



Bayer Principles for Responsible Artificial Intelligence

Artificial intelligence (AI) offers significant opportunities to support Bayer's mission "Health for all, Hunger for none" to improve health and enable sustainable food systems. Bayer places particular emphasis on patient safety, patient experience, and public trust in its healthcare operations, as well as on farmer welfare, agronomic reliability, and trust in AI-supported decisions - all upheld throughout the AI lifecycle.

Bayer is committed to using AI in a responsible, human-centered, and trustworthy manner. In line with our responsibility as a life-science company, these AI Principles are grounded in respect for human dignity, the prevention of harm, and the responsible stewardship of scientific and technological innovation. They define the ethical framework that guides how Bayer develops, deploys, and uses AI across diverse applications and geographies. Bayer supports the implementation of these principles through internal governance structures for the responsible use of AI and through access to interdisciplinary and independent ethical expertise, including engagement with our external Bioethics Council.

The principles are informed by internationally recognized frameworks for responsible and trustworthy AI, including the OECD AI Principles, the EU's Trustworthy AI guidance, and relevant regulatory developments such as the EU Artificial Intelligence Act.

1. Human-Centricity and Human Control

We are guided by the conviction that AI should be developed and used as a tool that serves people, respects human dignity, personal autonomy, supplements professional judgment, and preserves the ability of individuals to make informed decisions. AI must remain subject to meaningful human oversight.

- Bayer designs, deploys, and uses AI in a human-centric manner, ensuring appropriate possibilities for human intervention. In contexts where outcomes may materially affect individuals, health, safety, livelihoods, the environment, or critical business decisions, Bayer takes particular care and ensures adequate human oversight.
- Bayer takes technical and organizational measures to mitigate automation bias and to ensure that AI supports, rather than replaces human judgement.
- Bayer ensures appropriate AI literacy among employees involved in the development, deployment, or use of AI, enabling informed judgement, responsible use, and effective human oversight.

2. Accountability and Responsible Governance

We remain accountable for the development, deployment, and use of AI throughout its lifecycle. Responsibility for AI-enabled outcomes always rests with people and the organization, not with the technology itself - particularly where AI may materially affect patients, healthcare systems, farmers, agricultural production, or environmental sustainability. Bayer



seeks to prevent harm arising from the use of AI and applies precautionary and risk-based approaches, especially where potential impacts are uncertain, significant, or difficult to reverse.

- Decisions to use AI are based on careful consideration of benefits, risks, and proportionality in the given context.
- AI-related risks are assessed before and during development or deployment, and appropriate risk management measures are applied.
- Bayer ensures traceability and auditability of AI systems.
- Bayer maintains transparency on ownership and purpose of AI systems and procures appropriate expertise among teams developing, deploying or using AI on technology, responsible usage and business context.
- The internal governance processes to support ethical assessment, escalation, and oversight of AI-related risks include those arising from third-party systems.

3. Transparency and Explainability

We believe that trust in AI depends on transparency and understanding. We therefore strive to make the use of AI visible, understandable, and traceable, particularly where AI may have a significant impact on individuals or society and as required by laws and regulations.

- Bayer makes individuals aware of their interaction with AI.
- Bayer adequately communicates the intended purpose, capabilities, limitations, and risks of AI systems to relevant users, including healthcare professionals and patients, as well as farmers and agricultural practitioners.
- Bayer clearly identifies AI-generated or AI-modified content as required.
- Bayer strives to use explainable AI. If the use of AI may adversely affect individuals, Bayer provides clear and easy-to-understand information about the rationale and decision logic underlying AI-supported outcomes and takes appropriate measures to minimize these risks.

4. Accuracy, Quality, and Fairness

We are aware that inaccurate or biased AI outputs can cause harm, including discrimination, and may also create potential risks to human health and safety. Ensuring reliable and fair AI outputs is therefore essential.

- Bayer assesses AI systems in a risk-based manner to ensure they are suitable for their intended purpose and perform reliably without producing inaccuracies by design.
- Bayer tests AI outputs for appropriate accuracy before use and monitors them throughout the AI lifecycle.
- Bayer uses only data for training, testing, and validation that is relevant, sufficiently representative, and, to the extent possible, accurate and complete for the intended purpose.



5. Privacy and Security

Bayer is committed to protecting personal data, confidential information, and intellectual property throughout the AI lifecycle and to applying security measures proportionate to risk and context of use.

- Bayer uses personal data for AI only where necessary and in line with applicable data protection requirements.
- Bayer safeguards confidential and sensitive information, including intellectual property rights, by taking appropriate measures.

Dedicated security and governance measures are applied to AI systems to address risks related to automation, scale, and misuse.

6. Social and Environmental Well-Being

Bayer recognizes that the use of AI can affect biological systems, livelihoods, and ecosystems in complex, interconnected, and, in some cases, irreversible ways. Guided by this responsibility, we develop and use AI in the context of our mission “Health for all, Hunger for none” to support societal value, environmental responsibility, and sustainable innovation across the life sciences.

- Bayer considers potential long-term social, environmental, and ethical impacts of AI, particularly where AI influences real-world systems such as health, agriculture, or the environment.
- Bayer strives to use AI in ways that support safe, equitable, and resilient practices, with particular care where impacts may disproportionately affect people, communities, or environmentally sensitive systems.

For questions regarding these principles, please contact the responsible Bayer AI Governance function (aigovernance@bayer.com).