Alopexx Pharmaceuticals' F598 Monoclonal Antibody Binds to poly-*N*-acetylglucosamine (PNAG) on Microbial Surfaces Offering Potential Protective Immunity Against Multiple Pathogens

Structure featured on the cover of the April 6 issue of the Journal of Biological Chemistry

- Clinical Studies in Multiple PNAG Expressing Bacterial Infections Underway -

CONCORD, Mass. April 6, 2018—Alopexx Pharmaceuticals today announced publication of additional data confirming the potential protective immunity offered by its lead monoclonal antibody, F598. The results have been published in the April 6, 2018 issue of the ***Journal of Biological Chemistry*** with the antibody structure featured on the cover**.** In the paper, entitled 'Structural basis for antibody targeting of the broadly expressed microbial polysaccharide poly-*N*-acetyl glucosamine', Gerald B. Pier, Ph.D. Professor of Medicine, Harvard Medical School, Microbiologist, Brigham and Women's Hospital and senior author Paul Ramsland, Ph.D., Vice Chancellor's Principal Research Fellow at the School of Science, Engineering and Health, RMIT University in Melbourne, Australia, delineate the structure of F598 and how it binds to poly-*N*-acetylglucosamine **(**PNAG), a polysaccharide capsule found on many pathogens causing human infections, including several multi-drug resistant microbes. F598, a novel broad spectrum monoclonal antibody, is in clinical development for the prevention and treatment of serious bacterial, fungal and protozoal infections.

"This is the first study to determine the structural basis for this human antibody's recognition of PNAG, which depicts its ability to bind to many microbial pathogens," said Dr. Pier. "Of the microbial carbohydrate-binding antibodies being investigated for clinical use, F598 is unique in its ability to target a wide range of pathogens including Gram negative and Gram positive bacteria, along with fungi and protozoan parasites.

"Our monoclonal antibody F598 was shown to mediate protective immunity against PNAG-producing bacteria such as *S. pneumoniae* and *S. aureus*, other organisms causing bacterial meningitis, and a wide range of additional infectious agents, including antibiotic-resistant organisms. With the widespread use of antibiotics leading to a rise of antibiotic-resistant organisms, it is envisioned that F598 could provide immediate protective immunity to patients at a significant risk of developing a serious infection, thereby reducing or avoiding the need for

antibiotics," said Hal Landy, M.D., Chief Medical Officer at Alopexx. "We are currently evaluating the clinical activity of F598 in treating and preventing a variety of infections."

About F598

F598, the Company's lead compound, is a fully human monoclonal IgG1 antibody directed against PNAG, an antigenic target that has the potential to serve as an alternative to antibiotics in the prevention and treatment of a wide range of serious bacterial infections. F598 has completed a phase I trial where it was found to be well-tolerated and safe with a 20-30 day half-life following a single administration. Alopexx is now performing and planning a number of proof-of-concept studies. Additional published and presented animal data indicate potential efficacy against a variety of infectious situations driven by a diverse array of microbes, including diseases thought to have multi-microbial causes such as colitis and graft versus host disease. Alopexx Pharmaceuticals obtained the rights for all antibodies developed against PNAG by Dr. Gerald B. Pier and colleagues at Brigham and Women's Hospital and Harvard Medical School.

About Alopexx Pharmaceuticals

Alopexx Pharmaceuticals, part of the Alopexx Enterprises portfolio of companies, specializes in the development of promising new alternatives for the treatment and prevention of staphylococcal and other serious bacterial infections. For more information please visit www.Alopexx.com.

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