

7th International
Congress of
Immunology

BERLIN West

July 30 - August 5, 1989

Abstract Form

Only this official form is acceptable as the original submission. This form should be accompanied by 5 photocopies.

ROLE OF INTERLEUKIN 8 (IL-8) IN LEUKOCYTE HOMING AND EMIGRATION. Arthur O. Anderson¹, Christian G. Larsen², Joost J. Oppenheim², and Kouji Matsushima². ¹USAMRIID, Fort Detrick, Frederick, MD 21701-5011 and ²NCI-FCRF, Fort Detrick, Frederick, MD 21701-1014, U.S.A.

IMPORTANT:

Please indicate your preference of workshop number:

1st choice: W54

2nd choice: W48

See list of workshops

Please state 3 keywords

Interleukin 8

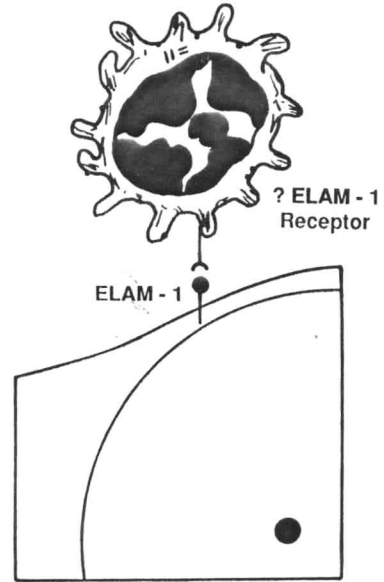
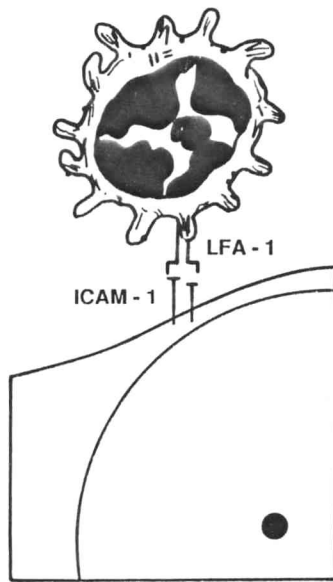
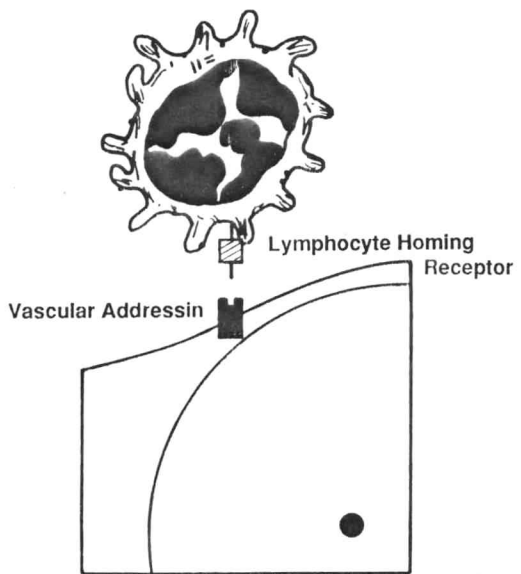
Chemotaxis

Homing

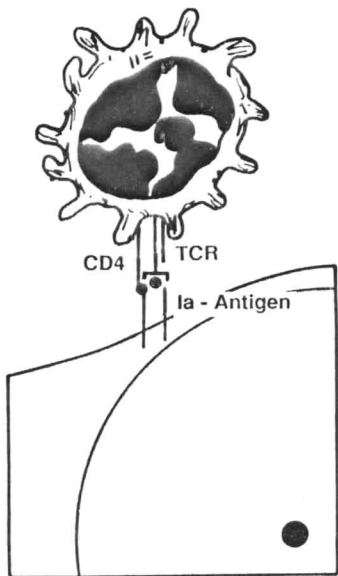
I like to present a poster

yes no

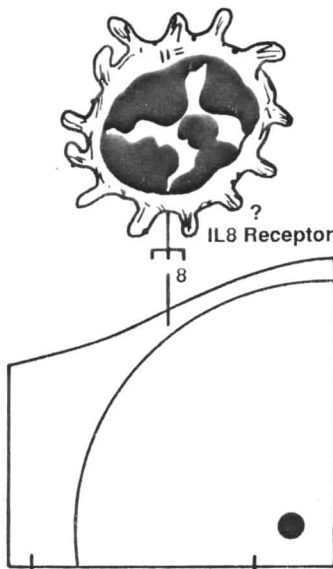
Adherent lymphocytes are attracted into lymphatic tissues by chemical gradients diffusing from between endothelial cells (Immunol. 31:731, 1976). A T-cell chemotactic factor (TCF) was purified from conditioned media of PHA-stimulated human mononuclear leukocytes and had an identical NH₂-terminal amino acid sequence with that of recombinant neutrophil activating protein (rNAP-1, J. Exp. Med. 167: 1883, 1988). TCF and rNAP-1 exhibited 8Kda relative mobilities by SDS-PAGE, and both showed in vitro chemotactic activity with different optimal dose ranges for neutrophils and lymphocytes. Intradermal injection of human rNAP-1 (IL-8) in the ears of Fisher rats induced dose-dependent accumulation of lymphocytes and neutrophils but not monocytes. Lymphocytes and neutrophils were recruited by 0.001 µg/ml and 0.1 µg/ml optimal doses of IL-8, respectively. Lymphocyte emigration across high endothelial venules (HEV) was accelerated by IL-8 in regional lymph nodes without any neutrophil emigration. These data demonstrate that recruitment of neutrophils or lymphocytes from the blood into connective tissue is a function of net concentration of IL-8 except in lymph node HEV where neutrophils are excluded.



IL-1 / TNF



γ - IF



IL-8

