Supporting Information

Improved *In Vivo* Performance of Amperometric Oxygen (*PO*₂) Sensing Catheters via Electrochemical Nitric Oxide Generation/Release

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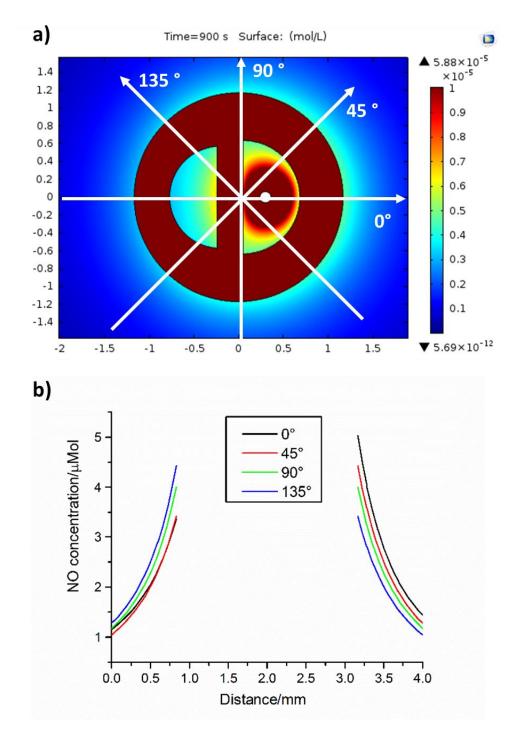


Fig. S1. Distribution of NO levels around a dual lumen catheter after 900 s in the presence of air from simulation via Comsol Multiphysics[®]: a) Concentration color map near catheter surface; b) concentration of NO outside the catheter along the lines disecting the catheter at 0° , 45° , 90° and 135° , as indicated in a).

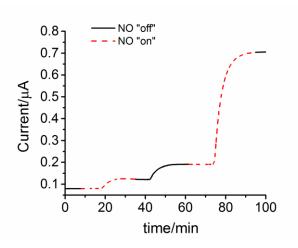


Fig. S2. Calibration curve of PO_2 sensing catheters on the benchtop with NO generation/release switched "on" and "off" as indicated.

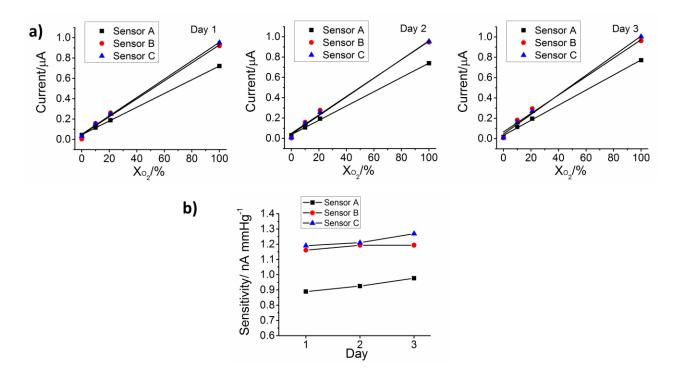


Fig. S3. Stability of the PO_2 sensing catheters over 3d: a) calibration curve of three sensors on different days with continuous NO generation/release; b) summary of the change in sensitivity over 3 d period for each of the three sensors.

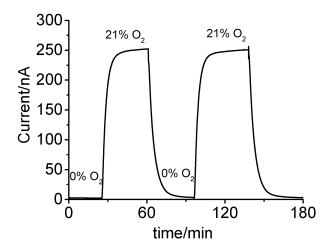


Fig. S4. Typical reversible response of the electrochemical NO generaton PO₂ sensing catheter under investigation.

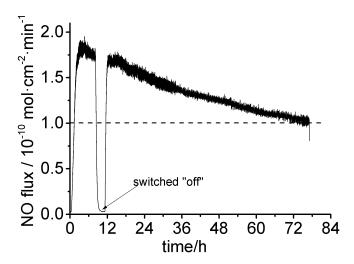


Fig. S5. NO release profile from an electrochemical NO generation/release PO_2 sensing catheter. NO release is switched "off" at ~ the 8th h to demonstrate the control of the release.