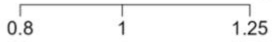
Potential drug targets for prostate cancer： A mendelian randomization study and application for target-derived drug design

Supplementary Figure 1. the results of Bidirectional MR analysis for prostate cancer on levels of six initial screening proteins

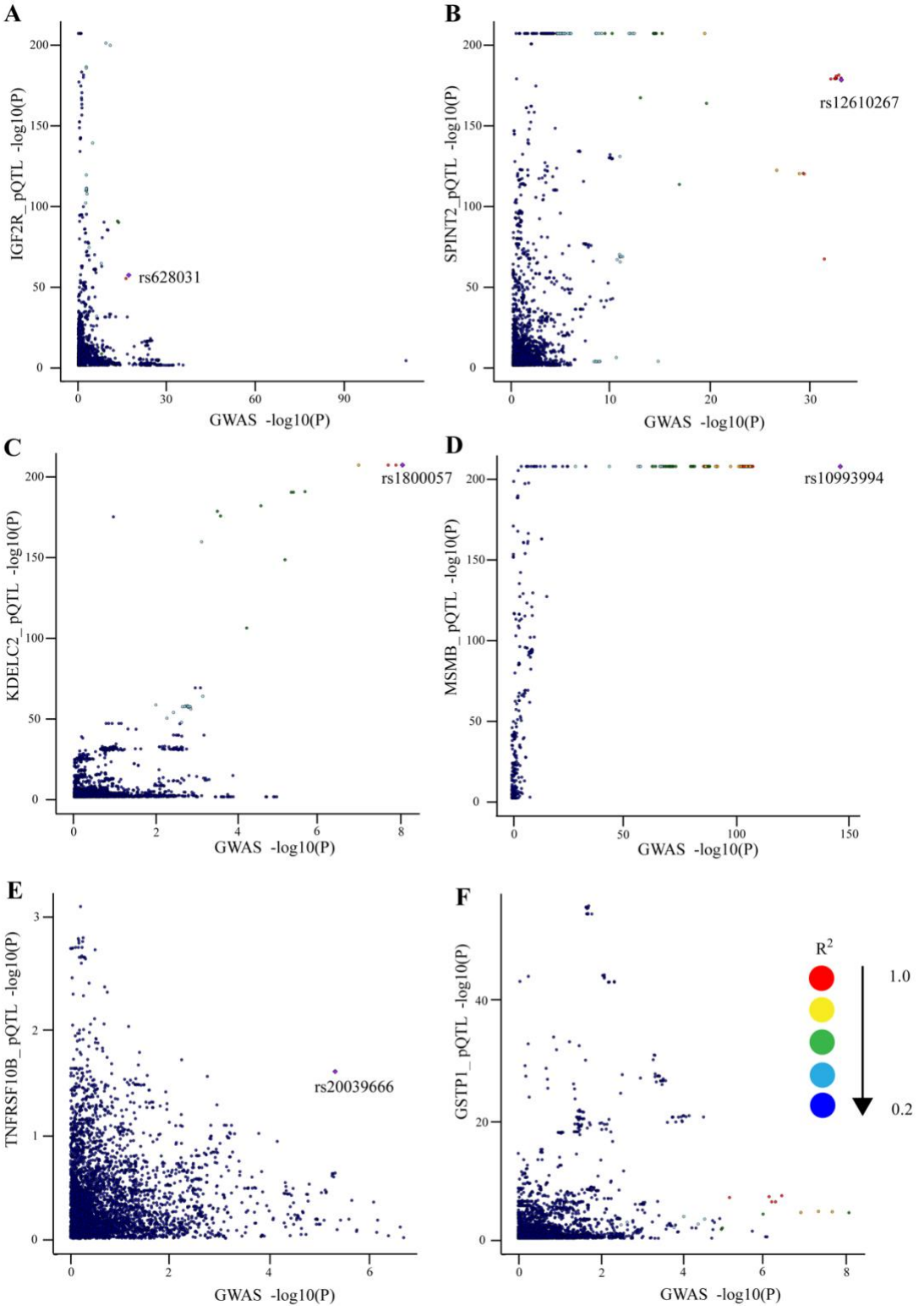
Supplementary Figure 2. the results of colacalization analysis of six potential proteins for prostate cancer

Supplementary Figure 3. Protein-Protein interaction network between potential causal proteins and affirmed drug targets for PCa

exposure	Protein	method	nsnp	pval	OR (95% CI)
		MR Egger		0.403	1.014 (0.981 , 1.048)
		Weighted median		0.622	1.006 (0.981 , 1.032)
Prostate cancer	MSMB	Inverse variance weighted	113	0.602	1.005 (0.987 , 1.022)
		Simple mode		0.693	1.010 (0.960 , 1.064)
		Weighted mode		0.696	1.006 (0.976 , 1.037)
		MR Egger		0.944	0.997 (0.910 , 1.091)
		Weighted median		0.706	0.995 (0.970 , 1.021)
Prostate cancer	SPINT2	Inverse variance weighted	114	0.180	1.033 (0.985 , 1.084)
		Simple mode		0.224	0.970 (0.924 , 1.018)
		Weighted mode		0.706	0.994 (0.963 , 1.026)
		MR Egger		0.287	1.023 (0.981 , 1.066)
		Weighted median		0.146	1.021 (0.993 , 1.049)
Prostate cancer	IGF2R	Inverse variance weighted	114	0.588	1.006 (0.984 , 1.028)
		Simple mode		0.080	1.051 (0.995 , 1.110)
		Weighted mode		0.197	1.023 (0.989 , 1.058)
		MR Egger		0.729	0.980 (0.874 , 1.099)
		Weighted median		0.396	1.012 (0.985 , 1.039)
Prostate cancer	KDELC2	Inverse variance weighted	114	0.897	1.004 (0.945 , 1.067)
		Simple mode		0.546	1.018 (0.961 , 1.078)
		Weighted mode		0.313	1.018 (0.983 , 1.054)
		MR Egger		0.061	1.034 (0.999 , 1.071)
		Weighted median		0.456	1.010 (0.983 , 1.038)
Prostate cancer	GSTP1	Inverse variance weighted	114	0.081	1.017 (0.998 , 1.035)
		Simple mode		0.595	1.016 (0.959 , 1.077)
		Weighted mode		0.486	1.012 (0.979 , 1.046)
		MR Egger		0.168	1.026 (0.989 , 1.064)
		Weighted median		0.438	1.011 (0.983 , 1.041)
Prostate cancer	TNFRSF10B	Inverse variance weighted	114	0.172	1.013 (0.994 , 1.033)
		Simple mode		0.717	1.012 (0.951 , 1.076)
		Weighted mode		0.483	1.012 (0.980 , 1.044)

