Life Sciences Review TOP 10
DRUG DISCOVERY AND DEVELOPMENT
SOLUTIONS PROVIDERS IN EUROPE - 2023

ResoTher Pharma

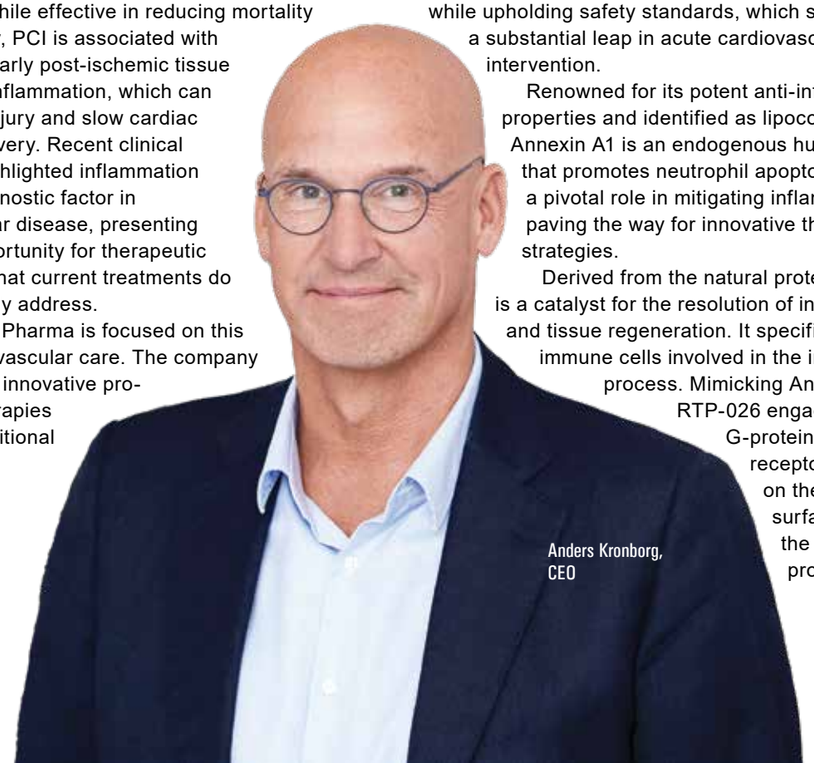
Improving Cardiovascular Outcomes

ResoTher Pharma, a biotechnology firm specializing in critical care cardiovascular interventions, is at the forefront of addressing a significant unmet medical need in the treatment of ST-elevation myocardial infarction (STEMI).

STEMI, a type of myocardial infarction caused by the blockage of a major heart artery, accounts for about 38% of all acute coronary syndromes. It affects approximately7 million individuals annually and is a signifier of broader cardiac pathology in over 4 million people globally. This condition, prevalent in both developed and developing countries, can lead to severe heart damage and complications such as arrhythmias, heart failure, and death.

The preferred treatment for STEMI patients, percutaneous coronary intervention (PCI), involves restoring blood flow to the blocked artery using a stent or balloon. While effective in reducing mortality and morbidity, PCI is associated with risks, particularly post-ischemic tissue reperfusion inflammation, which can exacerbate injury and slow cardiac function recovery. Recent clinical data have highlighted inflammation as a key prognostic factor in cardiovascular disease, presenting a critical opportunity for therapeutic intervention that current treatments do not adequately address.

ResoTher Pharma is focused on this gap in cardiovascular care. The company is developing innovative pro-resolving therapies that offer additional therapeutic benefits to patients. Its research is centered on novel peptide drugs that can modulate the inflammatory response following PCI, thereby improving outcomes for STEMI patients. ResoTher Pharma's commitment extends beyond developing these therapies; it is dedicated to understanding the intricacies of inflammation in cardiovascular diseases. The firm's mission encompasses not just unraveling these complexities but also harnessing inflammation's latent healing potential to provide better patient outcomes.



Anders Kronborg, CEO

A Groundbreaking Solution in RTP-026

ResoTher Pharma's lead candidate, RTP-026, is a peptide-based compound meticulously crafted to modulate the post-myocardial infarction inflammatory response. This groundbreaking compound, developed in collaboration with Queen Mary University of London, has shown promising outcomes in its phase 1 trials. Its standout feature includes curbing inflammation while upholding safety standards, which signifies a substantial leap in acute cardiovascular intervention.

