

Press release: Manufacturing of life-enhancing medicines boosted by new government funding

- 2 new programmes to help companies produce more medicines and get them to patients quicker have been given a multi-million pound government boost
- companies in Northumberland, Oxford and London have been awarded £4.3 million funding to develop digital solutions, including artificial intelligence, which will streamline production of next-generation medicines
- in a separate series of investments, delivering on the commitment made in the [Life Sciences Sector Deal](#), a further £3 million has been awarded to support the work of Advanced Therapy Treatment Centres in rolling out new cell and gene therapies across the NHS

Patients could soon receive faster treatment thanks to a multi-million pound government boost to streamline the production of medicines and treatments, including those used to treat blood cancers and inherited disorders.

Companies in Northumberland, Oxford and London will adopt new digital technologies, such as artificial intelligence, to support the manufacture of next-generation medicines and treatments.

The £4.3 million funding aims to create more efficient and innovative methods for manufacturing medicines. The challenge works to set the UK apart as a leader with greater capacity for manufacture of safe, affordable and effective therapies.

Life Sciences Minister Lord Henley said:

New technology can help us live longer, healthier lives and the new projects announced today will improve the speed and accuracy with which medicines get to the people that need them.

Advances in technology can help us address the challenges that an ageing society presents and we are backing the technologies of tomorrow in our modern Industrial Strategy, with the biggest increase in public research and development investment in UK history.

The 3 individual projects are:

- Arc Trinova in Northumberland will use new technologies to speed up the process of the production of patient specific medicines; it is currently a timely process dispensing individual doses from bulk because of the careful handling, labelling and batch release processes

- Oxford Biomedica will look to dramatically reduce the supply time for manufacturing by using a new digital and robotics framework to increase capacity, reduce waste and cut costs
- Autolus Ltd in London will look to avoid mix-ups of complex medicines on the supply chain by developing a computer based system that will constantly monitor the operation, making adjustments to timing, coordination and production where necessary, improving the efficiency of the whole system and working at a pace that human operators cannot imitate

One year on from the launch of the Industrial Strategy, this £7.3 million investment is the latest commitment from the £180 million [Industrial Strategy Challenge Fund \(ISCF\)](#) dedicated to leading-edge Medicines Manufacturing.

Taking steps to improve patient access to life-saving treatments and medicines, Advanced Therapy Treatment Centres, working across the UK, will support the roll-out of cell and gene therapies as clinical trials show them to be safe and cost-effective. The centres bring together expert clinicians, researchers, scientists, developers and private companies to demonstrate how the therapies have impact on patients' lives.

Advanced therapies, including cell and gene therapies, represent the next generation of therapies that have the potential to offer treatments for a number of conditions including some blood cancers and inherited conditions for which there are currently limited treatment options.

UK Research and Innovation (UKRI) is responsible for managing the Industrial Strategy Challenge Fund, which funds the winners of the Medicines Manufacturing Challenge.

Dr Ian Campbell, Interim Executive Chair, Innovate UK for UKRI, said:

The projects announced today will bring real benefits to patients and boost the knowledge economy as part of the government's modern Industrial Strategy. This is vital for the UK as a global leader in the development of advanced therapies and medicine manufacturing.

The projects awarded funding in the Digitalisation of Medicines Manufacturing are:

- Autolus Ltd in London 'Digital Delivery of Personalised Advanced Therapies' that will look at using technology to boost the flawless tracking and tracing of thousands of individual patient batches to ensure there are no mix-ups
- ARC Trinova Ltd in Northumberland 'Fill-Inova: Enabling flexible and agile highly potent medicines manufacture' that will use technologies to increase the throughput to thousands of units per hour
- Oxford Biomedica 'Digitalisation of Medicines Manufacturing' that will look at how to dramatically reduce the supply time for manufacturing

The Advanced Therapy Treatment Centres have been established previously by

£21 million funding from the Industrial Strategy Challenge Fund and are working to develop systems and methodologies that will allow the delivery of advanced therapies across the healthcare system.

The Advanced Therapy Treatment Centres are:

- Innovate Manchester Advanced Therapy Centre Hub (iMATCH),
- The Midlands-Wales Advanced Therapy Treatment Centre (MW-ATTC, comprising Birmingham, Wales and Nottingham)
- The Northern Alliance Advanced Therapies Treatment Centre (NAATTC, comprising Scotland, Newcastle and Leeds)

The Cell and Gene Therapy Catapult is playing a key role in the coordinating the work of the 3 Advanced Therapy Treatment Centres to ensure that learning and best practice is shared effectively. They will allow the creation of bespoke manufacturing and supply systems capable of operating across the entire NHS with the potential to treat many patients each month.