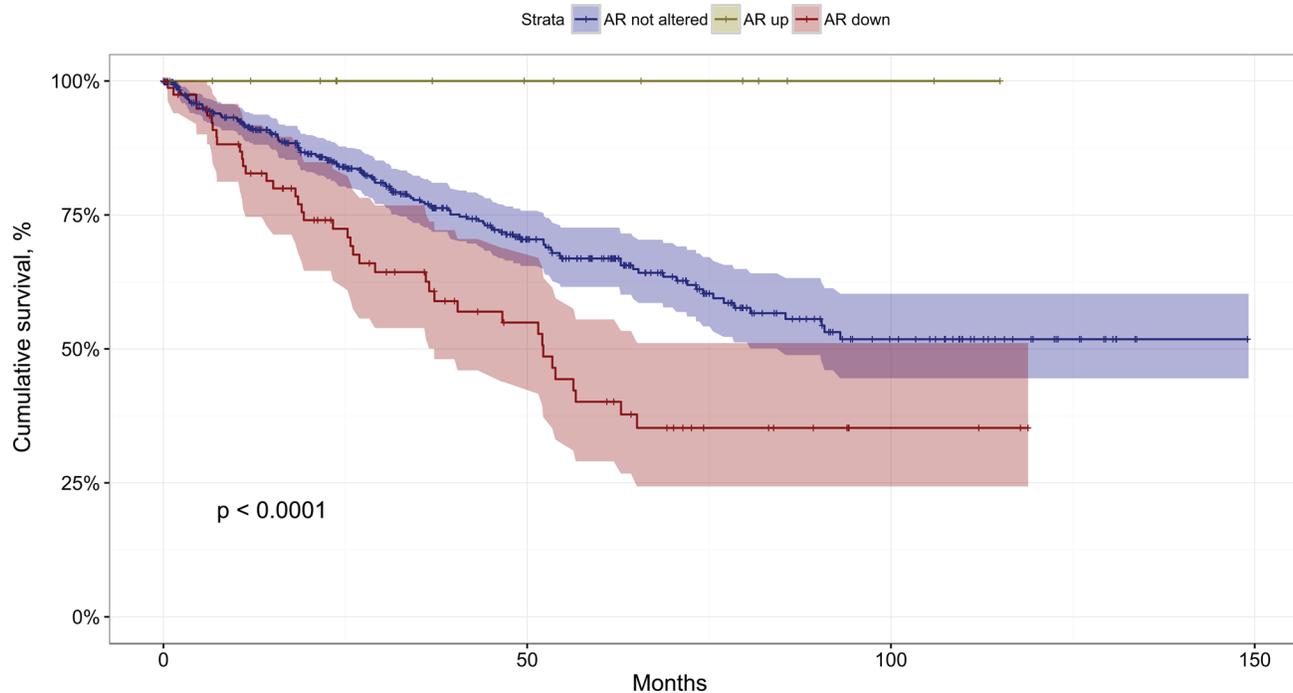
