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(54) Title: IMPROVED AMINO ACID SEQUENCES DIRECTED AGAINST IL-6R AND POLYPEPTIDES COMPRISING THE SAME FOR THE TREATMENT OF IL-6R RELATED DISEASES AND DISORDERS

(57) Abstract: The present invention relates to amino acid sequences that are directed against/and or that can specifically bind Snterleukin-6 Receptor (IL-6R) with improved affinity and/or avidity, and/or that have an improved efficacy and/or potency, and which are capable of (partially, or preferably totally) blocking the IL-6/IL-6R interaction and/or inhibit signalization through IL-6, 1L-6R and/or the IL-6/IL-6R complex. The invention further relates to compounds or constructs, and in particular proteins and polypeptides, that comprise or essentially consist of one or more such amino acid sequences. The invention also relates to nucleic acids encoding such amino acid sequences and polypeptides, to methods for preparing such amino acid sequences and polypeptides, to host ceils expressing or capable of expressing such amino acid sequences or polypeptides, to compositions, and in particular to pharmaceutical compositions, that comprise such amino acid sequences, polypeptides, nucieic acids and/or host cells, and to uses of such amino acid sequences or polypeptides, nucleic acids, host cells and/or compositions, in particular for prophylactic, therapeutic or diagnostic purposes.