NXY-059 ($n = 853$) or placebo ($n = 852$) within 6 h of stroke onset and were included in the safety analysis; 1,699 patients were included in the efficacy analysis. Mean time from stroke onset to treatment was 3 h 46 min; 28.7% of all patients also received alteplase.

The primary endpoint—disability at 90 days as measured by the MODIFIED RANKIN SCALE—was improved in patients who received NXY-059 compared with those who received placebo ($P = 0.038$). NXY-059 did not alter neurological improvement as measured by change in the NIH STROKE SCALE ($P = 0.86$); however, the analysis was compromised by the statistical assumptions used. Compared with placebo, NXY-059 treatment resulted in more cases of complete neurological recovery ($P = 0.01$). NXY-059 did not alter survival, but patients who received this treatment plus alteplase were less likely to experience symptomatic hemorrhage than were those receiving placebo plus alteplase ($P = 0.036$).

The authors conclude that a confirmatory study is now required to verify the improvements in disability seen with NXY-059 treatment for acute ischemic stroke.

*Rebecca Ireland*

**Original article** Lees KR *et al.* (2006) NXY-059 for acute ischemic stroke. *N Engl J Med* **354:** 588–600

## Congestive heart failure contributes to excess deaths in rheumatoid arthritis

Mortality in patients with rheumatoid arthritis (RA) is higher than in the general population. Deaths caused directly by RA are rare; the additional deaths must, therefore, result from other conditions. It is not known, however, to what extent individual comorbidities contribute to excess mortality in patients with RA.

Researchers at the Mayo Clinic investigated the contributions of ischemic heart disease and of congestive heart failure (CHF) to mortality in patients with RA, in a retrospective study of 603 individuals diagnosed between 1955 and 1995, matched with a non-RA control population. There were 345 deaths in the RA group compared with 222 in the control group. Statistically, there was no difference in the incidence of myocardial infarction or ischemic heart disease between the groups, but the incidence of CHF was significantly higher in the RA group (37.1% versus 27.7%, $P < 0.001$). As the death rate for patients with heart conditions was similar in both groups, it seems that the increased incidence of CHF in the RA population is primarily responsible for the excess deaths attributable to CHF in patients with RA.

The reasons for the increased incidence of CHF observed in RA are unclear. It has been reported that high levels of systemic markers of inflammation are predictive of CHF, and C-reactive protein has been found to be a risk factor for the condition. Pericardial and valve disease, which are possible complications of RA, and potential cardiotoxic effects of RA drugs, could also be implicated.

*Jim Casey*

**Original article** Nicola PJ *et al.* (2006) Contribution of congestive heart failure and ischemic heart disease to excess mortality in rheumatoid arthritis. *Arthritis Rheum* **54:** 60–67

**GLOSSARY**

**MODIFIED RANKIN SCALE**
A scale that is used to measure disability in stroke victims; ranges from 0 (no residual symptoms) to 5 (severe disability—bedridden and requiring constant care)

**NIH STROKE SCALE**
A structured, clinician-rated scale incorporating physical examination, pre-set questions, and language assessment to quantify neurological deficits following stroke