Contrary to what Atrah says, cadaver bone can be rendered free from infection by using a combination of serological examination at donation and terminal sterilisation. This allows cancellous implants of weightbearing quality to be prepared from young cadaver donors. In other countries this technique is also used for femoral heads found to be contaminated with bacteria. In addition, the bone can be cut to the required shapes and sizes and washed free of marrow and fat, which obviates immune responses and improves incorporation.[2] The bone may be freeze dried to simplify storage (that is, shelf storage at room temperature) and transportation. After packaging, sterilisation may be achieved with either ethylene oxide gas or irradiation. This technique has been used in the Yorkshire Regional Tissue Bank for 27 years with excellent clinical results, and the service is available to other units if required.

To ensure that common principles are applied to the banking of all tissue grafts and implants within Britain it has been proposed that a British Association of Tissue Banks should be established, details of which are available from the address below.

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Randomised clinical trials in general practice

SIR,—Like G Tognoni and colleagues[1] and Viv Peto and Angela Coulter[2] we have experience of clinical studies in general practice that fall short of expectations regarding recruitment.

In a postmarketing surveillance study (of treatment of reflux oesophagitis) 457 general practitioners said that they were prepared to recruit at least three patients. After one year some doctors had been successful in recruiting but many had not recruited any patients. Recruitment increased sharply after we took two actions: we sent a personal letter relating actual to planned numbers of patients, and we subsequently visited each general practitioner to discuss possible issues regarding recruitment. This resulted in just over 1100 patients. We acknowledge that the yield may have been less if changes to clinical practice had been required. Still, 88 doctors failed to recruit patients despite our—and their—efforts.

We are convinced that it is essential that every trialist is visited regularly. At every visit the clinical record forms should be checked and compliance with the protocol discussed. The doctors should also be encouraged to continue recruitment (a simple flow chart summarising the criteria for eligibility and actions necessary at recruitment may help). We have found that this attention is a strong incentive in itself, probably as powerful as financial compensation.

Many of the studies for which general practitioners' cooperation is sought do not meet the essential criteria of a medically interesting question (the most powerful built in incentive), a sound but simple methodology, and an easy to use case record form. We do not see any incentive that could compensate for participation in such a study. Many doctors who do cooperate will be discouraged from doing so again, especially if additionally the study is criticised by colleagues or peers.

We agree with both Tognoni and colleagues and Peto and Coulter that financial incentives risk being counterproductive and may even induce scientific fraud, as recently highlighted in the lay press and the *BMJ*.[3,4] Fees are meant to compensate for costs and to be a reasonable payment for invested time. Every award beyond that should be strongly discouraged.

Even if a trial fulfils all the criteria we often find that general practitioners have little training in methodology in general. It is difficult for these general practitioners to understand the relevance of (in their view) small deviations from the protocol. We would welcome better education, both in universities and after qualification, and are considering supporting postgraduate education on this subject.

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Cost effectiveness of magnetic resonance imaging

SIR,—Anthony Stevens[1] identifies our study on the cost effectiveness of magnetic resonance imaging in the neurosciences[2] as one that establishes a more rational basis on which decisions about the purchase and use of magnetic resonance imagers can now be made. We accept his point that the cost per patient imaged will be sensitive to throughput, but the situation is more complex than he suggests.[3] Firstly, a clear distinction needs to be made between patients and examinations; several examinations may be needed per patient, depending on case mix. Furthermore, our high level of measured benefit relates to the mix of cases scanned in a specialty NHS centre such as that at Coventry; benefit levels cannot be applied pro rata if case mix changes.

Stevens's model predicts a throughput of 3840 patients for a 12 hour day. In reality, Coventry, which does operate a 12 hour day, averaged 3082 examinations last year (but only 2480 patients). A cautionary note also needs to be sounded over the much higher throughput (5760) that Stevens predicts for high field systems. Throughputs for mid-field and high field scanners in specialty units seem to be similar, although improved throughput has been reported with high field machines after recent upgrading of software.[4] We do not think that even the most sophisticated magnetic resonance imaging unit would be able to examine four sites on one patient with changes of surface coil in 30 minutes as Stevens predicts. Units report similar "patient time in room" for different types of equipment, with only 11% of scans being completed in 30 minutes or less.[5] Finally, Stevens makes no allowance for other factors such as non-attendance of patients (10% in Coventry), non-completion of the scan (due to non-compliance or movement by the patient), equipment down-time, preventive maintenance, and research and development work (eight hours a week in Coventry).[3]

Nevertheless, Coventry has recently shown (as part of the waiting list initiative) that high throughputs can be achieved under certain conditions. A mobile scanner (0·5 T) was hired and 225 patients examined in 10 days (equivalent to 5400 patients a year). These patients, however, were hand picked with the expectation that imaging would be straightforward (they required examinations at single sites); non-attendance was low (5%) and downtime only 1·5 hours. The impact of magnetic resonance imaging on management in this select group of patients is unclear.

Finally, we question certain costs used in Stevens's model. Firstly, service and cryogen costs (£65 000-85 000) seem low; the costs in Coventry are £96 600 (£65 000 for maintenance alone). Secondly, staffing costs are incorrectly modelled as a linear function of operating hours; in fact, workload is partially patient related (processing requests, consultation, producing reports, etc) and, too, an increase to 12 hours a day means higher out of hours staffing costs. Finally, although Stevens minimises cost by excluding upgrading of the system (and also contrast agents), we believe that any well managed service should budget for both of these.

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Wasted drugs in HIV infection and AIDS

SIR,—Sharon Steel and Rob George discuss the potential wastage of expensive drugs used to treat HIV infection.[1] In Riverside East drugs for patients with HIV infection are estimated to account for over 60% of the total drug budget. To assess whether stockpiling of drugs occurs we conducted a survey of outpatients attending the genitourinary medicine clinic at Westminster Hospital.

We asked 30 consecutive patients who were positive for HIV and taking zidovudine to complete a short questionnaire; 20 questionnaires were returned. Patients were required to count the number of tablets remaining in their possession (not including the most recent prescription). The table shows the number of weeks' supply of each drug patients had in reserve. Seven of the 20 patients had at least three weeks' supply of zidovudine stockpiled.

Number of weeks' supply of various drugs retained by 20 patients with HIV infection

	No of weeks in reserve					
	≤1	1-2	2-3	3-4	4-5	>5
Zidovudine (n=20)	9	4		4	1	2
Co-trimoxazole (n=7)	4	2			1	
Dapsone (n=2)	1			1		
Fansidar (n=2)	1			1		
Acyclovir (n=5)	3		2			
Gluconazole (n=1)	1					
Ketoconazole (n=1)	1					

We studied patients taking zidovudine because this drug accounts for over half of the outpatient drug costs for HIV positive patients. If we extrapolate our findings to our total population of patients (600 taking zidovudine with a mean two weeks' supply in reserve) over £50 000 worth of this drug may lie unused in patients' homes (and £100 000 worth of all drugs, if zidovudine is used as a marker for these other drugs).

Multiple causes of stockpiling are likely. The nature of HIV infection often necessitates frequent