# **Charles River Laboratories NHP Report**

March 2024



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In connection with the 2023 proxy season, we received a shareholder proposal requesting the preparation of a Board report related to non-human primates (NHPs) utilized by the Company. We concurred that more transparency on this topic was warranted. We also detailed our commitment to consult with our shareholders and to evaluate their feedback regarding the content of the report.

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**A Letter from Martin Mackay, Ph.D.**, Chair of the Responsible Animal Use Committee of the Charles River Laboratories International, Inc. Board of Directors

Last year, Charles River Laboratories made a commitment to shareholders to publish a report describing the efforts we have been taking to reinforce confidence that the non-human primates we import are sourced appropriately. As the Chair of the Responsible Animal Use Committee of the Board of Directors, I am pleased to share our initial report of the Company on this topic.

As a leading non-clinical drug development partner, Charles River has a significant impact on the global pharmaceutical and biotechnology industry by supporting the research of over 80% of the drugs approved by the U.S. Food and Drug Administration in the last five years. We passionately pursue our mission of helping clients bring innovative life-saving and life-changing treatments to patients worldwide as quickly, safely and responsibly as possible.

In operation for over 75 years, Charles River has and continues to take all of its responsibilities surrounding this mission seriously, including animal welfare and compliance with applicable laws and regulations. Throughout our history, we have been a market leader in creating the industry standards for biomedical-research quality, animal welfare, and ethics. Our extensive history of investing in and embracing the components of the 3Rs (Replacement, Reduction, and Refinement) has sharpened our aim to advance science guided and driven by a foundationally important fourth R – Responsibility. This fourth R, developed specifically for Charles River, ensures we are placing a lens of responsibility on everything we do, driving progress for patients and animals that depend on our work.

This report provides an overview of the processes, procedures and practices in place to ensure we are meeting our responsibilities and are properly managing related risks. We have carefully assembled the content of this report with an eye to information that we believe is important to our various constituencies, but most importantly our shareholders, with whom we have engaged in extensive outreach this past year to assess what disclosures would be most valuable.

We are proud to share with you the ways we have historically demonstrated our long-standing commitment to animal welfare, as well as some of the more recent initiatives we have implemented and our vision for the future. We will continue to invest, innovate and work to supplement these processes, procedures and practices and develop new ways to meet the high standards required of our mission.

Sincerely, Martin

### **Background**

At the Charles River's Annual Meeting of Shareholders held on May 9, 2023, the Company's shareholders overwhelmingly agreed with management regarding the preferred report approach — a report on measures we take to reinforce confidence that the non-human primates (NHPs) we import are sourced in accordance with applicable laws. After engaging with shareholders throughout the past year, it has become apparent to us that our *overall* NHP sourcing process (including how we assess purpose-bred status) is of interest to shareholders and other constituencies, and thus we have expanded the content of this report accordingly.

We are now pleased to share this report which, influenced by shareholder feedback, is separated into the following sections:

- Overall views on the utilization and need for NHPs
- Enhanced Safeguards consisting of:
  - Genetic Testing
  - NHP Supplier Risk Management Process (including Monitoring and Auditing)
- Increased Disclosure
- Diversification of Supply Chain
- New Approach Methods (NAMs)
- · Statement on Zoonosis
- Internal Governance Structures
- Conclusion

# Charles River's Position on Sourcing of NHPs and the Ongoing Importance of NHPs

As we said last year and continue to assert, Charles River Laboratories is steadfastly opposed to the illegal importation of NHPs into the United States. In furtherance of that objective, we are committed to dedicating our resources to collaborate with the U.S. government and our industry partners to maintain current practices and develop and implement additional policies, processes, and procedures while also ensuring we provide a safe and secure NHP supply chain most suitable for biopharmaceutical research.

Our compliance with applicable laws, regulations and global standards is critical to our ability to fulfill our valuable mission - helping clients bring innovative, life-saving and life-changing treatments to patients worldwide as quickly, safely and responsibly as possible. Our Company, and to a large extent, the entire biopharmaceutical industry, relies on access to, transportation of, and safe and humane handling of NHPs in biomedical research facilities to fulfill the mission of putting medicines, therapies, and vaccines in the hands of patients and providers.

