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(54) Title: THYMIC STROMAL LYMPHOPOIETIN RECEPTOR-SPECIFIC CHIMERIC ANTIGEN RECEPTORS AND METHODS USING SAME

(57) Abstract: The invention provides a chimeric antigen receptor (CAR) comprising an antigen binding domain specific for TSLPR, a transmembrane domain, and an intracellular T cell signaling domain. Nucleic acids, recombinant expression vectors, host cells, populations of cells, antibodies, or antigen binding portions thereof, and pharmaceutical compositions relating to the CARs are disclosed. Methods of detecting the presence of a proliferative disorder, e.g., cancer, in a mammal and methods of treating or preventing a proliferative disorder, e.g., cancer, in a mammal are also disclosed.