Dr. Mukherjee, *et al.* Respond to Dr. Deo

TO THE EDITOR:

In response to Dr. Deo's letter claiming that ICRC and *Mycobacterium w* "may not be very different," the following points are offered for consideration.

1) ICRC was isolated by Bapat, *et al.* [1] from leproma nodules and grown in a "conditioned" medium. This organism belongs to the *M. avium-intracellulare* complex and grows in T/900R mice with evidence of dissemination in the liver and sciatic nerve with production of foot drop [2].

2) *Mycobacterium w* has its origin in a collection of atypical mycobacteria grown from sputum specimens and made available in 1974 to Dr. G. P. Talwar by Dr. S. P. Tripathy who was Director of the Tuberculosis Research Center in Madras at that time. This organism, probably a commensal of the upper respiratory tract, is a fast grower and is nonpathogenic to mice, rats and guinea pigs. Its growth and metabolic properties [4, 6] are similar to organisms belonging to Runyon's Group 4.

3) The results of DNA hybridization studies on the two organisms reported by Grossinsky, *et al.* [3] show that at a low stringency the percentage of binding of *M. leprae* DNA is 10.5 for ICRC and *Mycobacterium w*, 10.8 for *M. avium* and 10.3 for *M. phlei.* More importantly, at a high stringency *Mycobacterium w* has a distinctly higher binding, i.e., 3.9% as compared to 2.9% for ICRC. In the same article the authors have made the statement that *Mycobacterium w* shows the highest degree of homology with *M. leprae* among the three candidate vaccines.

4) With reference to the RFLP patterns studied by the same workers, the restriction enzymes selected and the regions probed are rather conserved. Restriction and probing of other regions are likely to bring out dissimilarities between the two organisms.

The data from the source, growth characteristics, animal pathogenicity and DNA analysis stated above make it clear that the two organisms are quite different. The therapeutic efficacy obtained with *Mycobacterium w* used in conjunction with multidrug therapy (MDT) has been clearly and unequivocally demonstrated in a number of studies [5, 7, 8]. The only logical way by which the comparative merits of these two different organisms for immunoprophylaxis or immunotherapy can be gauged is with a comparative trial on a standard protocol by an independent party.

We look forward to the results from the ongoing comparative vaccine immunoprophylaxis trial in progress in Avadi, Tamil Nadu, India, where *Mycobacterium w*, ICRC (contributed by Dr. C. V. Bapat), and killed *M. leprae* plus BCG are under a coded comparative trial.

We hope that the data presented above clarifies any doubt about the identity of *Mycobacterium w.*

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