ContraFect Announces Publication of Paper on Recent Exebacase Data in Antimicrobial Agents and Chemotherapy Journal

Exebacase concentrations below the minimum inhibitory concentration (sub-MIC) demonstrated sustained reductions in bacterial fitness and virulence of Staphylococcus aureus

YONKERS, N.Y., May 31, 2019 (GLOBE NEWSWIRE) -- ContraFect Corporation (Nasdaq:CFRX), a clinical-stage biotechnology company focused on the discovery and development of biologic therapies for life-threatening, drug-resistant infectious diseases, today announced that an article titled "Postantibiotic and Sub-MIC Effects of Exebacase (Lysin CF-301) Enhance Antimicrobial Activity against Staphylococcus aureus" will be published in the June edition of the peer-reviewed Antimicrobial Agents and Chemotherapy Journal of the American Society of Microbiology. Exebacase (CF-301) is a recombinantly-produced lysin (cell wall hydrolase enzyme) with potent bactericidal activity against Staph aureus, a major cause of blood stream infections (BSIs) also known as bacteremia.

The paper describes a series of in vitro studies of pharmacodynamic parameters of exebacase against Staph aureus, including the postantibiotic effect (PAE), postantibiotic sub-minimum inhibitory concentration (MIC) effect (PA-SME), and sub-MIC effect (SME). The study examined how sub-MIC exebacase exposures affect bacterial growth and extend its antimicrobial activity against 14 different Staphylococcus aureus (Staph aureus) strains tested in human serum. The findings demonstrated that sub-MIC exposures to exebacase resulted in aberrant changes in bacterial cell wall structure and inhibition of virulence phenotypes, including biofilm formation. In an animal model of Staph aureus infection, PAE resulted in bacterial growth delays of 19 hours and extended growth delays by 6 hours in the presence of daptomycin. These data suggest that sub-MIC concentrations of exebacase during therapeutic use in addition to standard of care (SOC) antibiotics, may contribute to efficacy via sustained reductions in bacterial fitness and virulence.

“We are pleased to report on these important new observations of the sustained antimicrobial activity of exebacase at sub-MIC concentrations which further underpins the efficacy of exebacase observed in the Phase 2 superiority design study in patients with Staph aureus bacteremia including endocarditis. Data from this study demonstrated that the addition of exebacase to SOC antibiotics has the potential to improve clinical outcomes for patients with Staph aureus BSIs, particularly for those with methicillin-resistant Staph aureus (MRSA), where we saw a 43% higher responder rate in patients treated with exebacase compared to those treated with antibiotics alone," said Cara Cassino, M.D., Chief Medical Officer and Executive Vice President of Research and Development at ContraFect. "We look forward to meeting with the FDA to discuss the results of the exebacase Phase 2 study and our plans for Phase 3, which include focusing on patients with MRSA bacteremia including right sided endocarditis. These are some of the most difficult to treat Staph infections and we believe exebacase has the potential to be the first-in-class new treatment modality for these patients.”

To access the article abstract and latest electronic issue of Antimicrobial Agents and Chemotherapy, please click here.

About ContraFect:

ContraFect is a biotechnology company focused on discovering and developing differentiated biologic therapies for life-threatening, drug-resistant infectious diseases, particularly those treated in hospital settings. An estimated 700,000 deaths worldwide each year are attributed to antimicrobial-resistant infections. We intend to address life threatening infections using our therapeutic product candidates from our platform of direct lytic agents (DLAs), which
Exebacase (CF-301) is a recombinantly-produced lysin (cell wall hydrolase enzyme) with potent bactericidal activity against *Staph aureus*, a major cause of blood stream infections (BSIs) also known as bacteremia. Exebacase has the potential to be a first-in-class treatment for *Staph aureus* bacteremia. It has a novel, rapid, and specific mechanism of bactericidal action against *Staph aureus*. By targeting a conserved region of the cell wall that is vital to bacteria, resistance is less likely to develop to exebacase. In addition, *in vitro* and *in vivo* experiments have shown that exebacase is highly active against biofilms which complicate *Staph aureus* infections. Exebacase was licensed from The Rockefeller University and is being developed at ContraFect.

**Forward-Looking Statements:**

This press release contains, and our officers and representatives may make from time to time, “forward-looking statements” within the meaning of the U.S. federal securities laws. Forward-looking statements can be identified by words such as “projects,” “may,” “will,” “could,” “would,” “should,” “believes,” “expects,” “anticipates,” “estimates,” “intends,” “plans,” “potential,” “promise” or similar references to future periods. Examples of forward-looking statements in this release include, without limitation, statements regarding the Company’s ability to discover and develop differentiated biological therapies for life-threatening, drug-resistant infectious diseases, whether exebacase has potent bactericidal activity against *Staph aureus*, statements made regarding *in vitro* studies of pharmacodynamic parameters of exebacase against Staph aureus, whether sub-MIC concentrations of exebacase during therapeutic use in addition to SOC antibiotics may contribute to efficacy via sustained reductions in bacterial fitness and virulence, whether the sustained antimicrobial activity of exebacase at sub-MIC concentrations further underpins the efficacy of exebacase observed in the Phase 2 superiority design study in patients with *Staph aureus* bacteremia including endocarditis, whether data from the Phase 2 study demonstrated that the addition of exebacase to SOC antibiotics has the potential to improve clinical outcomes for patients with *Staph aureus* BSIs, particularly for those with MRSA, statements made regarding the FDA and plans for Phase 3, whether exebacase has the potential to be the first-in-class new treatment modality for patients with MRSA bacteremia including endocarditis, the Company’s ability to address life threatening infections using its therapeutic product candidates from its DLA platform which includes lysins and amurins and whether lysins are a new therapeutic class of bacteriophage-derived, recombinantly produced, antimicrobial proteins with a novel mechanism of action associated with the rapid killing of target bacteria, eradication of biofilms and synergy with conventional antibiotics, whether the properties of the Company’s lysins will make them suitable for targeting antibiotic-resistant organisms, such as *Staph aureus* and *P. aeruginosa*, whether exebacase has potent bactericidal activity against *Staph aureus*, whether exebacase has the potential to be a first-in-class treatment for *Staph aureus* bacteremia, whether resistance is less likely to develop against exebacase and whether exebacase is highly active against biofilms which complicate *Staph aureus* infections. Forward-looking statements are statements that are not historical facts, nor assurances of future performance. Instead, they are based on ContraFect’s current beliefs, expectations and assumptions regarding the future of its business, future plans, strategies, projections, anticipated events and trends, the economy and other future conditions. Because forward-looking statements relate to the future, they are subject to inherent risks, uncertainties and changes in circumstances that are difficult to predict and many of which are beyond ContraFect’s control, including those detailed in ContraFect’s filings with the Securities and Exchange Commission. Actual results may differ from those set forth in the forward-looking statements. Important factors that could cause actual results to differ include, among others, our ability to develop treatments for drug-resistant infectious diseases. Any forward-looking statement made by ContraFect in this press release is based only on information currently available and speaks only as of the date on which it is made. Except as required by applicable law, ContraFect expressly disclaims any obligations to publicly update any forward-looking statements, whether written or oral, that may be made from time to time, whether as a result of new information, future developments or otherwise.

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