discussed in relation to the occurrence and expression of cross-reacting embryonic antigens associated with the cell surface of these rat tumours.

B AND T CELLS IN CANINE LYMPHOSARCOMA. D. E. ONIONS, Department of Clinical Veterinary Medicine, University of Cambridge.

Canine multicentric lymphosarcoma is a common spontaneous neoplasm of dogs. Canine lymphoma cells, like normal canine lymphocytes, may be divided into two classes, T and B, based on the spontaneous rosette formation between canine T cells and human erythrocytes, and the presence of a receptor for (human) complement on the surface of B cells.

The presence of an Fc receptor on canine lymphocytes appears to be an unreliable marker for B cells as many complement receptor lymphocytes (EACL) lack a detectable Fc receptor for using a rosetting technique with antibody coated erythrocytes.

SCANNING ELECTRON MICROSCOPY OF K CELL ACTIVITY ON RED CELL MONOLAYERS. A. E. WILLIAMS, Western General Hospital, Edinburgh, J. R. INGLIS, W. J. Penhale, A. FARMER and W. J. IRVINE, Department of Therapeutics, University of Edinburgh.

K cell activity against syngeneic cells (De Landazuriet *et al.*, *Cell Immunol.* 1974, **14**, 193) and defects in K cell activity in cancer patients (Wisloff *et al.*, *Scand. J. Immunol.*, 1973, **2**, 325) have been demonstrated. However, the identity of the K cell is still uncertain and conflicting evidence supports B lymphocytes, monocytes, macrophages and other leucocytes.

We have used the SEM to examine the interaction between human leucocytes (separated in Ficoll–Triosil and pre-incubated on glass) and antibody coated sheep erythrocyte monolayers (Kennedy and Axelrad, *Immunology*, 1971, **20**, 253). Only a small proportion of the leucocyte suspension adhered to the monolayer and the non-adherent cells lacked antibody dependent cytotoxic activity. Three morphologically distinct cell types were associated with areas of lysis in the erythrocyte monolayer within 4 h and correlation with light microscopy suggested that they were macrophages, granulocytes and lymphoid cells. Surface changes in the erythrocytes during contact with K cells indicate that mechanical factors may be involved in cell lysis in this system.

THERAPY OF METHYL CHOLANTHRENE INDUCED CBA MOUSE TUMOURS WITH *CORYNEBACTERIUM PARVUM* AND IRRADIATED TUMOUR CELLS. R. BOMFORD, Department of Experimental Immunobiology, Wellcome Research Laboratories, Beckenham.

Mice were injected subcutaneously with 2×10^4 tumour cells and 2 days later given *C. parvum*, irradiated tumour cells, or both admixed, into the footpad. Tumour growth was unaffected by *C. parvum* or tumour cells alone, but was suppressed by appropriate mixtures. The conditions for successful therapy were: 1. sufficient tumour cells ($> 5 \times 10^4$); 2. sufficient, but not excessive, *C. parvum* (optimally between about 5 to 20 μg, increasing with the dose of tumour cells); 3. the same tumour cells in the tumour challenge and treatment mixture; other MCA tumour cells were ineffective; 4. mice with an intact T cell system; tumour growth was not suppressed in T cell depleted mice. The results suggest that the therapeutic effect depends on the potentiation by *C. parvum* of a T cell dependent component of the immune response to TSTAs.

ROLE OF IMMUNOCOMPETENCE IN LOCALIZED BCG SUPPRESSION OF TUMOUR GROWTH. M. V. PIMM and D. G. Hopper, Cancer Research Campaign Laboratories, University of Nottingham.

Admixture of BCG organisms with cells of syngeneically transplanted rat tumours prevents their development and this leads to immunologically specific rejection of tumour deposits at distant sites. Immunosuppression by whole body irradiation did not prevent suppression of growth from mixed BCG : tumour cell inocula but did abrogate the concomitant rejection of distant challenge inocula. Tumour suppression at the site of BCG was, however, prevented by macrophage depletion of the host by silica treatment. These observations suggest that local BCG suppression of tumour does not require lymphocyte mediated immune responses and probably depends on less specific macrophage