GNQ Insilico's AI-Driven Digital Twin Platform Shows Promising Results in First Virtually Simulated Clinical Drug Trial

- *GNQ Insilico's ("GNQ") proprietary genomics-driven platform is leveraging Artificial Intelligence (AI) and Quantum Computing technologies to create "intelligent digital twins" of human patients that can mimic howa drug will interact with an individual patient's unique biology, down to the cellular level.*
- *GNQ's platform has demonstrated success in synthesizing digital twins of human patients.*
- *Additionally, GNQ was able to simulate the effects of a drug on these digital twins.*
- *The results highlight howgenomics and AI can be used by the pharmaceuticals and life sciences industries to improve the efficiency of clinical trial designs for newdrug development.*

Vancouver, British Columbia--(Newsfile Corp. - June 18, 2024) - Trenchant Technologies Capital (CSE: AITT) (OTC: AITTF) (FSE: 5730) "Trenchant" or "the Company"), is pleased to announce that its portfolio company GNQ Insilico ("GNQ") has demonstrated promising results in synthesizing digital twins of human patients, and simulating the effects of an infertility drug on these digital replicas using its proprietary AI-driven platform.

Applications of Digital Twins in Drug Discovery and Development

In the healthcare industry, digital twins are an emerging technology that has the potential to advance patient care and personalized medicine. Medical digital twins are computer-based virtual models of living and non-living entities which can range from an individual human patient to organs, tissue cells, neural networks, micro-environments, or entire populations. Rather than 3D models, medical digital twins are dynamic virtual replicas of real-life entities and processes, continually interacting with and adapting to real-time data and predicting corresponding future scenarios within a complex system, using AI and quantum computer technologies.

Medical digital twins have the potential to significantly improve the drug discovery and drug development process by improving the efficiency, efficacy and outcome of clinical trials. Currently, the average new drug experiences a 90% failure rate[1] during clinical trials, while the average cost to bring a new drug to market is estimated at between $161 million - $1.8 billion (fully capitalized costs inclusive of failures)[2]. The average timeframe for bringing a typical new drug to market, from discovery to FDA approval, is between 10 - 15 years[3].

Significant improvements in drug discovery and development can be made possible through "in silico" drug simulations using digital twins, by mimicking how a drug will interact with an individual patient's unique biology, down to the cellular level. This could assist pharmaceutical companies in better designing and optimizing clinical trial protocols by enabling them to more accurately predict how these drug compounds will behave prior to human trials, thereby reducing costs and failure rates.

GNQ's Virtually Simulated Clinical Trial

GNQ Insilico simulated the pharmacokinetics and pharmacodynamics of an existing infertility treatment on thousands of digital twins, spanning diverse genetic backgrounds and health profiles, that were synthesized using its platform. GNQ's AI optimizer then analyzed the simulated outcomes to identify optimal dosing strategies tailored to each digital twin's characteristics, accounting for factors like genetics, epigenetics, and environmental exposures.

Sudhir Saxena, CTO of GNQ Insilico commented: *"Human clinical trials are often hindered by variability in howpatients respond to drugs. Our AI-driven digital twins platform will enable us to better optimize the trial design for precise patient subpopulations, before ever running an expensive clinical trial."*

Two of GNQ's team members, in collaboration with other technologists from leading organizations, also co-authored a recently published paper on a related subject, which illustrates how quantum computing may be leveraged to optimize clinical trial design. To learn more, read the paper: '*Towards Quantum Computing for Clinical Trial Design and Optimization: A Perspective on NewOpportunities and Challenges*'.

About GNQ Insilico

GNQ Insilico is an AI-biotechnology company pioneering the development and application of next-generation artificial intelligence capabilities to accelerate therapeutic research, clinical development, and individualized patient care. For more information, visit www.gnqinsilico.com.

About Trenchant Technologies Capital

Trenchant Technologies Capital (CSE: AITT) is an investment issuer focused primarily on seeking investment in companies introducing novel technologies, including Artificial Intelligence and Quantum Computing, to traditional business models that are due for disruption. Trenchant's team undergoes a rigorous due diligence process to identify companies led by seasoned management teams that are strong candidates for acquisition or an initial public offering (IPO).

In May 2024, Trenchant Technologies Capital acquired a 20% ownership interest in GNQ Insilico from parent company My Next Health Inc. Further, Trenchant holds an option to acquire up to 40% of GNQ Insilico. Learn more here.

ON BEHALF OF THE BOARD TRENCHANT CAPITAL CORP.

Per: *"Eric Boehnke"*
Eric Boehnke, CEO

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Forward-Looking Statements

This news release contains certain "forward-looking statements" within the meaning of such statements under applicable securities law. Forward-looking statements are frequently characterized by words such as "anticipates", "plan", "continue", "expect", "project", "intend", "believe", "anticipate", "estimate", "may", "will", "potential", "proposed", "positioned" and other similar words, or statements that certain events or conditions "may" or "will" occur. These statements, including but not limited to GNQ's ability to successful complete all necessary trials and regulatory approval processes necessary to be in a position to commercialize any of its technologies, including but not limited to its proprietary genomics-driven platform are only predictions. Various assumptions were used in drawing the conclusions or making the predictions contained in the forward-looking statements throughout this news release. Forward-looking statements are based on the opinions and estimates of management of GNQ at the date the statements are made and are subject to a variety of risks and uncertainties and other factors that could cause actual events or results to differ materially from those projected in the forward-looking statements. Trenchant Capital and GNQ are under no obligation, and expressly disclaims any intention or obligation, to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as expressly required by applicable law.

Neither the Canadian Securities Exchange nor its Market Regulator (as that term is defined in the policies of the Canadian Securities Exchange) accepts responsibility for the adequacy or accuracy of this news release.

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[1] Sun, D., Gao, W., Hu, H., & Zhou, S. (2022). Why 90% of clinical drug development fails and how to improve it? Acta Pharmaceutica Sinica B, 12(7), 3049-3062. https://doi.org/10.1016/j.apsb.2022.02.002

[2] Morgan, S., Grootendorst, P., Lexchin, J., Cunningham, C., & Greyson, D. (2011). The cost of drug development: A systematic review. *Health Policy*, *100*(1), 4-17. https://doi.org/10.1016/j.healthpol.2010.12.002

[3] Sertkaya, A., Birkenbach, A., Berlind, A., & Eyraud, J., Eastern Research Group, Inc. (2014). *Examination of Clinical Trial Costs and Barriers for Drug Development*. Assistant Secretary of Planning and Evaluation (ASPE). https://aspe.hhs.gov/reports/examination-clinical-trial-costs-barriers-drug-development-0

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