

# SHORT CUTS

ALL YOU NEED TO READ IN THE OTHER GENERAL JOURNALS

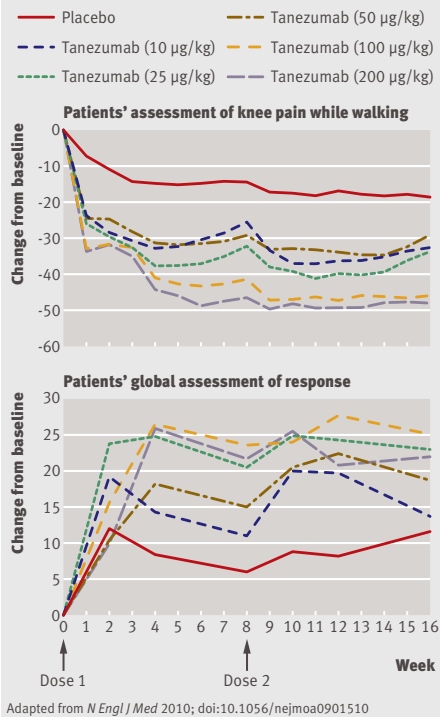
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**“Like about 40% of adults of my age in Western countries, I have a fatty liver, though I don’t qualify for having non-alcoholic fatty liver disease because I drink too much”**

Richard Lehman’s journal blog at [www.bmj.com/blogs](http://www.bmj.com/blogs)

## RESPONSE TO TREATMENT



## Safety worries halt trials of promising biological analgesic

Tanezumab is a monoclonal antibody directed against nerve growth factor, one of the mediators of pain in damaged or inflamed tissue. This new agent has analgesic potential, and an early trial reports good results for people with severe osteoarthritis of the knee. Two infusions of tanezumab at a variety of doses significantly improved objective measures of pain over 16 weeks, relative to a placebo control (improvement of 45-62% v 22% for controls;  $P < 0.001$ ).

So it is effective, but is it safe? The US Food and Drug Administration (FDA) is already worried about this new biological analgesic and has suspended three further trials while researchers investigate the role of tanezumab in 16 cases of joint failure that emerged earlier this year. All patients needed joint replacement for progressive osteoarthritis with bone necrosis. One commentator (doi:10.1056/nejme1004416) suspects overuse and “excessive wear and tear” of joints made more comfortable by tanezumab. Other less serious side effects include sensory symptoms such as paresthesia (7% in this trial) and headache (9%). *N Engl J Med* 2010; doi:10.1056/nejmoa0901510

## Promising results for hands only CPR by bystanders

In 2005, the authorities in Arizona, US, launched a state-wide campaign to improve previously dismal rates of bystander cardiopulmonary resuscitation (CPR) during out of hospital cardiac arrests. The campaign, which reached at least half a million people, encouraged compression only resuscitation or “hands only CPR” on the grounds that it was potentially as effective as full CPR but easier to teach, learn, remember, and perform. Resuscitation rates went up significantly (from 28.2% (95% CI 24.6% to 31.8%) to 39.9% (36.8% to 42.9%);  $P < 0.001$ ) and lives were saved (overall survival increased from 3.7% (2.2% to 5.2%) to 9.8% (8.0% to 11.6%);  $P < 0.001$ ), according to a recent observational study from the state.

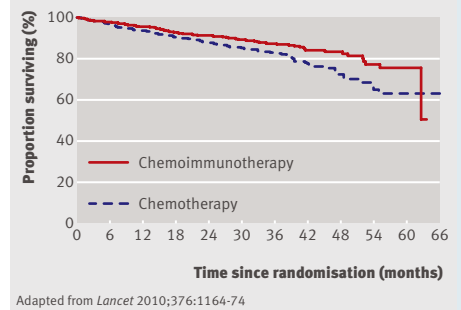
More than 4000 cardiac arrests were included in the analysis, which suggested that hands only CPR by bystanders worked better than no CPR (odds ratio for survival to hospital discharge 1.59, 1.18 to 2.13), and better than full CPR (1.60, 1.08 to 2.35). The results were independent of age, sex, location of arrest, rhythm, emergency response times, CPR methods used by the emergency personnel, and deployment of hypothermia. An editorial (p 1493) says these results are encouraging, but not the final word. The chance of a good neurological outcome remained poor, even after bystander CPR. In this study, just 4.2% (182/4317) of all participants made it home with good or only moderately impaired cerebral function. Type of CPR made no significant difference to neurological outcome.

*JAMA* 2010;304:1447-54

## Rituximab prolongs survival in chronic lymphocytic leukaemia

Treatment guidelines for chronic lymphocytic leukaemia may have to change for good after a landmark trial of the monoclonal antibody rituximab. Adults given the antibody in addition to standard chemotherapy were more likely to achieve remission, less likely to progress, and less likely to die (16% (65/408) v 21% (86/409); hazard ratio 0.67, 95% CI 0.48 to 0.92) than controls given standard chemotherapy alone. Even the authors were surprised. Few new treatments for chronic lymphocytic leukaemia have had a measurable effect on overall survival, and an editorial (p 1122) says

## OVERALL SURVIVAL BY TREATMENT GROUP



this trial should prompt a re-evaluation of treatment recommendations, with rituximab firmly in the front line for eligible adults.

The trial, which was funded by Hoffmann-La Roche, investigated 817 adults with new and untreated disease. They were relatively young (mean age 61) and otherwise physically fit.

Response to treatment depended to some extent on the genetic profile of tumour cells. These authors identified a subgroup of around 8% of patients with a 17p deletion who did not respond to rituximab.

*Lancet* 2010;376:1164-74

## Genetic defects implicated in ADHD

Attention deficit hyperactivity disorder (ADHD) runs in families but a clear genetic basis for the disorder remains elusive. The search for single nucleotide polymorphisms associated with ADHD has been disappointing, so researchers recently turned their attention to larger chromosomal defects—duplications and deletions known as copy number variants (CNVs).

In one study of British and Icelandic cohorts, genome-wide scanning found twice as many of these variants in children with ADHD as in unaffected controls (0.156 v 0.075 per child;  $P = 8.9 \times 10^{-5}$ ). The difference was even more pronounced for children with both ADHD and a learning disability (0.424 v 0.075;  $P = 2.0 \times 10^{-6}$ ), and the authors tentatively suggest genetic testing for this subgroup. Overall, 14% (50/366) of children with ADHD carried a large duplication or deletion, compared with only 7% (75/1047) of unaffected controls. A substantial minority of the defects overlapped with loci previously implicated in autism and schizophrenia.

*Lancet* 2010; doi:10.1016/S0140-6736(10)61109-9

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