



Global Discovery & Safety Assessment

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The Leading, Non-Clinical Contract Research Organization



#1

Market position
for early-stage
CROs

>1,500

Ph.D. or
equivalent
scientists at CRL



~30%

share of
outsourced
Safety
Assessment
market

>350

Patents worked
on by
DSA segment



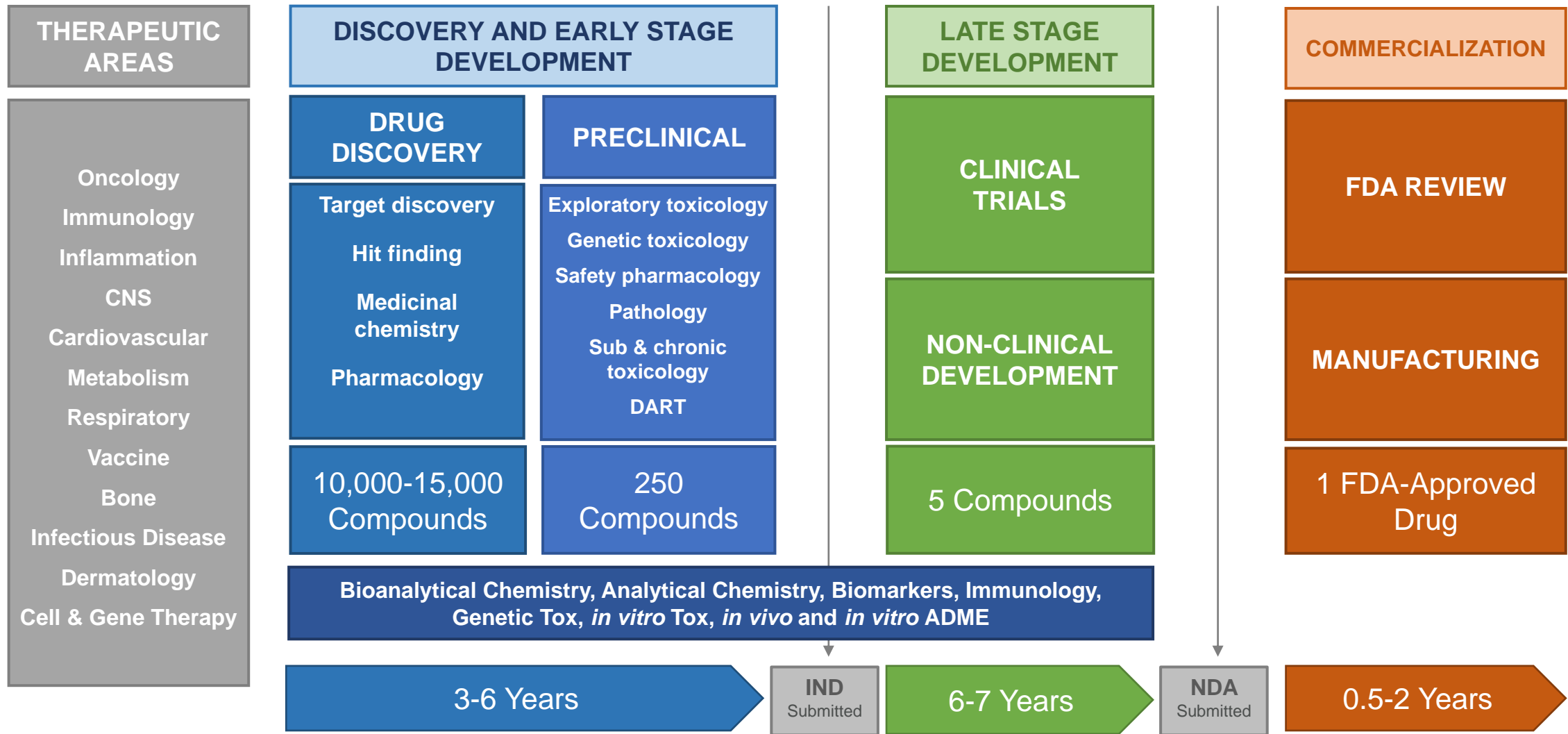
**High-
Single-
Digit**

DSA organic
revenue
growth
(5-Yr Target &
2019 Outlook)

