If α has a value (for a two-tailed test) of 0.025 the values of β for sample sizes from 10 to 100 are:

sample size (t)	10	20	30	40	50	60	70	80	90	100
β	98	85	71	60	51	44	29	25	16	14

Thus, even with 60 schizophrenic offspring, which on our assumptions would require an initial cohort of 2000 index and 2000 control mothers, there would still only be a 56% (100 – 44) chance of detecting a significant result. And to have at least a 75% (100 – 25) chance of detecting a doubling of the risk of having a schizophrenic child more than 80 schizophrenic offspring would be needed, which would require an initial cohort of at least 2700 index and 2700 control mothers.

It is apparent, therefore, that the size of the cohort studied by Cannon *et al* (n=80) was hopelessly inadequate. Similar criticisms apply to an earlier study of similar design by Crow & Done (1992). Even though they had 945 mothers with a history of a flu-like illness in the second trimester of pregnancy they only had 7 schizophrenic offspring.

Cannon *et al* are right to point out that ecological studies of the kind that we and others have performed cannot by themselves establish an aetiological role for maternal influenza, because it remains unknown which, or even what proportion of, pregnant women actually contracted influenza. They are quite wrong, though, to suppose that their negative findings, or those of Crow & Done, weaken that evidence.

CANNON, M., COTTER, D., COFFEY, V. P., *et al* (1996) Prenatal exposure to the 1957 influenza epidemic and adult schizophrenia: a follow up study. *British Journal of Psychiatry*, **168**, 368–371.

CROW, T. J. & DONE, D. J. (1992) Prenatal exposure to influenza does not cause schizophrenia. *British Journal of Psychiatry*, **161**, 390–393.

WOODGATE, M. & CURTIS, D. (1996) Prenatal exposure to the 1957 influenza epidemic. *British Journal of Psychiatry*, **168**, 791.

W. ADAMS
R. E. KENDELL
University of Edinburgh Medical School
Edinburgh EH8 9AF

No evidence for association between *CNTF* null mutant allele and schizophrenia

SIR: Recently, Thome *et al* (1996) reported data suggesting a possible association between a null mutated allele of the ciliate neurotrophic factor (CNTF) gene and endogenous psychosis in Caucasian individuals. CNTF is thought to be important for the survival of motor neurons (Sendtner *et al*, 1992). Disruption of the *CNTF* gene in mice causes motor neuronopathy (Masu *et al*, 1993). The null mutation in the human *CNTF* gene producing a new splice acceptor site resulting in an aberrant protein has been found to be polymorphic in Japanese (Takahashi *et al*, 1994) and Caucasian (Thome *et al*, 1996) populations. Thome *et al* (1996) reported that the frequency of the mutant allele in psychiatric patients was significantly increased, compared with controls. We analysed the *CNTF* genotypes of 205 unrelated Japanese patients with schizophrenia, aged 25–65 years (mean 48.9), who met DSM–III–R criteria for schizophrenia, and of 184 age and gender-matched unrelated Japanese controls, aged 31–65 years (mean 50.1).

With our sample size, there was more than 0.98 chance of detecting an odds ratio of 2.28 at α=0.05, one-sided. In our subjects, the distribution of the single genotypes in controls *v.* schizophrenics was as follows. Normal: 65.6% *v.* 70.2%; heterozygote mutant: 29.2% *v.* 27.3%; homozygote mutant: 5.2% *v.* 2.4%. The mutant allele frequencies in the schizophrenics and the controls were 0.16 and 0.18, respectively (Odds ratio is 0.90, 95% CI 0.62–1.32). Thus, our subjects provided no evidence for an association between the *CNTF* null mutant allele and schizophrenia.

MASU, Y., WOLF, E., HOLTMANN, B., *et al* (1993) Disruption of the CNTF gene results in motor neuron degeneration. *Nature*, **365**, 27–32.

SENDTNER, M., SCHWALBRUCH, H., STOCKLI, K. A., *et al* (1992) Ciliary neurotrophic factor prevents degeneration of motor neurons in mouse mutant progressive motor neuronopathy. *Nature*, **358**, 502–504.

TAKAHASHI, R., YOKOJI, H., MISAWA, H., *et al* (1994) A null mutation in the human CNTF gene is not causally related to neurological diseases. *Nature Genetics*, **7**, 79–84 (erratum 215).

THOME, J., KORNHUBER, J., BAUMER, A., *et al* (1996) CNTF and endogenous psychoses? *Nature Genetics*, **12**, 123.

T. ARINAMI
Institute of Basic Medical Sciences
University of Tsukuba
Tsukuba, Ibaraki, 305, Japan

M. TORU
Tokyo Medical and Dental University
School of Medicine
Tokyo, 113, Japan

Should the administration of ECT during clozapine therapy be contraindicated?

SIR: There are only a few reports (Masiar & Johns, 1991; Green *et al*, 1994) regarding the