Table S2. Immunohistochemistry and NK Cell Quantification

Formalin-fixed, paraffin-embedded prostatic tissue from diagnostic core needle biopsies and radical prostatectomy were selected for immunohistochemical analysis. Immunohistochemistry was performed using standard methods. In short, 3 µm thick tissue sections were immunostained using the CD56 antibody (Roche Diagnostics International AG, Rotkreuz, Switzerland) following the manufacturer's instructions. Tissue sections were pre-treated in PT Link (Agilent Technologies, CA, United States) using a high pH/low pH target retrieval solution (Dako DM828). The staining took place using the Ready-To-Use (RTU) format on the DakoLink 48 (Agilent Technologies) utilizing the EnVision Flex+ detection kit (K8002) and were incubated for 20 minutes. The sections were counterstained with hematoxylin.

The hematoxylin-eosin stained slides from the core biopsy and prostatectomy were evaluated by light microscopy. The tissue block containing the core needle biopsy with the most adenocarcinoma infiltration was selected together with the tissue block from the corresponding focus in the tissue from the prostatectomy. Selection of healthy tissue for assessment of NK cell infiltration was done selecting the tissue block containing a core biopsy with healthy tissue (if possible, without any adenocarcinoma in the core) and the tissue block from the corresponding area with normal tissue in the prostatectomy.

Stained slides were digitalized using the Hamamatsu Nano ZoomerXR at a magnification equivalent to x20. Evaluation of the CD56 stained slides was done using the Hamamatsu NDP.view V.2.6.13 viewing software at x40.

Whole field inspection of each core was carried out by one observer (SSD) to evaluate the presence of tumor tissue and CD56 immunoreactivity. NK cells were quantified in the whole tumor and divided by the total tumor area; thus, NK cell infiltration was determined as NK cells/mm^2. In healthy

tissue, NK cell quantification was performed in the same manner as for the tumor tissue, i.e., in a randomly chosen area with the same size as the tumor area.