

SUPPLEMENTARY INFORMATION

Angiogenesis inhibitor or aggressiveness marker? The function of endostatin in cancer through electrochemical biosensing

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Table S1. t_{exp} values obtained in the comparison between the slope values of the calibration plots constructed with the bioplatform for endostatin prepared in buffer solution and in the indicated amount/dilution of each biological matrix.

		Intercept, nA	Slope, nA mL pg^{-1}	t_{exp}^{**}	$t_{\text{tab}}(95\%, 2, 2 \text{ tails})^{**}$
Buffered solutions		73 ± 2	0.09 ± 0.02	--	
Tissues (0.05 µg)	NT5*	93.7 ± 0.7	0.07 ± 0.02	4.809	
	T5 (III)*	107 ± 2	0.07 ± 0.02	5.231	
Plasma (1/150)	2*	82 ± 2	0.105 ± 0.005	1.028	
	16*	108 ± 2	0.106 ± 0.005	0.814	4.303
Cell extracts (0.1 µg)	SW480	85 ± 4	0.10 ± 0.01	0.279	
	KM12SM	118 ± 9	0.10 ± 0.03	0.232	
Cell secretomes (1/75)	SW480	85 ± 6	0.10 ± 0.02	0.238	
	KM12SM	108 ± 10	0.09 ± 0.03	0.301	

*These codes correspond to those of **Table 3** in the manuscript. **Estimated as described in [1] by comparing the slope values.

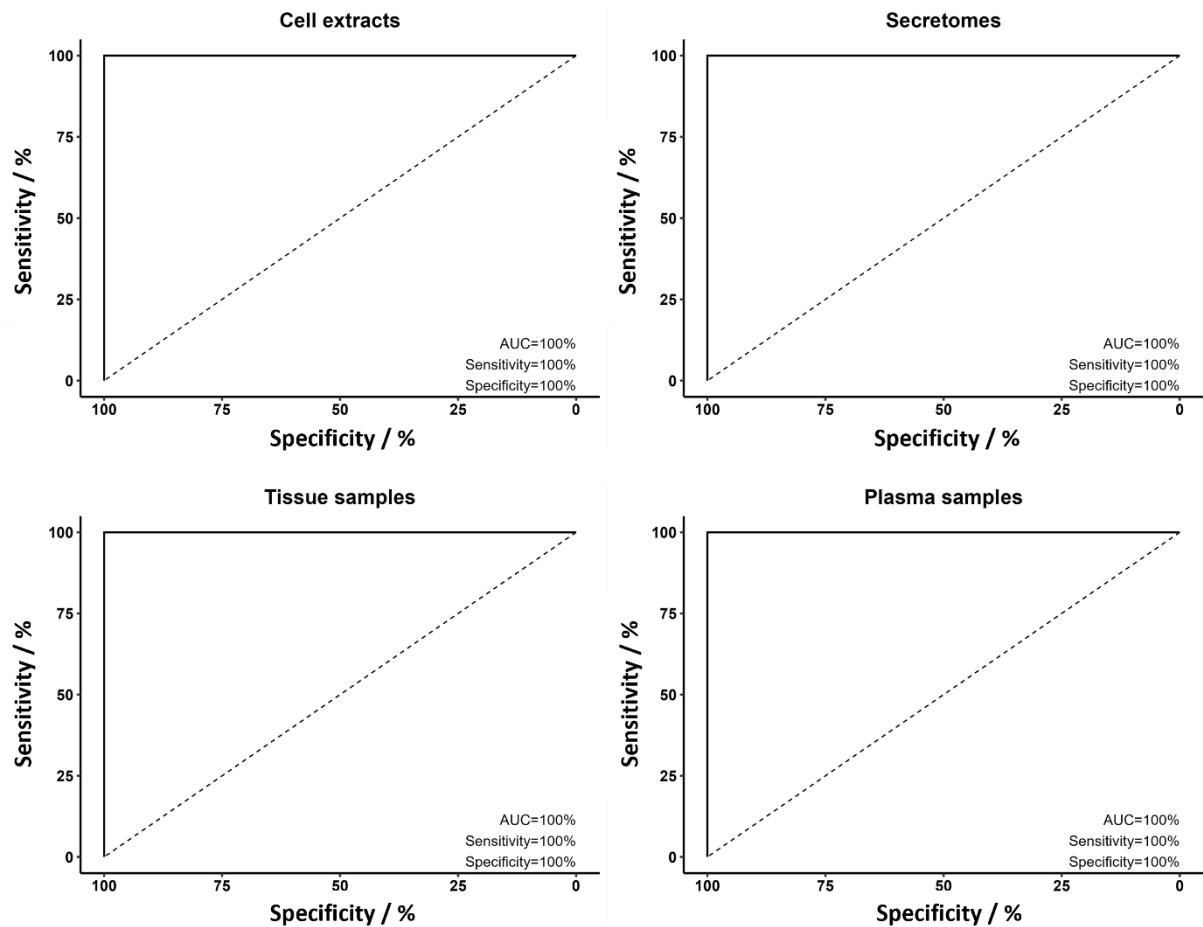


Fig. S1. ROC curves of the bioplatform diagnostic value to discriminate the metastatic capabilities of cancer cells and between healthy subjects and CRC patients through the determination of endostatin in cell extracts or exosomes, or in tissue and plasma samples, respectively.

Table S2. Potential of the bioplatform to assist in CRC staging through the determination of endostatin in plasma and tissue samples and estimated cut-off values.

Comparison	Plasma samples					Tissue samples				
	Cut-off (ng mL ⁻¹)	AUC	Specificity	Sensitivity	p-value (Mann- Whitney)	Cut-off (pg µg ⁻¹)	AUC	Specificity	Sensitivity	p-value (Mann- Whitney)
CT_Stage I	67.8	100	100	100	0.00020794	191.59	100	100	100	3.37E-06
CT_Stage II	77.635	100	100	100	0.00020794	195.81	100	100	100	3.37E-06
CT_Stage III	81.96	100	100	100	0.00020794	226.405	100	100	100	3.37E-06
CT_Stage IV	89.735	100	100	100	0.00020794	235.38	100	100	100	3.37E-06
Stage I_Stage II	99.545	100	100	100	0.0021645	212.86	100	100	100	0.0021645
Stage I_Stage III	103.87	100	100	100	0.0021645	243.455	100	100	100	0.0021645
Stage I_Stage IV	111.645	100	100	100	0.0021645	252.43	100	100	100	0.0021645
Stage II_Stage III	113.92	100	100	100	0.0021645	251.03	100	100	100	0.0021645
Stage II_Stage IV	121.695	100	100	100	0.0021645	260.005	100	100	100	0.0021645
Stage III_Stage IV	126.805	100	100	100	0.0021645	288.975	100	100	100	0.0021645

Reference

- [1] J.M. Andrade, M.G. Estévez-Pérez, Statistical comparison of the slopes of two regression lines: A tutorial, *Anal. Chim. Acta* 838 (2014) 1–12, <https://doi.org/10.1016/j.aca.2014.04.057>.