80

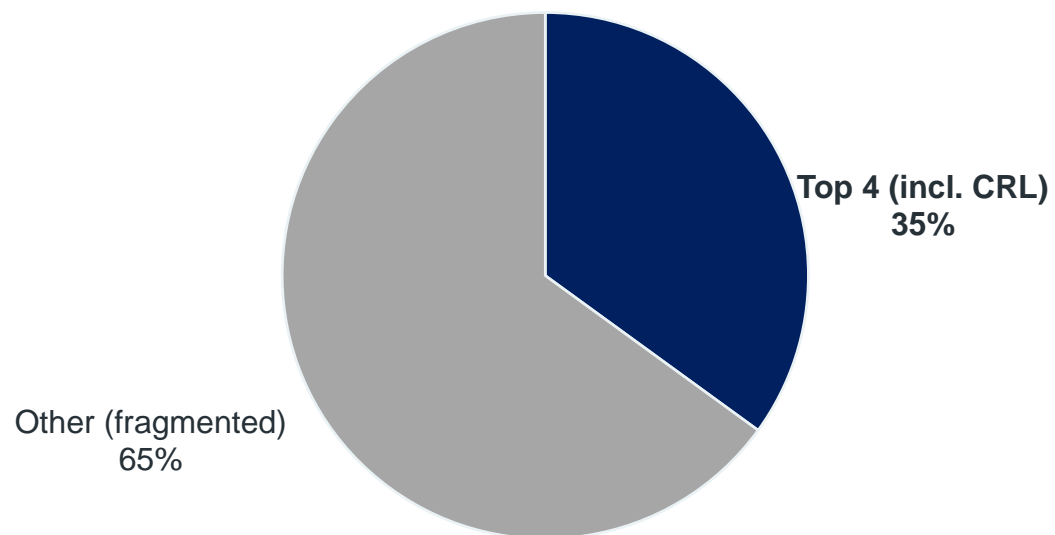
Novel
molecules
originated for
clients since
1999

Drug Development Process



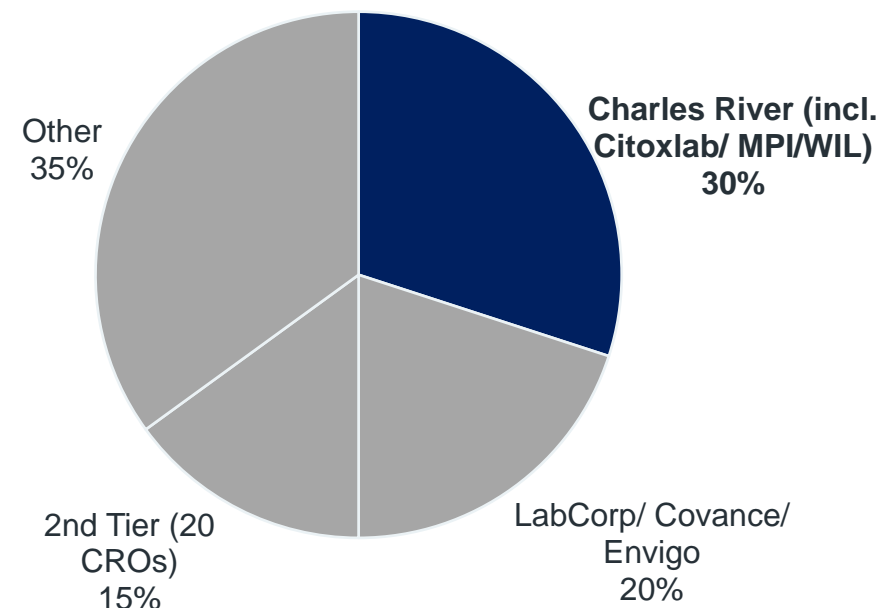
Early-Stage Market Overview

Global Discovery Outsourced Spend by Service Area



~\$5B Outsourced Market
Low-Double-Digit Growth
~25% Outsourcing Penetration

Outsourced Safety Assessment Market



~\$4.5B Outsourced Market
Mid- to high-Single-Digit Growth
55%+ Outsourcing Penetration

