

## UK government unveils innovation booster

The UK government announced a new program of support for life sciences, including enhanced R&D tax credits and other tax incentives, a £180 (\$278) million seed fund to help universities and small- to medium-sized enterprises (SMEs) commercialize medical research, and a £130 (\$199) million program of research in stratified medicines.

These measures (**Box 1**) are part of a wider strategy to make the sector more competitive, outlined by Prime Minister David Cameron in a speech to industry executives in London on December 5, 2011. Alongside the financial incentives, a program of change will be rolled out to make the National Health Service (NHS) more receptive to innovation, including a scheme providing early access to drugs before they are registered, moves to reduce variations in the uptake of new treatments from one region to another, and a scheme to make patient data available to researchers. The NHS will work “hand in glove” with the industry as “the fastest adopter of new ideas in the world,” Cameron pledged.

Stephen Whitehead, chief executive of the Association of the British Pharmaceutical Industry says, taken together, the measures mean companies “will see a quicker return on investment” and as a result the UK “will see increased investment from the pharmaceutical industry.”

Life sciences is one of the UK's leading industries, employing 165,000 people and with a turnover of £50 (\$77) billion per annum. But its significance is far greater than these bare statistics for a government striving to fill the hole left by the implosion of financial services and rebalance the economy toward manufacturing and exports. Cameron said the point of the new strategy “is not just to sort of hang on in there with a significant foothold,” but to try and take a bigger share of a growing market.

Glyn Edwards, interim chief executive of the London-based UK BioIndustry Association (BIA), welcomed Cameron's announcement of a £180 (\$278) million Biomedical Catalyst Fund, designed to help early-stage research cross the valley of death between university laboratories and the marketplace. But he said, “the government should not stop here.” Among other measures, the BIA is lobbying for the introduction of a Citizens Innovation Fund under which the general public could make tax-free investments in funds that are exclusively targeted at innovative SMEs.

The move on patient data follows a pilot exercise in which the South London and Maudsley NHS Foundation Trust has given academics at the Institute of Psychiatry, King's College London, access to a database covering 250,000 patients, which includes brain scans and medical records.

Cameron noted these have all been “consented to and anonymous,” but inevitably the measure aroused concerns about data protection and patient confidentiality. These criticisms were knocked on the head by Sharmila Nebhrajani, chief executive of the Association of Medical Research Charities, who noted a recent survey found 80% of the public is in favor of giving researchers access to patient data. Charities that are members of the association raise £1 (\$1.55) billion per annum from the public for health research, and Nebhrajani claims, “This really is the patient voice in research.”

Although billed as new, the strategy adds to a structure put in place over years of lobbying and consultation. Despite good reaction to the latest measures, commentators stressed that keeping pace with international competition and equipping UK life sciences to deal with the triple challenges of falling healthcare budgets, patent expiries and the end of one-size-fits-all blockbuster drugs remains a work in progress.

In particular, the government must lighten the debilitating regulatory load, argues John Hardy, professor of neuroscience at University College London, citing the Human Tissue Act, animal experimentation rules and the “colossal amount” of regulation around clinical trials. “Less regulation would be at least as useful as more money,” Hardy adds.

**Nuala Moran, London**



Prime Minister David Cameron sees a role for the biotech industry in the country's economic recovery.

Matthew Lloyd/Getty Images

### Box 1 UK takes action to stimulate biotech innovation

Several initiatives have been put in place by the UK government to stimulate biotech innovation and translation of new technology. These include the following:

- £130 (\$201) million for stratified medicines research
- £180 (\$278) million for a Biomedical Catalyst Fund
- A technology road map for establishing a world-leading synthetic biology industry to be developed by an independent panel
- An investment of £10 (\$15) million per annum in the new Catapult Centre for Cell Therapy to be based in London, backed by a further investment of £25 (\$39) million over five years in regenerative medicines research
- £75 (\$116) million to expand the European Bioinformatics Institute in Cambridge, providing a new facility for storing biological data to support life sciences research and its translation
- £60 (\$93) million for networks and systems to provide secure access to NHS patient data, plus changes to the rules so that there is a default assumption that data collected as part of NHS care can be used for research
- The appointment of two independent life sciences champions, one as chair of an independent Life Sciences Advisory Board, the second to act as a collaboration champion fostering translational research partnerships
- The introduction in 2013 of an above-the-line R&D tax credit, to improve the visibility and certainty of R&D tax relief
- The launch of an enhanced web-based UK Clinical Trials Gateway
- A new seed enterprise investment scheme to help smaller high-risk, early-stage companies by offering a 50% income tax relief on investments; giving R&D tax credits to contract research organizations and others when routine R&D is subcontracted
- Moves to simplify R&D tax credits for smaller companies