

**Supplemental Digital Content 2: Statistical power of observed sample size to detect a range of possible effect sizes**

Effect Estimates*			Statistical Power**		
No Exposure	Single Exposure	Multiple exposures	8-12 years	15-20 years	All subjects
Reference	0.00	-0.50	>99%	95%	>99%
Reference	0.00	-0.45	98%	90%	>99%
Reference	0.00	-0.40	95%	82%	>99%
Reference	0.00	-0.35	88%	70%	98%
Reference	-0.10	-0.50	>99%	92%	>99%
Reference	-0.10	-0.45	97%	85%	>99%
Reference	-0.10	-0.40	91%	75%	99%
Reference	-0.10	-0.35	82%	63%	96%

\*The effect estimates for those with one exposure and 2 or more exposures are expressed in standard deviation units with the no exposure group as the reference.

\*\*Statistical power for 2 degree of freedom test using  $\alpha=0.05$  to compare a continuous outcome variable across anesthesia exposure groups using one-way ANOVA. Statistical power is provided for the observed sample of subjects tested at ages 8-12 (N=224, 200 and 128 for no exposure, single exposure and multiple exposures respectively), subjects tested at ages 15-20 (N=186, 179 and 76), and all subjects (N=410, 380 and 206).