Renowned for its potent anti-inflammatory properties and identified as lipocortin-1, Annexin A1 is an endogenous human protein that promotes neutrophil apoptosis and plays a pivotal role in mitigating inflammation, paving the way for innovative therapeutic strategies.

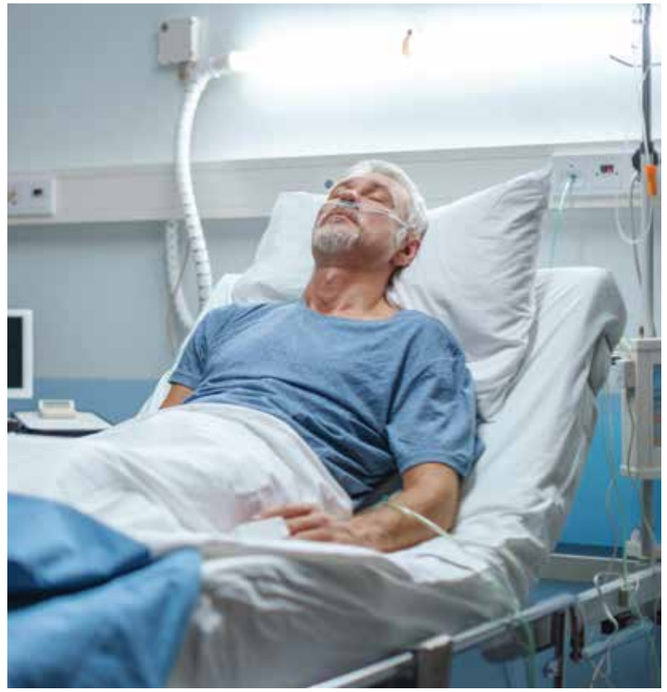
Derived from the natural protein, RTP-026 is a catalyst for the resolution of inflammation and tissue regeneration. It specifically targets immune cells involved in the inflammatory process. Mimicking Annexin A1, RTP-026 engages with a G-protein-coupled receptor expressed on the leukocytes' surface to initiate the tissue repair process and reduce inflammation. This mechanism coordinates various actions, including managing the entry of neutrophils and monocytes to the injured tissue, initiating neutrophil apoptosis to prevent tissue damage and aiding the removal of apoptotic cells through efferocytosis. A pivotal shift in macrophage behaviour towards a pro-resolving phenotype further amplifies its impact.

> *"RTP-026 has triumphantly cleared phase 1 trials, showcasing safety and efficacy. The anticipation swells as we gear up for phase 2A trials commencing in late 2023. Our sights are set on a potential market entry by 2031*

These orchestrated cellular events contribute to resolving inflammation and activating cellular events that support tissue healing. RTP-026 harnesses the body's innate repair mechanisms to significantly reduce the impact of myocardial infarction, paving the way for long-term heart health.

Charting the Path Ahead

ResoTher Pharma uses innovative science to lead the way toward improving patient outcomes in cardiovascular medicine. Its intravenous product, RTP-026, has been refined to perfection despite the resource constraints that continue to provide obstacles to exploring additional compounds in the pipeline.



"RTP-026 has successfully cleared phase 1 trials, showcasing safety and efficacy. The anticipation swells as we gear up for phase 2A trials commencing in late 2023. Our sights are set on a potential market entry by 2031," says Samra Sanni, vice president of drug research at ResoTher Pharma.

This initiative is more than just a scientific pursuit; it is a beacon of hope for people suffering from PCI-related hyperinflammation. ResoTher Pharma has recently won a 2.5-million-euro grant from the European Innovation Council, attracting significant attention from industry leaders who are eager to collaborate and provide transformative solutions. The grant represents more than just financial support; it validates the company's bold pursuit, propelling RTP-026 toward revolutionary advancements in cardiovascular medicine.

"Our focus centres on our Phase 2A lead asset, marking us as a research-centric biotech enterprise. We target major pharmaceutical players, seeking partners or interested parties for collaboration or acquisition of our pioneering product," says Anders Kronborg, CEO of ResoTher Pharma.

Located in Copenhagen, Denmark, the firm's alliance with a pharmaceutical powerhouse is a strategic move and a gateway to accelerate regulatory processes and expand its global outreach. ResoTher's pioneering approach, exemplified by RTP-026, holds the promise of rewriting the narrative for millions battling STEMI.