An *in silico* model to optimise drug treatment regimens for clinical cancer studies

CRACK IT Solutions

Physiomics plc is seeking partners with access to clinical pharmacokinetic, pharmacodynamic and tumour growth data, ideally from individual patients, to calibrate their new Virtual Tumour Clinical *in silico* model.

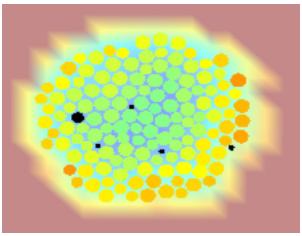
What could your solution be used for?

Virtual Tumour Clinical is calibrated with key human data and can be used to:

- Design new regimens with proprietary compounds as well as standards of care, small molecules or large molecules.
- Help test possible schedules for combinations of different drugs that would be effectively impossible to investigate experimentally.
- Allow prioritisation and predict the outcomes of the most effective drug combinations in the clinic.
- Reduce attrition rates and the number of animal studies needed to optimise drug regimens for clinical use.

Need for collaboration

We are seeking partners who have access to clinical pharmacokinetic, pharmacodynamic and tumour growth data, ideally from individual patients, with which to calibrate Virtual Tumour Clinical. We wish to collate data on a wide variety of tumour types in order to broaden the applicability of the final model. Such collaborators could be large pharmaceutical companies, biotechs, academics, or healthcare providers.



3Rs impact assessment

In the UK, over 500,000 mice were used in non-toxicology cancer research in 2013. We have demonstrated that Virtual Tumour (the precursor to Virtual Tumour Clinical) can reduce some of these animal studies by running many experiments *in silico* rather than *in vivo*. For example, in a retrospective study, one pharmaceutical client determined that applying the existing Virtual Tumour technology would have saved around 3 months of animal experiments and associated costs. Virtual Tumour Clinical could further reduce the overall burden of animal studies by increasing the success rate of clinical trials and reducing the need for new drug combination regimens to be tested *in vivo*.

To find out more or to connect with the technology developer contact:
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