Responsible Use of Artificial Intelligence

Overview

Alnylam is a biotechnology company that uses RNA interference (RNAi) to develop innovative medicines for rare, specialty, and select prevalent indications. We utilize artificial intelligence (AI) to enhance our capabilities and accelerate our ability to bring new medicines to the patients who can benefit from them. We use various forms of AI across our business with clear human oversight and are committed to the quality, safety, data privacy and security of our AI applications ensuring that they adhere to our ethics and compliance standards and policies.

Governance and Oversight

Alnylam has established a cross-functional, internal governance committee to oversee the adoption and use of AI within the company. The committee consists of representatives from various functions and departments, such as research, development, corporate communications, marketing, legal, compliance, privacy, IT, regulatory affairs, and data science. The committee is responsible for setting strategic direction, reviewing and approving AI projects, ensuring alignment with our values and policies, and monitoring the performance and impact of our AI applications.

Alnylam has also established and communicated its policy on the use of AI, which defines the scope, principles, roles and responsibilities, and governance processes for AI within the company. The policy provides guidance on how to identify, assess, and mitigate the risks and challenges associated with AI, such as IP protection, data quality, bias, transparency, explainability, privacy, compliance, security, and ethics. The policy also directs employees who use AI to safe and reliable alternatives to public, non-private technologies, such as open-source tools, platforms, and data sources, that may not meet our standards and expectations.

Guiding Principles

Alnylam follows a set of guiding principles for the use of AI, which are aligned with our core values and reflect our commitment to the patients, communities, and stakeholders we serve. These principles are:

- **Good data management principles and practices, including data integrity.** We aim to ensure that the data we use for AI is accurate, complete, relevant, and reliable. We follow best practices for data collection, storage, processing, analysis, sharing and deletion. We respect the ownership, consent, and rights of data providers and protect the confidentiality and privacy of data subjects.

- **Human in the loop.** We recognize that AI is a tool to augment and enhance human capabilities, not to replace them. We ensure that there is always a human in the loop, who is responsible for the use and oversight of AI applications. We also ensure that the (human) users of AI applications make or review key decisions/AI outputs, have the ability to override AI outputs, and are empowered to make informed decisions and to provide feedback and input.

- **Information security and confidentiality.** We protect the security and confidentiality of our AI applications and the data they use and generate. We use appropriate technical and organizational measures to prevent unauthorized access, use, disclosure, modification, or destruction of our AI systems and data.

- **Data privacy and confidentiality.** We respect the privacy and confidentiality of the individuals and entities whose data we use and generate for AI. We comply with applicable laws and regulations and internal standards and policies on data privacy and confidentiality. For more details on how Alnylam protects your privacy, click here.

- **Responsible and ethical AI.** We use AI in a way that is ethical, fair, transparent, and accountable. We ensure that our AI applications are aligned with our mission, vision, and values and that they do not cause harm, or result in discrimination or injustice, to the patients, communities, employees, and stakeholders we serve. We strive to make our AI applications explainable, understandable, and traceable and to disclose the limitations, uncertainties, and assumptions of our AI models and outputs.

- **Transparency.** We strive to be as transparent as possible about our use of generative AI technologies. Whenever AI-generated content is utilized, we provide clear and prominent disclaimers to inform users, customers, and partners of our use of AI.

- **Continuous improvement.** We regularly evaluate and enhance our governance frameworks as generative AI capabilities rapidly evolve to ensure responsible innovation is aligned with our AI principles.

- **Diversity, non-discrimination and fairness.** We strive to avoid unfair bias when AI products and services are designed and used. We make sure that the algorithms we use are not biased (e.g. using an inadequate data set) while conceived with consideration for the whole range of human abilities, skills and requirements.