The use of NHPs is fundamental to this work and to foundational scientific research and understanding on how to prevent and treat emerging infectious diseases, including the successful development of every COVID-19 vaccine

and the work of major academic medical centers. NHPs are also necessary for the development of the approximately 11,200 drug products currently in preclinical development — including for cancer, diabetes, neurologic and myriad other rare diseases.

Before a drug can be evaluated in a clinic on humans, the FDA generally requires testing in two animal species, including one non-rodent species, to ensure drug efficacy and patient safety. Because of their close genetic, physiological, and behavioral similarity to humans, NHPs are often the only relevant animal models for critical translational research.

We support efforts by global legislative and regulatory authorities and the research community to replace, reduce, and refine the use of animals in drug development, and to create new technologies to eliminate the use of animals all together. This is why Charles River recently announced a new initiative, the Alternative Methods Advancement Project (AMAP) bringing together our research, development, investment, and partnership efforts to purposefully strive and invest in artificial intelligence (Al) and new digital technologies, new products, and new *in vitro* and *in silico* methods, with a goal of reducing and replacing the number of animals used in biomedical research.

Despite our collective efforts, the scientific community at large, including every major global regulatory authority, recognizes that the use of many of these new drug testing technologies at a broad scale is still many years away. Therefore, in addition to continuing to approve alternatives, we must also continue to develop and invest in robust and effective policies, processes and procedures to ensure that how we work with animals in general, including NHPs, is not only compliant with applicable laws, regulations, and standards but is responsible, humane, and in keeping with our longstanding commitment to the 4Rs.

In furtherance of these collective aims, Charles River has both enhanced existing procedures and implemented new procedures.



We reached out to our top 25 shareholders (representing more than 55% of our shareholder base) and their input was taken into account in the creation of this report."

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For over a year, Charles River has been engaging extensively with subject matter experts in NHP population genetics to advise on the most optimal approach to identifying parent-offspring linkage, commonly referred to by many as "genetic testing."

#### Enhanced safeguards to ensure proper sourcing

Recent international developments have called certain aspects of the global NHP supply chain into question. In response to this and shareholder concerns, Charles River has implemented new practices above and beyond what is required by applicable laws. At the J.P. Morgan Healthcare Conference in January of 2024, Charles River provided an update on our strategy including new practices to ensure we can continue to support our clients' vital need for NHPs in research while also ensuring we provide a safe and secure legally sourced supply chain.

In addition to plans to diversify our supply chain and more effectively utilize our global infrastructure, the update also previewed work underway to implement enhanced safeguards to ensure stronger purpose-bred sourcing, innovate for the future, and continue to provide increased disclosures of practices and some data (including the publication of this report).

### Genetic Testing

For over a year, Charles River has been engaging extensively with subject matter experts in NHP population genetics to advise on the most optimal approach to identifying parent-offspring linkage, commonly referred to by many as "genetic testing." The expert consultants include representatives from the National Primate Centers and forensically accredited academic centers, as well as a world leading genomics center.

Charles River evaluated three distinct technologies to support parentage testing for purpose-bred NHPs. The testing methods were evaluated using a sample set of known breeders and offspring sourced under controlled conditions from a Charles River facility. The samples were anonymized and only the unique animal identifiers and date of birth information were provided.

As a result of this research, Charles River recommends utilizing a routinely adopted genetic testing method that, in a pilot study run by Charles River, accurately identified parent-offspring linkage in 100% of samples with confidence levels of 100%. In addition to extraordinary reliability, this method is also the most cost-efficient of the evaluated methodologies, which we anticipate would optimize resource use and further facilitate bringing NHP parentage testing to scale. We expect to begin to implement this testing program at our Mauritius NHP supplier before the end of 2024. We anticipate providing further updates on the progress of the implementation of this testing program in future reports.

NHP Supplier Risk Management Process – Enhanced Monitoring and Auditing Processes
While extraordinarily helpful toward ensuring confidence in the purpose-bred status of NHPs, genetic testing methods will take time, resources and international regulatory and supplier cooperation to fully implement at scale. While working through the lengthy commercial and regulatory adoption process, Charles River is moving forward with a significant new safeguard – enhancing the monitoring and auditing processes that are already a part of our dedicated NHP Supplier Risk Management Process.

Newly adopted for 2024, Charles River has further increased our focus on risk and compliance through the development and adoption of an enhanced, further comprehensive and cross-functional NHP Supplier Risk Management Process, targeting all NHP suppliers and augmenting our standard supplier risk management process. This robust process more formally brings together internal stakeholders across Charles River to manage and mitigate risks related to the procurement and delivery of NHPs, with defined governance and documented processes, procedures and practices designed to ensure that we partner with trustworthy and ethical suppliers of NHPs.

