



charles river

# Meeting with Management

## Strategic Overview

James C. Foster

Chairman, President & Chief Executive Officer

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September 21, 2023



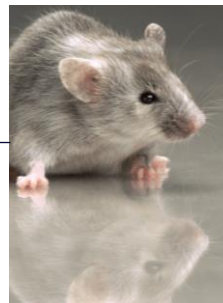
# Focus of CRL 2023 Meeting with Management

- An update on our growth drivers and strategic imperatives, as well as the current state of the market environment
  - Resilience of our business model during a period of normalizing demand trends
  - CRL continuing to enhance capabilities around higher-growth end markets, principally biologics and cell & gene (C&GT) therapies
    - Impact of our partnership strategy and technology
- Updated financial targets through 2026
  - Believe we are well positioned to deliver 6%-8% organic revenue growth from 2023-26E
- ESG: Our commitment to Corporate Citizenship and advancing responsible science and the 4Rs
- Technology: The digitalization of our business will transform the client experience and our connectivity with them



# The Scientific Partner of Choice to Accelerate Biomedical Research and Therapeutic Innovation

Working with clients from  
discovery and early-stage  
development through the  
safe manufacture of life-  
saving therapies



## Innovate

Broad portfolio of high-quality research models and associated services to support biomedical researchers in discovery of new therapeutics



## Accelerate

Flexible and efficient outsourced model for non-clinical development to enable quick progression into the clinic



## Manufacture

Comprehensive solutions to support biopharmaceutical manufacturers in the critical testing, process development, and production of advanced therapies



# Leading, Global, Non-Clinical Drug Development Partner with a Mission to Create Healthier Lives

## Global Scale

~21,500

Global employees

~2,600

Scientific professionals  
with advanced degrees

>2,000

Biopharma clients

~70%

Revenue from  
biopharma industry

>150

Locations in

>20

Countries

## Proven Results

#1

Position in  
Research Models,  
Safety Assessment &  
Microbial Solutions

Supported  
>80%

of FDA-approved  
novel drugs over last  
five years (2018-22)

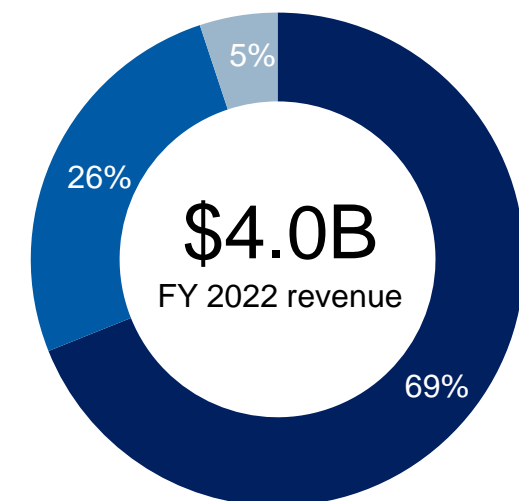
15%

Revenue CAGR

18%

Non-GAAP EPS CAGR  
(2018-2022)

## Diverse Revenue Base by Region



■ North America ■ Europe ■ Asia-Pacific

# CRL Investment Thesis



**Unique, scientifically differentiated portfolio** with integrated, non-clinical capabilities and broad expertise across **all drug modalities**



**Leading partner** to accelerate biomedical research and therapeutic innovation with **flexible, efficient outsourcing solutions**



**Large and diversified client base** across the entire drug research, development, and manufacturing continuum



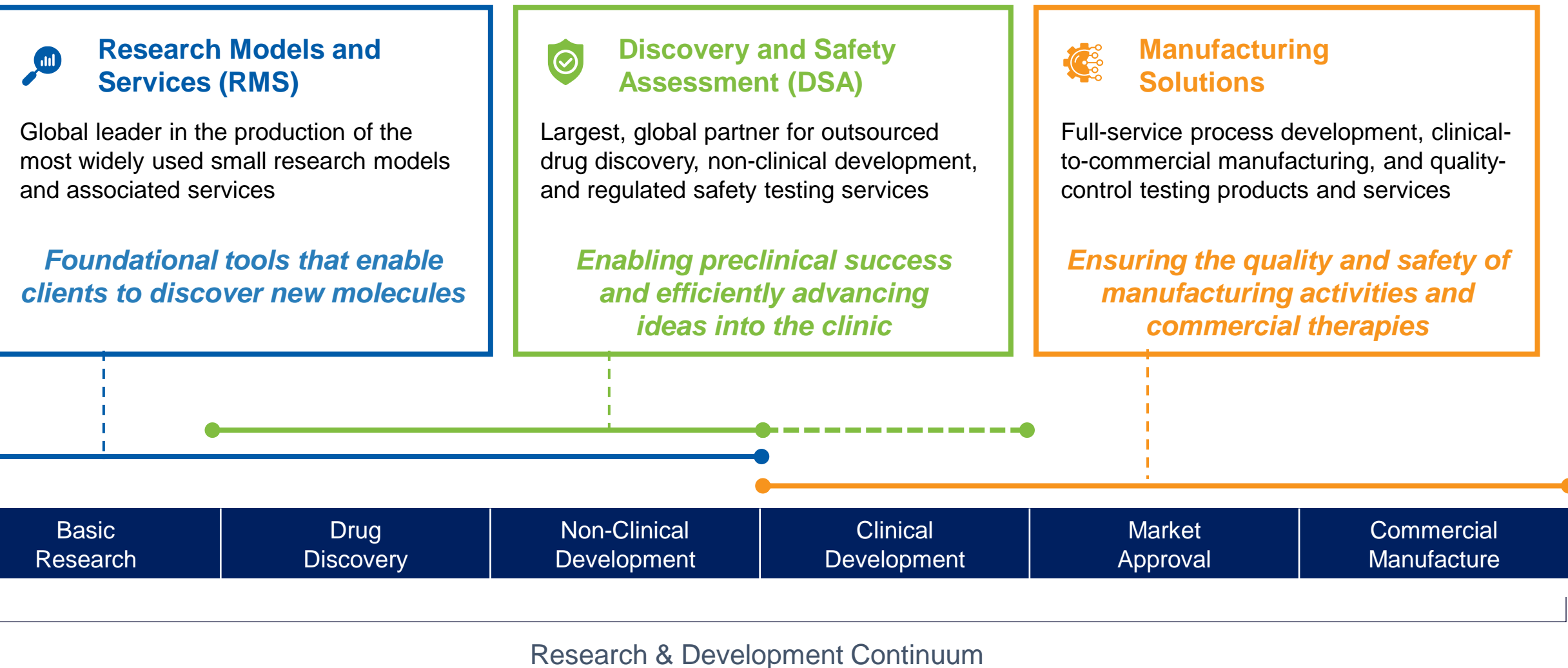
**Strong and durable industry fundamentals** driven by **increased outsourcing** to address unmet medical needs and evolving complexity of disease



