Press Release

Launching the Atinary Lab:
The Self-driving Data Factory
in Kendall Square, Cambridge, MA

Atinary Launching its Self-driving Data Factory: The AI-driven Laboratory for High-Quality Data and Molecules Generation

The Atinary Lab will demonstrate cutting-edge AI and self-driving lab technology in collaboration with Takeda Pharmaceuticals.

MENLO PARK, California, and LAUSANNE, Switzerland – November 7, 2024 – Atinary Technologies is excited to announce an expanded collaboration with Takeda Pharmaceuticals, the largest pharmaceutical company in Japan. The launch of the Atinary Lab, the Self-driving Laboratory™, is a groundbreaking leap toward reshaping the future of R&D with AI-driven, automated workflows in drug discovery and advanced chemistry. Atinary Lab will bring to life the unparalleled potential of SDLabs™, Atinary's no-code AI platform, alongside cutting-edge autonomous technology. This project will contribute to setting new standards for tackling complex challenges in life sciences and beyond. The Atinary Lab will be located in Kendall Square, Cambridge, MA.

The Atinary Lab will serve as a demonstration hub, allowing Takeda to experience firsthand the powerful synergies of AI, automation, and robotics in optimizing laboratory workflows to tackle complex challenges, and accelerate R&D. This pioneering lab is more than just a step toward the future of digital R&D: it will generate large, high-quality, reproducible, and machine learning-ready (ML-ready) datasets to continually refine Atinary's algorithms, including large language models (LLM), transfer learning, and multi-fidelity learning. By implementing these

transformative technologies, the Atinary Lab will showcase the lab of the future, equipped to solve some of the most complex challenges in R&D.

This expanded collaboration builds on the initial projects between Atinary and Takeda launched in 2023. The initial results, driven by Atinary's ML algorithms and orchestrated in SDLabs demonstrated increases in yields from under 50% to above 90%, after only 3 closed loop cycles or iterations (link to webinar).

The Atinary Lab will leverage Takeda's expertise to design the workflow and define the lab equipment specifications. Atinary will be responsible for constructing the lab, providing the AI and ML expertise and tools, software engineering resources, and technical talent to integrate robotic platforms and analytic equipment in needed to execute the seamless operation of the self-driving lab.

The lead investor to fund the inaugural Atinary Lab's construction is AgFunder, the deep tech venture capitalist with roots in agriculture, AI, and biology. AgFunder was the lead investor in Atinary's seed round in 2023.

Key Features of the Atinary Lab:

- High-Throughput and Low-Throughput Self-Driving Workflows: Initial case studies focusing various classes of small molecule reaction workflows.
- Self-driving Data Factory: The Atinary Lab will feature AI-driven Design of Experiments (AI-DoE), automated reaction screening, and advanced data analytics, all integrated

seamlessly into automated workflows to generate high-quality, reproducible, and ML-ready datasets.

- Advanced Connectivity: A critical aspect of the Atinary Lab will be connectivity and communication between different hardware and software systems, allowing AI to drive and orchestrate experiments with minimal human intervention.

"The launch of Atinary's Self-driving Lab™ is a significant step forward in demonstrating the lab of the future that can run 24/7. The goal is to produce the datasets and tools needed for exponential R&D that can increase success rates and bring breakthrough molecules and solutions to market much faster," said Dr. Hermann Tribukait, Co-Founder and CEO of Atinary Technologies.

Dr. Adrian Ramirez, Senior Lab Automation Scientist at Takeda, stated that "this technology eliminates the tedious repetitive manual tasks, minimizes human error and biases and maximizes efficiency across complex laboratory workflows. This project positions Atinary and Takeda as leading innovators in the rapidly evolving AI-driven experimentation for drug development. In 10-15 years, I envision that lab scientists will not need to run many experiments anymore."

"The Atinary Lab is designed as a data factory, generating vast amounts of high-quality and AI-ready data to pre-train our advanced AI models. This approach will drastically reduce the number of fine-tuning cycles customers need to run to reach optimal performance", said Dr. Loïc Roch, Co-Founder and CTO of Atinary Technologies.

Manuel Gonzalez, Partner at AgFunder further stated that "Atinary is revolutionizing R&D with its AI-driven automation and pioneering Self-driving Lab™ technology. By building a fully Self Driving Lab™, Atinary is taking innovation to new heights, streamlining complex workflows, and unlocking unparalleled possibilities in materials and drug discovery. It's inspiring to be part of a journey that isn't just pushing the boundaries of what's possible, but actively redefining them."

About Atinary Technologies

Atinary offers AI technology solutions that revolutionize science and R&D with the goal of accelerating the discovery of breakthrough molecules for a healthier and sustainable future for everyone. The sweet spot applications of Atinary's no-code AI platform and self-driving labs™ technology are in formulation, catalysis, and synthesis. Our clients include pharma, biotech, chemicals, and climate tech leaders, among others. Atinary's vision is to transform R&D for the good of society. For more information visit us at https://atinary.com/ and on Atinary's Linkedin page.

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