



CordenPharma & pHLIP Announce Strategic Alliance to Develop pHLIP LNP Targeted Delivery Platform for RNA & Gene Therapies

4 January 2024 – Basel / Providence > CordenPharma International (Basel, Switzerland) and pHLIP, Inc. (Kingston, RI) are pleased to announce their strategic alliance to collaborate in developing and commercializing the pHLIP-LNP targeted delivery platform for RNA-based and genetic therapeutics. The alliance will combine CordenPharma's proprietary Lipid NanoParticle (LNP) technology and GMP manufacturing expertise with pHLIP's proprietary pH (Low) Insertion Peptide (pHLIP®) targeted delivery technology and drug development expertise to formulate (pHLIP®) coated LNPs for use by biopharmaceutical companies seeking to deliver mRNA-based and gene therapy payloads. Such payloads can be used to treat cancer, inflammation, and genetic diseases, or employ mRNA strategies for vaccination. The companies believe that their novel pHLIP-LNP platform will greatly enhance the commercial viability and success of many pioneering RNA, DNA and CRISPR therapies. The alliance will also enable CordenPharma and pHLIP to collaborate in developing and manufacturing small molecule drug payloads directly conjugated with (pHLIP®) peptides for biopharmaceutical companies seeking to selectively target their small molecular payloads into cells in acidic diseased tissues. CordenPharma serves as the CDMO supplier in the GMP manufacture of pHLIP® peptides and (pHLIP®) drug conjugates, and the new alliance further builds upon their collaborative efforts in this important field.

Dr. Michael Quirnbach, CordenPharma CEO & President, commented "CordenPharma is proud to participate in this alliance with pHLIP, as it represents a great synergy of cutting-edge technology and lipid, peptide, conjugate and LNP expertise which brings a potentially game-changing delivery platform to the LNP-based drug development field. Our collaboration allows access to effective, precisely targeted LNP delivery of RNA, DNA, and gene therapy payloads across various important therapeutic indications, with an ultimately profound effect on saving the lives of patients."

Dr. Yana Reshetnyak, pHLIP Co-Founder, CEO & President, stated "I am very excited about the potential scientific, medical and commercial benefits of the pHLIP-LNP delivery platform to address large unmet medical needs in the field of RNA and gene therapies. pHLIP® peptides insert across the membranes of acidic cells, including cancer cells, activated macrophages and fibroblasts, to deliver drugs directly into the cytoplasm. pHLIP® drug conjugates are now in clinical trials. Also, prior research has shown that pHLIP® can target a variety of nanoparticles, including lipid nanoparticles, to tumors, where it promotes more efficient intracellular delivery of encapsulated payloads. pHLIP® peptides position LNPs close to the membrane lipid bilayer of a targeted cell, promoting fusion, lipid exchange and cytoplasmic cargo delivery. The range of potential therapeutic cargoes is large, and includes the important directions enabled by RNA delivery. CordenPharma's expertise in formulating and manufacturing LNPs and pHLIP® peptides makes them our ideal partner for this important venture. The University of Rhode Island will continue to be our partner in the development of the pHLIP® platform technology and pHLIP® therapeutics. The pHLIP-LNP delivery platform technology holds tremendous potential for further unlocking the promise of the medical uses of RNA, DNA and CRISPR therapeutics."



[Photo by CordenPharma] Lipid NanoParticle (LNP) Purification Process Development and Scale-up via Tangential Flow Filtration (TFF)

About CordenPharma

CordenPharma is a CDMO partner supporting biotech and pharma innovators of complex modalities in the advancement of their drug development lifecycle. Harnessing the collective expertise of the teams across its globally integrated facility network, CordenPharma provides bespoke outsourcing services spanning the complete supply chain, from early clinical-phase development to commercialization.

With scientific expertise and partnership at its core, CordenPharma provides customers high-value, end-to-end services with a strategic focus on Peptides, Oligonucleotides, customized Lipid Excipients, Lipid NanoParticles (LNPs), sterile Injectables, and the extensive supply of Small Molecules (both Highly Potent and Regular Potency).

The CordenPharma Group is comprised of 12 facilities across Europe and North America. In the 2022 financial year, the organization generated sales of 870 million Euros and had over 3,000 employees.

Please visit [cordenpharma.com](https://www.cordenpharma.com) for more information.

About pHLIP, Inc.

pHLIP, Inc. is a privately held clinical-stage biotechnology company pioneering a peptide-based targeted delivery platform. The family of pH (Low) Insertion Peptides (pHLIP®) comprises a technology that uses the low pH (or high acidity) at the surfaces of cells as a novel biomarker. pHLIP® peptides target cancer, stromal and some activated immune cells simultaneously, leading to synergistic therapeutic effects. Our strategy is to develop and commercialize our own pipeline of pHLIP® Drug Conjugates (PDCs) for imaging and treatment of diseases, and to partner with biopharmaceutical companies for pHLIP® targeted delivery of their proprietary therapeutic payloads.

The Company is currently engaged in a Phase II clinical trial for its proprietary pHLIP® ICG surgical imaging agent for breast cancer and is evaluating therapeutic PDCs for clinical translation.

The pHLIP® platform technology was exclusively licensed from the University of Rhode Island, Yale and the Memorial Sloan Kettering Cancer Center.

Please visit phlipinc.com for more information.

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