

Safety of medicine and the use of animals in research

Frances Balkwill and colleagues' response (July 9, p 127)¹ to our letter² shows the intense resistance of entrenched interests to new technologies that could improve pharmaceutical safety.

Our letter called for the UK Government to invest in an assessment of new technologies for safety testing. Balkwill and colleagues take the position that not only should this research not be done, but that even to question whether animal testing best assures pharmaceutical safety means the questioner is opposed to all animal research and is therefore standing in the way of progress towards new life-saving cures.

Nothing could be further from the truth. We are calling for a paradigm shift in which new models of pharmaceutical safety testing are allowed to compete on their scientific merits against old models. The only thing we have against animal testing is the attitude that it is the only and the best technology for assessing safety. We are in favour of whatever best assures safety. Therefore, we are in favour of assessing which particular in-vivo or in-vitro tests are best.

Animal research is far more expensive and labour-intensive than in-vitro research. Since pharmaceutical safety testing is regulated by the UK Government, the market forces that would otherwise cause costly and inferior technologies to be naturally supplanted by superior technologies are impaired. We call on the Government to support research to assess the performance of new in-vitro and other technologies relative to the old in-vivo technologies so that progress towards safer and more economical new pharmaceuticals can be accelerated.

KB, CSF, CH, AP, BP, GT, KT, and IW are honorary advisers to the patient safety charity Safer Medicines Trust. We declare that we have no conflicts of interest.

*Kathy Archibald, Anthony D Baxter, Kelly BéruBé, David Bunton, Margaret Clotworthy, Bob Coleman, Christopher S Foster, Chris Hillier, Morag McFarlane, Anup Patel, Barbara Pierscionek, James Root, Gerry Thomas, Katya Tsaïoun, J Malcolm Wilkinson, Ian Wilmut, Karen L Wright

kathy@safermedicines.org

Safer Medicines Trust, PO Box 62720, London SW2 9FQ, UK (KA); Cyprotex, Macclesfield, UK (ADB, KT); Lung & Particle Research Group, Cardiff University, Cardiff, UK (KB); Biopta, Glasgow, UK (DB); Human Focused Testing, Cambridge, UK (MC); 27 Wodehouse Terrace, Falmouth, UK (BC); Liverpool University, Liverpool, UK (CSF); Glasgow Caledonian University, Glasgow, UK (CH); Tissue Solutions, Clydebank, UK (MM); St Mary's Hospital, Imperial College Healthcare NHS Trust, London, UK (AP); Clinical Studies Committee, European Association of Urology Research Foundation, Arnhem, Netherlands (AP); University of Ulster, Coleraine, UK (BP); Pfizer, Sandwich, UK (JR); Imperial College, London, UK (GT); Wales Cancer Bank, Cardiff, UK (GT); Kirkstall, Sheffield, UK (JMW); MRC Centre for Regenerative Medicine, University of Edinburgh, Edinburgh, UK (IW); and Lancaster University, Lancaster, UK (KLW)

- 1 Balkwill F, Whitehead S, Willis P, et al. Safety of medicines and the use of animals in research. *Lancet* 2011; **378**: 127–28.
- 2 Archibald K, Coleman R, Foster C, on behalf of 19 other signatories. Open letter to UK Prime Minister David Cameron and Health Secretary Andrew Lansley on safety of medicines. *Lancet* 2011; **377**: 1915.