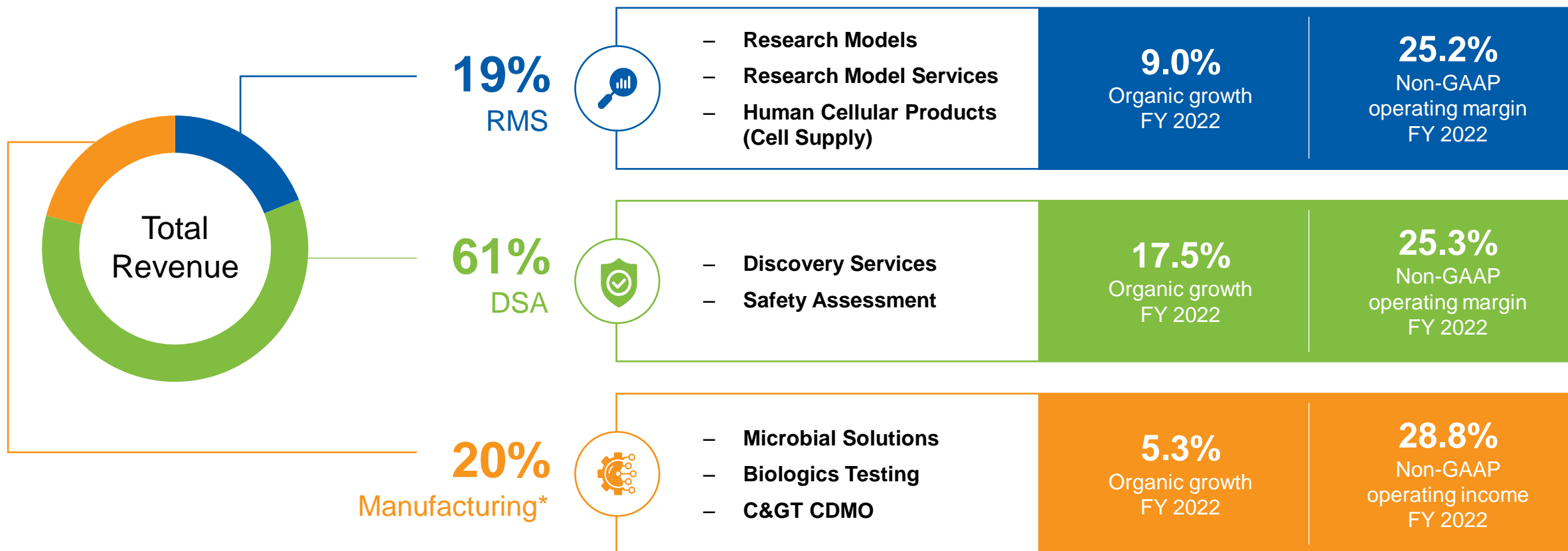
Robust value creation strategy led by **M&A and strategic partnerships** to maintain leadership positions in **high-growth markets**



# Unique, Scientifically Differentiated Platform



# Balanced Revenue Contribution and Robust Growth Profile



See [ir.crriver.com](https://ir.crriver.com) for reconciliations of GAAP to non-GAAP results.

All revenue and operating income/margin figures based on FY 2022 financial information.

\* Note: Charles River completed the previously announced divestiture of the Avian Vaccine business in December 2022. Avian is included in the FY 2022 figures above.

