and that which is clinically significant (or non-significant). However, in a straightforward comparison between the effects of two anti-depressant drugs, using standard rating scales, it is generally accepted that unless the statistical differences between them reach the 5 per cent level of significance then for clinical purposes no differences have been demonstrated.

In this particular trial, although, as was pointed out in the report, 'such differences as were present were always in favour of amitriptyline', there was no single assessment that showed a significant difference in favour of the control drug. Since the report was a short one, the non-specific factors that were recorded were not enumerated, but these were as follows: sex, age, marital status, previous attacks, duration from first attack ever, duration of present attack, religion, educational level, previous treatments, and menstrual status in females. The two treatment groups were well matched in respect of all these factors. Although non-drug variables such as these may play a part in influencing the response to psychotropic drugs, it is doubtful whether such differences are of practical clinical significance (Wheatley, 1973).

I agree with Dr. Tyrer that scientifically it would have been prefereable to include a group treated with placebo only. However, our trial was undertaken in general practice, and it would have been unethical to leave unsupervised depressed patients without specific antidepressant treatment, when it is generally accepted that such treatment is in fact efficacious.

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CONTROL OF GROSS SELF-MUTILATION WITH LITHIUM CARBONATE

DEAR SIR,

Self-mutilation is common in hospitals for the mentally subnormal (1) and is often extremely difficult to control. This is evident from the wide variety of therapeutic measures that have been advocated including sedatives and tranquillizers, intensive individual care, recreation, constructive occupation (1) and behaviour therapy techniques (2, 3).

We wish to report satisfactory control with lithium carbonate of gross self-mutilation in a severely subnormal girl in her early twenties. Brain-damaged at birth and without speech, she was admitted to Strathmartine Hospital, Dundee, in 1963 at the age of 18 with a five year history of hyperactivity and repeated self-injury. In hospital her behaviour became a constant and serious problem; in addition to being withdrawn and negativistic she had frequent bouts of screaming when she threw herself on the floor or down a stone staircase, struck her head repeatedly against sharp corners of furniture, metal radiators or the head and sides of her bed, producing swelling, haematomas and lacerations. She persistently gnawed at the backs of her hands so that they were chronically ulcerated, and at times her general condition gave such cause for concern that she was put into a special jacket. Her conduct failed to respond to intensive individual nursing care combined with a succession of tranquillizing drugs, and in September 1967 it was decided, empirically, to observe the effect of lithium carbonate. She was physically fit; blood examination, including the uric acid level, was normal and all other drugs apart from hypnotics were withdrawn.

Lithium carbonate was prescribed in a dose of 500 mgs t.d.s. (6 days per week) and produced a steady plasma level of 0·9 mEq./l. For a few days there was little change but within a week the patient became quiet, docile and co-operative. Her chronically ulcerated hands healed completely in two weeks, head-banging ceased and for the first time she began to show some interest in her fellow patients. In view of the apparent dramatic response to lithium, consideration was given to the substitution of a placebo, but her parents, gratified by the marked improvement, were unwilling to risk the possibility of serious relapse following withdrawal of the drug.

In late December 1967, she developed a respiratory infection which was associated with relapse into self-destructive behaviour, and lithium was withdrawn for a few days until the infection cleared. Fortunately, the episode was short-lived, and since 6 January 1968 she has remained constantly on lithium, at the above dose, with plasma levels consistently within therapeutic limits. Although she has continued to be rather negativistic, and on three separate occasions each lasting a few weeks was temporarily elated and over-active, self-mutilation has not recurred during the five years she has been treated with lithium. There seems little doubt that lithium has improved very substantially the management problem which

she presented and the quality of life that she now leads; she goes out regularly for afternoons and occasionally spends weekends at home. It is interesting that she now menstruates regularly, whereas before lithium therapy she was amenorrhoeic.

The significance of self-mutilation is obscure, but two broad categories have been defined: primitive self-mutilation occurring in conditions of ego impairment or immaturity (mental retardation or infancy), and self-destructive activity related to mental conflict, in particular depression (4). The virtual disappearance of self-mutilation with lithium therapy raises the possibility that this patient's behaviour may have been, in part at least, the manifestation of an affective disorder. Her response to lithium suggests to us that similar patients might benefit from treatment with this drug, and that pilot studies of its efficacy in groups of subnormal patients showing aggressive and self-destructive behaviour should be undertaken. Such a study is presently being carried out at Strathmartine Hospital.

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FLUPENTHIXOL AND THE OUT-PATIENT MAINTENANCE TREATMENT OF SCHIZOPHRENIA

Dear Sir,

I am flattered that my friend Dr. Freeman (*Journal*, January 1973, page 121), should have devoted so much space to criticising my brief interim report on flupenthixol (*Journal*, October, page 458). As I hope to publish a fuller account shortly, I intended my letter to convey clinical impressions rather than a statistical analysis. As Dr. Freeman has so rightly pointed out (*Journal*, September 1970, page 351), 'the pursuit of methodological purity in itself is no guarantee that information of value will result'.

I agree wholeheartedly with him that flexibility in the use of anti-psychotic depot injections and the judicious exhibition of preparations to counteract the side effects are essential if withdrawals from treatment are to be avoided. Therefore I am pleased to find that flupenthixol has advantages over fluphenazine with respect to range of dose (up to 120 mg.), infrequency of side effects and—more importantly—the virtual absence of the more severe extra-pyramidal syndromes, like akathisia. The patients seem alert and participate more fully in activities and social relationships.

I am also pleased to see that Dr. Freeman appears to agree that depression does occur in schizophrenics under treatment with these injections. Like others (Johnson, 1969; Alarcon, 1972), I am uncertain as to its precise aetiology. However, unlike Dr. Freeman, I am quite certain that any condition resulting in serious disability and suicide cannot be over-emphasized. The point surely is that these injections, though greatly improving the prognosis in discharged schizophrenics, are no substitute for careful follow-up and frequent contact with such patients. The three suicides among Dr. Freeman's patients should make my point obvious.

I have never believed that the long-term prognosis in schizophrenia depends upon pharmacological factors alone. The complexity of the situation has been convincingly demonstrated by the recent work of Brown *et al.* (1972). However, the outlook is not improved when patients, families, neighbours, social workers, hostel wardens and even general practitioners are rendered antagonistic towards the regimen by the dramatic appearance of bizarre, distressing neurological syndromes, as may happen with the phenothiazines.

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THE COMPARABILITY OF NATIONAL SUICIDE RATES

Dear Sir,

In assessing the significance of the differences between reported suicide rates from different coun-