SUPPLEMENTARY MATERIAL

Propofol Detection and Quantification in Human Blood: The Promise of Feedback Controlled, Closed-loop Anesthesia

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![Figure S1: Schematic representation of the surface profiler scans over a partially membrane-coated glass cover slip (left) and the recorded surface profiles (right).](image)

Figure S1: Schematic representation of the surface profiler scans over a partially membrane-coated glass cover slip (left) and the recorded surface profiles (right).
Figure S2: CA transients recorded with a PVC membrane-coated GC sensor following the injection of 175 μL propofol standards (1.00 μM and 12.00 μM, with 5% BSA content) and HSA samples with 6.00 μM nominal propofol concentration into a continuously flowing PBS buffer solution.

The results of the standard addition measurements were calculated using the following equation:

\[ c_s = \frac{c_{St} V_{St}}{\frac{i_{2corr}}{i_{1corr}} (V_s + V_{St}) - V_s} \]

Eq. S1

where \( c_s \) is the sample concentration, \( c_{St} \) is the concentration of the standard, \( V_s \) is the sample volume, \( V_{St} \) is the volume of the standard, and \( i_{1corr} \) and \( i_{2corr} \) are background current corrected current values measured in the sample before and after the addition of the standard, respectively.
Figure S3: CA response of a membrane-coated GC working electrode on the external surface of a catheter prototype to propofol injectable emulsion in PBS in combination with an external reference and counter electrodes Inset: Calibration curves constructed from the corresponding steady state current and concentration values.