tify and rectify mistakes rather than merely increasing the burden of paperwork for researchers.

Ferris and Naylor rightly argue that their proposed measure is a reasonable addition to clinical trial monitoring in and of itself.⁵ However, too many individual straightforward and reasonable measures can result in a whole that is anything but. We agree with Yusuf that the correct direction is to reduce overhead costs and paperwork in the hope of making clinical trials more accessible.

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Is topical treatment of osteoarthritis site-specific?

The topical treatment of osteoarthritis has until now been left to the questionable domain of patent medicines and television advertising. Arthur Bookman and associates¹ are to be congratulated for bringing some science to the area through their placebo-controlled study of topical diclofenac. However, like all good trials, this study raises other questions.

The authors state that topical treat-

ment is site-specific but do not present data in support of this assertion. The appropriate control to determine site specificity would be topical application of diclofenac to an unaffected site. It is unlikely that a lipid-soluble agent dissolved in ethanol would travel from the skin to the joint without first being absorbed by veins or the lymphatic vessels and then entering the systemic circulation. A previous study, in which one of the authors participated, showed that topical diclofenac is in fact absorbed and metabolized.² Poor bioavailability may be enhanced by periarticular inflammation, but this has not been demonstrated either.

Nonetheless, because of the pharmacokinetic profile of topically applied diclofenac, which avoids the peaks and valleys associated with toxicity, this route may be superior to oral administration. If the efficacy of topically applied diclofenac is related to the systemic level of the drug, Bookman and associates¹ may have discovered a new ultra-low therapeutic range for non-steroidal agents, much like low-dose acetylsalicylic acid (ASA) in other situations. In this respect it would be interesting to know if concomitant use of low-dose ASA affected outcome.

The 2 placebo groups in this study enjoyed a benefit that was both clinically and statistically significant. Again, it is not known if the placebo effect is site-dependent, but it would seem that use of placebo creams should be continued in experimental design and considered in clinical practice.

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