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**WS 9.6 EFFECT OF IN VIVO DEPLETION OF BoT4<sup>+</sup> AND BoT8<sup>+</sup> LYMPHOCYTES WITH MONOCLONAL ANTIBODIES ON INFECTION WITH BOVINE VIRUS DIARRHOEA VIRUS IN CALVES**

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Three gnotobiotic calves were injected intravenously (i.v.) with monoclonal antibody (mAb) CC8, isotype IgG<sub>2a</sub>, directed against the BoT4 (CD4) antigen; two calves were injected i.v. with mAb CC63, isotype IgG<sub>2a</sub>, directed against the BoT8 (CD8) antigen; three further calves served as controls. All calves were inoculated intranasally with a cloned non-cytopathogenic isolate of bovine virus diarrhoea virus (BVDV), strain Pe515nc. Injection of either mAb effectively depleted the target lymphocyte population specifically. Extent of infection with BVDV in the three groups of calves was assessed by comparing the duration and extent of nasopharyngeal shedding as well as duration of viraemia and the virus titre in blood. The viraemia persisted longer in BoT4<sup>+</sup> depleted calves and the virus titre was generally higher than in control animals. There was no effect on the duration, but a small increase in the titre, of nasopharyngeal shedding. In contrast depletion of the BoT8<sup>+</sup> lymphocyte subset did not have a marked effect on viral infection. These results were taken to indicate that MHC class I restricted cytotoxic BoT8<sup>+</sup> lymphocytes were not a major effector cell population in recovery from primary BVDV infection.

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