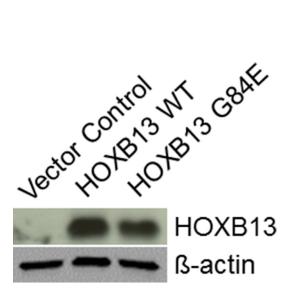
Somatic molecular subtyping of prostate tumors from *HOXB13* G84E carriers

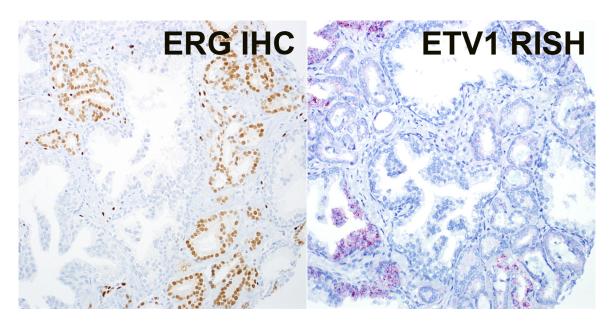
Supplementary Materials

Supplementary Table 1: Clinical-pathologic data for HOXB13 G84E carriers and controls

	HOXB13 WT (n = 375)	HOXB13 G84E (n = 102)	<i>P</i> -value
Age (median, IQR)	59 (54–63)	55 (51–60)	< 0.001
Prostate weight, g	50 (42–60)	47 (39–54)	0.0027
RP grade group			
1 (GS6)	109 (29.1%)	59 (58.4%)	< 0.001
2 (GS3+4=7)	143 (38.1%)	25 (24.8%)	
3 (GS4+3=7)	79 (21.1%)	9 (8.9%)	
4 (GS8)	32 (8.5%)	3 (3.0%)	
5 (GS9-10)	12 (3.2%)	5 (5.0%)	
RP pathologic stage			
pT2N0	214 (57.1%)	70 (70%)	0.069
pT3aN0	117 (31.2%)	24 (24%)	
pT3bN0	33 (8.8%)	3 (3%)	
pTxN1	11 (2.9%)	3 (3%)	



Supplementary Figure 1: Immunoblot using HOXB13 antibody utilized for immunohistochemistry in Figure 1. DU145 cell lines stably expressing HOXB13 WT or G84E were generated using lentivirus system. Whole cell lysates from cell lines were prepared with sonication in a buffer containing 50 mM Tris-HCl pH 7.5, 1 mM EDTA and 2%SDS. Western blot analysis of 5 ug of protein was performed using $0.2~\mu g/ml$ HOXB13 antibody (AF8156, R&D Systems) and β -actin antibody (ab8227, Abcam). The immunogen for this antibody was an E.coli -derived human HOXB13 fragment, amino acid residues 1-102. On immunoblotting, this antibody recognizes a single band of molecular weight 37 kd in extracts of prostate tissues and cell lines.



Supplementary Figure 2: Case with heterogeneous staining for ERG by immunohistochemistry (IHC) and ETV1 RNA *in situ* hybridization (RISH). This case appears to be a collision tumor as some tumor glands are positive for ERG and others are positive for ETV1. Images at 200× magnification.