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**Physiomics plc**  
**(“Physiomics” or “the Company”)**

**Results Update – Virtual Tumour shows improved drug schedule in cancer model**

Physiomics (AIM: PYC), the Oxford, UK based systems biology company, is pleased to announce that positive results have been generated in a pre-clinical *in-vivo* study into breast cancer based on the Company’s “Virtual Tumour” model predictions. The directors believe these results provide further validation as to the predictive capability of the Company’s technology.

In this study, Physiomics’ “Virtual Tumour” model enabled the Company to design innovative combination regimens for the anti-cancer drugs docetaxel and gemcitabine. Three new schedules were tested experimentally in a breast cancer pre-clinical *in-vivo* model and Physiomics’ predictions were substantiated. In the three cases, the doses were the same, but we adjusted the timing of the administration of the dose based on the “Virtual Tumour” simulation. The best schedule showed a 74% tumour growth inhibition compared to the untreated control group. This was 50% more efficient than the original schedule, achieved simply by adjusting the timing of administration. Furthermore the greater efficacy was achieved without increasing the toxicity.

The original schedule tested in this study is representative of the common practise in the clinic that is to give the two drugs to the patient at the same visit. Physiomics’ modelling approach has shown that increasing the time interval between administrations of the two drugs has the potential to increase the clinical outcome, with no detectable increase in toxicity. The directors believe that this is the first time that this outcome has been reported for this drug combination in an *in vivo* pre-clinical study.

The Virtual Tumour platform is used to design optimal combination chemotherapy regimens. Thousands of simulations can be performed *in silico* if necessary to find the best treatment regime and save customers time and money.

Dr Christophe Chassagnole, COO at Physiomics, will present these new results at the AACR 102nd Annual Meeting 2011, taking place in the Orange County Convention Center, Orlando, Florida on 2-6 April 2011. The abstract (“Modeling the sequence-sensitive gemcitabine/docetaxel combination using the Virtual Tumor”, No 4933) will be published in the 2011 Proceedings of the AACR and will be presented in the “Integrative Genomic Biology” poster session, scheduled 08:00 AM - 12:00 PM, 6 April 2011. More information about the conference may be found at: <http://www.aacr.org/home/scientists/meetings--workshops/aacr-102nd-annual-meeting-2011.aspx>

Dr Mark Chadwick, CEO of Physiomics, said

“We are pleased with the results of this study. We believe that the optimal clinical scheduling for these drugs is still an open question and that our rational approaches could help to resolve it. To the best of our knowledge, this is the first time that modelling has been used to provide such a dramatic improvement response with these two drugs in a xenograft study.”

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**Information on Physiomics plc**

Physiomics (AIM:PYC) is a computational systems biology services company applying simulations of cell behavior to drug development to reduce the high attrition rates of clinical trials. 80-90 per cent of all clinical drug candidates fail to reach the market and estimates show that an overall ten per cent improvement in success rates could reduce the cost of one drug's development by as much as \$242 million, from the current estimate of around \$800 million<sup>1</sup>.

Physiomics develops computational systems biology models to predict and understand cancer drug efficacy from pre-clinical research to clinical development. Physiomics has created detailed mathematical models incorporating the most important molecular events taking place during the human cell cycle and apoptosis processes. The company's SystemCell® technology enables the simulation of populations of "virtual cells". The company has also developed a "Virtual Tumour" model to simulate the effect of anti-cancer drugs on tumour growth. The models are used to optimise compound design and to design drug schedules and combination therapies.

Physiomics, based in Oxford, UK, was founded in 2001, and floated on AIM in 2004. For further information, please visit [www.physiomics-plc.com](http://www.physiomics-plc.com)

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<sup>1</sup>Tufts Centre Impact Report 2002