

The present invention relates to mono-specific and multi-specific polypeptide therapeutics that specifically target cells expressing prostate-specific membrane antigen (PSMA) and are useful for the treatment of prostate cancer (e.g., castrate-resistant prostate cancer), tumor-related angiogenesis or benign prostatic hyperplasia (BPH). In one embodiment, the multi-specific polypeptide therapeutics bind both PSMA-expressing cells and the T-cell receptor complex on T cells to induce target-dependent T-cell cytotoxicity, activation and proliferation.