

Contact:

Leslie Holsinger, PhD
Vice President, Biology
650.833.5707
leslie.holsinger@virobayinc.com

For Immediate Release

VIROBAY'S SPECTRUM-SELECTIVE CATHEPSIN INHIBITOR SHOWS EFFICACY IN BONE CANCER MODEL

MENLO PARK, Calif. – November 14, 2011 – Virobay, Inc., a privately held biotechnology firm with a broad portfolio of cysteine protease inhibitors for the treatment of autoimmune diseases, neuropathic pain, liver diseases and cancer, presented data showing that one of the company's spectrum-selective cathepsin inhibitors demonstrated efficacy in a mouse model of bone cancer pain. Virobay has a series of advanced, spectrum-selective cathepsin inhibitors with structural diversity and demonstrated activity in bone cancer and related pain. VBY-825, a prototype compound within this series, is an orally bioavailable, highly potent, reversible inhibitor of a subset of cathepsin proteases (including cathepsins S, K, L and B) that demonstrated protection from bone destruction and remodeling in this metastatic breast cancer model, as well as significant analgesic activity. These preclinical data suggest that Virobay's spectrum-selective cathepsin inhibitors have potential therapeutic utility in the treatment of metastatic and primary bone cancer and cancer-related bone pain, with a mechanism of action that would be highly complementary to standard chemotherapy.

The data were presented in a poster, titled "Efficacy of a Spectrum-Selective Cathepsin Inhibitor in a Mouse Model of Bone Cancer," by Holsinger, et al., at the *AACR-NCI-EORTC International Conference: Molecular Targets and Cancer Therapeutics*, on Sunday, November 13th.

"These preclinical data provide a compelling demonstration of the therapeutic potential of Virobay's cathepsin inhibitors in bone cancer and bone cancer pain," said Robert Booth, PhD, Virobay's president and chief executive officer. "The data demonstrate that the anti-tumorigenic and analgesic activity is due to the selective targeting of specific cathepsins that are known to facilitate osteolytic metastasis, bone invasion and bone matrix degradation. We believe that these data strongly support further development of Virobay's spectrum-selective cathepsin inhibitors in metastatic and primary bone cancer, and that this novel therapeutic approach may be especially valuable in combination with existing anticancer approaches."

VBY-825 is a member of a series of highly potent, spectrum-selective cathepsin inhibitors with structural diversity, which is being developed by Virobay. Increased cathepsin levels and activity have been shown to play a role in a variety of tumors, including lung and breast, and are correlated to poor patient prognosis. The proteolytic activity of multiple cathepsins may play a role in degradation of the basement membrane and extracellular matrix allowing a loss of cell adhesion and facilitating tumor metastasis. Cathepsin K inhibition has been shown to suppress bone resorption in women with post-menopausal osteoporosis as well as women with breast cancer by inhibiting osteoclast function. Studies with cathepsin S inhibitors have demonstrated a

reduction in the perception of pain (nociception) in animals, with no sedating effects, suggesting a role for cathepsin S in neuropathic and inflammatory pain.

About Virobay

Virobay is a leader in the design, synthesis and development of small molecule inhibitors of cysteine proteases, a diverse class of enzyme proteases that are key mediators in a variety of diseases, including autoimmunity, neuropathic pain, liver disease, cancer, and cardiovascular disorders. Virobay was founded upon a rich industry legacy of intensive research and development focused on the cathepsin family of cysteine proteases. Today, Virobay possesses a trove of maturing assets, including an advancing clinical pipeline and well-characterized libraries of highly potent and selective inhibitors with drug-like pharmacokinetics consistent with the potential for oral once-daily dosing in humans.

Virobay's unique expertise in the structure-based design of this class of inhibitors includes extensive understanding of the properties of the cysteine protease active site, detailed knowledge of the cell biology of this enzyme family and a collection of pharmacodynamic biomarkers, as well as a deep understanding of the medicinal chemistry required to achieve superior levels of potency, pharmacokinetics, safety and specificity. Virobay's clinical pipeline currently includes product candidates in autoimmune disease, neuropathic pain and liver fibrosis. For more information please visit our website: www.virobayinc.com.