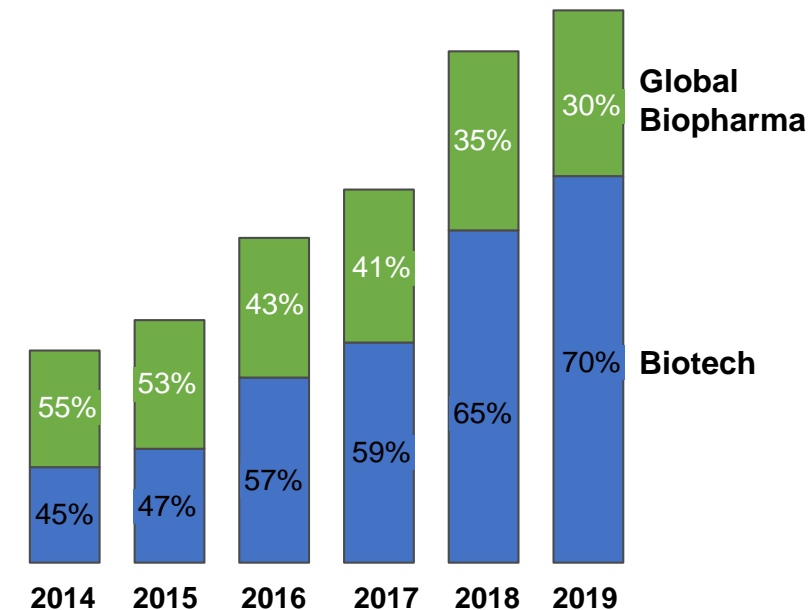
Early-Stage Market Overview, cont.

- The non-clinical CRO sector represents ~two-thirds, or nearly **\$10B**, of CRL's total addressable market opportunity
 - Expected to grow in the **high-single digits annually** over the next 5 years
- Drivers to future industry growth:
 - Biotech has become the **innovation engine** for the biopharma industry
 - Biotech funding remains robust in 2019 and consistent with the last four years
 - Biotechs expected to continue to be the primary driver of DSA growth with the discovery of novel therapeutics
 - **Outsourcing penetration** is also expected to continue to increase over the next 5 years
 - Global biopharmas seek to reduce costs and improve efficiency
 - SA outsourcing expected to increase to **~80% or greater** over the longer term
 - Discovery outsourcing expected to increase to **~50%** over the longer term

CRL is a Biotech-Centric Organization

- Biotech continues to lead in the discovery of new therapies
- Biotech clients value:
 - Strong **science**, **agility**, and **speed**
 - **Custom** approach to projects
 - Driving projects at their pace
 - Self-selecting toolkit preferred
 - **Quality** trumps all for biology, pharmacology, and safety
 - Chemistry is commoditized
 - Expect CRO partners to know them and the style in which they like to work and communicate

DSA Revenue Mix by Biopharma Client Segment (2014-2019)



Note: Chart does not include other non-biopharma DSA client segments, such as agchem companies.

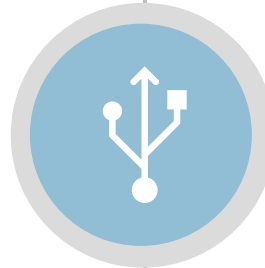
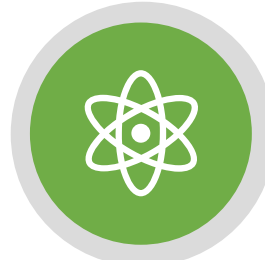
DSA Vision Drives Innovation and Growth

Scientific Expertise

Accelerate pathways to go/no-go decisions by investing organically and through partnerships and M&A

Digital Strategy

Best-in-class outsourcing experience through **digitalization** of data, enhanced data analytics, and providing **self-service** options



Operational Excellence

Revolutionize the industry with a seamless and flexible end-to-end, early-stage drug development platform through collaboration, harmonization, and process improvement

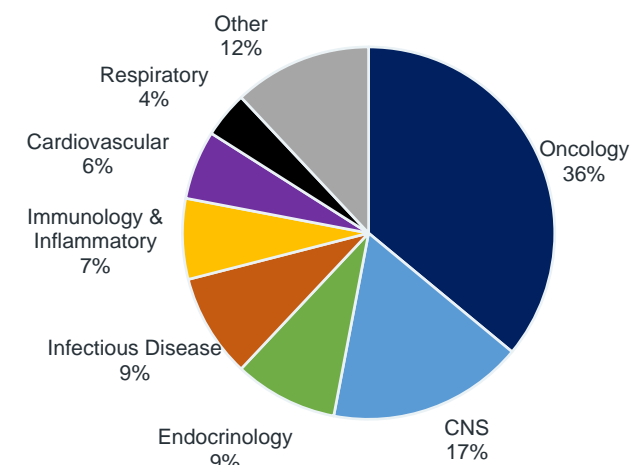
Our People

Engage, hire, and retain the best people by developing, appreciating, and empowering our people and allowing them to **make fast decisions**

