ELECTRONIC SUPPLEMENTARY INFORMATION

Blood compatible microfluidic system for pharmacokinetic studies in small animals

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Fig. S1: A. Wall layer photomask. B. Picture of a section of the microchannel walls build on top of commercial unpackaged photodiodes (optical microscope, 2.5X).

Fig. S2: Block diagram of the acquisition setup. The pump was used only for the dose-response curve and input function measurements. The agitating plate was used only for dose-response curve measurement.
Fig. S3: CV (A) and IV (B) measurements of one typical diode before processing, with the SiO$_2$/KMPR floor layer, and with the gold track and the complete microchannel.

Fig. S4: Dose response curve supplementary graphs. A. Resulting mean plateau height for each dilution. B. Resulting plateau standard deviation ($\sigma$) compared to Poisson statistical variation ($\sqrt{n}$).