



## **Epistem presents further data supporting its plucked hair biomarker technology at the Institute of Cancer Research Centenary Conference**

### **Data on the effects of gemcitabine on epithelial tissue released**

MANCHESTER, UNITED KINGDOM --(Marketwire-June 2 2009) - Epistem plc (LSE: EHP), the UK biotechnology and contract research company, will present preclinical results from its recently completed plucked hair biomarker study at the Institute of Cancer Research Centenary Conference, in Queen Elizabeth II Conference Centre, London, UK on 8<sup>th</sup> to 10<sup>th</sup> June 2009. This study was completed successfully on gemcitabine, commonly known as Gemzar<sup>®</sup>. This therapeutic agent is one of a class of antimetabolite chemotherapy drugs designed to target cells that are dividing rapidly, including cancer cells, and is used to treat lung, pancreatic, ovarian, bladder and metastatic breast cancer.

The data will be presented by Dr. Ged Brady in poster p196 that will be on display on 9-10<sup>th</sup> June 2009 and demonstrates that specific drug-induced changes are caused by this therapeutic agent. These can be monitored through the changes observed in gene expression in the epithelial tissue that is associated with a plucked hair. The Company has already presented data on the ability of its plucked hair biomarker technology to monitor the effects of another widely used chemotherapeutic agent, erlotinib, which belongs to a completely different class of drug called epidermal growth factor receptor inhibitors.

This positive new data confirms the utility of the plucked hair biomarker technology and its ability to monitor drug induced changes in epithelial tissue caused by different chemotherapeutic agents. The plucked hair biomarker platform provides a simple, minimally invasive means of monitoring the specific response of epithelial tissue to established oncology agents. This supports strongly the case for plucked hair as a valuable surrogate tissue in identifying, early on, the best lead candidates to take into clinical development for a variety of therapeutic agents in oncology. Furthermore, the plucked hair biomarker platform is now showing the potential to predict quantitatively the differential effects of new compounds in development versus both gemcitabine and erlotinib, as well as for other drugs in development which affect the growth of epithelial tissue in the clinical setting.



“Momentum continues to build as our plucked hair biomarker technology is used increasingly to identify pharmacodynamic markers in Phase I clinical studies. These results provide a strong basis to confirm the preclinical relevance of hair as surrogate tissue to measure target engagement and biological response to drug, that can then readily translate into early clinical studies,” said Lydia Meyer-Turkson, Director of the Biomarker Division at Epistem. “We are pleased that the data demonstrates the relevance of plucked hair as a pharmacodynamic biomarker for a cytotoxic known to affect the cell cycle and apoptosis” she added.

The abstract will be available on request following presentation. For further information on the Company please visit [www.epistem.co.uk](http://www.epistem.co.uk) or contact:

Dr. Danielle Hargreaves	+44 (0)161 606 7258
Public Relations	+44 (0) 7920 815603
Epistem plc.	info@epistem.co.uk

Mike Wort / Anna Dunphy	+44 (0) 207 861 3838
Financial PR/IR	De Facto Communications

#### **Notes to Editors:**

##### About Epistem

Epistem is a biotechnology company commercialising its expertise in epithelial stem cells in the areas of oncology, gastrointestinal diseases and dermatological applications. Epistem develops innovative therapeutics and biomarkers and provides contract research services to drug development companies. The Group's expertise is focused on the regulation of adult stem cells located in epithelial tissue, which includes the gastrointestinal tract, skin, hair follicles, breast and prostate. Epistem does not conduct research in the areas of embryonic stem cells or stem cell transplantation.

Epistem operates three distinct business divisions, Contract Research Services, Novel Therapies and Biomarkers.

##### *Biomarkers*



The Biomarker division provides services to drug development companies using its plucked hair biomarker technology. The Company's knowledge of the behaviour of epithelial cells and drug-induced gene expression change is used to measure drug effects during treatment. Changes in gene expression can be detected within hours and at low levels of chemotherapy or radiation. The highly sensitive Biomarker technology is based on using mRNA extracted from the bulb of cells at the base of a single hair follicle as a minimally invasive process to measure gene expression changes in epithelial tissue.