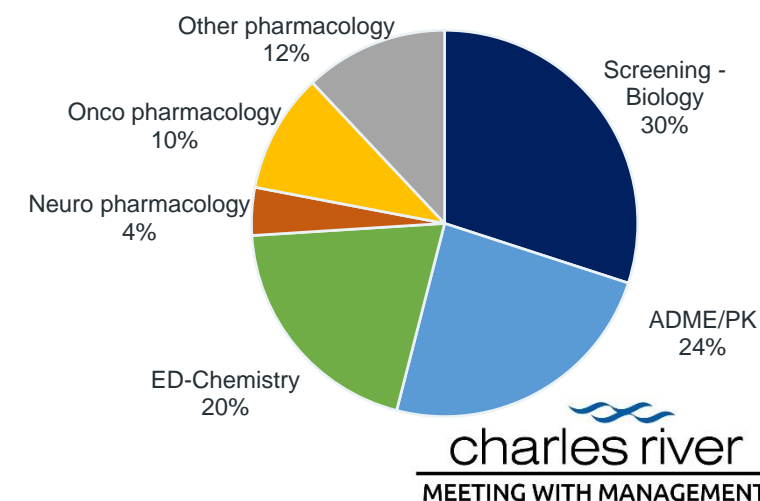
Scientific Expertise

- Broad scientific focus with capabilities across the early-stage continuum
 - Worked on ~**85%** of the drugs approved by the FDA in 2018
 - Premier, early-stage solutions in the fastest-growing areas of drug research: oncology, CNS, immunology, cell & gene therapies, and rare disease
- Extensive specialty toxicology expertise
 - Industry-leading **developmental** and **reproductive** toxicology (DART) and **juvenile** toxicity capabilities
 - Largest global provider with **8 sites** worldwide
 - **Inhalation, infusion, ocular, bone, immunotoxicology, and phototoxicology**
- Deep drug discovery expertise
 - Extensive **medicinal chemistry** and **structural biology** expertise
 - Comprehensive **tumor** and **HTS** (high-throughput screening) libraries
 - **Pharmacology** models for all disease areas

Drugs in Development by Therapeutic Class



Global Discovery Outsourced Spend by Service Area





Scientific Expertise, cont.

- Continuing to enhance and build our scientific capabilities through multiple strategies
 - **Organic investments:** screening and profiling platforms, HTMS (high-throughput mass spectrometry), and translational imaging platforms
 - **Partnerships** in innovative technologies to move with market trends and accelerate time to IND
 - Next-generation antibody platform
 - Technology platform to enhance SEND compliance
 - Artificial intelligence (AI) to expedite the discovery of novel compounds
 - **Acquisitions:** Citoxlab, MPI, KWS Biotest, Brains Online

Digital Strategy

- Build **best-in-class** outsourcing experience through **digitalization** of data, data analytics, and self-service options
 - Scientific data is the core of our business
- Digital strategy entails:
 1. Continuous upgrades to IT security and foundational information and data management tools to support global digital strategy and data analytics
 2. Enhance tools to support the operational excellence of CRL and our clients
 - i.e. SEND compliance, digital data downloads, and other resources
 3. Migrate towards a **full digital client experience** to enable clients with real-time access to data and self-service options
 - Ranging from sales quotations to study design and monitoring to data warehousing, analytics, and visualization tools
 - Leverage enhanced data analytics and machine learning/AI through organic investments and partnerships



Our People

- Engage, hire, and retain the best people by developing, appreciating, and empowering our people and allowing them to make fast decisions
 - Strive to be an **employer of choice**
- Focus on recruiting and retention
 - Implemented program in 2018 to increase hourly wages of employees in certain DSA businesses
 - Maintain recruiting and retention at targeted levels
 - Enhanced career path tool to encourage a culture of development





Our People, cont.

