For Immediate Release

Aquinox Pharmaceuticals Announces Results from LEADERSHIP Trial with AQX-1125 in Patients with Bladder Pain Syndrome/Interstitial Cystitis

Vancouver, British Columbia – June 25, 2015 (GLOBE NEWSWIRE) -- Aquinox Pharmaceuticals, Inc. ("Aquinox") (Nasdaq: AQXP), a clinical-stage pharmaceutical company discovering and developing targeted therapeutics in disease areas of inflammation and immuno-oncology, announced today results from its Phase 2 LEADERSHIP randomized clinical trial investigating the therapeutic potential of AQX-1125 in treating pain in patients with bladder pain syndrome/interstitial cystitis (BPS/IC). While AQX-1125 demonstrated a reduction in pain for patients on AQX-1125 as compared to those patients on placebo following six weeks of treatment, the difference did not reach statistical significance ($p = 0.061$).

"While we did not meet our statistical endpoint, we are encouraged to see in our first BPS/IC trial a positive trend in reduction of pain with AQX-1125 compared to placebo. Almost half of patients treated with AQX-1125 achieved a 2-point or greater reduction in pain," said David Main, President & CEO at Aquinox. "We believe today's top line data support further development of AQX-1125 for BPS/IC patients."

The mean change in pain score for patients on 200mg oral, once daily AQX-1125 vs. placebo was a reduction of 2.4 vs. 1.3 points, respectively. The primary endpoint was based on an 11-point numeric rating scale recorded by electronic diary. Approximately 49% of patients receiving AQX-1125 demonstrated a 2-point or greater reduction in pain compared to 34% of patients receiving placebo. Secondary endpoints are currently being analyzed and will be reported at a future meeting.

Consistent with past results, the LEADERSHIP trial demonstrated AQX-1125 to be well tolerated. No serious adverse events were recorded during the trial. The overall adverse event rate was similar between AQX-1125 and placebo. The most frequently reported adverse events were gastrointestinal disorders (32% for AQX-1125 vs. 34% for placebo).

Aquinox will host a conference call and live audio webcast today June 25, 2015 at 9:00 AM (ET) / 6:00 AM (PT) to summarize and discuss these results in greater detail.

Conference Call Details:
Date: Thursday, June 25th, 2015
Time: 9:00 AM (ET) 6:00 AM (PT).
Toll-free: (866) 357-7878
International: (315) 625-3088
Conference ID: 73646682

A live audio webcast and archive of the event will be available at: http://edge.media-server.com/m/p/ooh6y3sv.

The archived conference call will be available on Aquinox's website beginning approximately two hours after the event and will be archived and available for replay for at least 30 days after the event.

About the LEADERSHIP trial

The LEADERSHIP trial was a multicenter, randomized (1:1), double-blind, placebo-controlled, Phase 2 clinical trial investigating the ability of 200mg oral, once daily AQX-1125 to reduce pain in female patients with BPS/IC. The primary endpoint was to measure the difference in the change from baseline in the mean daily bladder pain score based on an 11-point numeric rating scale (NRS) at six weeks recorded by electronic diary. The trial was initiated in July of 2013 and conducted at investigative sites across Canada and the United States. A total of 69 subjects were enrolled. For more information on the LEADERSHIP trial, please visit www.clinicaltrials.gov.

About AQX-1125

AQX-1125, Aquinox's lead drug candidate, is a small molecule activator of SHIP1, which is a regulating component of the PI3K cellular signaling pathway. By increasing SHIP1 activity, AQX-1125 accelerates a natural mechanism that has evolved to maintain homeostasis of the immune system and reduce immune cell activation and migration to sites of inflammation. AQX-1125 has demonstrated preliminary safety and favorable drug properties in multiple preclinical studies and clinical trials. Aquinox is currently exploring AQX-1125 as an oral, once daily treatment in additional Phase 2 trials, including FLAGSHIP for COPD exacerbations expecting to report top line data near mid-year 2015 and KINSHIP for atopic dermatitis expecting to report top line data by Q1 2016.

About Bladder Pain Syndrome/Interstitial Cystitis (BPS/IC)

BPS/IC is a chronic inflammatory bladder disease characterized by pelvic pain and increased urinary urgency and/or frequency. For many sufferers, these symptoms are severe and adversely affect all major aspects of their lives, including overall physical and emotional health, employment, social and intimate relationships, and leisure activities. While the cause of the disease remains largely unknown, erosion of the bladder lining is thought to be a significant contributor. BPS/IC is estimated to affect between 5 and 14 million people in the United States. Most BPS/IC patients continue to suffer this debilitating condition, despite treatment with existing therapies. Most current therapies and those in development are focused solely on symptomatic relief of BPS/IC. Aquinox believes new and innovative therapies that target the underlying disease in order to reduce the chronic pain and urinary symptoms are needed.

About Aquinox Pharmaceuticals, Inc.

Aquinox Pharmaceuticals, Inc. is a clinical-stage pharmaceutical company discovering and developing targeted therapeutics in disease areas of inflammation and immuno-oncology. Aquinox's lead drug candidate, AQX- 1125, is a small molecule activator of SHIP1 suitable for oral, once daily dosing. Having successfully completed multiple preclinical studies and clinical trials with AQX-1125, Aquinox is now advancing AQX-1125 through Phase 2 development. Aquinox has a broad intellectual property portfolio and pipeline of preclinical drug candidates that activate SHIP1. For more information, please visit www.aqxpharma.com.

Cautionary Note on Forward-looking Statements

Certain of the statements made in this press release are forward looking, such as those, among others, relating to: the further clinical development of AQX-1125; the success and timing of future clinical trials; regulatory approval of AQX-1125 and potential market opportunities for AQX-1125. These statements are subject to risks and uncertainties that could cause actual results and events to differ materially from those anticipated, including, but not limited to, risks and uncertainties related to: our ability to enroll patients in our clinical trials at the pace that we project; the size and growth of the potential markets for AQX-1125 or any future product candidates and our

ability to serve those markets; our ability to obtain and maintain regulatory approval of AQX-1125 or any future product candidates; and our expectations regarding the potential safety, efficacy or clinical utility of AQX-1125 or any future product candidates. Actual results or developments may differ materially from those projected or implied in these forward-looking statements. More information about the risks and uncertainties faced by Aquinox is contained in the company's Annual Report Form 10-Q for the quarter ended March 31, 2015 filed with the Securities and Exchange Commission. Aquinox disclaims any intention or obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

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