# Antibody therapy phase I trial safety remains topical

Issues regarding the safety of phase I clinical trials involving antibody therapies remain topical on both sides of the Atlantic, according to an article in the *Journal of the National Cancer Institute*.

Concerns have been raised regarding the development process for immune system-altering antibodies aimed at treating cancer and other diseases. In the wake of the TGN 1412 trial tragedy,* Britain has temporarily restricted phase I trials of new antibodies and other immune system agents. The British MHRA investigation into the trial concluded that the resultant extreme cytokine release syndrome experienced by participants was due to an unexpected biological reaction, with no irregularities in the trial procedure or drug production.

Moreover, problems with these drugs are not new, although most have been overcome with dose or delivery adjustments. Furthermore, the risk of serious adverse events is likely to increase as researchers attempt to exploit the immune system to fight cancer.

In the US, concerns have been raised about the length of half-lives of monoclonal antibody therapies, compared with that of small molecules (approximately 3 weeks vs hours); there is a risk that multiple doses of antibody treatment could result in a cumulative toxicity. However, the US FDA's Oncology Drug Advisory Committee has decided that patients who are benefiting from an investigational treatment should be allowed to continue that treatment. The committee also voted against the need for 13 weeks of preclinical toxicity data prior to allowing antibodies into phase I trials as this may result in undue delays.

See also Inpharma 1554 p2;

* See Reactions 1094 p3; 800999900

Tuma RS. Phase I antibody risks, trial safety examined. Journal of the National Cancer Institute 98: 856-958, No. 14, 19 Jul 2006 801035300