- Enhance **onboarding** and **training** programs
 - Introduced robust technical training program in SA to increase global mobility and support the quality of our science and data
 - Developed and implemented value-driven onboarding program globally
- Our people are the key to:
 - Delivering best-in-class quality
 - Providing exceptional client service
 - Fostering stronger relationships with our clients
 - Improving organizational speed and responsiveness

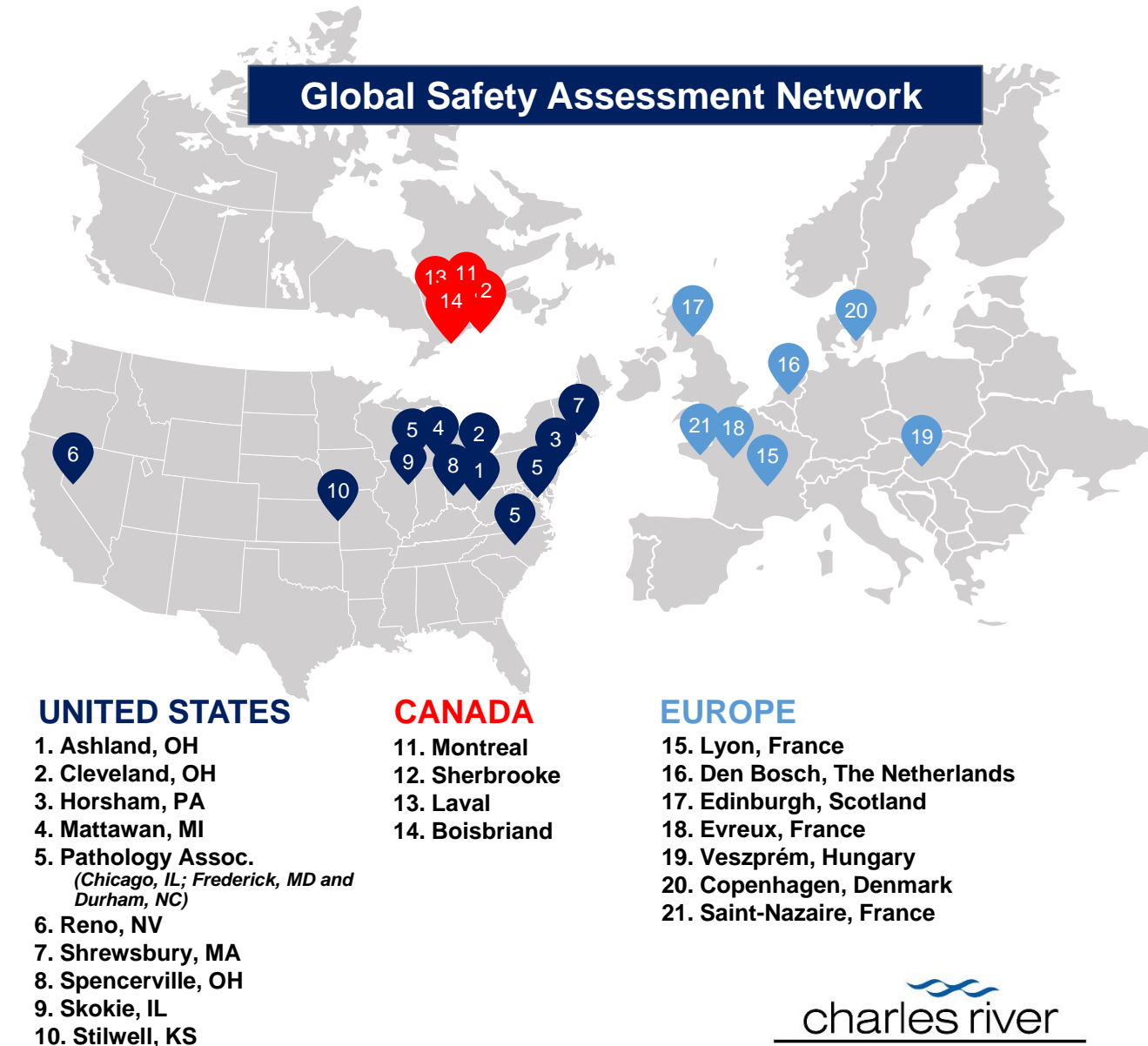


Operational Excellence

- Provide a seamless and flexible end-to-end, early-stage drug development platform through collaboration, harmonization, and process improvement
 - Drive greater operating efficiencies and automation of processes
- Leverage our size and broad portfolio to expedite hand-offs from site to site and business to business
- Maintain and enhance industry's **fastest** early-stage drug development timelines
 - Goal to **reduce** our clients' early-stage timelines by an **additional year**

Operational Excellence, cont.

