## **SUPPLEMENTARY TABLES**

Supplementary Table 1. The hemodynamic changes in mice after the anesthesia/surgery.

	Systolic blood pressure (mmHg)	Diastolic blood pressure (mmHg)	Mean arterial pressure (mmHg)	Heart rate (beats/minute)								
(9 months old mice)												
Control	$110.60 \pm 2.48$	$78.70 \pm 3.31$	$89.70 \pm 6.47$	597.70 ± 38.11								
Anesthesia/ surgery	$104.30 \pm 2.87$	$78.10 \pm 3.52$	$86.27 \pm 7.75$	$518.30 \pm 22.09$								
P value	0.1488	0.7483	0.5887	0.1320								
		(18 months old a	mice)									
Control	$114.57 \pm 7.75$	$83.27 \pm 5.99$	$93.33 \pm 8.10$	$602.88 \pm 33.28$								
Anesthesia/ surgery	$109.93 \pm 7.99$	$75.68 \pm 6.57$	$86.82 \pm 7.89$	$504.68 \pm 37.86$								
P value	0.5890	0.2693	0.3705	0.1955								

Blood pressure and heart rate were measured in the nine months old mice in both control condition and the anesthesia/surgery condition. There were no significant differences in these measurements between the mice in the control group and the mice in the anesthesia/surgery group. SBP: systolic blood pressure; DBP: dystonic blood pressure; MAP: mean arterial pressure. N = 6 in each group.

## Supplementary Table 2. The blood gas changes in mice after the anesthesia/surgery.

	РН	PCO <sub>2</sub> (mmHg)	PO <sub>2</sub> (mmHg)	Hematocrit (Hct) (%)	Na <sup>+</sup> (mmol/L)	K <sup>+</sup> (mmol/L)	Ca <sup>2+</sup> (mmol/L)	HCO <sup>3-</sup> (mmol/L)		
(9 months old mice)										
Control	$7.30 \pm 0.02$	$43.18 \pm 3.015$	$103.30 \pm 2.146$	$33.74 \pm 1.595$	$160.0 \pm 5.317$	$4.206 \pm 0.342$	$1.034 \pm 0.164$	$20.88 \pm 1.787$		
Anesthesia/surgery	$7.33 \pm 003$	$42.43 \pm 2.640$	$104.30 \pm 9.280$	$37.30 \pm 2.523$	$159.7 \pm 2.958$	$4.048 \pm 0.178$	$1.228 \pm 0.087$	$19.00 \pm 0.661$		
P value	0.2657	0.8602	0.7302	0.2187	1	0.9017	0.4127	0.2857		
(18 months old mice)										
Control	$7.32 \pm 0.06$	$40.25 \pm 4.225$	$105.62 \pm 4.462$	$37.80 \pm 4.703$	$163.59 \pm 2.994$	$4.340 \pm 0.609$	$1.324 \pm 0.043$	$23.69 \pm 1.800$		
Anesthesia/surgery	$7.34 \pm 0.07$	$41.54 \pm 4.132$	$102.51 \pm 7.623$	$33.60 \pm 2.995$	$161.63 \pm 2.072$	$4.537 \pm 0.393$	$1.320 \pm 0.045$	$22.97 \pm 2.523$		
P value	0.3743	0.7321	0.8651	0.0702	0.6906	0.2169	0.8960	0.4760		

The blood values of pH,  $PCO_2$ ,  $PO_2$ , Hct, Na+, K+,  $Ca^{2+}$ , and  $HCO^{3-}$  were determined in the nine months old mice. There were no significant differences in these measurements between the mice in the control group and the mice in the anesthesia/surgery condition. Hct: hematocrit. N = 4 - 5 in each group.