## **HEART**

## Cons of regular low dose aspirin to stave off serious illness in women outweigh pros

But limiting to over-65s may boost net health gain, suggest researchers

[Individualised prediction of alternate-day aspirin treatment effects on the combined risk of cancer, cardiovascular disease and gastrointestinal bleeding Online First doi 10.1136/heartjnl-2014-306342] [Editorial: Aspirin use in women for primary prevention Online First doi 10.1136/heartjnl-2014-306770]

The pros of giving healthy women regular low dose aspirin to stave off serious illness, such as cancer and heart disease, are outweighed by the cons, suggests a large study published online in the journal *Heart*.

But the balance begins to shift with increasing age, and limiting this form of primary prevention to women aged 65 and above, was better than not taking aspirin at all, or treating women from the age of 45 onwards, say the researchers.

They base their findings on almost 30,000 healthy women, who were at least 45 years old and taking part in the Women's Health Study.

Participants were randomly assigned to take either 100 mg of aspirin or a dummy tablet (placebo) every other day, to see whether aspirin curbed their risk of heart disease, stroke, and cancer.

During the trial period, which lasted 10 years, 604 cases of cardiovascular disease, 168 cases of bowel cancer, 1832 cases of other cancers, and 302 major gastrointestinal bleeds requiring admission to hospital were diagnosed.

Over the subsequent seven years, a further 107 cases of bowel cancer and 1388 other cancers were diagnosed.

Compared with placebo, regular aspirin was linked to a lower risk of heart disease, stroke, bowel cancer, and in some women, other cancers, but only marginally so.

And this slight health gain was trumped by the prevalence of internal gastrointestinal bleeding, which affected two thirds of the women taking the non-steroidal anti-inflammatory drug.

The risk of gastrointestinal bleeding rose with age, but so too did the drug's impact on lowering the risk of bowel cancer and cardiovascular disease, with the balance appearing to tip in favour of the drug for women aged 65 and above.

The researchers calculated that over 15 years, 29 over-65s would need to be treated with aspirin to prevent one case of cancer or heart disease/stroke.

"Recent findings that both daily and alternate day aspirin can reduce cancer risk, particularly for colorectal cancer, have re-ignited the debate on aspirin in primary prevention," write the researchers.

But they conclude that blanket treatment "is ineffective or harmful in the majority of women with regard to the combined risk of cardiovascular disease, cancer and major gastrointestinal bleeding."