# RMS Segment

Foundational tools for the discovery of new molecules



## Research Products

Production and distribution of the most widely used small research models, as well as cellular products



## Services

Flexible solutions that support our clients' use of models and the screening of drug candidates

- **Global footprint** ensures proximity to major biohubs
- Consistent, high-quality source of small research models provides **critical link to DSA business**

- Creative strategies, including **CRADL™**, to attract emerging biopharma clients at earlier stages
- **Enhanced digital enterprise** improves efficiency and client experience



# #1

Global RMS position

# ~40%

Global RMS share

# ~1 of 2

Small research models sold in North America and Europe from CRL

# ~150

of the most widely used research model strains

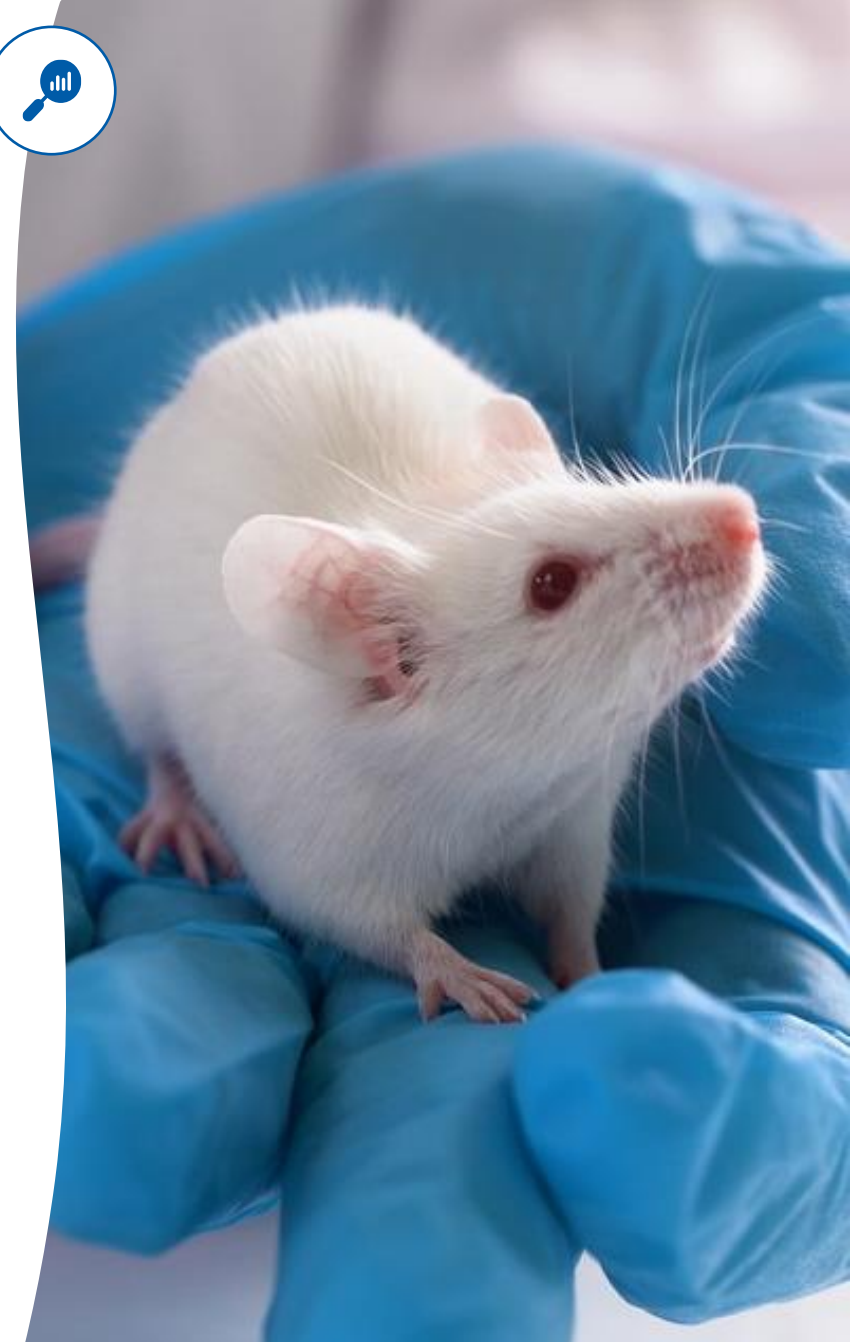


# RMS Growth Drivers: Expansion of Services, Capabilities, and Footprint



Re-established as a sustained growth engine

- RM Services driving incremental growth, representing nearly half of RMS segment revenue
- Expansion of CRADL™ offering
  - Enables clients to invest in research, not in infrastructure
  - Explora acquisition in 2022 further expanded CRADL™ to >30 locations with >400,000 ft<sup>2</sup> of full-service, turnkey vivarium rental capacity
- Continued expansion of China footprint in this high-growth region
  - New sites in central (Wuhan), southern (Shunde), and western (Chengdu) regions
  - RMS China averaged double-digit annual revenue growth since acquired in 2013
- Digital enablement of research models and GEMS businesses further differentiates CRL from competition
  - Real-time inventory and e-commerce capabilities



# DSA Segment

Drug discovery research, development, and regulatory-required safety testing of potential new drugs



## Discovery Services

Single source of services for discovering and characterizing novel drug candidates for preclinical development

