Results from STAMPEDE: radiotherapy for disease that has spread

Thank you

Thank you for taking part in the STAMPEDE trial. You are helping us to answer important questions about how to treat people with prostate cancer. This will help other patients with prostate cancer in the future.

This document describes some of the results of the part of the study that looked at the effects of radiotherapy for disease that has spread and compared this with the current standard treatment. In this document, we will call it the ‘radiotherapy comparison’. If you have any questions about it, or about previous results, please speak to your doctor or research nurse.

We wrote this summary in October 2018. We will have more results from this trial in a few years. This summary only includes results from the STAMPEDE trial. Other studies may find different results.

What was the STAMPEDE trial radiotherapy comparison about?

The STAMPEDE trial is testing how best to treat prostate cancer. It is testing several new approaches. We already have results from six of these, using the drugs zoledronic acid, docetaxel, celecoxib and abiraterone. The results we tell you about in this document are the newest results. They are about adding prostate radiotherapy to the current standard treatment, for men whose disease has already spread beyond the prostate. We aimed to see if adding radiotherapy could improve how long men lived, and delay the disease getting worse.

Why was the STAMPEDE trial needed?

Prostate cancer is the most common cancer in men in the UK. Around 7,000 men in the UK are diagnosed with prostate cancer that has already spread beyond the prostate each year. The STAMPEDE trial was set up to see if we could improve prostate cancer treatment by adding things to standard hormone therapy.

Radiotherapy

The most common form of radiotherapy uses high energy x-rays to treat cancer. It is currently used to treat prostate cancer in patients whose disease has not spread beyond the prostate. In STAMPEDE we looked at using it in men whose disease had already spread to see if this improves how men do. In this comparison, the radiotherapy used was external beam radiotherapy, which is delivered by a machine called a linear accelerator.

Who took part in the radiotherapy comparison in STAMPEDE?

People taking part in the radiotherapy comparison in STAMPEDE:

- had prostate cancer that was newly diagnosed as having spread beyond the prostate;
- were starting long-term hormone therapy for the first time;
- had not previously received radiotherapy or surgery to the prostate
• were fit enough to have radiotherapy
• had no clinically-significant heart problems

The trial is taking place in more than 100 hospitals throughout the UK, and in five hospitals in Switzerland.

The average age of men joining this comparison was 68. The average PSA before starting hormone therapy was 97ng/mL.

How was the radiotherapy comparison carried out?
Between January 2013 and September 2016, 2061 men joined this comparison in STAMPEDE.

• 1029 people were in group A. They received standard hormone therapy with or without docetaxel (standard treatment)
• 1032 people were in group H. They received standard hormone therapy with or without docetaxel, plus radiotherapy to the prostate.

So far, we have followed up how people are doing for around three years. We wanted to see if radiotherapy improved how long men lived, compared to the standard treatment. We also looked at the side-effects people had.

What did the radiotherapy comparison find?
The STAMPEDE trial found that overall, when compared to standard treatment, radiotherapy did not improve how long men whose disease had already spread (metastatic disease) lived for.

65% of men were alive after 3 years in the radiotherapy group, compared to 62% in the standard treatment group. This difference is not big enough for us to be confident it was not due to chance.

Among men with high metastatic burden disease, radiotherapy did not improve how long they lived for.

Radiotherapy did improve how long men went until their hormone treatment stopped working. Hormone therapy was still working in 32% of men in the radiotherapy group after 3 years, compared to 23% in the standard treatment group. Men with low metastatic burden disease benefited most from radiotherapy.

Metastatic burden
To find out which men had low metastatic burden disease, and which had high metastatic burden disease, doctors looked at bone and CT scans to see where the disease had spread.

If the disease was just in the glands, and/or only nearby parts of the bones, it was counted as 'low metastatic burden' disease.

If the disease had spread to other internal organs, or four or more different parts of the bone, including some outside the pelvis or spine, it was counted as 'high metastatic burden' disease.
Overall results

After 3 years...

No difference in how long the men in the two groups lived overall
But a difference in how long men lived without the disease getting worse

What side-effects did men experience?

38% of men in group A (who had the standard treatment) told us they had some severe side-effects. 39% of men in group H (the radiotherapy group) told us they had some severe side-effects. The main severe side-effects were those associated with hormone therapy:

- 14 out of every 100 men had hot flushes and/or impotence (no difference between the groups)
- 9 out of every 100 men had problems with their joints (e.g. arthritis) (no difference between the groups).

There were some severe side effects associated with the radiotherapy:

- 5 out of every 100 men in the radiotherapy group had severe bladder problems around the time of treatment
- 1 out of every 100 men had severe bowel side effects around the time of treatment

But these side-effects did not last long after the course of radiotherapy was completed.
How sure can we be about these results?

For men with low metastatic burden disease, we can be confident that radiotherapy is beneficial as the survival difference we saw was large. There were enough men with low metastatic burden for us to be very unlikely to see a difference like this by chance.

For men with high metastatic burden, we have no evidence that radiotherapy improves how long men live for, so cannot recommend this treatment for those men.

What do these results mean?

What do these results mean for you?

These results are not directly relevant to your future treatment, as they only apply to men starting long-term hormone therapy for the first time.

Whichever treatments you received or are receiving as part of STAMPEDE, please do carry on coming to your appointments. We are still very interested in how you do. This information will be useful to answer questions about long-term effects.

What do these results mean for other people?

These results suggest that people whose prostate cancer has a low metastatic burden and who are starting long-term hormone therapy for the first time are likely to benefit from radiotherapy in addition to the current standard treatment.

What difference will these results make?

We think these results will help improve how future patients with prostate cancer are treated.

Radiotherapy is widely used for men with localised prostate cancer, so is available around the country. It is relatively low-cost compared to many modern cancer drugs, so is likely to be cost-effective for the NHS. It can be used in addition to standard hormone therapy, and docetaxel or abiraterone, as it works in a different way to these treatments.

The STAMPEDE trial is still carrying on, and is looking at a number of other approaches that might help improve treatment of men with prostate cancer.

Conclusion

Thank you for taking part in the STAMPEDE trial. You are helping us to answer important questions about how to treat people with prostate cancer. The results from early comparisons in STAMPEDE are already helping other men with prostate cancer. We hope that these latest results will help patients in the future.

Further information

If you have any questions about the STAMPEDE trial, please speak to your doctor or research nurse.

Prostate Cancer UK have specialist nurses who can help answer any questions you have about prostate cancer. You can call them on 0800 074 8383.

This study is officially known as STAMPEDE: Systemic Therapy in Advancing or Metastatic Prostate Cancer: Evaluation of Drug Efficacy (MRC PR08). It is registered on clinical trials databases, where you can find out more information. Its registration numbers are:

- [www.ISRCTN.com](http://www.ISRCTN.com): ISRCTN78818544
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This research is important. Thank you for helping us to understand more about how to treat prostate cancer.