Enlivex Announces a new publication "Apoptotic cell therapy for cytokine storm associated with acute severe sepsis" in Cell Death & Disease, a Nature Research Journal

- Data show a 90% decrease in mortality with Allocetra™ treatment in a murine cecal ligation and puncture severe sepsis model

Nes Ziona, Israel, July 20, 2020 (GLOBE NEWSWIRE) -- Enlivex Therapeutics Ltd. (Nasdaq: ENLV), a clinical-stage immunotherapy company, today announced the publication of **"**Apoptotic cell therapy for cytokine storm associated with acute severe sepsis" in *Cell Death & Disease*, a *Nature Research Journal*. The published studies were conducted in collaboration with researchers at the Rheumatology and Rare Disease Research Center, The Whohl Institute for Translational Medicine, and the Hadassah-Hebrew University Medical Center.

Preclinical data from the studies demonstrate the ability of Allocetra™ to broadly resolve cytokine storm-associated organ failure and reduce mortality by 90% in a murine cecal ligation and puncture (CLP) animal model of severe sepsis. The CLP model has been proposed to more closely replicate the nature and course of clinical sepsis, as compared to other models. Highlights from the manuscript (www.nature.com/articles/s41419-020-02748-8) include:

- In the CLP model, treatment with Allocetra™ in combination with antibiotics and fluids decreased mortality by 90% when compared to treatment with antibiotics and fluids alone.
- Allocetra™-induced survival benefits in CLP mice were both dose dependent and statistically significant.
- CLP-induced sepsis led to widespread organ failure including in the lungs, heart, liver, and kidneys, all of which were resolved with Allocetra™ treatment.
- CLP-mice saw broad elevation of cytokines and chemokines across multiple immune modulation subsystems that decreased with Allocetra™ treatment.
- A positive effect by Allocetra™ treatment was shown for the first time both in aerobic and anaerobic metabolism of the immune system leading to significant improvement in both mitochondrial respiration and glycolytic reserve.

"We are very pleased with the peer-reviewed publication of these compelling preclinical data, as we believe that they provide important validation for the beneficial and robust effects of Allocetra™ across a broad range of organ systems," said Prof. Dror Mevorach, M.D., Chief Scientific and Medical Officer of Enlivex and lead author of the study. "Importantly, the data are consistent with our previously reported Phase Ib clinical trial results, demonstrating improved survival and early resolution of cytokine storms in severe sepsis patients treated with Allocetra™. Taken together, these clinical and preclinical studies highlight the potential of Allocetra™ to treat not only sepsis, but also similar pathologies associated with cytokine storms and multi-system organ failure, including those associated with severe cases of COVID-19."

ABOUT ENLIVEX

Enlivex is a clinical stage immunotherapy company, developing an allogeneic drug pipeline for immune system rebalancing. Immune system rebalancing is critical for the treatment of life-threatening immune and inflammatory conditions which involve hyper-expression of cytokines (Cytokine Release Syndrome) and for which there are no approved treatments (unmet medical needs), as well as solid tumors immune-checkpoint rebalancing. For more information, visit http://www.enlivex.com

Safe Harbor Statement: This press release contains forward-looking statements, which may be identified by words such as "expects," "plans," "projects," "will," "may," "anticipates," "believes," "should," "would", "could," "intends," "estimates," "suggests," "has the potential to" and other words of similar meaning, including statements regarding expected cash balances, market opportunities for the results of current clinical studies and preclinical experiments, the effectiveness of, and market opportunities for, ALLOCETRA™ programs. All such forward-looking statements are made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. Investors are cautioned that forward-looking statements involve risks and uncertainties that may affect Enlivex's business and prospects, including the risks that Enlivex may not succeed in generating any revenues or developing any commercial products; that the products in development may fail, may not achieve the expected results or effectiveness and/or may not generate data that would support the approval or marketing of these products for the indications being studied or for other indications; that ongoing studies may not continue to show substantial or any activity; and other risks and uncertainties that may cause results to differ materially from those set forth in the forward-looking statements. The results of clinical trials in humans may produce results that differ significantly from the results of clinical and other trials in animals. The results of early-stage trials may differ significantly from the results of more developed, later-stage trials. The development of any products using the ALLOCETRA™ product line could also be affected by a number of other factors, including unexpected safety, efficacy or manufacturing issues, additional time requirements for data analyses and decision making, the impact of pharmaceutical industry regulation, the impact of competitive products and pricing and the impact of patents and other proprietary rights held by competitors and other third parties. In addition to the risk factors described above, investors should consider the economic, competitive, governmental, technological and other factors discussed in Enlivex's filings with the Securities and Exchange Commission, including in the Company's most recent Annual Report on Form 20-F filed with the Securities and Exchange Commission. The forward-looking statements contained in this press release speak only as of the date the statements were made, and we do not undertake any obligation to update forward-looking statements, except as required under applicable law.

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