

Contact:

Hector Alila, Ph.D.
President and Founder
Esperance Pharmaceuticals, Inc.
hector@esperancepharma.com
(225) 615-8949

Media Relations:

Sarah Cavanaugh
MacDougall Biomedical Communications
scavanaugh@macbiocom.com
(781) 235-3060

**Esperance Pharmaceuticals Announces Initiation of Clinical Studies of its
Novel Membrane-disrupting Agent, EP-100, in Patients with Cancer**

Baton Rouge, LA (September 10, 2009) – Drug discovery and development company Esperance Pharmaceuticals today announced that it has begun enrollment and dosing of patients in a Phase 1 study of EP-100 in patients with advanced solid tumors. EP-100, the lead candidate from Esperance’s Cationic Lytic Peptide (CLYP™) platform technology, is a targeted membrane-disrupting peptide (tMDP) designed to seek and destroy cancer cells that over-express luteinizing hormone releasing hormone (LHRH) receptors on their surfaces. LHRH receptors are over-expressed in a wide range of cancers including breast, prostate, endometrial, pancreatic, ovarian, skin and testicular cancers.

“We are pleased to have begun human clinical trials of EP-100 as a novel cancer therapeutic candidate with the potential to offer an improved safety and efficacy profile over existing therapies such as radiation or chemotherapy,” said Hector Alila, PhD, President of Esperance. “Preclinical studies of EP-100 demonstrated this candidate’s efficacy across multiple indications in oncology, including aggressive cancers known to be resistant to the current standards of care and, importantly, studies of EP-100’s mechanism-of-action support that it targets and selectively kills cancer cells without harming normal cells.”

The Phase 1 study is a multi-center, open-label, dose escalating study designed to evaluate the safety, pharmacodynamic and pharmacokinetic properties of EP-100. This study will enroll adult patients with solid tumors that over-express LHRH receptors as determined by tumor biopsy. Up to a total of 36 patients that are either refractory to the standard of care or for which no standard of care exists may be enrolled in the study. EP-100 will be administered intravenously for three out of four weeks. Once the maximum tolerated dose (MTD) has been established, additional subjects with specific diagnoses of either breast, ovarian, endometrial, pancreatic or prostate cancer will be enrolled and dosed at the MTD. Additionally, patients with other types of cancer may be added based on activity observed in previous cohorts. More information on the trial can be found at www.clinicaltrials.gov.

Results from preclinical studies of EP-100 have shown that the drug regresses established tumors in breast, prostate, ovarian and endometrial cancer xenografts in mice. The results in ovarian cancer were presented at the 2009 American Association for Cancer Research (AACR) Annual Meeting. In *in vivo* studies, the efficacy of EP-100 in comparison to saline or untargeted membrane-disrupting peptide or cisplatin was studied in an ovarian cancer xenograft model (OVCAR-3). EP-100 regressed established OVCAR-3 xenografts following weekly injections at doses as low as 0.2 mg/kg bodyweight ($p < 0.03$ vs. baseline). In comparison, tumor growth was observed across the saline control, untargeted membrane-disrupting peptide and cisplatin arms. In addition, in the EP-100 arm tumor volumes, weights and CA125 (a clinical biomarker for ovarian cancer) were reduced. LHRH receptor levels were also reduced and PET imaging revealed that EP-100 treated tumors became necrotic, lacking viable tumor cells after treatment. EP-100 was well tolerated in all treated groups.

Esperance is using its CLYP™ technology to develop a robust portfolio of novel tMDPs to selectively destroy cancer cells that express target receptors. In addition to EP-100, Esperance has other drug candidates in preclinical stages, all of which

have a unique targeting mechanism of action whereby candidates bind specifically and exclusively to surface receptors on cancer cells.

About Esperance Pharmaceuticals

Esperance Pharmaceuticals, Inc. is developing a new class of highly potent targeted anticancer drugs using its Cationic Lytic Peptide (CLYP™) platform technology. These drug candidates, called targeted membrane-disrupting peptides (tMDPs), consist of a ligand component that binds to extracellular receptors on the cancer cell and a potent cytolytic peptide component that kills the cancer cell. Targeted MDPs, which are positively charged, specifically bind only to cancer cells that express the target receptors on their surfaces and interact with the negatively charged membranes of the cancer cells resulting in disruption of the cell membrane and causing the cancer cells to die by cell lysis. The drug candidates selectively kill cancer cells, including cells known to be resistant to chemotherapeutic drugs, without harming normal cells. In addition to EP-100, Esperance Pharmaceuticals has three other drug candidates in preclinical stages. The Company was founded on patented technology discovered by scientists at Louisiana State University. Founding investors include the Louisiana Fund I, Research Corporation Technologies and Themelios Ventures, LP—a venture fund managed by the principals of VCE Capital Partners, LLC. Additional investors include the Louisiana Technology Fund and private investors. More information can be found at www.esperancepharma.com