The enhanced and improved NHP Supplier Risk Management Process transfers oversight to an executive-level *NHP Supplier Governance Council*. Among its principal responsibilities, the NHP Supplier

Governance Council undertakes responsibility for approving NHP suppliers and reviewing any issues or requested exceptions to the NHP Supplier Risk Management Process. At the time of this report, members represented on the NHP Supplier Governance Council include our:

- · Chief Operating Officer
- · Head of Discovery & Safety Assessment
- · Chief Financial Officer
- General Counsel

On an ongoing basis, an *NHP Supplier Working Group* executes the NHP Supplier Risk Management Process, advises the NHP Supplier Governance Council and makes recommendations as needed. At the time of this report, stakeholders represented on the NHP Supplier Governance Council include senior leaders from:

- Finance
- Legal
- · Legal Compliance
- · Corporate and External Affairs
- NHP Operations
- · Strategic Programs
- Procurement

Aligned to a risk-based matrix, this NHP Supplier Risk Management Process applies to the following types of participants in the supply chain (NHP Suppliers):

- NHP farms and resellers
- · NHP brokers and consultants
- NHP transportation providers (air, ground, other)
- NHP customs brokers and freight forwarders
- Other third parties involved with NHP sourcing or delivery (e.g., veterinarians)

The Supplier Risk Management Process applies to both new and existing NHP Suppliers, and includes enhanced controls, monitoring and auditing across the entire NHP supplier lifecycle, including during:

- Identification and sourcing of NHP suppliers
- NHP supplier due diligence
- Review and approval of NHP suppliers
- Contracting with NHP suppliers
- Adverse events involving NHP suppliers
- Payment, renewal and termination of NHP supplier contracts
- Training and awareness

As a part of these enhanced monitoring and audit processes, and consistent with our newly enhanced NHP Supplier Risk Management Process, all NHP Suppliers will be subject to enhanced due diligence, monitoring and auditing across three separate functions of the business — NHP Operations, Legal Compliance and Procurement. The table below illustrates potential areas of review that could be in-scope for NHP suppliers, depending on their risk profile:

### **NHP Operations**

- · Business Overview
- · Permits & Licenses
- Inventory (including requirements of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), production statistics, breeder inventory, stock / commercial stock count)
- Infrastructure (including Environment, Health, Safety and Sustainability, site / personnel security, facilities, staff)
- Animal Care (including animal care and recordkeeping)
- Import, Export and Transportation (including import documentation, farm packing / loading, feed and water, offloading, vehicle inspection, duties)

### **Legal Compliance**

- Compliance Screening (including adverse media, sanctions / watchlists and Public Exposed Persons (PEP) lists)
- Compliance Questionnaire (including business information, financial information, government interaction, compliance with laws, trade compliance, conflicts of interest, compliance certification)
- External Due Diligence Report (including legal / regulatory violations, operational risks, compliance, ethics, sustainability and governance risks, and reputational risks)

### **Procurement**

- Third Party Risk Management (including denied parties / debarment screening, adverse media and litigation monitoring)
- ESG (including sustainability and human rights)
- Insurance (including insurance collection and validation)
- Financials (including financial stability scoring)

For each NHP Supplier, the Supplier Risk Management Process will be repeated in full at least every three (3) years or more frequently based on identified risks and other factors.

Collectively, these measures represent a broad-based, multi-layered, cross-functional approach that includes genetic testing to more certainly confirm parentage (where available), and more frequent supplier visits with enhanced audit procedures. In addition to these measures, Charles River has also agreed to share additional information and data regarding our work with NHPs.

#### **Increased Disclosure**

In talking to our shareholders (and other constituencies) it has become clear that it is important for us to promote greater transparency and disclosure around our NHP supply practices and usage. Accordingly, we have already

begun to increase the amount of disclosure provided in several areas. Examples include:

- This comprehensive annual report on NHP supply to shareholders
- New financial and supply data on NHPs initially provided in the 2023 Third Quarter earnings results call and presentation
- Additional information on NHP country of origin initially provided at the J.P.
   Morgan Healthcare Conference in January of 2024
- Strategic update on NHP supply at J.P. Morgan Healthcare Conference in January of 2024

# **Safety Assessment Study NHPs**

	2020	2021	2022	2023
Charles River Global NHP Usage	14,073	13,654	15,272	10,874

# **Diversification of NHP Supply Chain**

Charles River continues to diversify and secure our NHP supply chain through various supplier relationships. Most significantly, we recently acquired a 90% controlling interest in Noveprim, a highly-regarded NHP supplier in Mauritius. The investment in Noveprim carries benefits beyond simply the supply chain, giving us operational control and direct insight into animal welfare and greater ability to monitor to ensure NHPs are sourced in accordance with applicable laws.