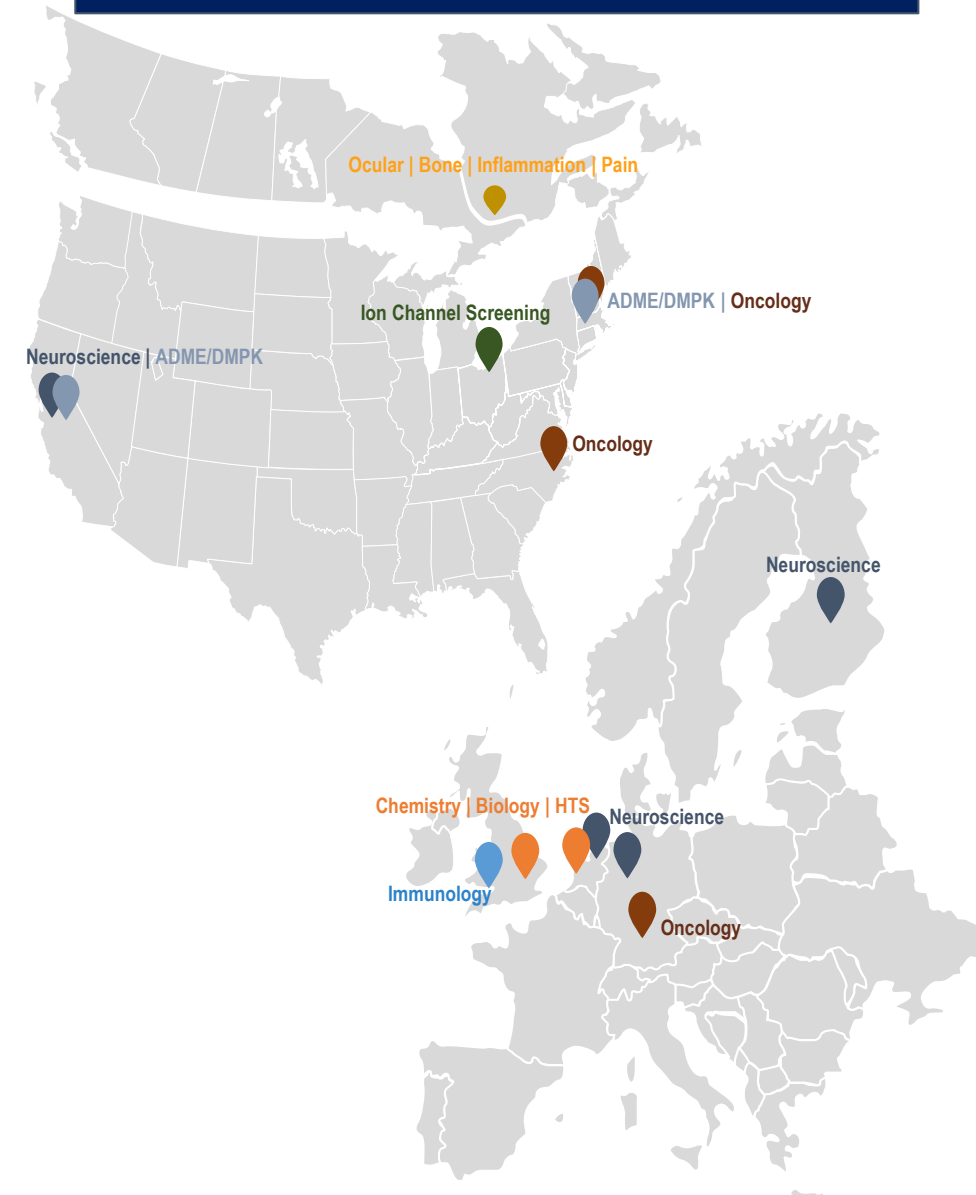
- **Global scale** and **proximity** to clients are key competitive strengths
 - Importance of our global network for clients working in multiple regions
 - **>1,800** SA study rooms including Citoxlab
- **Citoxlab** acquisition further enhanced our global SA network
 - Added capacity worldwide, particularly in Europe
- **Global network** enhances our ability to start studies on shorter timelines and promote client mobility
- Believe our SA business now has the global footprint and capabilities to fully support our clients and maintain our industry-leading position



Operational Excellence, cont.

