CAL/PMS

24th February 1998

To the Editor of the Lancet,

Tony Baxter and colleagues (Feb 21, page ) challenge the view of the Executive committee of the UK Haemophilia Centre Directors Organisation (UKHCDO) that recombinant factor VIII(rVIII) is safer than UK domestic factor VIII concentrate in relation to the risk of new variant Creutzfeld Jacob Disease (nvCJD). They suggest that the prion protein (PrP) of nvCJD may also be found in the albumin used as a stabiliser in the present generation of rVIII. They imply that rVIII is no safer in relation to this infection than plasma derived factor VIII. They are missing the point.

BSE is largely confined to the United Kingdon. The human manifestation of this infectious spongiform encephalopathy, nvCJD, has with a single exception not been described outside the UK. Although there is no direct evidence of blood transmission of nvCJD, the prion protein can be demonstrated in tonsils and circulating B-lymphocytes. Blood transmission is therefore a reasonable theoretical possibility which, given the long incubation period of the disease, may take may years to manifest. Of the 22 cases reported in the UK so far, six were blood donors. Two batches of UK manufactured plasma-derived factor VIII (pdVIII) have been withdrawn because donors to the plasma pools from which they were fractionated had developed nvCJD. Further batch-withdrawals are inevitable because pdVIII is manufactured from plasma pools of more than 20,000 donations and because it is estimated that the number of new cases on nvCJD over the next 25 years may range between 200 and 80,000. This would cause intolerable difficulties for haemophilic patients, their families and treaters.

In contrast, rVIII is currently manufactured exclusively in the USA and uses US albumin collected from a population in which nvCJD has not been reported. We reasoned that both rVIII and pdVIII manufactured in the United States should therefore be safer from the risk of transmission of nvCJD than blood products of UK origin.

We have urged for the past 18 months that haemophilia should be treated with recombinant factor VIII concentrates. The Directors of Public Health in Scotland and Wales have recognised the ethical and legal difficulties of using pdVIII and have recently recommended that all patients with haemophilia should use recombinant concentrates. In England, many Directors of Public Health have been less supportive, partly because they have found it difficult to justify such an increase in expenditure using the narrow definition of "cost effectiveness" and partly because the issues are complex and ill understood as demonstrated by the letter of Baxter et al.

Baxter et al are correct in asserting that it is important to consider the patient's peace of mind in assessing different treatment options. This is a challenge which evidence-based medicine fails adequately to address. Many patients with haemophilia have had relatives who have died from HIV, HBV, or HCV acquired from pd factor VIII or IX. This is a well-informed group, well aware that current methods of viral attenuation fail to inactivate all infectious blood borne viruses. It is hardly surprising that this group, especially parents of small children, are determined that they should be treated with recombinant products.

C A Ludlam, C R M Hay, G Dolan, On behalf of Executive Committee, References to be added