

Press release: New UK-Japanese research partnership to tackle degenerative and incurable diseases

- new UK-Japanese research programme to help treat patients with chronic degenerative diseases and bring together British and Japanese businesses to develop a new generation of assisted living products and services
- both countries also agree new collaboration on science and innovation, the ethical use of big data and robotics
- today measures aim to harness mutual strengths in science and innovation as part of the UK's modern [Industrial Strategy](#) and Japan's equivalent, Society 5.0

Medical researchers in Britain and Japan are to join forces in the fight to advance research into treatments for some of the most debilitating degenerative diseases such as diabetes, heart disease and arthritis, it was confirmed today (Thursday 10 January).

Prime Minister Theresa May, Business Secretary Greg Clark and Japanese Prime Minister Shinzō Abe announced a new £30 million partnership to promote new technology and innovation that could transform whole sectors and enable people to live longer, healthier lives in both countries.

The partnership includes a £10 million programme led by the UK's Medical Research Council (MRC) and Japan's Agency for Medical Research and Development (AMED) that will advance regenerative medicine. The research will help understanding in critical regenerative processes in human health and translate research into tools and technologies to treat patients. This could lead to new therapies for use against many types of cancer, including brain tumours or leukaemia, and repair damage caused by degenerative conditions such as motor neurone disease, Parkinson's disease or multiple sclerosis.

British and Japanese businesses, including startups, will support this by working together to develop and showcase a new generation of assisted living products. Through a joint competition focused on employing Artificial Intelligence (AI) and robotics in assisted living, they can access funding to help create safe, ethical and intelligent home environments. Additionally, Britain will join Japan in its Well Ageing Society Summit and Global Round Table for Dementia.

Business Secretary Greg Clark said:

The UK and Japan are home to some of the most innovative businesses in the world, and we share the same fundamental belief in the power of enterprise to improve the lives of our citizens.

This government wants to give older people at least five extra healthy independent years of life by 2035. Our modern Industrial

Strategy and its Ageing Society Grand Challenge aims to put the UK at the forefront of new technologies. We can do this most effectively by reaching out to other centres of excellence around the world. Japan is the perfect partner with which to build on our strengths in science, medicine and research and to lead the world in developing innovative solutions to help us live longer, healthier lives.

The new [NHS long term plan](#) and the modern Industrial Strategy's [Ageing Society Grand Challenge](#) will help people age well and use technology to detect and prevent diseases sooner. Today's announcements will harness the power of innovation to meet the needs of an ageing society, while putting the UK at the forefront of the AI and data revolution.

Health Secretary Matt Hancock said:

As global leaders, the UK and Japan must work closely together to tackle key emerging issues in healthcare, like the challenges of an ageing population and how we can harness the power of technology to revolutionise care.

The UK has one of the most advanced health systems in the world and is leading the way in life sciences, genomics and artificial intelligence. Japan will be a crucial partner in the future to develop the next generation of treatments as part of our long term plan for the NHS.

Digital Secretary Jeremy Wright said:

The UK is a world leader in AI and data and the unrivalled tech hub of Europe. By working closely with a country at the cutting-edge of AI like Japan, we can make sure we remain global leaders in developing tomorrow's technology to boost investment, grow our economy, improve people's lives, and support our long term plan for the NHS.

Dr Mark Palmer, Director of International Strategy at the MRC, said:

Regenerative medicine is a fast-moving, interdisciplinary field that holds the promise of revolutionising medical treatments. The UK and Japan are world leaders in regenerative medicine research and we very much look forward to the opportunity for further collaborative efforts in this field through a joint programme.

A further £20 million in new joint funding will support collaborations between British and Japanese researchers. The UK and Japan reaffirmed its

commitment to use robotics and AI to carry out tasks too dangerous for humans. From disaster response to mountain rescues to exploring the seas, this technology could revolutionise whole industries and has the potential to save people's lives.

Helping break down the barriers faced by both nations' innovative businesses, UK and Japanese centres of excellence in Artificial Intelligence and data science – led by the [Alan Turing Institute](#) – will share solutions on using large amounts of data legally, ethically and safely.

Britain and Japan will also collaborate on best practice in accelerating clean energy innovation. The initiative will focus on making a low-carbon hydrogen economy possible – with the potential to revolutionise whole industries from transport to heating and creating a cleaner, greener landscape. This builds on the UK's strengths in carbon capture, utilisation and storage and Japan's leadership in hydrogen technologies.

Through Britain's modern Industrial Strategy and Japan's Society 5.0, Britain and Japan are committed to strengthening economic links, and will work together to tackle shared Grand Challenges of an ageing society, Artificial Intelligence (AI) and data, clean growth, and the future of mobility.

The modern [Industrial Strategy](#) sets out a long-term plan to boost the productivity and earning power of people throughout the UK. It sets out how we are building a Britain fit for the future – how we will help businesses create better, higher-paying jobs in every part of the UK with investment in skills, industries and infrastructure.