Background: Gabapentin is a medicine used to treat epilepsy and pain caused by damaged nerves. Doctors have recently been using gabapentin to treat pain after an operation, with the intention of reducing the amount of morphine type drugs (called "opioids") needed while maintaining good pain relief. Doctors want to try to reduce the amount of opioid drugs because they cause side-effects (such as dizziness and reduced breathing rate), often delaying discharge from hospital and leading to slower recovery. There is uncertainty about whether adding gabapentin to the usual painkilling drugs will result in good pain relief, with fewer side effects, and therefore faster recovery after surgery.

Who participated? 1195 adults having major heart, lung or abdominal surgery who were expected to stay in hospital for at least 2-days after their surgery.

What was involved? The participants were either given gabapentin or placebo (the same tablet but with no active drug) just before and twice daily for 2-days after their surgery. We measured how long they stayed in hospital after the surgery, the amount of opioid drugs they used, the amount of pain they had, what their quality-of-life was and how much they cost the NHS. We measured these during their hospital stay and at 4-weeks and 4-months after the surgery.

What did the trial find? The trial found that there was no difference in the length of hospital stay, the number of adverse health events, or NHS costs between people who took gabapentin and those who took the placebo. People who took gabapentin for abdominal and thoracic surgery used fewer opioid-type drugs in-hospital after their surgery – but this did not translate into better pain control or fewer side-effects. Therefore, this trial tells us that doctors should stop routinely giving gabapentin to people to reduce their pain after major surgery.