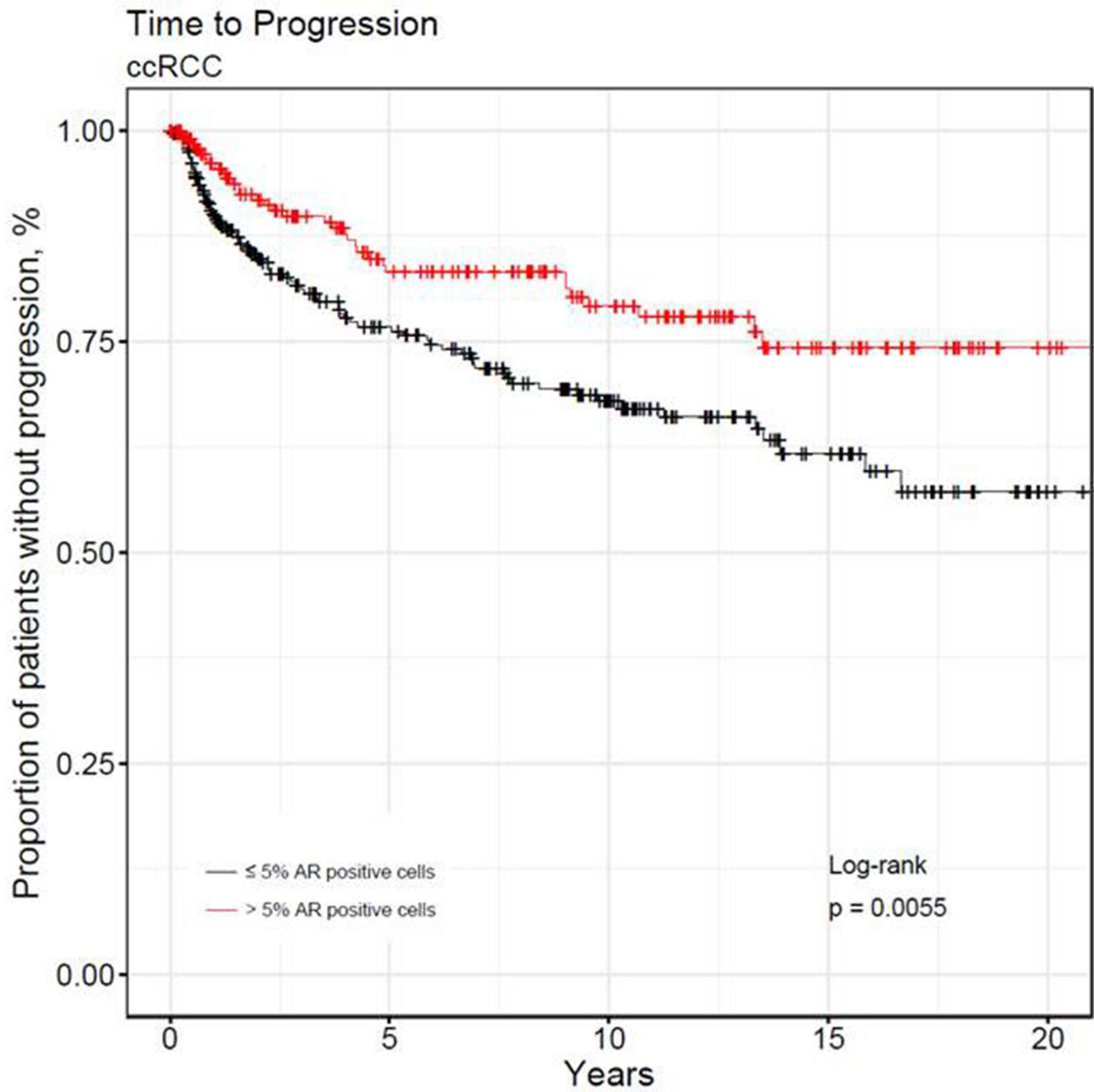


