

Critical Pharmaceuticals' CriticalSorb™ Nasal Drug Delivery Technology Shows Excellent Local Tolerability in Long Term Preclinical Studies

Nottingham, UK March 8 2011 - Critical Pharmaceuticals today announces the results of a long-term preclinical study that confirms the excellent local tolerability of its unique and proprietary CriticalSorb™ nasal drug delivery technology. The emerging biotechnology company is now preparing to take the technology forward into a phase I clinical trial.

CriticalSorb™ is already used in a number of marketed drugs for intravenous and oral administration and the results of this study complete the toxicology package for the nasal route of administration.

CriticalSorb™ is a best in class absorption promoter that enables the nasal delivery of biological and challenging small molecule drugs. Biological drugs represent a \$90 billion market, and yet nearly all need to be administered by frequent injection. CriticalSorb™ has the potential to transform the delivery of biological drugs by enabling non-invasive delivery that would be strongly preferred by patients.

Critical Pharmaceuticals is developing the CriticalSorb™ nasal delivery technology with support from a Wellcome Trust Translation Award. The first product to be developed using the technology is a nasal formulation of human growth hormone (CP024).

The toxicological study with CriticalSorb™ was designed to investigate the effects of repeated intranasal administration over a period of six months. No adverse responses were identified in clinical observations, bodyweight, food or water consumption, ophthalmoscopy, haematology, blood chemistry, urinalysis or necropsy. In addition, histopathology examination revealed no adverse health effect at any dose and a 'No Observed Adverse Effect Level' (NOAEL) was therefore considered to be the highest dose tested. In addition to the six month study on CriticalSorb™ and in preparation for an upcoming Phase 1 clinical trial,

Critical Pharmaceuticals has also completed a chronic study with repeated intranasal administration of CP024 over a period of 14 days that also shows excellent tolerability with no adverse effects reported.

Professor Lisbeth Illum, Chief Executive Officer of Critical Pharmaceuticals is enthusiastic about the excellent tolerability results with CriticalSorb "We have already demonstrated that CriticalSorb™ can achieve exceptional bioavailabilities for drugs that are difficult to deliver and these latest results confirm that CriticalSorb™ is well tolerated and doesn't damage the nasal mucosa, something that has been a significant issue for other nasal delivery systems. We look forward to confirming these excellent results in clinical studies and to address the significant need for improved biotechnology products that provide an attractive alternative to frequent injection for patients, clinicians and healthcare providers."

About Critical Pharmaceuticals

Critical Pharmaceuticals is a Nottingham UK-based biotechnology company developing a pipeline of unique biological drug products utilizing its proprietary drug delivery technologies. These technologies enable the development of sustained release injectable depot and nasal delivery of proteins and peptides and small molecular weight drugs. As well as developing its own pipeline, Critical Pharmaceuticals works in partnership with other pharmaceutical and biotechnology companies to enhance the delivery of their novel drug products. For more information visit www.criticalpharmaceuticals.com.

About the Wellcome Trust

The Wellcome Trust is a global charitable foundation dedicated to achieving extraordinary improvements in human and animal health. It supports the brightest minds in biomedical research and the medical humanities. The Trust's breadth of support includes public engagement, education and the application of research to improve health. It is independent of both political and commercial interests.

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