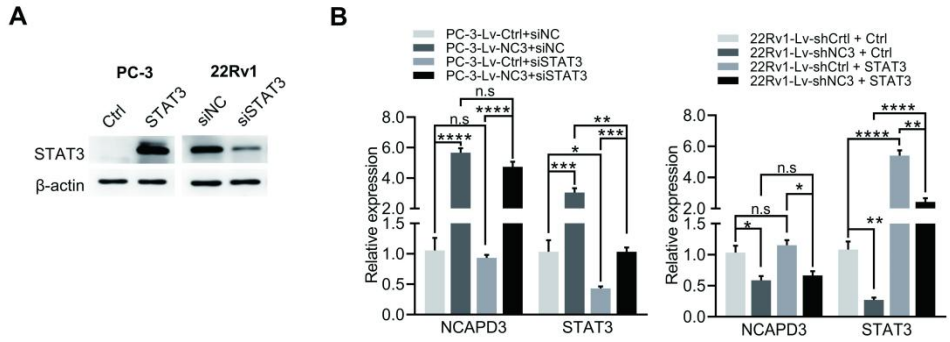
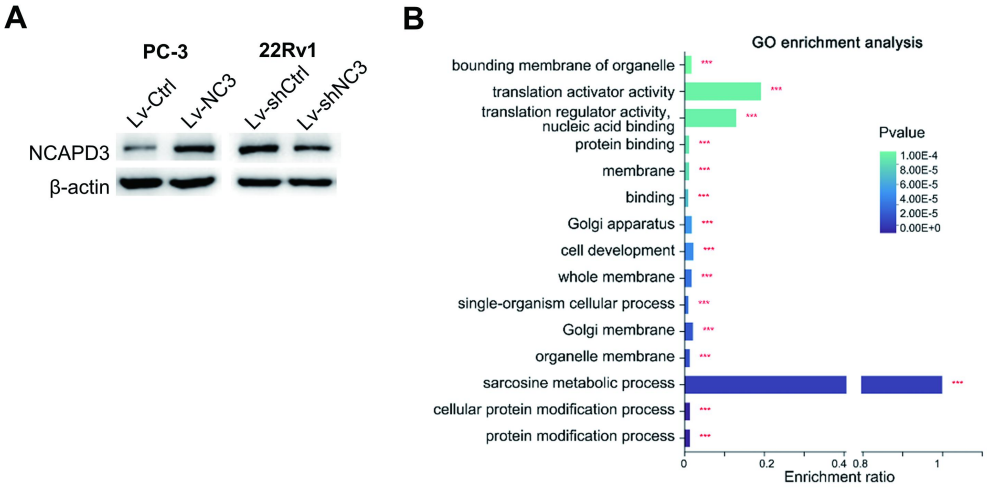
Supplementary Figure 1



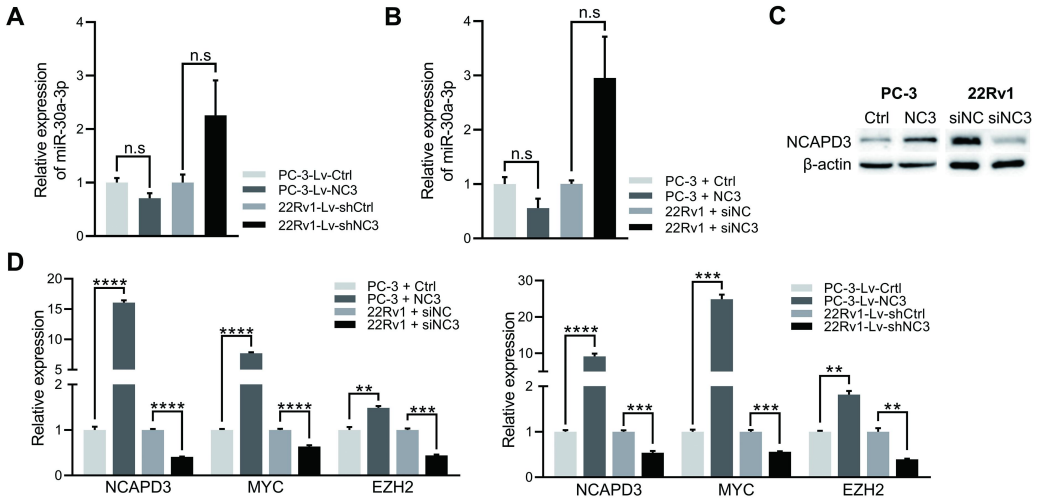
A The efficiency of STAT3 silencing in Fig.1H was demonstrated by Western blotting. **B** The knockdown and overexpression efficiency of NCAPD3 and STAT3 (Fig.1I) were quantified by qPCR assay.

Supplementary Figure 2



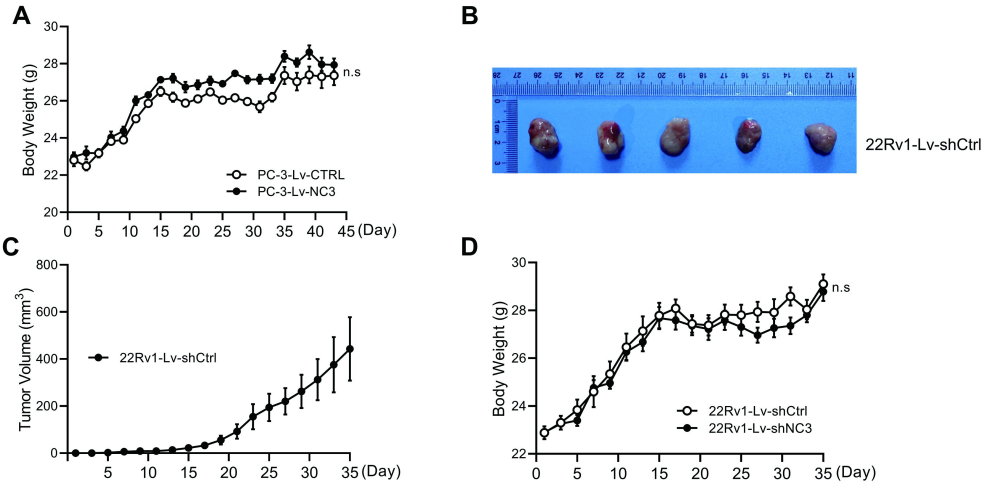
A The expression of NCAPD3 in overexpression-stable PCa cell lines and silent stable PCa cell lines of NCAPD3 was demonstrated before miRNA sequencing by Western blotting. **B** Bar charts of GO enrichment analysis of target genes of miR-30a.

