KemPharm, Inc. Files Antitrust and Other Counterclaims against Shire LLC

North Liberty, IA – March 1, 2011 – KemPharm, Inc. ("KemPharm") announced today that it has filed an Answer and Counter-Claims against Shire LLC ("Shire"), a subsidiary of Shire plc (LSE: SHP, NASDAQ: SHPGY). KemPharm's Answer denies the allegations of Shire's Complaint, raises affirmative defenses, and makes claims for unfair competition, antitrust violations and other relief. The counterclaims were filed in response to a lawsuit filed in Virginia on September 30, 2010, by Shire against KemPharm and Travis Mickle, Ph.D., President and CEO of KemPharm, alleging claims for breach of contract, and intentional interference with contract, related to Dr. Mickle's prior employment with New River Pharmaceuticals. The antitrust claims assert that the Shire lawsuit is objectively baseless and brought with an improper motive to interfere with KemPharm's business.

Additional information on KemPharm's development programs and press releases can be found at: http://www.kempharm.com

About KemPharm, Inc.

KemPharm, Inc. is focused on the discovery and development of new chemical entities (NCEs) to treat serious medical conditions through its proprietary Ligand Activated Therapy (LAT) prodrug approach. KemPharm utilizes its LAT prodrug technology to generate improved versions of FDA-approved drugs. Each NCE creates new composition-based intellectual property, may have a shorter development timeline and reduced development costs, and may be eligible for 505(b)(2) regulatory submission. The Company's business strategy includes seeking strategic development partners following clinical proof of concept demonstration in a Phase 1 trial. KemPharm also plans to explore discovery stage alliances with industry leaders, leveraging its proprietary prodrug know-how and LAT technology. KemPharm is developing candidates for ADHD, pain, other central nervous system disorders. www.kempharm.com

Forward Looking Statements and Information

This release contains forward-looking statements which are not based upon historical fact, including, without limitation, "will," "should," "expect," "anticipate," "plan," "predict," "believe," "may" and "project." Such statements, including statements relating to developments, progress, timelines, plans of our clinical and preclinical programs, and potential benefits of KemPharm Inc.'s product candidates, involve various assumptions, known and unknown risks, and uncertainties which may cause actual results or events to be materially different and adverse from those expressed in or implied by the forward-looking

statements. Such assumptions, risks and uncertainties may relate to difficulties or delays in discovery, development, testing, and regulatory approval of the company's product candidates, results that are inconsistent with preclinical results, unexpected adverse side effects, or inadequate therapeutic efficacy of the product candidates. The forward-looking statements in this release speak only as of this date, and KemPharm disclaims any obligation to update publicly any forward-looking statement to reflect the occurrence of events or circumstances after the date hereof.

Contacts:

KemPharm, Inc.
Kate Holt, Ph.D.
319-665-2575
E-mail: info@kempharm.com