attendance of those invited was poor. The result—a reduction of population mortality from breast cancer of 29% in women aged 55 plus—despite the poor attendance is actually most impressive for this seven year (relatively early) analysis of results. It is in line with those of the other randomised trials of screening in Scandinavia and New York.

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**We apologise for this editorial error.—ED, *BMJ*

HIV infection and tuberculosis

SIR,—In their editorial Mr John M Watson and Mr O Noel Gill discussed the increasing prevalence of tuberculosis in patients infected with human immunodeficiency virus type I (HIV-I).¹ They concluded that the increasing incidence of tuberculosis is not seen only within the United States² but is also emerging in Great Britain. In the United States tuberculosis is most prevalent in intravenous drug users infected with HIV,³ and thus it will be even more important in European countries such as Spain, Italy, and Austria, where an unproportionately high percentage of patients with AIDS are drug users. For example, one third of patients with AIDS in Barcelona have tuberculosis.⁴

We would like to add our experience in the Austrian Tyrol of tuberculosis in people with HIV- I infection. In 1988 in Innsbruck 12 patients were diagnosed as having AIDS. Extrapulmonary tuberculosis was the indicator disease in four of them.⁵ Diagnosis was proved by culture—for example, from urine, stool, or pleural samples. The concentration of urinary neopterin—a marker for activated macrophages⁶—was greatly increased in all of the patients. Interestingly, the four with tuberculosis had far higher urinary neopterin concentrations (range 1189-6671 μmol neopterin/mol creatinine) than the eight other patients (589-1663 μmol neopterin/mol creatinine; $p=0.03$, Wilcoxon rank test), three of whom had *Pneumocystis carinii* pneumonia, two had cytomegalovirus retinitis, two had AIDS dementia complex, and one had candida oesophagitis. Concentrations of β_2 -microglobulin and CD4+ T cell counts did not differ between the two groups of patients. During antituberculous treatment neopterin concentrations immediately started to decline.

The early diagnosis of tuberculosis in patients who are positive for HIV antibody is well known to pose problems. As extremely high neopterin concentrations were seen in our four patients with tuberculosis it is likely that neopterin testing could help as an early indicator of tuberculosis in such patients. Tuberculosis cannot easily be distinguished from other diseases that are associated with similar constitutional symptoms. Skin testing is not useful in people infected with HIV who received BCG vaccination in their childhood. Sputum culture can be too time consuming for an early decision. In addition, determination of neopterin concentration may prove helpful to monitor the response to and to optimise the duration and dose of tuberculostatic treatment.

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Assessment of care of children with sickle cell disease

SIR,—Dr R Milne assessed the quality of care of children with sickle cell disease discovered on neonatal screening.¹ In addition we wish to emphasise that carers should be alerted to observe affected children for signs that need prompt action—for example, increasing spleen size—and that such children have open access to a paediatric ward.

We have already commented on the experience in Reading,² where several factors have further improved the service, prompted by the realisation in October 1988 that a child with sickle cell anaemia had been born to a couple who were not aware of the implications of their risk state (A Burke, unpublished work). Of the 6000 children born in Reading a year, only 600 are born to parents from ethnic minorities, so we cannot yet justify screening all neonates.

The haematology laboratory recognised that it could diagnose and record carriers of haemoglobin disorders and issue cards with information. Couples at risk could be identified (as already undertaken for those at risk of rhesus disease); counselling and education would then take place and neonatal screening automatically follow, although existing routes whereby carriers are identified would continue to be encouraged. The medical laboratory scientific officers took a valuable initiative in collating the required computer data and organising a local haemoglobinopathy card, as a quality product, to encourage community participation.³ The local support group, Reading OSCAR (Organisation for Sickle Cell Anaemia Research), and the laboratory joined in seeing that people could attend haemoglobinopathy counselling courses like that run at the Central Middlesex Hospital.⁴ To date, two scientific officers, a hospital social worker, and three health professionals from the support group have acquired skills to help inform hospital and community members.

Most importantly the district medical officer and the district health authority supported our plea to make education the priority. They have funded a haemoglobinopathy counsellor, who links closely with the laboratory and obstetric department to distribute cards and information. She is responsible for seeing that a neonate identified as having a sickling disorder attends the joint haematology and paediatric clinic and that the family gets the support it needs. She offers continuing education for parents, while ensuring that the general practitioner and others concerned—for example, school teachers—are appropriately informed.

We believe that participation in the service and education will result in optimal management. We are watching closely the effect and acceptability of this programme in the community and hope to report more fully in the future.

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Haemolytic disease of the newborn

SIR,—We welcome Dr L A Derrick Tovey's informative article on haemolytic disease of the newborn, which reflects his long interest in the topic.¹ We have to assume, however, that he is expressing personal views when he says that it is recommended that prophylactic anti-D immunoglobulin should be given at 28 and 34 weeks' gestation and again when he says that it is recommended that antenatal prophylaxis is given at least in the first pregnancy. There is, in fact, no recommendation relating to the use of anti-D immunoglobulin for prenatal prophylaxis in the United Kingdom, either from the Department of Health, the Scottish Home and Health Department, or the Royal College of Obstetricians and Gynaecologists.

Dr Tovey's data from Yorkshire strongly suggest a beneficial effect from giving 500 IU at 28 and 34 weeks. There is also abundant circumstantial evidence from other sources that two doses of 250 IU may be similarly effective, and to test this hypothesis a multicentre trial has been designed and initiated and it is hoped that the results of this will facilitate the making of a formal recommendation so that the best use of limited supplies of anti-D immunoglobulin, which is prepared from human volunteers, is made. The trial is expected to provide conclusive evidence as to the value of prenatal prophylaxis within the next 18 months.

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NSAIDs and peptic ulcers

SIR,—I would like to suggest that the extrapolations that Dr C J Hawkey makes about how to prevent damage induced by non-steroidal anti-inflammatory drugs and the cost of such prevention are seriously flawed.¹

The first point concerns the frequency of serious gastrointestinal events associated with non-steroidal anti-inflammatory drugs. Dr Hawkey makes no mention of the record linkage study by Beardon *et al*² in which the incidence of serious gastrointestinal events was compared in some 25 000 patients taking non-steroidal anti-inflammatory drugs and in age and sex matched controls. The sample size on which he based his projections regarding incidence of serious events associated with non-steroidal anti-inflammatory drugs in the general population was a case-control study of 230 patients.³ The study by Beardon *et al* was not only controlled but was conducted in the Tayside region of Scotland and relevant to European practice. Furthermore, the yearly turnover of the population is low, in contrast to the American populations Dr Hawkey quoted. This point is important when looking for serious events as missing only a few may affect the results. The Tayside study clearly showed an age related effect and an incidence of