Supplementary Figure 3



A-B qRT-PCR analysis of miR-30a-3p expression in stable NCAPD3 overexpression or knockdown cells (A) and transiently transfected cells with NCAPD3 plasmid or siRNA (B). **C** NCAPD3 and STAT3 knockdown and overexpression efficiency (Fig.3B) were quantified by Western blotting. **D** Wester blotting quantification of Fig.5F was performed using ImageJ.

Supplementary Figure 4



A Plot of weight changes of the xenografted nude mouse in stable NCAPD3 overexpression and control group. **B** Tumor volume changed in 22Rv1-Lv-shControl xenograft tumors nude mice. **C** Average tumor volume of each mouse group was measured and presented. **D** Plot of weight changes of the xenografted nude mouse in the 22Rv1-Lv-shControl group.

Supplementary Table 1 Clinical information for the patient.

Number	Age (Years-old)	Gleason score	Median PSA (ng/mL)
5	60	Aggressive (7)	68.9
15	68.8	Very aggressive (8−10)	74.74

Supplementary Table 2 The sequences of oligonucleotides.

siRNA	**Sequences (5'-3')**
negative control siRNA	UUCUCCGAACGUGUCACGUTT
NCAPD3 siRNA	AGGAAUUCAAGUUAACAGAGGCUUG
STAT3 siRNA	GCAACAGAUUGCCUGCAUUTT
AR siRNA	AAGAAGGCCAGUUGUAUGGAC
MYC siRNA	CGAUGUUGUUUCUGUGGAATT
EZH2 siRNA	GCUCCUCUAACCAUGUUUATT
miR-30a-5p mimics	UGUAAACAUCCUCGACUGGAAG
miR-NC	ACAUAGGGCCCAUGCUAACUGC
miR-30a-5p FISH Probe	CTTCCAGTCGCGGATGTTTACA-Biotin

Supplementary Table 3 An informative list of antibodies and inhibitors.

Antibodies	**Catalog No.**	**Manufacturer**
β-actin	AC006	ABclonal
NCAPD3	sc-101016	Santa Cruz
STAT3	A1192	ABclonal
AR	A19611	ABclonal
MYC	A1309	ABclonal
EZH2	A19577	ABclonal
AGO2	A19709	ABclonal
PCLAF	sc-390515	Santa Cruz
Ki67	A11390	ABclonal
IgG	A19709	ABclonal
HRP Goat Anti-Rabbit IgG (H+L)	AS014	ABclonal
HRP Goat Anti-Mouse IgG (H+L)	AS003	ABclonal
MALTA1-IN-1	HY-115579	MCE
Stattic	HY-13818	MCE

Supplementary Table 4 The primers used for qRT-PCR assay.

Primer	Sequences (5'- 3')
β-actin	F-GAGCTACGAGCTGCCTGACG
	R-CCTAGAAGCATTTGCGGTGG
NCAPD3	F-TGGAGCAAGAGTCGAATGGCG
	R-GGGGCGGTTTATCAGGCAGTG
STAT3	F-GCTGCCCCATACCTGAAGA
	R-AAACTGCCCTCCTGCTGAG
AR	F-ATGGTGAGCAGAGTGCCCTATC
	R-ATGGTCCCTGGCAGTCTCCAAA
MYC	F-CCTGGTGCTCCATGAGGAGAC
	R-CAGACTCTGACCTTTTGCCAGG
EZH2	F-AAAGGAGTTTGCTGCTGCTC
	R-TGTTATTGGGAAGCCGTCCT
MALAT1-3'	F-AAAGCAAGGTCTCCCCACAAG
	R-GGTCTGTGCTAGATCAAAAGGCA
MALAT1-5'	F-GAATTGCGTCATTTAAAGCCTAGTT
	R-GTTTCATCCTACCACTCCCAATTAAT
miR-30a-5p	F-CGCCGCTGTAAACATCCTCGAC
	R-ATCCAGTGCAGGGTCCGAGG
miR-30a-3p	F-CGCCGCGCTGCAAACATCCGACT
	R-ATCCAGTGCAGGGTCCGAGG
U6	F-CTCGCTTCGGCAGCACA
	R-AACGCTTCACGAATTTGCGT
pri-miR30a	F-GTAACCTGGCCACTTGCCTA
	R-TCATCACCGAGCTTCTAGTTTCT
pre-miR30a	F-GCGACTGTAAACATCCTCGAC
	R-AGCTGCAAACATCCGACTGA
LINC00472	F-GGAGATACGGTCAGAGAGGC
	R-GGTGCTTCATAGGGGTCTGT

Supplementary Table 5 The primers used for ChIP assay.

Gene	Sequences (5'- 3')
MALAT1 promoter	F-CATGCCATTCCCCAGAACAGGC
	R-CCGCGCAGGGATACGCGA