

**Table S3. Measured extracellular parameters.** Parameters were measured in cell-free media in the experimental system described in the main text.

<b>Parameter</b>	<b>Description</b>	<b>Measured Value</b>	<b>Units</b>
$k_{LaO_2}$	O <sub>2</sub> volumetric mass transfer coefficient	$1.38 \times 10^{-3}$	s <sup>-1</sup>
$k_{LaNO\cdot}$	NO• volumetric mass transfer coefficient	$3.14 \times 10^{-3}$	s <sup>-1</sup>
$k_{NO\cdot-O_2}$	NO• autoxidation rate	$9.00 \times 10^5$	M <sup>-2</sup> s <sup>-1</sup>
$k_{NONOate,DPTA}$	DPTA NONOate dissociation rate	$8.24 \times 10^{-5}$	s <sup>-1</sup>
$k_{NONOate,PAPA}$	PAPA NONOate dissociation rate	$7.35 \times 10^{-4}$	s <sup>-1</sup>