FOR IMMEDIATE RELEASE

Caris Life Sciences Identifies New Mechanism of Action for an Aptamer with Therapeutic Potential to Treat Non-Hodgkin Lymphoma

Study Presented at the 59th American Society of Hematology Annual Meeting & Exposition

Aptamer C10.36 Triggers RNA “Splicing Chaos” and Cell Death In Vitro

IRVING, Texas, Dec. 11, 2017 – Caris Life Sciences®, a leading innovator in molecular science focused on fulfilling the promise of precision medicine, today announced a data presentation, at the 59th American Society of Hematology (ASH) Annual Meeting & Exposition in Atlanta, demonstrating the identification of a new mechanism of action to treat non-Hodgkin lymphoma (NHL). The company uses its proprietary ADAPT Biotargeting System® to find novel molecules and mechanisms for therapeutic and diagnostic applications.

The study entitled Aptamer C10.36 Reveals a Ribonucleoprotein Complex on the Surface of Non-Hodgkin Lymphoma Cells Providing Candidates for Multi-Target Therapeutics, showed that the single-stranded DNA aptamer, C10.36, specifically binds to heterogeneous nuclear ribonucleoprotein U (hnRNP U), a protein that controls pre-mRNA splicing, which is a highly dynamic process enabling cells to rapidly adjust to changing conditions by creating a range of mRNA variants that encode different proteins. Cancer cells frequently display splicing regulatory factors, such as heterogeneous nuclear ribonucleoproteins on their surface, and show broad dysregulated pre-mRNA splicing. If the splicing machinery is disrupted, it is believed “splicing chaos” may occur leading to cell death. Results of this study showed that C10.36 binding to cell-surface hnRNP U resulted in internalization of the complex, disruption of pre-mRNA splicing and cell death in a subset of NHL cell lines in vitro. The authors concluded that the aptamer, C10.36, binds to hnRNP U and kills NHL cells via a novel mechanism of interfering with pre-mRNA splicing.

“This paper further validates the capabilities of our aptamers to not only identify biomarkers for use in diagnostics and drug development, but to also identify new pathways and therapeutic candidates that impact them. Using the Adapt Biotargeting System, we can create and identify thousands to millions of synthetic molecules and targets simultaneously,” said David Spetzler, M.S., Ph.D., M.B.A., President and Chief Scientific Officer of Caris Life Sciences. “Our next steps are to continue to characterize the breadth of activity of C10.36 across various cancer cell lineages and to prepare for further validation in vivo.”

The ADAPT Biotargeting System is an unbiased profiling platform using a broad library of synthetically-manufactured molecules (aptamers) that bind to a wide range of biological targets and characterize complex biological systems in their native state, enabling them to profile biological samples at a systems-wide scale.
About Caris Life Sciences
Caris Life Sciences® is a leading innovator in molecular science focused on fulfilling the promise of precision medicine through quality and innovation, and the world’s leading immunotherapy diagnostic expert. Caris Molecular Intelligence®, the company’s Comprehensive Genomic Profiling Plus (CGP+) molecular testing service and the world’s leading immunotherapy diagnostic expert, assesses DNA, RNA and proteins, including microsatellite instability (MSI), total mutational load (TML) and PD-L1, to reveal a molecular blueprint to guide more precise and personalized treatment decisions. The ADAPT Biotargeting System™, the company’s revolutionary and unbiased profiling platform, is currently being utilized for drug target identification, therapeutic discovery and development, fixed tissue-based companion diagnostics, blood-based cancer screening and biomarker identification. Headquartered in Irving, Texas, Caris Life Sciences offers services throughout the U.S., Europe and other international markets. To learn more, please visit www.CarisLifeSciences.com.

# # #

Media Inquiries:
The Ruth Group
Kirsten Thomas / Joanna Zimmerman
kthomas@theruthgroup.com / jzimmerman@theruthgroup.com
Tel: +1-508-280-6592 / +1-646-536-7006
Source: Caris Life Sciences