PRAGMA THERAPEUTICS

PRESS RELEASE

PRAGMA THERAPEUTICS AWARDED FIRST PRIZE AND £300,000 FROM UK CHARITY ACTION ON HEARING LOSS TO DEVELOP NEW DRUGS TO TREAT HEARING LOSS

ARCHAMPS, France, April 25th 2016. PRAGMA Therapeutics SAS, a leading biopharmaceutical company in the field of stress and trauma-related disorders, announced today that it has received a Translational Research Initiative for Hearing (TRIH) award from the charity Action on Hearing Loss to develop novel small molecule drugs for the treatment of Sensorineural Hearing Loss in both civilian and military patient populations. To this end, PRAGMA has established an international collaboration with world-renowned Professor Robert Frisina, Director of the Global Center for Hearing & Speech Research at the University of South Florida, and principal investigator to perform efficacy studies in translational animal models of hearing loss.

Hearing loss is by far the most prevalent inner ear disorder; the World Health Organization estimates that 500 million people worldwide have mild to moderate to severe hearing loss. Hearing loss may develop slowly over many years or set in acutely, e.g. following some noise or head trauma. It may be either due to insufficient sound conduction from the outer to the inner ear or much more frequently to damage to the hair cells and neurons in the cochlea or to the auditory nerve ("sensorineural hearing loss"). Chronic hearing loss may have serious impacts on professional and personal lives, e.g. through reduced job performance and earning power, impaired memory and ability to learn new tasks or reduced alertness and increased risk to personal safety.

Action on Hearing Loss has awarded PRAGMA Therapeutics £300,000 over 3 years to fund the discovery and development of small molecule allosteric modulators of the metabotropic glutamate receptor type 7 (mGlu7) and preclinical proof-of-concept studies in two specific disease conditions: noise-induced hearing loss and presbycusis.

'We are grateful to Action on Hearing Loss to be the unique recipient worldwide of this prestigious award, extending our leading position in mGlu7 research and development into hearing loss field' commented Sylvain Celanire, CEO of PRAGMA Therapeutics. 'This second funding awarded to PRAGMA by the charity is a proof of our common commitment of developing innovative and groundbreaking treatments addressing age-related and noise-induced hearing loss, the highest unmet medical needs in the otic disorder field without a single drug approved as of today' added Sylvain Celanire.

The objective of the project team is to demonstrate oral proof-of-concept and identify biomarkers in animals, and to select a preclinical candidate which will be capable of further development into a drug.

'PRAGMA has built a fast-moving proprietary pipeline of unique drug-like molecules targeting mGlu7 receptor with an oral proof-of-concept already demonstrated in a translational model of post-traumatic stress disorders. Thanks to a first Flexigrant award granted by Action on Hearing Loss, our lead molecule PGT117 has already shown sustained exposure in the inner ear after oral administration, a major advantage compared to current investigational drugs in clinical development using invasive trans-tympanic injections' commented Guillaume Duvey, CSO of PRAGMA Therapeutics.

Professor Robert Frisina, Director of the Global Center for Hearing & Speech Research, added 'Millions of persons worldwide suffer from age-related or noise induced hearing loss. Yet we cannot obtain over-the-counter, or prescription medications to prevent or treat hearing loss. Through the generous support of Action on Hearing Loss, our international collaboration with PRAGMA can facilitate breakthrough progress in this field. We are particularly excited about carrying out this particular project, as it builds upon our previous gene discovery report regarding the importance of the GRM7 gene's role in the progression of human age-related hearing loss'

Action on Hearing Loss runs the world's largest donor-supported hearing research programs, dedicated to funding research into better treatments and cures for hearing loss and tinnitus.

Dr Ralph Holme, Head of Biomedical Research at charity Action on Hearing Loss, said: 'There is an urgent need for effective treatments to prevent and treat hearing loss - a condition that affects as many as one in six people in the UK and all too often isolates people from friends and family. In bringing together the drug discovery expertise of PRAGMA Therapeutics and the hearing research expertise of the Global Centre for Hearing and Speech Research, our new project aims to bring the development of urgently needed treatments a step closer.'

About Action on Hearing Loss

Action on Hearing Loss helps people to confront deafness, tinnitus and hearing loss to live the life they choose. Action on Hearing Loss enables them to take control of their lives and remove the barriers in their way. Action on Hearing Loss gives people support and care, develop technology and treatments, and campaign for equality. For more information about Action on Hearing Loss's Biomedical Research programmes, go to www.actiononhearingloss.org.uk/biomedicalresearch

ACTION ON HEARING LOSS
A national charity since 1911

About Global Center for Hearing & Speech Research (GCHSR)

GCHSR is an internationally recognized center for research and development at the University of South Florida, advancing our understanding of the characteristics and biological causes of hearing loss and deafness; providing novel bases for new drug, technological and behavioral interventions and treatments: www.gchsr.usf.edu

About PRAGMA Therapeutics

PRAGMA Therapeutics is a French pharmaceutical company discovering and developing innovative medicines acting at a unique biological target for the treatment of patients suffering from severe debilitating CNS disorders such as Post-Traumatic Stress Disorder and hearing loss. PRAGMA aims at preventing and treating both civilian and military populations with an unprecedented mechanism-of-action supported by strong scientific rational and genetic evidences. For more information, please go to www.pragmatherapeutics.com.