Additionally, we commit to annually disclose when a country of origin exceeds 30% of our globally sourced NHPs. For 2023 we procured > 30% of NHPs globally sourced for use in our DSA segment—but less than 50% – from Cambodia. Other countries from which we import NHPs but that did not meet the 30% threshold in 2023 include, but are not limited to, Mauritius and Vietnam.

# New Approach Methods (NAMs) – Investing in Alternatives

While the broader scientific community recognizes the indispensable need for NHPs for biopharmaceutical discovery and development, Charles River recognizes concerns and shares a vision with many others for finding new and innovative ways to reduce the numbers of animals used in medical research. We are actively innovating toward a future where our industry becomes less reliant on NHPs to discover and develop new medicines and treatments through the pursuit of alternative technology.

Charles River recently announced a new initiative, the Alternative Methods Advancement Project (AMAP), to bring together our research, development, investment, and partnership efforts in this exciting area of development.

AMAP is the centerpiece of fulfilling the company's commitment to the 4Rs - the *Replacement* of animal models, *Reduction* of the use of animal models, *Refinement* of procedures to reduce impact on animals, through an overall lens of *Responsibility* as the industry leader in shaping the future of safe and effective medicines and treatments.

Charles River has invested over \$200 million in the last four years in alternatives, primarily through partnerships, strategic acquisitions, and internal investments. Currently, we or our partners are actively developing, investing in, and partnering with companies pursuing new approaches such as:

- · Al and Biosimulation
- · Digital technologies
- Data, mathematical and computational models (Virtual Control Groups)
- In Vitro and In Silico methods
- Organs on a chip
- · Diagnostic imaging and 3D modeling



For 2023 we procured >30% of NHPs globally sourced for use in our DSA segment– but less than 50% - from Cambodia. Other countries from which we import NHPs but that did not meet the 30% threshold in 2023 include, but are not limited to, Mauritius and Vietnam."

Recent developments include Charles River's introduction of animal-free Endosafe® Trillium $^{\text{TM}}$ , a synthetic alternative replacement for LAL. LAL is derived from the blood of the Atlantic Horseshoe Crab and used in manufacturing quality-control testing products to detect endotoxins; a next-generation sequencing (NGS) service developed in partnership with PathoQuest S.A.S, which provides superior detection of viral contaminants in biologics compared to animal testing; and, the introduction of PathogenBinder $^{\text{TM}}$ , a novel testing method for detecting pathogens without the use of a sentinel animal, reducing the need for approximately one million research models annually.

Charles River has also formed a strategic partnership with Valo Health, a technology company with an integrated Al-based platform addressing novel target discovery, molecule design and clinical trial design, blending their expertise in science and Al-powered human-centric data and computation to reshape the entire preclinical drug discovery process. The first development of this partnership is Logica™, a collaborative offering in which Charles River clients can experience the benefits of Al-augmented small molecule discovery and design leading to de-risked preclinical candidates via accelerated programs. The predictive models used during a Logica™ program offer the potential for fewer iterative design cycles and fewer sub-quality molecules being assessed in animal models, thus reducing the need for animal models in these cases.

Additionally, Charles River also uses its voice to support the evaluation and advocacy of regulatory acceptance of alternative models to modify the reliance on NHPs where scientifically appropriate.

#### **On Zoonotic Disease Concerns**

In the course of shareholder consultations, we have also determined it useful that we address the issue of zoonotic disease, which are infections potentially spread between people and animals. After a global pandemic, we understand that there are concerns about the spread of disease. Charles River takes the health of our research animals, our employees, and the general public very seriously and has numerous safeguards in place to protect them. In the context of biomedical research, these issues are commonly recognized as the alarmist claims of animal rights activists and largely from where these concerns emanate today.

