Supplement figure legends

Supplement figure 1. A) AR activation of LNCaP-cl1 and -cl5 with dual luciferase reporter assay using pGL3-luc containing PSA promoter (PSAp) and pTK-RL (TK). B) Predicted miR-21 binding site in 3'UTR lesion of human SPRY1 and JAG1 gene on Target Scan.

Supplement figure 2. A) phosphor-ERK (p-ERK) expression levels in LNCaP-cl1 and -cl5 (upper), LNCaP-siCtr and -siSPRY1 (middle) and LNCaP without and with 2ng/ml EGF (lower) by western blotting. Protein was extracted 2 hours after the transfection of siRNA or EGF stimulation. B) N-cadherin (N-cad) expression levels in LNCaP-cl1 and -cl5 (upper) and JAG1 and N-cad expression levels in PC3-siCtr and -siJAG1 (middle) by western blotting. Invaded cell numbers of PC3-siCtr and -siJAG1 in Matrigel invasion assays after 48 hours incubation (lower).

Supplement figure 3. Summary of the differences in LNCaP-cl1 and -cl5. AR activity (cl1>cl5) regulate miR-21 expression (cl1>cl5). SPRY1 (cl1<cl5) and JAG1 (cl1<cl5) are negatively regulated by miR-21. SPRY1 negatively regulates AR activity (cl1>cl5) and suppresses PSA expression (cl1>cl5) and androgen-insensitivity (cl1>cl5). JAG1 positively regulate N-cad expression (cl1<cl5) and enhances cell invasion (cl1<cl5). SPRY1 negatively and JAG1 positively regulate androgen-dependent cell proliferation (cl1=cl5).