Online Resource 2

Hormone Receptor Expression Varies by Molecular Subtype, Age, and Sex in Pheochromocytoma and Paraganglioma: A Transcriptomic Analysis

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Table S1 Univariate Cox proportional hazards models of event-free survival by hormone receptor expression

Gene	Clinically aggressive and/or metastatic disease				Distant metastasis
	All patients (15 events)	Pseudohypoxia (8 events)	Kinase signaling (1 event)	Wnt-altered (6 events)	All patients (10 events)
ESR1	0.83 (0.48–1.43); p = 0.505	1.28 (0.59–2.80); p = 0.534	NE	0.50 (0.20–1.28); p = 0.148	1.30 (0.73–2.29); p = 0.373
ESR2	1.15 (0.67–1.99); p = 0.611	1.13 (0.57–2.22); p = 0.731	NE	1.65 (0.81–3.34); p = 0.167	1.27 (0.68–2.36); p = 0.453
GPER1	0.92 (0.64–1.33); p = 0.669	0.80 (0.50–1.29); p = 0.366	NE	0.74 (0.35–1.57); p = 0.430	0.89 (0.56–1.40); p = 0.607
PGR	1.02 (0.70–1.49); p = 0.921	1.60 (0.89–2.89); p = 0.119	NE	0.70 (0.43–1.14); p = 0.148	1.19 (0.76–1.87); p = 0.451
AR	1.14 (0.87–1.48); p = 0.348	0.98 (0.52–1.82); p = 0.938	NE	0.97 (0.76–1.25); p = 0.830	1.03 (0.71–1.49); p = 0.894
LHCGR	0.86 (0.71–1.04); p = 0.120	0.71 (0.43–1.18); p = 0.189	NE	0.91 (0.67–1.25); p = 0.569	0.85 (0.66–1.08); p = 0.176
NR3C1	0.67 (0.25–1.79); p = 0.429	1.12 (0.29–4.30); p = 0.869	NE	0.21 (0.04–1.19); p = 0.078	0.93 (0.28–3.08); p = 0.908

Values are hazard ratio (95% confidence interval); p-value, per 1-unit increase in log2 CPM (Efron method for ties). Analyses were performed at the patient level (one primary tumor per patient; 151 patients). Endpoints were derived from the curated dataset of Fishbein et al.; patients without evaluable event-free time or with unknown status were excluded (clinically aggressive/metastatic: 16 events, 15 evaluable; 150 patients analyzed; distant metastasis: 11 events, 10 evaluable; 146 patients analyzed). The kinase-signaling cluster had a single event, so hazard ratios were not estimable. Schoenfeld residual tests showed no violation of the proportional hazards assumption except for PGR in the Wnt-altered cluster (clinically aggressive/metastatic endpoint; p = 0.010). NE, not estimable