- Early discovery, *in vivo*, and *in vitro* capabilities
  - Expertise in most major therapeutic areas, with a focus on **oncology** and **CNS**
- **Broad capabilities** across small and large molecule, antibody, and C&GT
- Expertise in **integrated programs**
  - Ability to engage with clients at any stage of their discovery or early-stage development programs



## Safety Assessment (SA)

Full suite of safety studies required for regulatory submission on a global basis across all therapeutic areas

- **Global leader** in both non-regulated and regulated (GLP) outsourced SA services
- **Broad scientific capabilities**
  - General and specialty toxicology, bioanalysis, pathology, safety pharmacology, drug metabolism, and pharmacokinetics (DMPK) services
  - **Largest specialty toxicology offering** from inhalation and infusion to developmental and reproductive toxicology



100

Preclinical drug candidates discovered for clients since 1999

~30%

Outsourced SA share\*, with next largest competitor at 12%

~30

DSA sites worldwide ensure proximity to clients

A safety assessment program costs

5x-10x less

than a late-stage clinical program, providing incentive for clients to focus R&D spending on IND achievement

# DSA Growth Drivers: Best-in-Class Science and Service Driving Sustained Demand



Focused on preclinical R&D support

- M&A and technology partnerships enhancing scale, innovative capabilities, and therapeutic area expertise
- Sustained demand driven by greater outsourcing by biopharma clients
- Opportunity to drive incremental outsourcing penetration, with Discovery only ~30% outsourced and Safety Assessment 60%+ outsourced
  - Biotech leveraging outsourcing expertise to drive innovation instead of building in-house capabilities
  - Large biopharma utilizing scientific partners like CRL in place of maintaining internal resources
- Significant opportunity to further increase synergies and client overlap
  - More than half of Discovery clients remained with CRL for safety assessment
- Digital transformation remains critical driver for sustained growth
  - Successful launch of Apollo™ for Safety Assessment further connects clients to real-time data and our comprehensive portfolio





# Manufacturing Solutions Segment

Safe production and release of manufactured products



## Microbial Solutions

Rapid, efficient testing platform for microbial detection and identification of sterile and non-sterile applications

- Leading global provider of **quality-control (QC) testing** products and services
  - **FDA-mandated** lot release testing for sterile biopharmaceutical products
- **Market-leading platforms**
  - **Endosafe®** endotoxin detection
  - **Accugenix®** microbial identification and strain typing
  - **Celsis®** rapid microbial detection



## Biologics Testing

Process development and quality-control testing to support the manufacture of biologics

- **Premier global partner** in navigating the complex pathway to biologic effectiveness
  - Supports developers and manufacturers with their **testing, characterization, and cell bank manufacturing** needs
  - **Testing and assay development** throughout drug development, clinical, and commercial manufacturing



## C&GT CDMO

Scientific partner for C&GT development, testing, and manufacturing

- Solutions across **all major CDMO platforms for C&GT**
  - **Primary expertise in gene-modified cell therapy** with growing capabilities in gene therapy, including plasma DNA and viral vectors
- Excellent strategic fit across CRL portfolio
  - **Integrated value chain** from foundational cellular materials through analytical testing and the production of advanced therapies



~70%

of Microbial Solutions revenue from reagents/consumables, creating a recurring revenue stream

~65%

of CRL's C&GT CDMO revenue from gene-modified cell therapy production



# Manufacturing Growth Drivers: Capitalizing on the Rapid Expansion of Biologics and C&GT Pipelines



## Driven by biologics

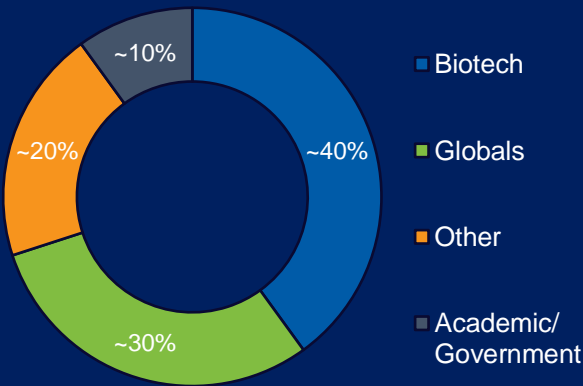
- No competitors have our comprehensive, rapid, and efficient testing platform for microbial detection and identification
  - Only >10% of industry-wide endotoxin testing volume converted to rapid testing methods – long runway for future growth
- Increased number of biologics in development, fueled by C&GT programs
  - ~3,300 C&GT programs in the biopharma R&D pipeline, with >2/3 of programs in preclinical phase
- Stay abreast of new technologies and initiatives to connect with clients
  - Evolving trend towards next-generation sequencing (NGS) testing technologies
- C&GT CDMO business gaining traction and expected to perform meaningfully better this year
  - Leveraging our premier position in this high-growth market sector for advanced modalities
  - Several clients moving towards commercialization after completed regulatory audits



# Large and Diverse Client Base Provides Stability and Sustained Growth

- Most of top 25 clients are large biopharmaceutical companies
- Capital market dependent (CMD) public biotechs with <2 years cash represent only ~5% of revenue
- Strong client overlap between business segments with opportunity to further capture incremental client wallet share

