NEW VAPRISOL® STUDY SUPPORTS A REDUCED DOSE IN PATIENTS WITH SEVERE LIVER IMPAIRMENT

Patients with hyponatremia and severe liver impairment benefit from a reduced dose of Vaprisol.

NASHVILLE, Tenn. (Thursday, March 23, 2017) – Cumberland Pharmaceuticals Inc. **(NASDAQ: CPIX)** today announced the publication of an open label multicenter study adding to the growing body of literature supporting the efficacy and use of Vaprisol® (*conivaptan*) Injection. The study, published in *Drug Design, Development and Therapy,* demonstrated that Vaprisol was well tolerated in hyponatremic patients with severe hepatic impairment.

Hyponatremia is an electrolyte disturbance in which sodium ion concentration in blood plasma is lower than normal. Vaprisol is used to treat hyponatremia, which is commonly seen in a variety of critical care conditions, and is often found in those with liver cirrhosis or severe liver impairment. Cirrhosis is the 12th leading cause of death in the United States, with a mortality rate of 9.7 per 100,000 persons.

This study, published in March 2017, concluded that - for hyponatremic patients suffering from severe hepatic impairment - Vaprisol dosing should be reduced by 50%. Treatment is recommended to be initiated with a loading dose of 10 mg given intravenously >30 minutes, followed by infusions of 10 mg per day for 2 – 4 days. If serum sodium is not increasing at the desired rate, Vaprisol may be titrated up to 20 mg per day.

A.J. Kazimi, CEO – Cumberland Pharmaceuticals Inc. said "With reported incidences of hyponatremia in hospitalized cirrhosis patients being greater than 50%, the opportunity to treat hyponatremic patients inflicted with various degrees of hepatic impairment is high. There is much information and experience supporting the use of Vaprisol as a safe and well-tolerated treatment, and these study results support Cumberland's mission to provide effective treatment options that help address the unmet medical needs."

About Vaprisol®

Vaprisol an intravenous treatment for hyponatremia used in the critical care setting. Hyponatremia is an electrolyte disturbance in which sodium ion concentration in blood plasma is lower than normal. This can be associated with a variety of critical care conditions including congestive heart failure, liver failure, kidney failure and pneumonia. The product is a vasopressin receptor antagonist that raises serum sodium levels and promotes free water secretion. Vaprisol was approved by the U.S Food and Drug Administration in 2005 for euvolemic hyponatremia and in 2007 for hypervolemic hyponatremia. For full prescribing information, visit www.vaprisol.com.