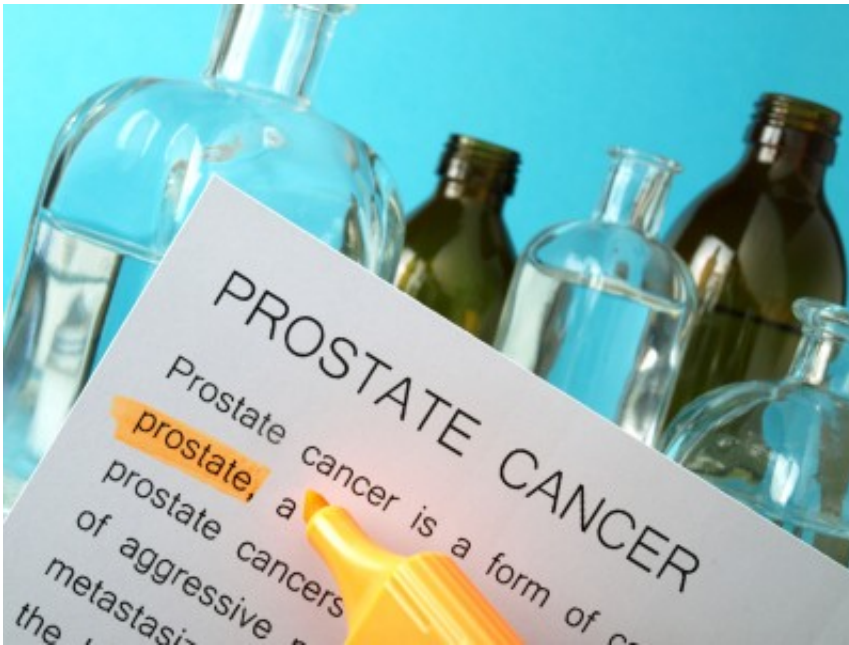


Scientists overcome barrier to prostate cancer research

October 24 2013



Professor Risbridger and her team are currently trying to find markers that will predict which cancer will go on to spread into other organs.

Monash scientists have overcome one of the major barriers to the study and treatment of localised -or organ confined- prostate cancer.

This type of tumour has, to date, resisted most attempts to grow in the laboratory and there is no animal model. Now Professor Gail Risbridger, from the Monash School of Biomedical Sciences, and her team have developed a way to grow these cells enabling research to distinguish

between benign and aggressive cancers, which remains currently a mystery.

Each year in Australia, close to 3,300 men die of prostate cancer and around 20,000 new cases are diagnosed every year. With an ageing population prostate cancer is likely to become more of a burden to the health system.

Despite its prevalence, there is still much about prostate cancer that remains a mystery. There are no accurate tests to detect the disease and if screening detects a cancer, doctors often can't tell if the cancer is indolent or will become aggressive and is truly dangerous.

Finding and treating all [prostate cancers](#) early might seem as if it would always be a good thing. However it is not currently possible to detect which patient with prostate cancer has the type that is aggressive and which has the benign or indolent form which essentially does no harm.

Treatment options for men with localised prostate cancer are active surveillance or treatment with surgery or radiation. The tools we have to be certain of the best treatment for individual men is limited and treatments like surgery and radiation can have urinary, bowel, and/or sexual side effects that may seriously affect a man's quality of life. So there is a need to improve our decision making tools and capability to predict which cancers if left untreated will impact on a man's life.

Professor Risbridger said localised prostate cancer is poorly understood because it was a difficult cancer to grow in the laboratory and there was no good [animal model](#) for the early stages of disease.

Her laboratory is one of the first in the world to develop a way to grow tissue from patients in a way that allows scientists to study the biology of disease from its localised form and how it becomes a more dangerous

cancer that spreads to other organs.

Professor Risbridger and her team are currently trying to find markers that will predict which cancer will go on to spread into other organs.

"Currently there is no accurate way to predict which patient has a localised cancer that will become aggressive and therefore require surgery and radiotherapy," Professor Risbridger said.

"It is important to identify these patients and conversely identify those for whom it may not be necessary to have treatment because the cancer will not spread.

"As our population ages, more men will be diagnosed with prostate cancer and we need to identify the aggressive cancers and provide [treatment](#) for those that need it, but leave the non-aggressive ones alone."

Provided by Monash University

Citation: Scientists overcome barrier to prostate cancer research (2013, October 24) retrieved 20 April 2024 from <https://medicalxpress.com/news/2013-10-scientists-barrier-prostate-cancer.html>

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