Revenue by Client Segment\*



CRL New Biotech Clients Added\*\*



>2,000

Biopharma clients in 2022

Largest client

<3%

of total  
FY 2022 revenue

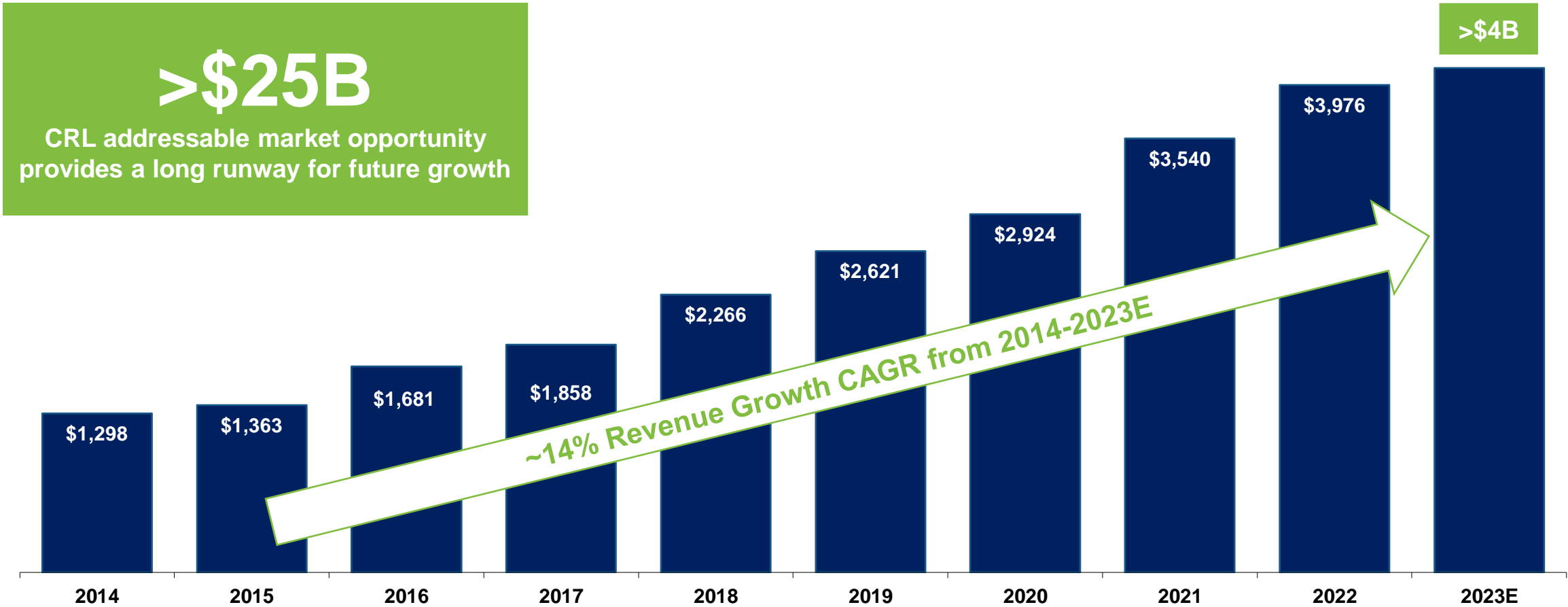
Top 25 clients

~30%

of total  
FY 2022 revenue

# Durable Track Record of Long-Term Growth

Driven by sustained industry fundamentals and attractive growth opportunities



# Current State of the Market

- Near-term normalization in the overall demand trends and market dynamics
  - Recent shift in client spending towards commercializing their late-stage clinical programs
- Biotech funding has slowed from peak 2020-21 levels, but recent signs of stabilization and ample funding available for promising drug candidates
  - IPOs and new biotech creation have slowed, but VCs still have capital to deploy and are doing so more selectively
  - Expect funding to return to more sustainable, pre-pandemic levels based on YTD 2023 activity
- Big pharma continues to steadily invest in R&D
  - CRL global biopharma revenue growth has exceeded SMID biotech for last 2 quarters
  - Believe pharma will continue to rely on biotech licensing, partnering, and M&A to advance their pipelines and drive growth
  - Drug pricing reform (IRA) and other policy changes may shift biopharma pipeline focus over the next few years (i.e., potential move away from small molecules)
    - Our focus on biologics and the complexity of our work is uniquely tailored to this trend
- China likely to become less favorable to U.S./Western clients due to continued geopolitical tension, reinforcing importance of US/EU-based CROs/CDMOs

35

FDA novel drug approvals in  
2023 (through August);  
Tracking to surpass 2022  
levels

~\$50B

YTD August 2023 annualized  
biotech funding; Tracking to be  
similar to 2018-19 levels



