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Ohr Pharmaceutical Presents Biodistribution and Safety Data on Squalamine Eye Drops at ARVO 2012 Annual Meeting

Key Study Demonstrates Therapeutic Potential for Treating Wet-AMD

NEW YORK, NY -- (Marketwire) -- 05/07/12 -- Ohr Pharmaceutical Inc. (OTCBB: OHRP) announced today that it presented a poster presentation titled "A Novel Eye Drop Formulation of Squalamine For Exudative AMD: Evaluation Of Ocular Distribution And Ocular Safety In Rabbits" on Sunday, May 6, 2012 at the Association for Research in Vision and Ophthalmology (ARVO) 2012 Annual Meeting taking place May 6-10, 2012, in Ft. Lauderdale, FL.

Dr. Taraporewala, Ph.D., CEO of Ohr, presented data on the ocular tissue uptake and biodistribution of Squalamine eye drops in Dutch belted rabbits when administered once or twice daily in each eye for up to fourteen days. Squalamine concentrations in the posterior sclera/choroid tissues, where neovascularization in wet-AMD originates, were well above the target therapeutic levels where Squalamine has previously shown clinical benefit and is sustained well above that level for a full dosing interval. Moreover, the eye drop was found to be safe to ocular tissues, consistent with previous longer term studies.

The results indicate:

- Rapid uptake to the posterior sclera/choroid ocular tissues with slow tissue clearance
- Sustained Squalamine concentrations well above threshold anti-angiogenic levels, which persist throughout the period in between doses ("trough level")
- Safety to ocular tissues with no signs of ocular adverse clinical findings, consistent with previous longer term toxicity studies
- Negligible systemic uptake which minimizes the potential for systemic adverse events

"These results demonstrate the compelling clinical potential of Squalamine eye drops in Wet-AMD and other ophthalmic neovascular disorders," said Dr. Michael Elman, co-author of the presentation. "I am excited at the opportunity to be involved in this promising drug program."

Dr. Irach B. Taraporewala, Ph.D., CEO of Ohr, added, "Our eye drop could provide immeasurable benefit to the large wet-AMD patient population. The current standards of care, Roche/Genentech's Lucentis® and Regeneron's Eylea®, are injected directly into the eye, and had combined 2011 annual revenues in excess of $3 billion dollars."

The poster can be viewed in its entirety by going to the investor page of the Company's website and clicking on the ARVO poster link.

About Squalamine
Squalamine is an anti-angiogenic small molecule with a novel intracellular mechanism of action, that counteracts not only Vascular Endothelial Growth Factor ("VEGF") but also other angiogenic growth factors such as Platelet Derived Growth Factor ("PDGF") with high potency at nanomolar concentrations. Recent clinical evidence has shown PDGF to be an additional key target for the treatment of wet-AMD. Using the intravenous formulation in over 250 patients in Phase 1 and Phase 2 trials for the treatment of wet-AMD, Squalamine demonstrated favorable biologic effect and maintained and improved visual acuity outcomes, with both early and advanced lesions responding. Ohr Pharmaceutical has developed a novel eye drop formulation of squalamine for the treatment of wet-AMD designed for self-administration which may provide several potential advantages over the FDA approved current standards of care, Roche/Genentech's Lucentis® and Regeneron's Eylea®, which require intravitreal injections directly into the eye. Preclinical testing has demonstrated that the eye drop formulation is both safe to ocular tissues and achieves in excess of target anti-angiogenic concentrations in the tissues of the back of the eye.

About Ohr Pharmaceutical Inc.
Ohr Pharmaceutical Inc. (OTCBB: OHRP) (www.ohrpharmaceutical.com) is a pharmaceutical company dedicated to the clinical development of new drugs for underserved therapeutic needs in large and growing markets. The company is focused on two lead compounds: Squalamine eye drops for the treatment of the wet form of age-related macular degeneration, and OHR/AVR118 for the treatment of cancer cachexia, currently being investigated in a Phase II trial.

Safe Harbor Statement under the Private Securities Litigation Reform Act of 1995:
This news release contains forward-looking statements within the meaning of the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995. These forward-looking statements are made only as the date thereof, and Ohr Pharmaceutical undertakes no obligation to update or revise the forward-looking statement whether as a result of new information, future events or otherwise. Our actual results may differ materially and adversely from those expressed in any forward-looking statements as a result of various factors and uncertainties, including the future success of our scientific studies, our ability to successfully develop products, rapid technological change in our markets, changes in demand for our future products, legislative, regulatory and competitive developments, the financial resources available to us, and general economic conditions. For example, there can be no assurance that Ohr will be able to sustain operations for expected periods. Shareholders and prospective investors are cautioned that no assurance of the efficacy of pharmaceutical products can be claimed or assured until final testing; and no assurance or warranty can be made that the FDA or Health

Canada will approve final testing or marketing of any pharmaceutical product. Ohr's most recent Annual Report and subsequent Quarterly Reports discuss some of the important risk factors that may affect our business, results of operations and financial condition. We disclaim any intent to revise or update publicly any forward-looking statements for any reason.

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