

# Effect of Daily Aspirin on Long-Term Risk of Death Due to Cancer

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Outside the well known anti-platelet effect of aspirin in prevention of cardiovascular event, a group of scientists tried to demonstrate that aspirin might also reduce the risk of cancer, particularly gastrointestinal cancer. Researchers used individual patient data from all randomized trials of daily aspirin versus no aspirin with mean duration of scheduled trial treatment of 4 years or longer to determine the effect of allocation to aspirin on risk of cancer death.

The main conclusion was that in eight eligible trials, allocation to aspirin reduced death due to cancer. On analysis of individual patient data, benefit was apparent only after 5 years follow-up. The 20-year risk of cancer death (1634 deaths in 12 659 patients in three trials) remained lower in the aspirin groups than in

the control groups (all solid cancers) and benefit increased with scheduled duration of trial treatment ( $\geq 7.5$  years: all solid cancers and gastrointestinal cancers).

The latent period before an effect on deaths was about 5 years for esophageal, pancreatic, brain, and lung cancer, but was more delayed for stomach, colorectal, and prostate cancer.

Benefit was unrelated to aspirin dose (75 mg upwards), sex, or smoking, but increased with age—the absolute reduction in 20-year risk of cancer death reaching 7.08 (2.42-11.74) at age 65 years and older.

Daily aspirin reduced deaths due to several common cancers during and after the trials. Benefit increased with duration of treatment and was consistent across the different study populations.

*Comment on a paper:*

**P.M. Rothwell, F.G.R. Fowkes, J.F.F. Belch, et al.** – Effect of daily aspirin on long-term risk of death due to cancer: analysis of individual patient data from randomized trials. *The Lancet*, Early Online Publication, 7 December 2010, 6736(10): 62110-1