

Avalon GloboCare Announces Publication Featuring QTY Code Technology in the Official Journal of the American Chemical Society

Findings support utility of QTY protein code as a novel platform to generate water-soluble proteins for wide spectrum of biomedical applications

Reports plans to apply for additional patents related to QTY code applications jointly with MIT

FREEHOLD, N.J., Aug. 08, 2022 (GLOBE NEWSWIRE) -- Avalon GloboCare Corp. (NASDAQ: AVCO), a leading global developer of innovative cell-based technologies and therapeutics, today announced a new publication featuring the Company's QTY protein code technology in *Chemical Reviews*, a top-ranked peer-reviewed scientific journal and the official journal of American Chemical Society (journal Impact Factor is 72). The publication, entitled "*Protein Design: From the Aspect of Water Solubility and Stability*," focuses on the innovative QTY protein design code—co-developed by Avalon—as a novel platform to generate water-soluble proteins for a wide spectrum of biomedical applications. The Company initially licensed the technology from the Massachusetts Institute of Technology (MIT) and has advanced the platform through a sponsored research agreement with the university.

The "QTY Code" breakthrough technology, developed in 2011 by the laboratory of Dr. Shuguang Zhang, Ph.D., of MIT's Media lab in Boston, MA, is a protein-design platform that can turn difficult to work with water-insoluble transmembrane receptor proteins into water-soluble proteins, enabling their potential use in many clinical applications, including drug development.

The publication provides a comprehensive review of the QTY protein code design platform. Proteins are molecular machines inside of cells that perform the majority of essential biological functions. Proteins need to maintain their correct 3-dimensional structure for human health, to perform their functions. Well-known human disorders are related to misfolding of proteins that result in their poor solubility, stability, and function. A better understanding of the protein folding process is necessary for development of therapies for diseases involving protein misfolding.

The QTY code design approach may have the potential to facilitate the 1) development of important drug modalities including monoclonal antibodies, 2) creation of water-soluble proteins from insoluble proteins that are important but difficult to work with drug targets, 3) evolution of computational methods for rational drug design, 4) development of novel

therapeutic targets for pharmaceutical and cellular medicines, and 5) production of other important biomedical applications.

"We are excited to have the technology we developed together with MIT's Dr. Zhang featured in this publication," said David Jin, M.D., Ph.D., President and Chief Executive Officer of Avalon. "Over the past 70 years, there has been rapid advancement in the understanding of how biology works at the molecular level. Our QTY protein design code extends this knowledge, enabling an even more precise understanding and manipulation of protein structures and function. Not only does the QTY code contribute significantly to the knowledge base of an important class of proteins, but we believe it also provides new pathways for further investigation and subsequent applications that were previously unattainable. Importantly, we believe this publication is a validation of Avalon's strategy. We previously licensed patents from MIT related to the use of QTY solubilized membrane proteins to be used as decoy receptors in therapeutics. We subsequently filed additional patent applications jointly with MIT, and plan to apply for more patents with the university related to the QTY protein design technologies."

"As the QTY code method evolves, we expect the construction of new functional proteins will become increasingly easier. Potential applications for these new designs include: (i) novel therapeutics which utilize functional equivalents of native cellular receptors; (ii) integrated vehicles for drug delivery and personalized medicine; (iii) biomimetic sensing platforms with high specificity and diagnostic precision; (iv) biocompatible human-electronic interfaces with molecular level integrations; and (v) functional supramolecular nanomaterials with hyperstability. We hope that these findings can inspire other researchers to explore new methodologies for water-soluble protein design, leveraging our growing portfolio of intellectually property, and develop them into biological entities and biomaterials that can be used in biomedicine to better the health of individuals," concluded Dr. Jin.

About Avalon GloboCare Corp.

Avalon GloboCare Corp. (NASDAQ: AVCO) is a clinical-stage, vertically integrated, leading CellTech bio-developer dedicated to advancing and empowering innovative, transformative immune effector cell therapy, exosome technology, as well as cell therapy related companion diagnostics. Avalon also provides strategic advisory and outsourcing services to facilitate and enhance its clients' growth and development, as well as competitiveness in healthcare and CellTech industry markets. Through its subsidiary structure with unique integration of verticals from innovative R&D to automated bioproduction and accelerated clinical development, Avalon is establishing a leading role in the fields of cellular immunotherapy (including CAR-T/NK), exosome technology (ACTEX[™]), and regenerative therapeutics. For more information about Avalon GloboCare, please visit <u>www.avalon-globocare.com</u>.

For the latest updates on Avalon GloboCare's developments, please follow our twitter at @avalongc_avco

Forward-Looking Statements

Certain statements contained in this press release may constitute "forward-looking statements." Forward-looking statements provide current expectations of future events based on certain assumptions and include any statement that does not directly relate to any historical or current fact. Actual results may differ materially from those indicated by such forward-looking statements as a result of various important factors as disclosed in our filings

with the Securities and Exchange Commission located at their website (http://www.sec.gov). In addition to these factors, actual future performance, outcomes, and results may differ materially because of more general factors including (without limitation) general industry and market conditions and growth rates, economic conditions, and governmental and public policy changes. The forward-looking statements included in this press release represent the Company's views as of the date of this press release and these views could change. However, while the Company may elect to update these forward-looking statements at some point in the future, the Company specifically disclaims any obligation to do so. These forward-looking statements should not be relied upon as representing the Company's views as of any date subsequent to the date of the press release.

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