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JOINT MEETING

WEMBLEY CONFERENCE CENTRE

Thursday, 19th October, 1978

Avon Lecture Theatre

Chairman: Prof. P.J. Morris

- 10.00 a.m. Dr Hans WIGZELL (University of Uppsala, Sweden)  
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11.00 a.m. Coffee

- 11.30 a.m. Prof. J. Richard BATCHELOR (East Grinstead)  
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12.30 p.m. Lunch

FACILITATION OF HOMOGRAFT ACCEPTANCE

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- 2.15 WHITE, D.J.G., R.Y. Calne, K. Rolles and A. Plumb (Cambridge)  
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Abstracts for papers marked \* appear on pages 11-13 of the full meeting programme.

ABSTRACTS (not for publication)Mechanism of action of Cyclosporin A

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Dept. of Surgery, University of Cambridge, Addenbrooke's Hospital, Cambridge.

We have demonstrated Cyclosporin A (Sandoz Ltd) to be a potent suppressor of graft rejection in rats, rabbits, pigs, dogs, monkeys and man. It has been demonstrated *in vitro* that this agent inhibits T cell proliferation. We now report on the *in vivo* effect of this agent on T cell responsiveness.

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Cyclosporin A has been tested in limited clinical trials in patients with cadaveric kidney transplants. We will present the results of our studies on the T cell function of these patients. The ability of Cyclosporin A to remove specifically that clone of lymphocytes from the blood which were reactive towards the graft will be discussed in relation to donor specific immunosuppression.

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Left orthotopic kidney transplants were performed between appropriate combinations of HO, IR, and HO-B4 rats. We conclude that whereas a kidney presenting a single haplotype MHC antigenic difference is readily rejected, kidneys presenting A or B sub-region differences alone are accepted. Skin grafts across each of the three antigenic differences were rejected. Renal rejection may require a combined A + B modified target antigen expression by the kidney as has been shown for cell mediated lysis. These results are analogous to the tissue typing correlation in human and Rhesus monkey kidney transplants where in unrelated host-donor combinations an LD match may be more important than SD.

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