- **Integrated drug discovery (IDD)** programs generating greater pull-through between Discovery and SA businesses
 - Establish broader working relationships with clients earlier in the drug discovery process and leverage synergies through to SA
 - Multi-year progression for successful discovery targets to transition into IND-enabling safety studies
- Key initiatives to support DSA client pull-through:
 - Leverage cross-functional scientific teams
 - Alliance/ project management to ensure efficient hand-offs from business to business
 - Integrated scientific program management guiding clients through the drug discovery and development process
 - Empower clients with enhanced access to technology/data
 - Business-wide, centralized scheduling
- Goal to achieve **~50% client overlap** between Discovery and SA over the longer term

Global Discovery Centers of Excellence



DSA Drivers to Operating Margin Improvement

- DSA segment offers greatest opportunity for margin improvement in CRL portfolio
- Goal to increase DSA non-GAAP operating margin to **mid-20% range** within **two years**

Capacity

- Leverage existing space
 - SA: No need to build greenfield SA capacity with MPI and available space at other sites
 - Discovery: Leverage expansions this year at Agilux (MA), KWS (UK), and South San Francisco

Efficiency & Other

- Continue to implement initiatives to enhance operating efficiency and generate procurement savings
- Achieve operating margin expansion at recent acquisitions through attainment of acquisition synergies and additional productivity measures
- Labor initiatives to optimize employee utilization and reduce turnover
- Other initiatives including the strengthening of the supply chain

Pricing

- Incremental pricing opportunities
 - Industry capacity utilization continues to improve
 - Our unique specialty capabilities generate pricing power

DSA Strategic Imperatives



Best employee
experience through
hiring, training,
engagement, and
compensation



Best science and
technology with the
goal to allow faster
go/no-go decisions

Best client
experience through
provision of
excellent client
service,
collaboration, and
fast data



Best processes
enable us to
provide a flexible
early-stage R&D
platform



Charles River is the scientific partner of choice, recognized for strong science, a collaborative approach to client needs, and the fastest delivery from target identification to IND

Citoxlab Integration Update



Citoxlab Acquisition Further Solidifies CRL's Scientific Capabilities and Global Scale in DSA

STRENGTHENS SERVICE PORTFOLIO

- **GLP general & specialty toxicology**
 - Reproductive toxicology & ocular services
 - Ecotoxicology (agrochemical testing)
- Preclinical **medical device** testing
- **Non-GLP** services
 - Drug transporters & drug-to-drug interaction

ENHANCES GLOBAL SCALE TO MEET GROWING DEMAND

- Enhances CRL's presence in **Europe**
- ~60% of Citoxlab's revenue generated in EU
- Expands DSA capacity with >700K sq. ft. across 9 operating sites in 6 countries

EXPANDS CLIENT BASE

- Diverse client base of biopharmaceutical, agriculture & industrial chemical, and medical device companies worldwide
- Expansion of small and mid-sized **biotech client base**
 - CRL's fastest-growing market segment

COMPELLING FINANCIAL PROFILE

- Immediately **accretive** to non-GAAP EPS
- Expected to generate **attractive financial returns** through high-single-digit revenue growth and operating margin expansion
- Further enhances CRL's long-term growth profile

