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(54) Title: COMPOSITION AND VACCINE FOR TREATING PROSTATE CANCER

(57) Abstract: The present invention relates to a composition comprising at least one mRNA encoding a combination of antigens capable of eliciting an (adaptive) immune response in a mammal, wherein the antigens are selected from the group consisting of PSA (Prostate-Specific Antigen), PSMA (Prostate-Specific Membrane Antigen), PSCA (Prostate Stem Cell Antigen), STEAP (Six Transmembrane Epithelial Antigen of the Prostate), MUC1 (Mucin 1) and PAP (Prostatic acid phosphatase). The invention furthermore relates to a vaccine comprising at least one mRNA encoding such a combination of antigens and to the use of said composition (for the preparation of a vaccine) and/or of the vaccine for eliciting an (adaptive) immune response for the treatment of prostate cancer (PCa), preferably of prostate adenocarcinoma, locally limited, locally advanced, metastatic, castration-resistant (hormone-refractory), metastatic castration-resistant and non-metastatic castration-resistant prostate cancers, and diseases or disorders related thereto. Finally, the invention relates to kits, particularly to kits of parts, containing the composition and/or the vaccine.