# Prognostic relevance of androgen receptor expression in renal cell carcinomas

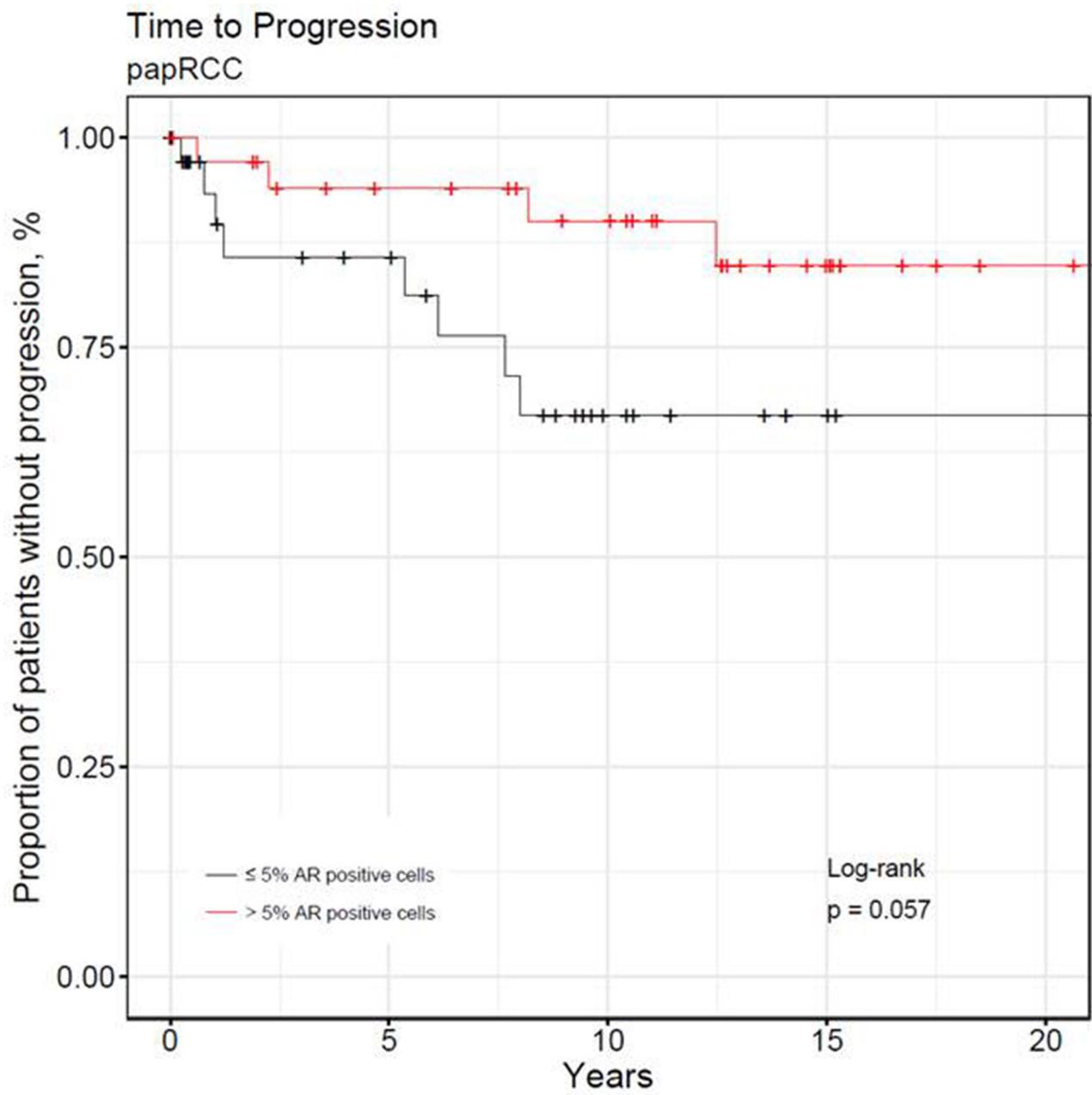
## SUPPLEMENTARY MATERIALS



**Supplementary Figure 1: Analysis of a TCGA dataset.** Association between mRNA expression of AR and survival times are represented as Kaplan-Meier-Plots.



**Supplementary Figure 2: Time to progression and AR expression in clear cell RCC.** Association between time to progression and AR expression represented by Kaplan-Meier-Plots.



**Supplementary Figure 3: Time to progression and AR expression in papillary RCC.** Association between time to progression and AR expression represented by Kaplan-Meier-Plots.

