## UPDATE



Prostate Cancer Research

pcr.org.uk

**AUTUMN 2021** 

# Keeping cancer at bay

## Longer lives for men with high-risk prostate cancer

Latest results from the STAMPEDE\* clinical trial show that the drug abiraterone, when used with standard hormone therapy, helps men with high-risk prostate cancer live longer. This is a powerful breakthrough for patients and we're very proud to fund STAMPEDE scientists to make this key drug more effective.



'We take millions of snapshots of a prostate cancer's DNA sequence and build them into a photo that could predict which treatment will work best for every individual man.'

### Professor Gert Attard Lead researcher UNIVERSITY COLLEGE LONDON

**Start date:** December 2020 **Duration:** 36 months, with quarterly evaluations

\*STAMPEDE: Systemic Therapy in Advancing or Metastatic Prostate Cancer: Evaluation of Drug Efficacy

#### The research at a glance



- 1 Some prostate cancer patients respond better to certain treatments than others. This can make it difficult to know how to treat an individual's cancer.
- 2 STAMPEDE is one of the biggest ongoing UK clinical trials looking into advanced prostate cancer and has already changed how prostate cancer is treated.



3 The PCR-funded project will analyse prostate tumour DNA from men taking part in the STAMPEDE trial.



4 In some tumours, there may be extra copies of DNA or DNA may be lost. This is known as copy number profiling.



5 The researchers will see if these differences in DNA can be used to predict responses to treatment



6 The researchers hope to develop a test to choose treatments for patients based on the DNA of their cancer

#### What is STAMPEDE?

STAMPEDE is one of the largest ongoing clinical trials into advanced prostate cancer. New results, presented for the first time at the prestigious European Society for Medical Oncology (ESMO) conference in September 2021, could change the way that prostate cancer is treated worldwide. This is just the latest breakthrough from STAMPEDE: the trial already changed clinical practice when it proved that hormone therapy and chemotherapy work better when they are given to patients earlier than they used to be. We are glad to see science delivering another muchneeded innovation, and proud to be funding the next phase of this important work.

#### Saving even more lives

The STAMPEDE trial has led to breakthroughs, but there are still vital areas to investigate. For example, if we know more about the finer biological details of the tumours from the men taking part in the trial, we will be in a stronger position to decide which treatment is best for each patient. Prostate Cancer Research is funding Professor Gert Attard. Dr Emily Grist and their wider team to analyse DNA from these STAMPEDE tumours. The team will investigate whether a tumour has more or fewer DNA copies than normal, and determine if this means that the patient is more or less likely to benefit from the drugs tested on the trial. When the team combines their findings with other STAMPEDE studies. we hope to develop a new test to indicate which drugs to prescribe. New treatments could be implemented into clinical practice quickly - allowing us to treat men more effectively.

'Supporting our research means supporting bold science backed by patients. With your help, we can continue to build on successes such as STAMPEDE to make cancer treatments both smarter and kinder.'

#### **Oliver Kemp**

CEO

PROSTATE CANCER RESEARCH



Researchers will analyse tumour DNA from samples collected from the STAMPEDE trial.



#### RESEARCH UPDATE AI TRANSFORMING CANCER RESEARCH

Drugs are not the only way forward in cancer research. Computers are also playing an increasing role. Artificial intelligence (AI) is a type of technology that mimics behaviours associated with human intelligence, such as learning and problemsolving. But AI can also revolutionise cancer research, and we are leading the way with three exciting initiatives:

- Professor Daniel Brewer and his team are developing new ways to predict which tumours need treatment and which don't.
- Dr Anna Wilkins and Dr Erik Sahai are developing software to predict whether an individual's prostate cancer will return.
- The dynamic team at Lucida Medical is working to make prostate cancer scans cheaper, more accessible and more accurate.

OUR MISSION
Together, we
will develop and
deliver breakthrough
medicines and
treatments.

OUR VISION
A world where people are free from the impact of prostate cancer.

#### RESEARCH UPDATE HOW FAT FUELS PROSTATE CANCER



We have launched a new research project led by Dr Claire Fletcher at Imperial College, London. Claire will investigate how the fat that surrounds the prostate sends signals into the prostate that may affect the behaviour of a tumour. These signals may be different between heavier and lighter men, and a better understanding of this connection will help us treat prostate cancer for all men. Claire's project is especially relevant now that obesity, which has been linked to more aggressive prostate cancer, is on the rise in the UK.



PCR: Transforming research. Transforming lives.

