## Supplemental Online Material

Table 3 online supplemental material. Correlation coefficients R, F test statistics and regression coefficients  $h_{HbO}$  (10<sup>-7</sup>) of P1, N1, and P2 to predict HbR for each anesthetic and for combined anesthetics.

	R			F			h <sub>HbO</sub>			
HbO vs.	P1	N1	P2	P1	N1	P2	P1	N1	P2	(P2,N2)
Alpha-Chloralose	0.99	1	0.99	209	625	470	0.73	0.29	0.37	
Pentobarbital	0.98	0.97	0.9	152	70	20	0.31	0.22	0.47	
Ketamine-Xylazine	0.92	0.92	0.91	28	26	24	1.12	0.08	0.06	(.14,-0.19)
Fentanyl	0.93	0.91	0.92	32	23	27	1.78	0.16	0.08	(.29,-0.34)
Isoflurane	0.98	0.99	0.99	118	251	258	1.75	0.39	0.45	
Propofol	0.88	0.86	0.89	16	14	20	0.26	0.21	0.43	
Regression all Anesthetics Combined	0.64	0.57	0.33	28	19	5	0.7	0.16	0.11	(.35,-0.54)
Regression GABAergic Anesthetics Combined	0.65	0.96	0.99	19	296	1098	0.66	0.31	0.41	

We do not report results for N2 in this table because N2 is 0 for four of the six anesthetics. Last column report P2 and N2 regression coefficients when both P2 and N2 are used as regressors.



Fig. 3 Online Supplemental Material. Scatter plot of  $\Sigma$ HbO vs.  $\Sigma$ SEP components for the 7 conditions (different points) and 6 anesthetics (different curves).



Fig. 4a Supplemental Online Material. Measured and predicted  $\Sigma$ HbR using as regressors different SEP components without baseline blood flow.



Fig. 4b Supplemental Online Material. Measured and predicted  $\Sigma$ HbO using as regressors different SEP components and baseline blood flow interaction and fitting for all anesthetic simultaneously.