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ARISAPH PHARMACEUTICALS ANNOUNCES RESULTS OF ITS POTENT SMART DPP-4 INHIBITOR, ARI-2243, AT THE ADA

- ARI-2243 is a highly potent DPP-4 inhibitor, possessing K_i of 27 pM
- ARI-2243 induces superior reduction in plasma glucose
- ARI-2243 produced compelling reduction in HbA1c in refractory diabetic animal model
- ARI-2243 is highly selective to DPP-4 through its proprietary soft drug inactivation
- ARI-2243 is long acting and orally active

BOSTON, MA June 25, 2007 – Arisaph Pharmaceuticals, Inc., a privately held drug discovery biopharmaceutical company, announced today the results of its potent, smart DPP-4 inhibitor, ARI-2243, presented at the 67th session of the American Diabetes Association meeting in Chicago, Illinois. The results showed that ARI-2243 is an extremely long acting, potent inhibitor of DPP-4 and produced superior reductions in plasma glucose compared with sitagliptin in oral glucose tolerance test (OGTT) in mice. Additionally, ARI-2243 produced significant reduction in hemoglobin A1c levels (HbA1c) following 9 weeks of daily oral dosing in a highly refractory diabetic animal model compared with no significant change with vildagliptin. The long-acting and potent attributes of ARI-2243 are expected to confer a differentiated efficacy profile in diabetic patients. Arisaph is currently completing IND enabling studies and expects to initiate first-in-man testing in 2008.

Arisaph designed ARI-2243 as a once a day, orally active, smart DPP-4 inhibitor that is highly potent and functionally selective. In vitro kinetic studies show that ARI-2243 has an affinity (K_i) of 27 picomolar, binding tightly to DPP-4 and dissociating very slowly from the enzyme. Such binding kinetics confer potency and long activity. Specifically, during OGTT in normal mice, ARI-2243 produced far greater lowering of plasma glucose compared with sitagliptin. Specifically, the ED_{50} with ARI-2243 was 0.006 mg/kg compared with sitagliptin, which had an ED_{50} of 1.5 mg/kg. Moreover, at 18 hours post dose, ARI-2243 lowered plasma AUC 25%, demonstrating long duration of action of the smart inhibitor.

In ZDF rats, an animal model that develops overt diabetes, ARI-2243 produced a significant reduction in HbA1c of 2.5% and 2.2% versus placebo and vildagliptin, respectively following eight weeks of therapy. Additionally, animals treated with 3.0 mg/kg of ARI-2243 showed less diabetes progression than animals treated with placebo or 3.0 mg/kg of vildagliptin. Such superior efficacy data in a highly refractory diabetes animal model suggest that ARI-2243 will produce a differentiated efficacy profile in human type II diabetes.

In addition to the compelling efficacy, ARI-2243 is functionally selective through a smart, soft drug inactivation process. Specifically, ARI-2243 binds rapidly and tightly to DPP-4 and once bound, the complex dissociates very slowly, thereby preventing the degradation of GLP-1 at the site of action. Unbound ARI-2243 then undergoes a unique soft drug inactivation as it passes through the gut and into the systemic circulation, which limits the exposure of the active species to unwanted targets, such as DPP 8 and 9. The conversion product, ARI 2498 is a millimolar inhibitor of the DPP family, in particular, DPP 8 and 9. Such soft drug inactivation confers functional selectivity and contributes to a favorable therapeutic window in animals.

“In ARI-2243, we have designed a smart, long acting DPP-4 inhibitor that is extremely potent and functionally selective,” commented Christopher P. Kiritsy, President and Chief Executive Officer of Arisaph Pharmaceuticals. “The preclinical efficacy data presented at the ADA highlight the compelling efficacy of ARI-2243 at low doses. With such promising data, we expect to achieve superior HbA1c lowering in humans using significantly lower doses of ARI-2243, thereby supporting our goal of developing best-in-class medicines for validated targets.”

About Arisaph

Arisaph, located in Boston, Massachusetts, is an emerging drug design and discovery biopharmaceutical company with active programs to develop differentiated therapies for diabetes, cancer and cardiovascular disease. Arisaph utilizes proprietary drug discovery platforms to develop ultra-smart drugs that are efficacious and act on select targets. Arisaph has successfully applied its specificity profiling and retro-inversal chiral chemistry technology platforms to synthesize promising candidate drugs for seven targets, including ARI-2243, a lead candidate for DPP-4 inhibition to treat type II diabetes, currently undergoing non-clinical toxicology evaluation, and ARI-1778 or reverse D-4F, an orally active mimetic peptide, being developed in collaboration with Abbott Laboratories to treat atherosclerosis. Through a licensing agreement with Tufts University the Company has exclusive worldwide rights to several important issued patents in the diabetes area and several pending patents that have utility for the treatment of cancer and cardiovascular disease.

About DPP-4:

DPP-4 or dipeptidylpeptidase type 4 is a naturally occurring, proteolytic enzyme that rapidly degrades the incretin hormones, gastric inhibitory polypeptide (GIP) and glucagon-like protein (GLP-1). GLP-1 has a favorable anti-diabetic role because it stimulates glucose dependent insulin secretion from the pancreas, slows gastric emptying and decreases glucagon secretion. Inhibitors to DPP-4 improve glycemic control in patients with type II diabetes by increasing the half-life of native GLP-1. DPP-4 is a validated target for the treatment of type II diabetes and inhibitors of DPP-4 have been shown to lower post-prandial glucose and HbA1c levels. Diabetes is a major healthcare problem throughout the world with the prevalence of the disease projected to double to 300 million cases worldwide by the year 2025 according to the World Health Organization.

Certain statements in this press release, including statements regarding the Company's research and development effort, the Company's expectation to complete IND enabling studies and to initiate human clinical studies, the Company's ability to finance its development programs into initial human clinical testing, and the Company's ability to successfully capitalize on the early stage research are subject to risks and uncertainties. These risks and uncertainties include risks and uncertainties related to: our ability to discover and develop new compounds and products using a novel approach to drug discovery; the early stage of all of our discovery and development efforts; our ability successfully to complete preclinical and clinical development of our products; our ability to obtain and maintain regulatory approvals for our products; competition from other technologies and technologies similar to ours; obtaining, maintaining and protecting intellectual property utilized by our products; changes in legislation and regulations affecting our products and potential product candidates; our need to obtain additional funding to support our business activities; our dependence on collaborators and other third parties for development, manufacture, marketing, sales and distribution of products; the ability of our licensees to achieve developmental, regulatory and other milestones and to commercialize their products; the effect of conditions in the pharmaceutical industry and the economy in general, as well as certain other risks and uncertainties.