# Strategic Plan Targets: 2026 Goals

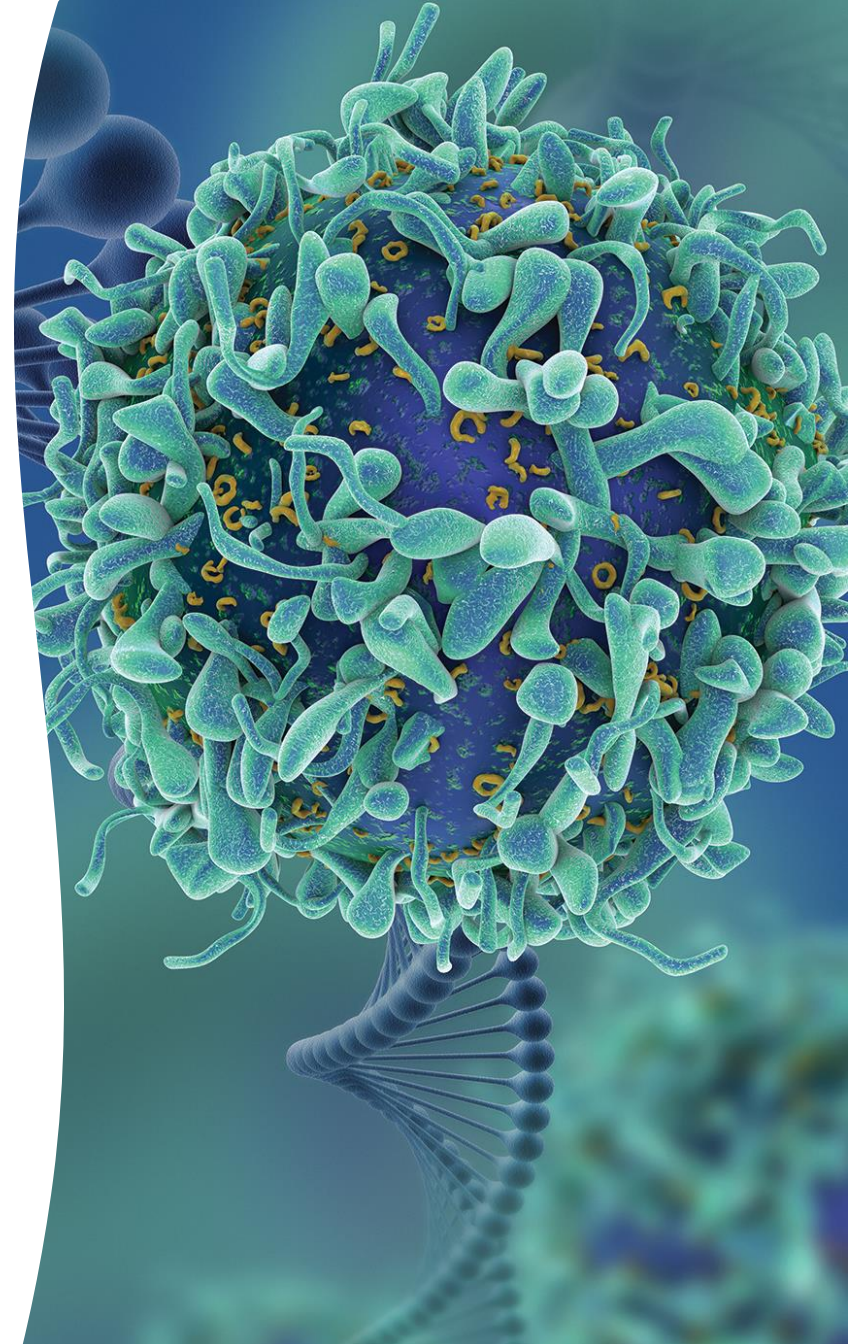
Focused on driving  
profitable revenue  
growth

2026 Financial Targets		
	Organic Revenue Growth (2023-26E CAGR)	Non-GAAP Operating Margin (2026E)
RMS	6%-8%	Mid- to high-20% range
DSA	6%-8%	Mid- to high-20% range
Manufacturing	~10%	Above 30%
Consolidated	6%-8%	~150 bps of cumulative improvement from 2023

