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(54) **Title:** ARENAVIRUSES USED IN TREATMENTS OF PROSTATE CANCER

- artLCMV-PAP-NP/PSA-GP (LCMV based)
- artPICV-PAP-NP/PSA-GP (PICV based)

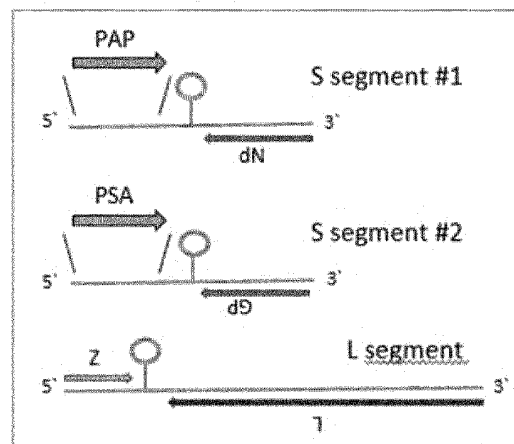


FIG. 1A

(57) **Abstract:** The present application relates to arenaviruses expressing prostate cancer-related antigens. In particular, described herein is a modified arenavirus particle which is engineered to carry a heterologous open reading frame (ORF) encoding a prostate cancer-related antigen or an antigenic fragment thereof, wherein the prostate cancer-related antigen is selected from the group consisting of: prostatic acid phosphatase (PAP), prostate specific antigen (PSA), and prostate-specific membrane antigen (PSMA). Also described herein are arenavirus genome segments or S segments encoding the prostate cancer-related antigen or an antigenic fragment thereof, cDNA, DNA expression vector, a pharmaceutical composition comprising such an arenavirus particle, methods of generating such an arenavirus particle and treating prostate cancer using such an arenavirus particle, and a kit for such usage.

[Continued on next page]

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