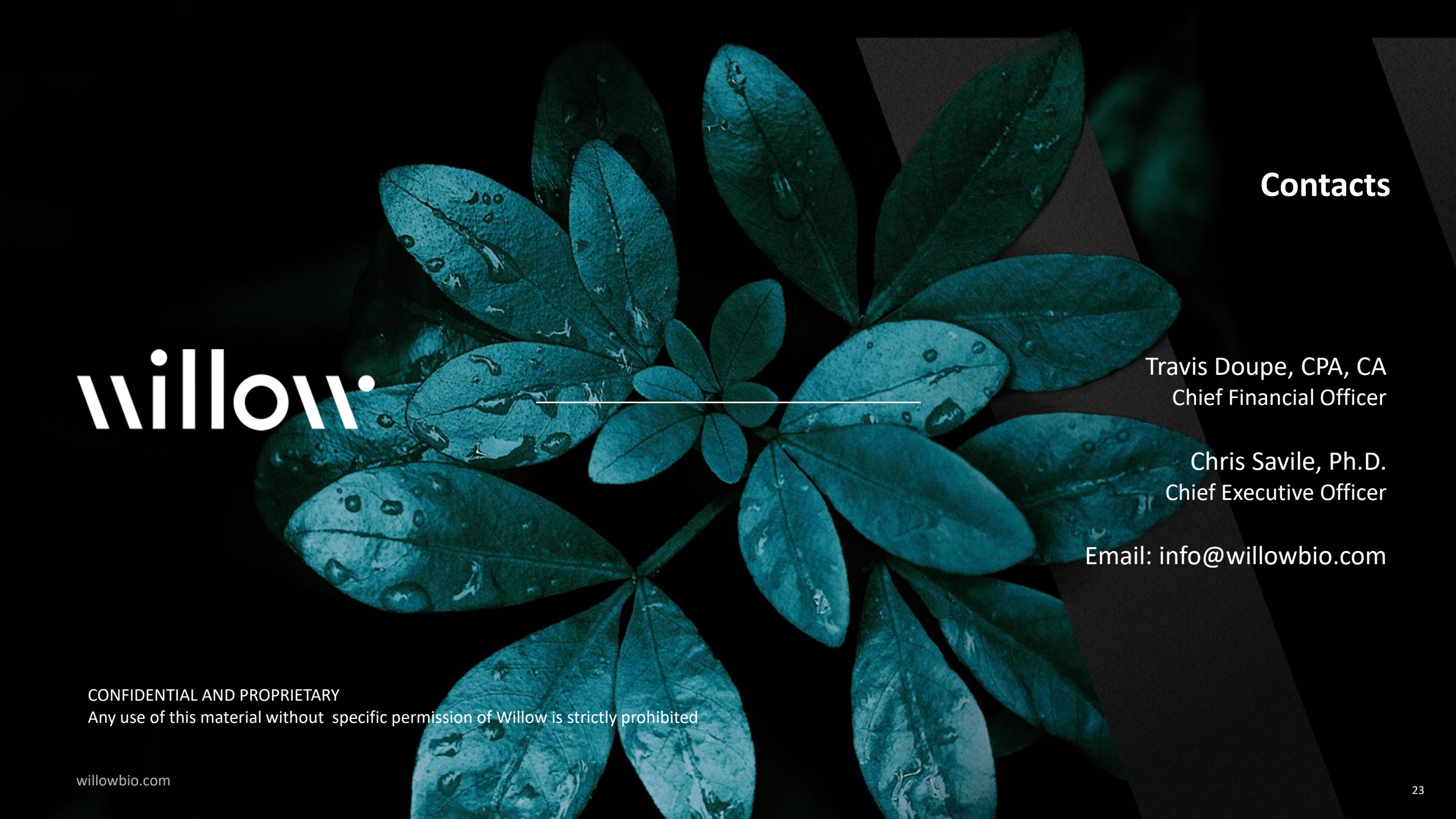
- Turnover improved from 10 mg to 20 g
- From concept to commercial in
  - 3 cycles (versus 9 industry std.)
  - 6 months (versus >12 industry std.) with 3 FTEs

Willow technology delivers where others have failed!

Case Study: Steroid API



- Willow's engineered BioOxi system reduces 8 chemistry steps to 1 bio step!
- Provides steroid API with same purity and specifications while reducing COGS and waste by 75%
- Low-cost steroid API provides access to multiple steroid APIs, expanding overall value



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