

Supporting Information for:

Using the inherent chemistry of the endothelin-1 peptide to develop a rapid assay for pre-transplant donor lung assessment

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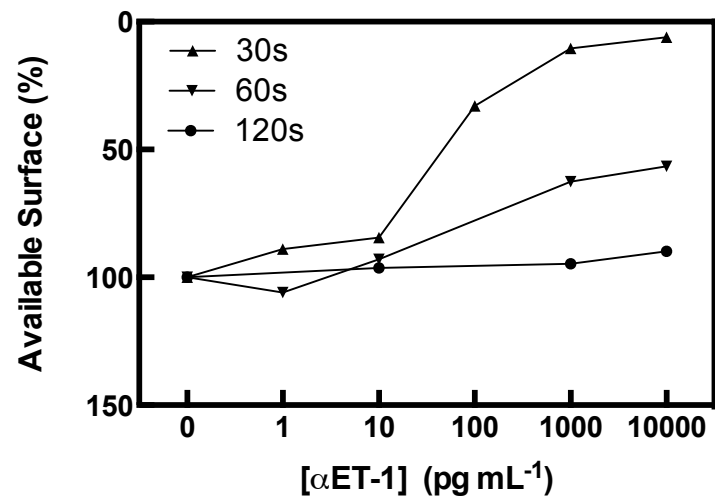
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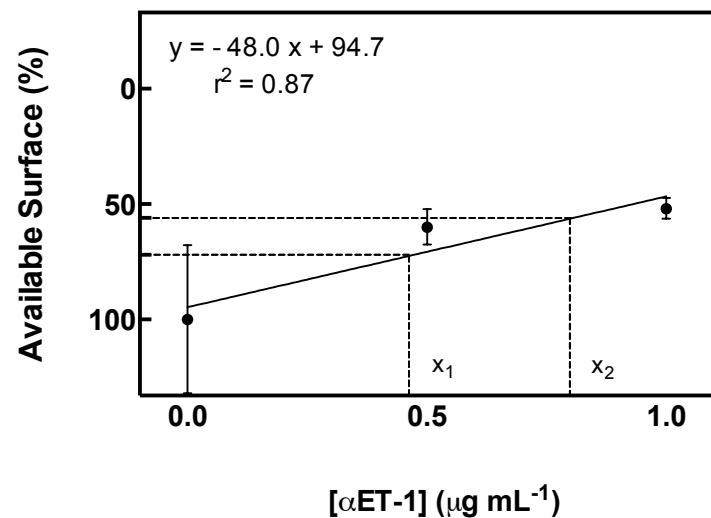
SI Figure 1. ET-1 biosensor characteristics

SI Figure 2. ET-1 detection in PBS

SI Table 1. Estimated ET-1 concentrations in PBS



SI Figure 1. ET-1 biosensor characteristics. Currents obtained (reported as % available surface for various concentrations of ET-1 antibody bound to the ET-1 peptide SAM (1 ng mL^{-1}) for sensors that were electrodeposited for 30 (triangles), 60 (inverted triangles), or 120 (circles) seconds.



SI Figure 2. ET-1 detection in PBS. Currents obtained (reported as % available surface) for the oxidation of ferrocyanide at the electrode surface for the detection of ET-1 in PBS. The equation and goodness of fit for the standard curve (circles, solid line) are shown in the upper left quadrant of the graph. Each point represents $n = 5$ different sensors and error-bars indicate s.e.m. The dashed lines represent the observed % available surface for two unknown ET-1 concentrations, x_1 and x_2 , extrapolated to theoretical anti-ET-1 concentrations.

SI Table 1. Estimated ET-1 concentrations in PBS.

Buffer	Unknown Sample	% Available Surface	[α ET-1] Calculated (ng mL ⁻¹)	[ET-1] Calculated (ng mL ⁻¹)*	[ET-1] Actual (ng mL ⁻¹)
PBS	x ₁	72.0	472	528	500
	x ₂	56.0	806	194	250

*Calculated [ET-1] is obtained from the following equation: [ET-1]calc. = [α ET-1] added – [α ET-1] calculated where [α ET-1] added is 1 μ g mL⁻¹ and [α ET-1] calculated is obtained by solving the equation of the line in SI Fig 2. .