

A CATIONIC LIPOSOMAL ADJUVANT PROMOTING TH1 AND CD8 T CELL IMMUNITY IN MOUSE MODELS OF INFECTIOUS DISEASE AND CANCER.

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Adjuvants are a critical component of vaccines. Very few adjuvants have however been approved for use in humans, and commercially available vaccines are almost exclusively adjuvanted with antibody-promoting aluminum compounds. In contrast, protection against many infectious diseases relies on cell mediated immunity, and safe adjuvants inducing these responses are needed. We have previously demonstrated the Th1 inducing capacity of a cationic liposome adjuvant based on DDA (Dimethyldioctadecyl-ammonium bromide) and TDB (Trehalose 6,6'-dibehenate) in several mouse models of disease. This poster will highlight a recently developed modification of the DDA/TDB adjuvant which has the capacity to promote strong CD8 T cell immunity. Prophylactic vaccination with this adjuvant and the Human Papilloma Virus strain 16 antigen E7 completely protected against TC-1 tumour formation in C57BL/6 mice, and therapeutic vaccination significantly reduced tumour load and increased survival.