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| For more than 65 years we’ve been saving and changing children’s lives through medical research and have supported some of the most significant medical breakthroughs in recent history – breakthroughs that have helped save thousands of children’s lives and changed many more.  Here are some examples of recent projects you can talk about, which are steps towards successes, (potential breakthroughs in the making) all made possible thanks to Action. | C:\Users\smoss\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.Word\Kids_Characters-1.jpg | C:\Users\smoss\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.Word\Kids_Characters-7.jpg |

**Reducing the risk of stillbirth** *(GN2156, Manchester)*

**This research has led to practical advice for pregnant women which could save up to 100,000 babies a year internationally.**

Stillbirth is devastating, with long-lasting effects on bereaved parents. Tragically, around 9 babies are stillborn every day in the UK. Parents want to know why their baby has died, whether it might happen again if they try for another baby and what they can do to avoid further stillbirth.

Action, along with research partners Cure Kids and Sands, supported a three-year study led by Professor Alexander Heazell looking specifically at mothers’ sleep positions in late pregnancy in relation to the risk of stillbirth.

This work, completed in 2017, confirmed findings from earlier studies in New Zealand and Australia that, in the third trimester (after 28 weeks of pregnancy), pregnant women who go to sleep on their back are more likely to have a stillbirth.

Supported by NHS England, a public health campaign has been launched advising women to go to sleep on their side in the third trimester. The ‘Sleep on Side’ campaign has received wide media coverage and it is estimated that if all pregnant women in the UK followed this advice it could save the lives of around 130 babies a year*.*

**This new advice has the potential to save up to 100,000 babies a year internationally, sparing parents from the heartache of stillbirth.**

**A test to predict risk of early labour** *(GN2248, London)*

**Research funded by Action in 2014 has made important steps towards developing a blood test that could be used in early pregnancy to identify women who are at high risk of going into labour too soon.**

Latest figures suggest around 61,000 babies are born too soon every year in the UK. Sadly, premature birth is the biggest killer of babies in the UK, and babies who survive a very early birth are at risk of developing lifelong disabilities.

Research Training Fellow Dr Joanna Cook investigated the role of naturally occurring substances called microRNAs, which seem to be involved in controlling when a woman goes into labour. These can be detected in the blood and, importantly, their levels have been found to be different in women who go on to develop cervical weakness – a known cause of premature birth. If diagnosed early enough cervical weakness can be treated and pregnancy prolonged.

Dr Cook says: “In our clinic we often see women who have already had very premature babies, but didn’t receive special monitoring in their first pregnancies because we had no way of knowing they were at risk.”

**These promising results will now be tested in a larger group of women. If successful it is hoped that a commercially available test would be ready in around five years.**

**Fighting neuroblastoma** *(GN2196, Glasgow)*

**Researchers have identified new drug combinations that could lead to a safer, more effective treatment for a devastating childhood cancer with anticipated clinical trials within two years.**

In this three year Action funded study researchers, led by Professor Robert Mairs, tested a number of new drug combinations to help treat children with high-risk neuroblastoma. Their aim was to reduce the suffering associated with the side effects of existing treatments, and try and save more young lives.

At present, around a third of children lose their lives within five years of being diagnosed with neuroblastoma, like [Felix](https://www.action.org.uk/our-research/real-stories/felixs-story) who sadly died aged just six after enduring two years of gruelling treatment.

Professor Mairs, who is based at the Institute of Cancer Sciences in Glasgow, set out to enhance a treatment known as targeted molecular radiotherapy. In this approach, radioactive drugs which seek and destroy cancer cells are injected into the bloodstream. It can be used to treat cancers that have spread through the body and even destroy tumours that are too small to detect on scans.

Researchers tested new combinations of drugs, designed to make cancer cells more susceptible to radiation-induced damage. They found two drugs, known as radiosensitisers, which work well in combination with a radioactive drug. Professor Mairs comments: “This holds promise as another component in the arsenal for the treatment of high-risk neuroblastoma.”

**It is anticipated that clinical trials in children with this devastating disease will take place within two years.**

**Developing a protective new treatment for children with cystic fibrosis** *(GN2299, London)*

**Action funding, together with the Cystic Fibrosis Trust, awarded in 2014 has seen researchers move closer to developing a new type of treatment to protect the lungs of children with cystic fibrosis, with patient trials estimated within three years.**

The inhaled medicine aims to target an underlying cause of symptoms rather than just alleviating the symptoms themselves.

The surface of the lungs becomes dehydrated in children with cystic fibrosis and researchers, led by Professor Steve Hart at the UCL Great Ormond Street Institute of Child Health, believe this is a major cause of symptoms – causing the production of thick, sticky mucus.

“Our new medicine is designed to combat this,” says Professor Hart. “By keeping the surfaces moist, we hope this will reduce the thickness of the mucus, leading to fewer chest infections, improved breathing and reduced coughing.”

But a big challenge is getting the new medicine to penetrate through existing mucus and into the lung cells where it can get to work.

“During this study, we developed a formulation that can deliver the medicine to where it’s needed,” says Professor Hart.

“We’re excited about the progress we’re making with this new medicine, which we hope will one day dramatically improve the lives of children with cystic fibrosis.”

**The team estimate trials in patients could happen within three years.**