# Strengthen Portfolio

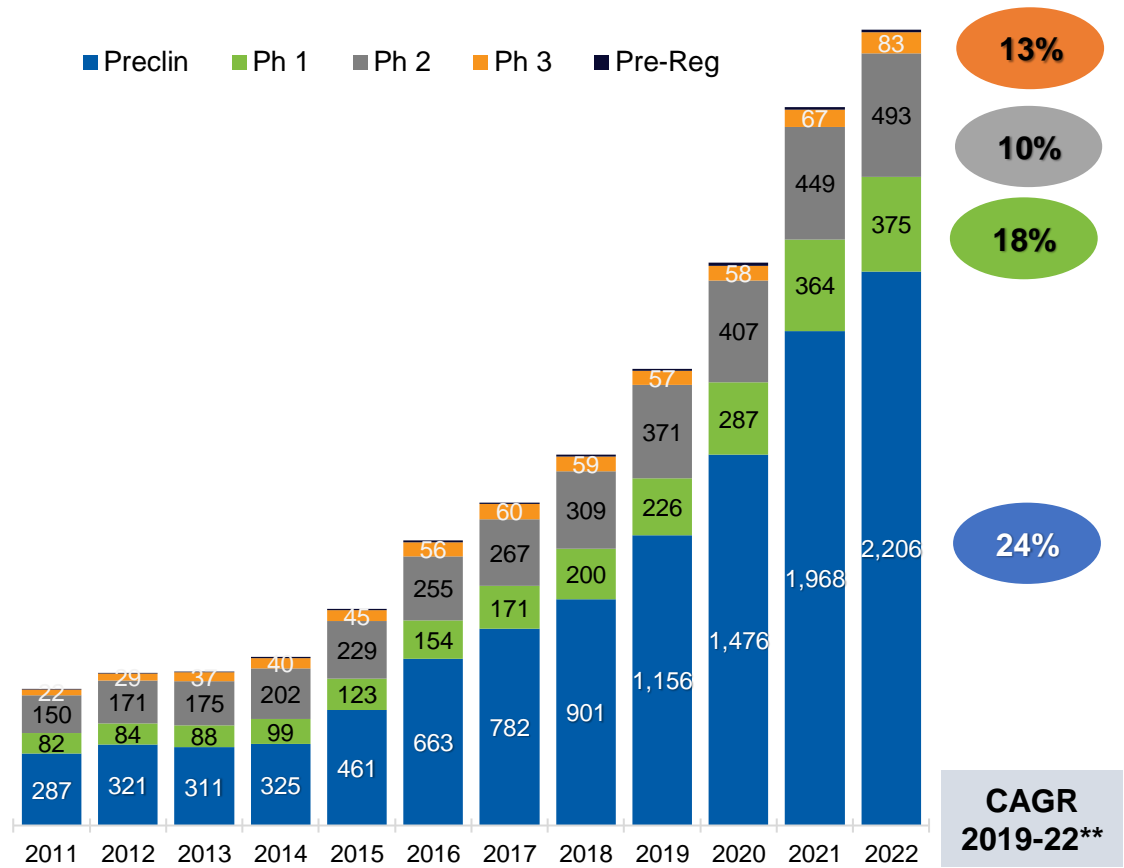
Best, early-stage translational portfolio from one integrated partner

- Enhancing our scientific capabilities with a focus on advanced modalities (incl. C&GT) and key therapeutic areas
  - Continue to expand expertise around humanized models, CRADL™, antibody discovery, bioanalysis and advanced screening capabilities, microbial detection, process development, and next-generation sequencing
- Selectively adding to portfolio via technology partnerships and our M&A roadmap to create even more compelling value for our clients
  - Will also evaluate creative and new opportunities to partner with emerging biotech clients earlier in the R&D process, including our VC relationships and biohubs strategy
- Enable clients to advance their drugs to the clinic and commercial phase faster and more efficiently



# C&GT Continues to be a Significant Growth Opportunity

## C&GT Pipeline by Phase: ~3,300 Active Programs



~20\*  
total

Therapies approved by FDA today



10-20  
per year

C&GT approvals expected  
per year by 2025



~15%

of biopharma R&D pipelines  
are C&GT programs



>2/3

of programs in **preclinical phase**,  
setting the stage for sustained growth



2,700+

C&GT developers worldwide



\$12.6B

Funding for C&GT companies  
in FY 2022

# Multiple Strategies to Strengthen Portfolio and Enhance Value for Our Clients and Shareholders



## Disciplined M&A

M&A remains top, long-term priority for disciplined capital deployment and enhances growth strategy

Invested >\$4.5B in >25 acquisitions since 2012

Focused on enhancing breadth of scientific capabilities, expanding global scale, and maintaining leadership in advanced and emerging therapies



## Strategic Partnerships

Partnerships and licensing arrangements add innovative capabilities and cutting-edge technologies with limited upfront risk

~20 active partnerships currently with >\$100M invested to date<sup>(1)</sup>

Highlights include:

- Distributed Bio (acquired) – antibody discovery
- SAMDI Tech (acquired) – label-free high-throughput screening (HTS)
- Cypre – 3D tumor modeling
- Wheeler Bio – Antibody manufacturing
- Vernal Bio – mRNA manufacturing/LNP design



## Venture Capital Relationships

Innovative strategy to establish CRL as a preferred partner to a large group of emerging, VC-backed biotech companies and create value

~10% of annual revenue comes from VC-backed companies<sup>(2)</sup>

Slightly below 30% average annual return on our VC relationships (investments and revenue)<sup>(3)</sup>

(1) Amount invested in strategic partnerships excludes purchase price to acquire Distributed Bio.

(2) VC revenue includes VC firms with which we have invested, those with which we have a strategic relationship, and other revenue from VC portfolio companies with which we have no formal relationship.

(3) Return calculation as of FY 2022 includes VC investment gains and operating cash flow from revenue generated from VC funds in which we have invested (both net of tax). It does not include revenue generated from VC funds in which we have not invested.