### Supplementary Table 1: HALO algorithm settings

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Parameter Name = "Classifier" Value = "Foersch\_AR\_Ery-Elimination"  
Parameter Name = "Class List" Value = "Tissue"  
Parameter Name = "Classify Registered" Value = ""  
Parameter Name = "Nuclear Stain" Value = "0.251,0.184,0.130"  
Parameter Name = "Positive Stain 1" Value = "0.310,0.438,0.587"  
Parameter Name = "Positive Stain 2" Value = "0.0,0.0,0.0"  
Parameter Name = "Stain 1 Localization" Value = "Nucleus"  
Parameter Name = "Stain 2 Localization" Value = "Cytoplasm"  
Parameter Name = "Minimum Tissue OD" Value = "3.7e-002"  
Parameter Name = "Tissue Edge Thickness" Value = "0."  
Parameter Name = "Nuclear Contrast Threshold" Value = "0.466"  
Parameter Name = "Minimum Nuclear OD" Value = "0.123"  
Parameter Name = "Minimum Nuclear Size" Value = "9.8"  
Parameter Name = "Maximum Nuclear Size" Value = "571.7"  
Parameter Name = "Minimum Nuclear Roundness" Value = "0."  
Parameter Name = "Nuclear Segmentation Aggressiveness" Value = "0.88"  
Parameter Name = "Fill Nuclear Holes" Value = "1"  
Parameter Name = "Maximum Cytoplasm Radius" Value = "5."  
Parameter Name = "Stain 1 Min OD Weak" Value = "9.e-002"  
Parameter Name = "Stain 1 Min OD Moderate" Value = "0.19"  
Parameter Name = "Stain 1 Min OD Strong" Value = "0.273"  
Parameter Name = "Stain 2 Min OD Weak" Value = "0.112"  
Parameter Name = "Stain 2 Min OD Moderate" Value = "0.287"  
Parameter Name = "Stain 2 Min OD Strong" Value = "0.445"  
Parameter Name = "Stain 1 Mask" Value = "not set"  
Parameter Name = "Stain 2 Mask" Value = "not set"  
Parameter Name = "Output Image" Value = "Stain 1 Markup"  
Parameter Name = "Verbose Output" Value = "Database"

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**Supplementary Table 2: Correlation of AR expression in renal clear cell carcinomas with clinicopathological characteristics**

Variable	AR > 5%, n(%)	AR < 5%, n(%)	<i>P</i>
<b>Sex</b>			<b>= 0.023</b>
Female	61 (33)	126 (43)	
Male	126 (67)	164 (57)	
<b>Age at surgery, years</b>			<b>= 0.138</b>
< 65	118 (63)	155 (53)	
> 65	69 (37)	135 (47)	
<b>ECOG</b>			<b>= 0.077</b>
= 0	109 (58)	180 (62)	
> 0	78 (42)	110 (38)	
<b>Tumour extent</b>			<b>= 0.001</b>
Stage 1/2	136 (73)	158 (54)	
Stage 3/4	51 (27)	132 (46)	
<b>Fuhrman grade</b>			<b>= 0.108</b>
G1/2	165 (88)	235 (81)	
G3/4	22 (12)	55 (19)	
<b>Distant metastasis</b>			<b>= 0.013</b>
No	166 (89)	231 (80)	
Yes	21 (11)	59 (20)	
<b>Lymphnode metastasis</b>			<b>= 0.077</b>
No	180 (96)	266 (92)	
Yes	7 (4)	24 (8)	

**Supplementary Table 3: Correlation of AR expression in renal papillary cell carcinomas with clinicopathological characteristics**

Variable	AR > 5%, n(%)	AR < 5%, n(%)	P
<b>Sex</b>			= 0.136
Female	7 (21)	14 (40)	
Male	27 (79)	21 (60)	
<b>Age at surgery, years</b>			= 0.405
< 65	16 (47)	25 (71)	
> 65	18 (53)	10 (29)	
<b>ECOG</b>			= 0.176
= 0	19 (56)	24 (69)	
> 0	15 (44)	11 (31)	
<b>Tumour extent</b>			= 0.390
Stage 1/2	29 (85)	25 (71)	
Stage 3/4	5 (15)	10 (29)	
<b>Fuhrman grade</b>			= 0.500
G1/2	32 (94)	31 (89)	
G3/4	2 (6)	4 (11)	
<b>Distant metastasis</b>			= <b>0.036</b>
No	33 (97)	27 (77)	
Yes	1 (3)	8 (23)	
<b>Lymphnode metastasis</b>			= 1
No	31 (91)	31 (89)	
Yes	3 (9)	4 (11)	