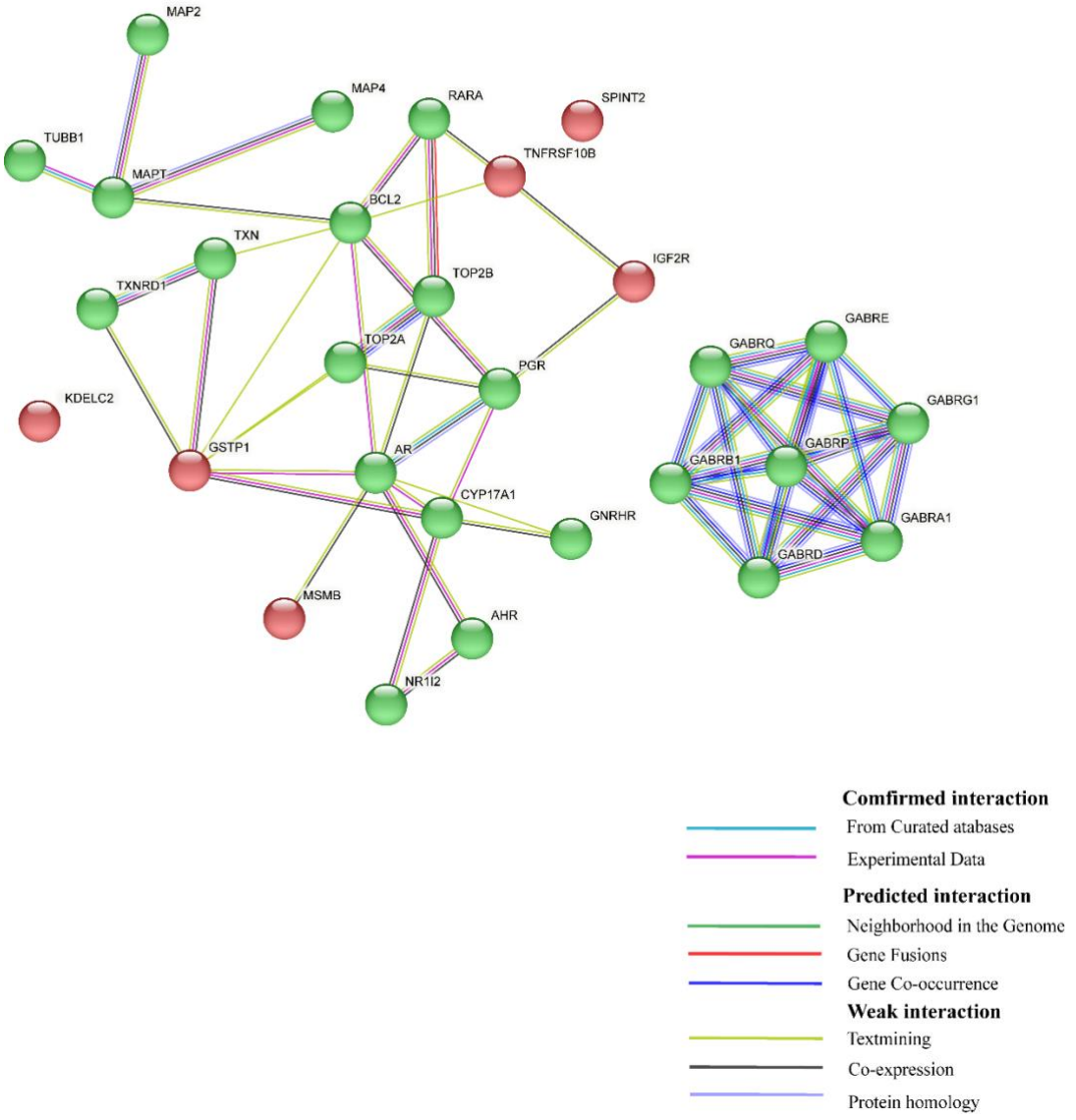


Supplementary Figure 1. the results of Bidirectional MR analysis for prostate cancer on levels of six initial screening proteins OR: odd ratios, nsnp: the numbers of single nucleotide polymorphisms



Supplementary Figure 2. the results of colacalization analysis of six potential proteins for prostate cancer Bayesian co-localization analysis of initial screening proteins for IGF2R(A), SPINT2(B), KDELC2(C), MSMB(D), TNFRSF10B(E),

GSTP1(F), respectively.the SNP about minimal sum of P value in corresponded protein QTLs and prostate cancer GWAS was shown in purple points and marked.



Supplementary Figure 3. Protein-Protein interaction network between potential causal proteins and affirmed drug targets for PCa. Red core symbolize the potential causal proteins. Green core symbolize the affirmed drug targets for PCa. Different color

lines symbolize the different connection between proteins.