# Innovative Partnership Examples

Partnership strategy is increasingly essential to extend our science and technology base

## Valo

- Partnership established 2022
- AI-enabled drug discovery solutions
- Partnering on Logica™, an AI-powered drug solution that leverages Valo Health's Opal Computational Platform and CRL's leading preclinical expertise
  - Logica™ has the capability to transform a drug target into a first-in-class development candidate in just over 2 years

## DECIPHER

- Partnership established 2020
- Digital pathology
- Co-development of a digital pathology workflow
- First to offer clients GLP-validated digital pathology peer review using Decipher Patholytix Preclinical for toxicologic pathology

 Patholytix  
Preclinical

- CRL is co-developing exclusive AI models to support accelerate pathology review

## PathoQuest

- Partnership established in 2016 (expanded 2020)
- Next-generation sequencing (NGS) for biologics QC testing
- PathoQuest provides a pioneering NGS approach to biologics characterization and release testing
- Rapid, *in vitro* testing approach for viral safety testing and genetic characterization of cell lines

# Drive Greater Speed and Efficiency

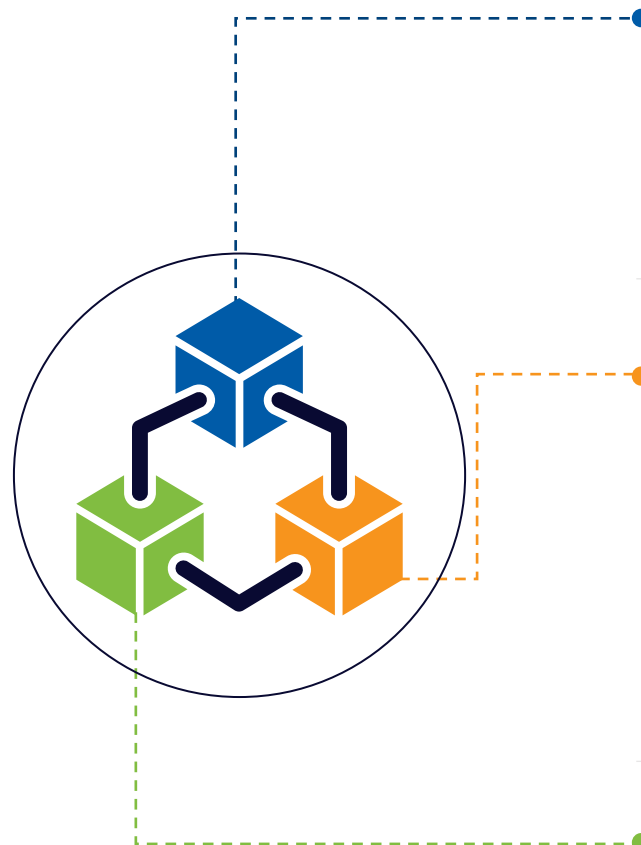
Evolve into a “data-first, technology-driven” scientific organization

- Leverage our scalable operating model and digital enterprise, and optimize cost structure to drive greater productivity
  - Committed to operating margin improvement averaging ~50 bps per year beyond 2023
- Maintain the “gold standard” for outsourced drug development by adopting key technologies and optimizing processes
  - Accelerate timelines around safety assessment studies, integrated drug development projects, C&GT projects, and microbial contamination testing
- Enhance speed and execution with seamless access to real-time client data, data-driven insights, and leveraging scientific and operational data
  - Multiple efforts to digitalize additional client-facing functions, including RMS e-commerce solutions and recent launch of Apollo™ for Safety Assessment



# Cutting-Edge Digital Transformation Enhances 75 years of Scientific Expertise

Faster Data.  
Better Application.  
Improved Timelines.  
More Educated Results.



- **Digital roadmap for faster and more efficient data access**

- Better scheduling and resource optimization
- Remove “white space” and reduce manual work

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- **Digital ecosystem to manage client relationships**

- Enhance real-time client connectivity
- E-commerce solutions
  - Enable clients to order research models online and goal to book their own studies
- Promote better data management and scientific decision making

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- **Enhance data-driven insights**

- Enhanced AI/machine learning
- Drive data automation

# Advance Culture and Focus on Sustainability/4Rs

Enhanced focus on employee experience, Diversity, Equity, & Inclusion (DE&I), and responsible science

- Remain focused on being a purpose-driven organization with the best people and an exceptional employee experience
  - Promote a culture of belonging and an inclusive environment
  - Foster training and career development that require continual learning and employee engagement
- Alternative technologies to animal testing continue to evolve and hold promise
  - CRL committed to being a leader in the preclinical R&D process, including responsible science focused on the 4Rs
  - Non-animal/*in vitro* alternatives still at an early level of maturity and will likely take decades for the science to meaningfully advance the IND-enabling safety assessment process
- Remain grounded in our purpose to be a good corporate citizen





# Robust Value Creation Supported by Strategic Imperatives



## Strengthen Portfolio

### **Continuous innovation to distinguish ourselves scientifically and unlock new capabilities**

- Emerging therapies and modalities
- High-growth investment opportunities



## Drive Efficiency

### **Maximizing synergies across portfolio to drive value for clients**

- Process optimization and harmonization to drive continuous improvement
- Scale operating model and optimize operational effectiveness



## Enhance Speed

### **Targeting to further reduce our clients' early-stage development timelines**

- Leveraging expertise in science, digital enterprise, and regulatory compliance
- Decentralized and agile decision making to enhance responsiveness



## Champion Technology

### **Transforming industry and client experience with best-in-class technology platform**

- Real-time access to scientific data with self-service options
- E-commerce solutions, automation/robotics, and AI/machine learning



## Advance Culture

### **Delivering meaningful contributions through an exceptional work environment**

- Focused on opportunities for growth, well-being, meaningful work, and recognition
- Make a difference to colleagues, clients, and communities through purpose, belonging, and support



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