Our facilities are highly regulated and robustly designed to prevent the transmission of any zoonotic disease. All NHPs imported into our quarantine facilities first undergo a quarantine in the country of origin. The pre-export quarantine includes several pathogen screens and a thorough physical exam conducted by veterinarians. In some cases, Charles River veterinarians help to conduct this pre-export screening. NHPs must meet or exceed the health regulations of the exporting country, the importing country and Charles River's contract specifications in order to be eligible for export. Imported animals are then further quarantined in our quarantine facilities as regulated by

government agencies and retested to ensure they meet both the government mandates and Charles River's own specifications for pathogens and health of the animals.

In the United States, as described above, every NHP must clear a comprehensive quarantine period in the country of origin. Upon arrival in the US, the NHPs then go through a second minimum 31-day quarantine period where they go through additional tests prior to release by the Centers for Disease Control and Prevention (CDC).

In the U.S., quarantine facilities are licensed and permitted by the CDC. Prior to issuing permits, the CDC conducts a thorough and complete inspection of the site and reviews and approves all procedures and processes conducted onsite. After becoming a CDC-approved site, there is a bi-annual permit renewal process, as well as annual visits to maintain permits. In addition, the CDC can conduct inspections at any time. As confirmed by the CDC in a recent Wall Street Journal article<sup>1</sup>, no member of the public has ever contracted a zoonotic disease from a CDC regulated quarantine facility, including Charles River facilities.

Besides importing animals into the U.S., Charles River also imports animals to Canada and Europe. In each case we follow the same practices regarding pre-export quarantine in the source country, import into facilities meeting the country's standards and health testing that meets both governmental and Charles River requirements.

#### Governance

It is clear to us that shareholders are also keenly interested in our internal governance processes around these issues, including Board and management oversight responsibilities and involvement and responsibility in developing, implementing, and complying with our processes and procedures. Over the past few years, we have augmented our previously strong oversight structure as follows:

- In June 2023, we established a new committee of our Board the Responsible Animal Use Committee (RAUC). The RAUC responsibilities include to:
  - Review, evaluate and advise the Board and Company management regarding the Company's impact on responsible animal utilization.
  - Review, evaluate and advise the Board and Company management, including as necessary in coordination with the Science & Technology Committee of the Board, regarding the Company's progress in developing, investing in and/or acquiring the scientific and technological resources and expertise required to appropriately reduce the impact of animals in Company operations, including assessing the risks and benefits associated with the underlying methods and technologies.

<sup>&</sup>lt;sup>1</sup> Subbaraman, Nidhi. "How One Texas County is Fighting 43,000 Monkeys." Wall Street Journal, January 2,2024.

- Review, evaluate and advise the Board on the Company's efforts to ensure effective governance and oversight of responsible animal utilization practices and operating standards of care to foster the continuous improvement of such practices; and
- Review, evaluate, and make recommendations to the Board and Company management on the Company's internal and external stakeholder messaging (including coordination and dialogue with industry groups and associations) in order to more fully, transparently and accurately convey the Company's commitment to responsible animal utilization, contributions to the research community with respect to alternative and innovative approaches to reduce the impact of animals in research, and implementation of the 4Rs (Replacement, Reduction, Refinement, and Responsibility).
- We maintain a long-standing Science & Technology Committee of our Board, which works collaboratively with the RAUC, particularly on reviewing, evaluating and advising on our investments in alternatives.
- In 2023, we created the management-level Office for Responsible
   Animal Usage (ORAU) to further enhance oversight of responsible animal
   utilization and reduction practices, and operating standards of care and to
   review, assess and implement alternate technologies.

 As discussed above, in the past year we enhanced our NHP Supplier Risk Management Process by creating a more robust NHP Supplier Risk Management Working Group and new NHP Supplier Governance Council.

These structures, together with our general approach to enterprise risk management, collectively provides comprehensive oversight of all NHP supply related issues relevant to Charles River.

#### Conclusion

We believe this report provides an in-depth view for shareholders of the extensive processes, procedures, and practices Charles River Laboratories has already implemented and, with respect to our NHP supply chain, is investing in for the future. We take our responsibilities to all stakeholders seriously and strive to fully meet the expectations of all who rely on our Company to perform its vital mission.

We look forward to continuing to engage shareholders and other stakeholders on this topic and the importance of biomedical research in the future so that we can continue to help bring new breakthrough medicines, treatments and vaccines to patients worldwide who need them.

