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AstraZeneca's compound interest

By Lev Osherovich, Senior Writer

Academics often lament that pharmas have shelves full of discontinued compounds that could be useful as research tools or therapeutics repurposed for new indications. Now, the U.K.'s **Medical Research Council** has partnered with **AstraZeneca plc** to make the pharma's shelved compounds available to academics investigating basic disease mechanisms.

In December, the Medical Research Council (MRC) put out a call for proposals for its new Mechanisms of Disease grant initiative, which aims to validate proposed disease targets with pharmacological tools and obtain clinical proof of concept for targeting new disease pathways.

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—Christopher Watkins, Medical Research Council

AstraZeneca will give academic recipients of the new MRC grants access to 22 discontinued compounds for mechanistic studies in indications beyond the ones for which the compounds were originally developed.

Christopher Watkins, head of translational research at MRC, said the grant program aims to unlock the residual value of AstraZeneca compounds that are known to be biologically active *in vivo* but have left the pharma's pipeline because of commercial or strategic considerations.

"AstraZeneca has identified compounds that are deprioritized but are incredibly useful in studying mechanisms of human disease," said Watkins. "All of the compounds have already undergone clinical evaluation."

The compounds cover a range of targets including kinases, proteases, neurotransmitter receptors and ion channels. AstraZeneca has publicly disclosed detailed pharmacological data about all of the compounds, thus giving researchers a sense of what can be done with them at a molecular level.

Clive Morris, AstraZeneca's VP of new opportunities, said the agreement gives the pharma a chance to explore alternative uses for its discontinued compounds without spending any money.

"This initiative provides AstraZeneca with access to the best of external science and many ideas that we may not have evaluated internally," said Morris.

AstraZeneca and MRC have formed a joint steering committee to review and select proposals. Watkins said 15–20 projects will receive a total of £10 million ($15.5 million) in funding, all of which comes from MRC.

The pharma retains all commercial rights to the compounds themselves, but any IP on new uses for these molecules "is likely to be the property of the researchers, with AstraZeneca having the right to negotiate an exclusive license," said Morris.

Morris said the new funding initiative has a wider scope than typical academic-industry partnerships focused on particular disease areas or targets.

"We're calling for proposals to use these compounds as tools across the disease spectrum," noted Watkins.

In 2010, the pharma partnered with MRC's commercial arm, **Medical Research Council Technology** (MRCT), in a more focused project to screen a library of 100,000 AstraZeneca compounds and 50,000 MRCT compounds against 10 undisclosed targets in neurology, cancer, cardiovascular disease and infectious disease. The partners will retain ownership of their respective compounds and plan to negotiate licenses for projects chosen for further development.

In addition, AstraZeneca has partnered with another British biomedical research foundation, **Cancer Research UK**, to discover new targets and biomarkers in oncology.[1]

The next steps for the Mechanisms of Disease grant program is to review preliminary proposals in February.

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1. Osherovich, L. *SciBX* **4**(45); doi:10.1038/scibx.2011.1256

COMPANIES AND INSTITUTIONS MENTIONED

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