Integration Highlights

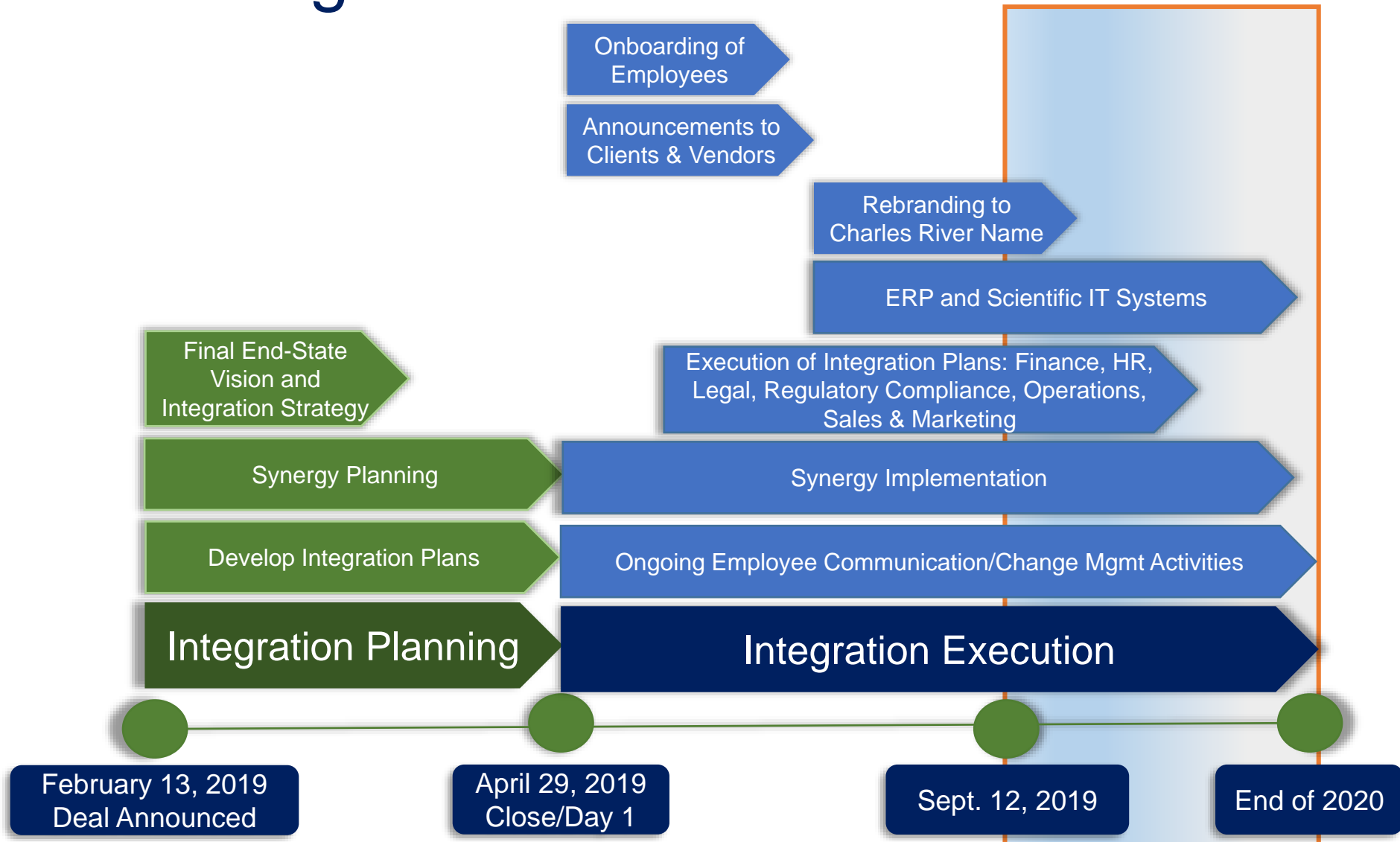
- Acquisition closed on April 29, 2019
 - Four months of CRL ownership
- **Client feedback** positive and supportive
- **Employee feedback** positive and employees excited to join CRL
- Day 1 organizational structure successfully executed
 - Sales, marketing, & client services structure solidified by Week 8
- Day 1 interim branding introduced
 - Atlanbio to CRL branding in July
 - Citoxlab to CRL branding in August
- **Rapid start to integration plan**
 - Operational and functional onboarding
 - Strong cross-site collaboration
 - Multiple operational synergies
- Maintaining momentum in legacy CRL and Citoxlab businesses



A Charles River Company



Planned Integration Timeline



Integration Summary

- All aspects of integration have been well executed
 - Successfully tracking to integration plan
 - **Employee onboarding** and **transition** complete
 - Rebranded to ONE Charles River
 - Exceptions: Solvo and Accellab
 - Tracking to expected **cost synergies of \$8-10M** over two years
 - Strong post-acquisition financial performance
 - Strong demand and financial results in 2Q19
- Strong business momentum maintained through integration
- All Citoxlab clients have been retained