

## Preventing deaths from ovarian cancer

### Could our current research lead to a new national screening programme?

Cancer Research UK is supporting a crucial piece of research to see whether screening for ovarian cancer would save lives from this devastating disease. This research will help determine whether the UK should have a national screening programme which could have a huge impact on the survival of many of the thousands of women who develop ovarian cancer every year,

### The ovarian cancer problem

Every year ovarian cancer claims the lives of more than 4,000 women. Unfortunately, the disease is often diagnosed very late, once it has spread to other parts of the body. This is mainly due to the symptoms of ovarian cancer (including abdominal pain and bloating, fatigue and weight loss) being vague and difficult to distinguish from other conditions. If doctors could detect the disease at an earlier stage it would be easier to treat it successfully.

One way of diagnosing cancers earlier is through screening – testing a population of people who do not have any symptoms, for a particular disease. The U.K. Already has successful breast, bowel and cervical cancer screening programmes, which save thousands of lives every year.

Now scientists are looking at the possibility of introducing other screening programmes. This is not a simple process however. Firstly, the most vital component in any screening programme – a test which is simple to perform and which can accurately pinpoint people who may have the disease – needs to be developed. It then needs to be tested in large scale trials to prove that it would be effective in a national screening programme.

### Looking at the options for ovarian cancer screening

Cancer Research UK is working with its partners, including the Medical Research Council and the Department of Health, to fund UKCTOCS, a huge trial of ovarian cancer screening. Over 200,000 women between the ages of 50 and 74 are involved – half are being regularly screened and half are a comparison group who are not receiving screening.

Two different screening methods are being investigated. The first is a blood test that measures levels of a molecule called CA125, which is produced by some ovarian cancers, women have annual blood tests and the changes in CA125 levels over the years are used to calculate their risk of developing ovarian cancer, using something called the 'risk of ovarian cancer algorithm'. This is a calculation that helps the researchers determine exactly what the results of CA125 tests mean. The second test is an ultrasound scan that looks for anomalies in the ovaries.

Preliminary results from UKCTOCS were published in 2009, and are extremely encouraging, suggesting that ovarian cancer screening may help to detect the disease in its earlier stages.

Lead investigator Professor Ian Jacobs points out that there is still a long way to go before they will know whether or not screening for ovarian cancer saves lives. It will also be important for the researchers to balance the benefits of screening with the recognised risks of causing anxiety and leading to unnecessary operations for some women.

**“Early results are encouraging and suggest that both types of screening can successfully identify ovarian cancers earlier than clinical diagnosis. By 2015 we’ll know whether or not a screening programme is able to detect cancer early enough to save lives. If the findings are positive my hope is that this will pave the way for a national screening programme to help reduce the number of women dying from the disease”.**

Professor Ian Jacobs

The UKCTOCS trial will continue form many more years. The women taking part will continue to be monitored for the development of ovarian cancer. Due to the nature of clinical trials, full results will not be available until after the trial is finished, in 2015.

