

**Arcturus Therapeutics Holdings, Inc. (ARCT)****SDG Universe:** SDG 3: Good Health & Well Being**Sector:** Biotechnology**Employees:** 170+**Regions:** Arcturus Technologies is headquartered in San Diego, California, US. They have partnered with companies in multiple countries including the United States, Austria, Japan, and Germany.

OVERVIEW Arcturus Therapeutics Holdings Inc is an RNA medicines company focused on opportunities in rare diseases with a current focus on liver and respiratory diseases.

Arcturus Therapeutics is a leading clinical-stage, messenger RNA medicines company focused on the discovery, development, and commercialization of therapeutics for rare diseases and vaccines.

- Founded by Joseph Payne and Pad Chivukula in 2013.
- Company operates in the segment of research and development of medical applications for nucleic acid-focused technology. The product pipeline of the company includes LUNAR-OTC, LUNAR-CF, and LUNAR-COV19.

E / In the environmental dimension, Arcturus Therapeutics faces lower risks as its focus is on biopharmaceuticals, which have a negligible environmental impact. Nonetheless, the company has not yet demonstrated a robust environmental framework. Their risk exposure is partially reduced as it is a small-sized company which mainly operates in countries with high regulatory standards.

- 100% of revenues come from business lines with relatively low toxic emissions and waste intensities according to MSCI
- Reporting covers some sustainability issues such as staff related topics, supply chain management, society, business ethics, customer and product responsibility to a very limited extent

S / Arcturus focuses on research, development, and innovation in the field of biotechnology and pharmaceuticals, improving the quality of life for patients suffering from various diseases, including rare and life-threatening conditions. Their work directly contributes to social well-being by addressing unmet medical needs. It also has certain social initiatives and responsibilities as part of its corporate ethos.

- **Pandemic Response:** Arcturus was actively involved in the global effort to combat the COVID-19 pandemic. They had been working on developing an mRNA-based COVID-19 vaccine candidate along with a booster, which proved to demonstrate initial effectiveness against the virus. This initiative aligns with the company's social responsibility to contribute to public health and address a global crisis.
- The majority of company operations are in markets that do not have sizeable underserved populations

MEASURES & MILESTONES

Founded joint venture in 2021 with Axcelead for domestic mRNA vaccine and therapy manufacturing

Improved GHG Intensity by **78.8%** in 2022

Total GHG Emissions of **25.50 MT CO2** (2022)

0% of company operations have exposure to fossil fuel sectors

Included in **152 funds** classified as Article 8 by the EU SFDR



- Arcturus has shown a strong commitment to ethical conduct in all their research, development, and business operations. This commitment includes adhering to high ethical standards in clinical trials, research ethics, and corporate governance.

G / Regarding business ethics, the company's code of conduct addresses some issues in varying degrees of detail and also provides measures to ensure compliance with the code (e.g., a confidential and anonymous whistleblower channel).

- Female Directors: 25%
- Independent Directors: 75%
- As of March 24, 2023, Arcturus owns over 305 patents and pending patent applications including 41 U.S. patents, 33 pending U.S. patent applications, 10 pending international applications under Patent Cooperation Treaty (“PCT”), 100 foreign patents and 121 pending foreign patent applications, all related to the compositions of matter, methods of use, and manufacturing/drug product formulations.
- Ernst & Young (EY) has been selected as the independent auditor for Arcturus Technologies' ESG initiatives, reinforcing the company’s commitment to transparency and accountability. EY's rigorous assessment and verification processes ensure that Arcturus’ data and company reporting align with best practices and industry standards, providing stakeholders with reliable information regarding sustainability efforts and governance practices.
- Key Policies: Code of Business Conduct and Ethics, Audit Committee, Compensation Committee, and Nominating & Corporate Governance Committee Charter are available on company website

CASE STUDY

Initiated Dosing of its COVID-19 STARR™ mRNA Vaccine Candidate, LUNAR-COV19 (ARCT-021) in a Phase 1/2 study

- In Phase 1, escalating doses will be administered as a single injection to younger adults aged 21 to 55 years old. Based upon the safety, immunogenicity and T-cell response data from this group, dose regimens will be selected for further evaluation in Phase 2 which includes cohorts in younger adults and older adults aged 56 to 80 years old.
- ARCT-021 preclinical data has shown highly promising results with 100% seroconversion for neutralizing antibodies after a single administration using a very low 2 µg dose. Neutralizing antibodies continued to increase for 60 days after dosing.
- The ARCT-021 vaccine candidate is devoid of viruses and does not utilize viral vectors or adjuvants. ARCT-021 utilizes Arcturus’ self-transcribing and replicating (STARR™) mRNA technology and is delivered with Arcturus’s proprietary LUNAR® lipid-mediated delivery system.

FUTURE ROADMAP Arcturus Technologies has a promising future based on the company's strong foundation and commitment to ESG principles. Their focus on biotechnology and pharmaceuticals minimizes environmental risks, and they operate primarily in regions with robust regulatory standards, reducing exposure to environmental concerns. With a solid track record in addressing unmet medical needs and a focus on responsible corporate citizenship, Arcturus Technologies holds promising prospects for investors seeking a socially responsible and innovative investment opportunity.



BLOOMBERG

S&P Global ESG Rank: 53 <i>0-100, 100 is better</i>	ISS Quality Score: 9 <i>1-10, 1 is better</i>
Sustainalytics Risk Score: 0 <i>0-100, 0 is better</i>	CDP Climate Score: n/a <i>1-8, 8 is better</i>
Bloomberg ESG Disclosure: 31.78 <i>0-100, 100 is better</i>	MSCI Rating: A <i>AAA is better</i>

RATING STATUS Arcturus Therapeutics has been upgraded to 'A' from 'BBB' via MSCI.

- Per MSCI: “Our analysis of accounting practices in the Governance assessment no longer includes key metrics derived from accounting ratios. Our latest analysis indicates limited risks related to the company’s accounting practices compared to global peers, which is a key contributor to the upgrade. Also, we note significant votes against only one director (vs. two in 2021) at the latest AGM (FY 2022); this may indicate improved shareholder satisfaction. The company’s business ethics practices remain robust.”

SOURCES: Public Filings, Company Website & Materials, Bloomberg, ISS, MSCI, Factset