Seven pharma companies offer up compounds to UK researchers

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UK researchers will be granted access to a ‘virtual library’ of deprioritised pharmaceutical compounds through a new partnership between the Medical Research Council (MRC) and seven global drug companies, announced today by Business Secretary Vince Cable.

AstraZeneca, GlaxoSmithKline, Janssen Research & Development LLC*, Lilly, Pfizer, Takeda and UCB will each offer up a number of their deprioritised molecules for use in new studies to improve our understanding of a range of diseases, with a view to developing more effective treatments.

The compounds have undergone some degree of industry development, but have all stalled at some point in early testing – often because they are not sufficiently effective against the disease in question. However, they may still be useful against other diseases with shared biological pathways.

These compounds are incredibly valuable to academic researchers, who can use them to understand how a disease takes hold in the body and how it might be stopped or slowed down. It is hoped that re-purposing such compounds could lead to the development of new medicines for many debilitating conditions. And because the compounds have already undergone some preliminary development, such as safety testing, any new treatments arising from the research could reach patients much faster.

Projects funded through a previous compound sharing initiative between the MRC and AstraZeneca are already demonstrating success in this area, with the first human trials of a new treatment for chronic cough getting underway (see case study below).

Professor Sir John Savill, Chief Executive of the Medical Research Council, added:

“Our ground-breaking compound collaboration with AstraZeneca attracted a huge amount interest from the academic community and saw the MRC award £7 million for research into Alzheimer’s, cancer and rare diseases. We’re now building on this success by expanding into a rolling programme with seven companies that will allow the academic community to access even more assets for use in innovative research projects. By funding studies using these compounds, which otherwise would not be carried out, we will enable scientific breakthroughs that will improve the health of patients in the UK and worldwide.”

A full list of available compounds will be published later this year, when UK scientists will be able to apply for MRC funding to use them in academic research projects. There is no fixed budget for the programme, which will make the compounds available on a continuous basis via the MRC’s normal response-mode funding mechanism. It is hoped that more companies, and more compounds, will be added as the scheme progresses.

Stephen Whitehead, Chief Executive of the Association of the British Pharmaceutical Industry (ABPI), said:

“This partnership between the Medical Research Council (MRC) and seven pharmaceutical companies is a fantastic example of open innovation that benefits both industry and academia by opening up new interesting avenues for research that may not otherwise be available, or even redirecting towards other diseases. The ABPI and our members are committed to greater collaboration with UK researchers and the whole of the academic community to improve our understanding of diseases so that we can continue to develop life-changing medicines for the benefit of patients.”

Research proposals will be submitted to the MRC, which will independently judge the scientific quality of the applications and award funding accordingly. The rights to intellectual property (IP) generated using the compounds will vary from project to project, but will be equitable and similar to those currently used in academically-led research.

Case study: from acid reflux to chronic cough A number of the projects funded through the MRC’s previous compound sharing collaboration with AstraZeneca, launched in December 2011, are already beginning to bear fruit.

In Manchester, clinical trials are underway to see whether a drug designed originally to treat gastro-oesophageal reflux disease can be ‘repurposed’ to treat chronic cough.

Cough is the single most common reason that people seek medical care. It is thought that one in five people in the UK suffer from chronic coughing (lasting longer than eight

weeks), which can have a huge impact on their quality of life.

Previous work by The University of Manchester researchers, led by Professor Jacky Smith, found that in around half of people with chronic cough, the cough reflex is related to gastro-oesophageal reflux, where the stomach contents escape back up into the food pipe causing a burning sensation.

It is hoped that the repurposed drug, which was not found to be helpful in patients with heartburn who were already taking acid-blocking treatments, may be successful in improving cough.

ENDS

Notes to editors *A Johnson & Johnson company in collaboration with Johnson & Johnson Innovation

To request an interview with Professor Jacky Smith or an MRC spokesperson, or one of the seven companies involved in the partnership, contact Hannah Isom in the MRC press office on 0207 395 2345 (out of hours: 07818 428 297) or email press.office@headoffice.mrc.ac.uk.

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