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(54) Title: PROTEINASE 3 (PR3) CHIMERIC AUTOANTIBODY RECEPTOR T CELLS AND RELATED METHODS AND USES

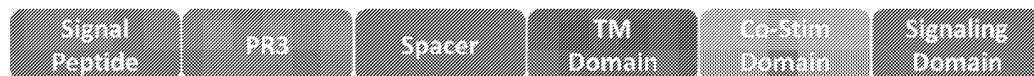


FIG. 1

(57) Abstract: Provided herein are cell and protein therapeutics that comprise a Proteinase 3 (PR3) antibody binding domain, such as a wild type PR3 protein or mutant PR3 protein, and methods of use thereof. Also provided herein are chimeric autoantibody receptors (CAARs) comprising an extracellular PR3 antibody binding domain. Among the provided CAARs are those in which the extracellular PR3 antibody binding domain is a wild type or mutated PR3 protein or fragment thereof that are able to be specifically bound by an anti-PR3 antineutrophil cytoplasmic antibody (ANCA). Also provided herein are polynucleotides that encode the provided CAARs, genetically engineered cells such as T cells containing the provided CAARs, and to related methods and uses thereof in adoptive cell therapy.

[Continued on next page]

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