



New targeted anti-cancer therapy lights up investors – 29/01/2008

PhotoBiotics is pleased to announce the completion of a further funding round to support development of its innovative technology for targeting light-activated anti-cancer drugs to tumours. Following its successful bid for €300,000 of EU funding, the Imperial College London-based spin-out company has just acquired additional funds from a consortium which includes two new investors.

The new financing round comes hot on the heels of PhotoBiotics' latest research results, which show that special tumour-seeking proteins (antibody fragments) deliver light-activated drugs specifically to cancer targets. When illuminated, they cause complete and selective tumour regression in an animal model (published on-line in the *International Journal of Cancer*).

In photodynamic therapy (PDT), diseased tissues containing light-activated drugs are illuminated with cold laser light. The resulting chain reaction converts oxygen into a highly toxic form that destroys any cells in close proximity.

PDT has successfully treated head and neck, prostate and skin cancers. Compared to other cancer treatments, PDT leaves patients with little cosmetic scarring and there is no possibility of drug resistance developing. But being non-targeted, PDT cannot deliver light-activated drugs specifically to tumours: they can circulate in the body long after treatment, leaving patients prone to acute light-sensitised skin damage.

PhotoBiotics latest proprietary research solves this problem. Called targeted PDT (*t*-PDT), drugs go specifically to cancerous cells, rapidly leaving the body before they can cause skin damage. Based on its initial highly promising results in animals, PhotoBiotics is completing further pre-clinical studies, and expects to take its technology forward into clinical trials within the next three years, expanding the applications of *t*-PDT for many more cancers.

On the latest investment, Dr Elizabeth Rollinson, PhotoBiotics' Commercial Director said, "This confirms that our new *t*-PDT approach is beginning to attract the funding it deserves to make it into a mainstream clinical reality, and we are excited that PhotoBiotics is in the vanguard of developing this innovative technology. The funding round will allow PhotoBiotics to attain value-enhancing milestones in its therapeutic and diagnostic research and development programmes."

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Notes to editors:

PhotoBiotics' latest research paper is available here: <http://www3.interscience.wiley.com/cgi-bin/fulltext/116837461/HTMLSTART>

'Targeted photodynamic therapy with multiply-loaded recombinant antibody fragments', *International Journal of Cancer*, published online 31 October 2007.

About PhotoBiotics and PDT (see www.photobiotics.com)

Photobiotics is a spin-out company from Imperial College London, set up to develop novel biologically-targeted photodynamic therapeutic (*t*-PDT) agents. Created from PhotoBiotics' unique blend of world-class chemistry, physics, and biotechnological expertise, the new *t*-PDT agents will specifically target and destroy tumours, proliferating tissues, pathogenic organisms, and have a range of therapeutic and diagnostic applications.

PhotoBiotics believes *t*-PDT has the potential to offer strikingly improved treatment regimes and therapeutic index (the ratio of effective dose to toxic dose) that could replace conventional PDT and significantly extend its market penetration. Relatively few organisations worldwide have the skills set necessary to develop *t*-PDT technology and though the science is challenging, PhotoBiotics is delivering on its promise in a series of successful in vitro and in vivo trials. For more information, please go to PhotoBiotics website.