

FOR IMMEDIATE RELEASE

Contact:

Kathryn Morris

Yates Public Relations

Tel: 845-635-9828

Hydra Biosciences Raises \$22 Million in Series D Financing

Company Advancing TRP Ion Channel Drugs to Initiate Human Clinical Trials in 2009

CAMBRIDGE, Mass., January 16, 2009 – Hydra Biosciences, Inc., a biotech company developing novel ion channel drugs, today announced that it has raised \$22.2 million in a Series D financing led by MedImmune Ventures, a wholly-owned venture capital fund of MedImmune, the biologics business of the AstraZeneca Group. Proceeds from the financing will be used to advance multiple Transient Receptor Potential (TRP) ion channel drug programs, with the most advanced program moving toward clinical trials in 2009, to be applied to diseases such as pain, inflammation, and pulmonary disease.

MedImmune Ventures joins existing investors Advanced Technology Ventures, Abingworth, Polaris, BioVenture Investors, Biogen-Idec Ventures, and Lilly Ventures in the Series D round. Hydra Biosciences has raised \$47 million in previous rounds of financing.

“We are excited about the continuing recognition by both investors and pharma companies in our unique platform for novel TRP ion channel drugs,” said Russell Herndon, President and CEO of Hydra Biosciences. “This funding allows us to continue to advance our ion channel drug programs with a goal of initiating our first human clinical trial with a TRP ion channel modulator in 2009.”

“Hydra Biosciences’ strong management team and expertise in TRP ion channel receptor drug discovery has the potential to create first-in-class drugs for significant diseases, such as pain, inflammation and pulmonary disease,” said Maggie Flanagan LeFlore, Ph.D., Managing Director of MedImmune Ventures. “We look forward to working with Hydra and its current investors to help fulfill this potential.”

As part of the closing of this financing transaction, Karen Gotting-Smith, Ph.D., Vice President, Development Business Performance and Continuous Improvement, AstraZeneca, will join the board of directors of Hydra Biosciences as the designee of MedImmune Ventures.

About Ion Channels

Aberrant ion channels activity has been implicated in many diseases, including hypertension, cardiac arrhythmias, gastrointestinal disorders, cystic fibrosis and pathological pain. Many drugs on the market today act on ion channels, either directly or indirectly, including calcium channel blockers for hypertension and angina, and sodium channel blockers for pain. Hydra Biosciences' TRP channel discovery program has identified numerous modulators predicted to impact diseases such as pain and inflammation, hypertension and pulmonary diseases. Many of these modulators have been shown to be efficacious in animal models of disease. In addition, ion channels have been successful drug targets, with modulators of ion flux representing up to 17% of world pharmaceutical sales.

About Hydra Biosciences

Hydra Biosciences, a biopharmaceutical company based in Cambridge, Massachusetts, develops drugs to treat pain, inflammation, cardiovascular and other diseases using its expertise in novel ion channels. Hydra Biosciences' proprietary platforms enable the company to identify and develop drug candidates that address significant unmet medical needs. More information about Hydra Biosciences is available at: www.hydrabiosciences.com.

###