Prostate cancer (PCa) like other tumors expresses antigens that may serve as target for specific immunotherapy. Special antigen-presenting cells (e. g., dendritic cells) are capable of generating tumor-specific immunity. Cytotoxic T-cells (killer cells) are very effective against antigens and, consequently, against the respective tissue or tumor. Cancer testis antigens (CTA) are expressed in various human cancers but, aside from the testicles, not in normal tissue. Therefore, they are suitable for a specific tumor immunotherapy. We looked at different CTA (LAGE-1, PRAME, MAGE-C2, NY-ESO-1, SSX-2 and PAGE4) and their occurrence in prostatic cancer. Expression of CTA in various PCa cell lines and PCa material from patients was very heterogeneous. Only PAGE4 was expressed in primary PCa and in LnCaP cells as well as in hormone-dependent and hormone-refractory PCa probes. We conclude that PAGE4 should be further evaluated as a potential target for immunotherapy of PCa.