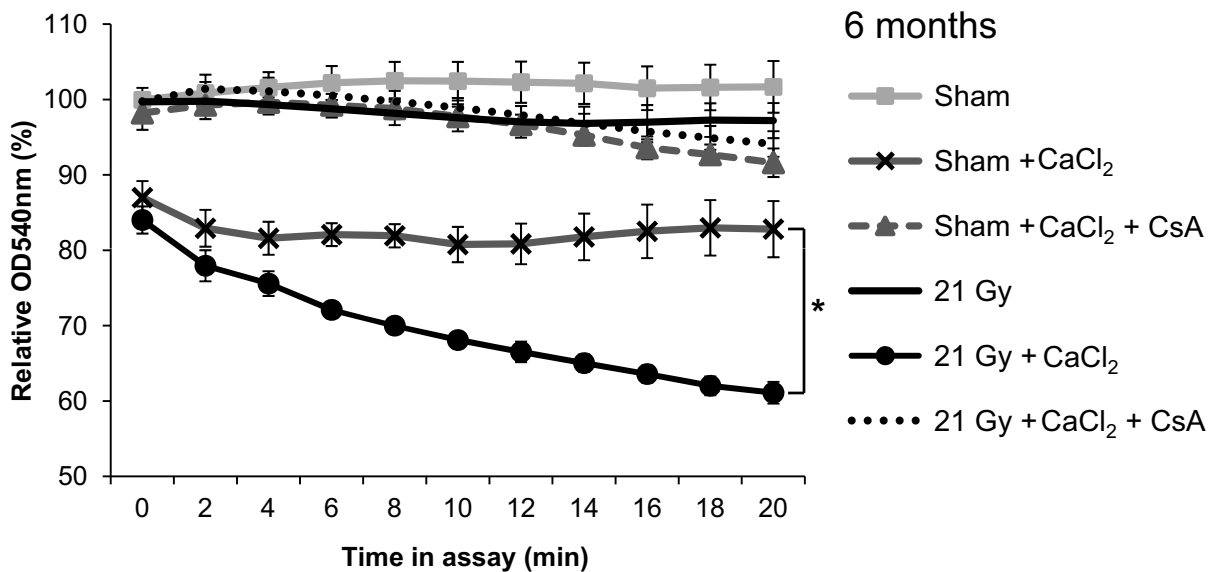
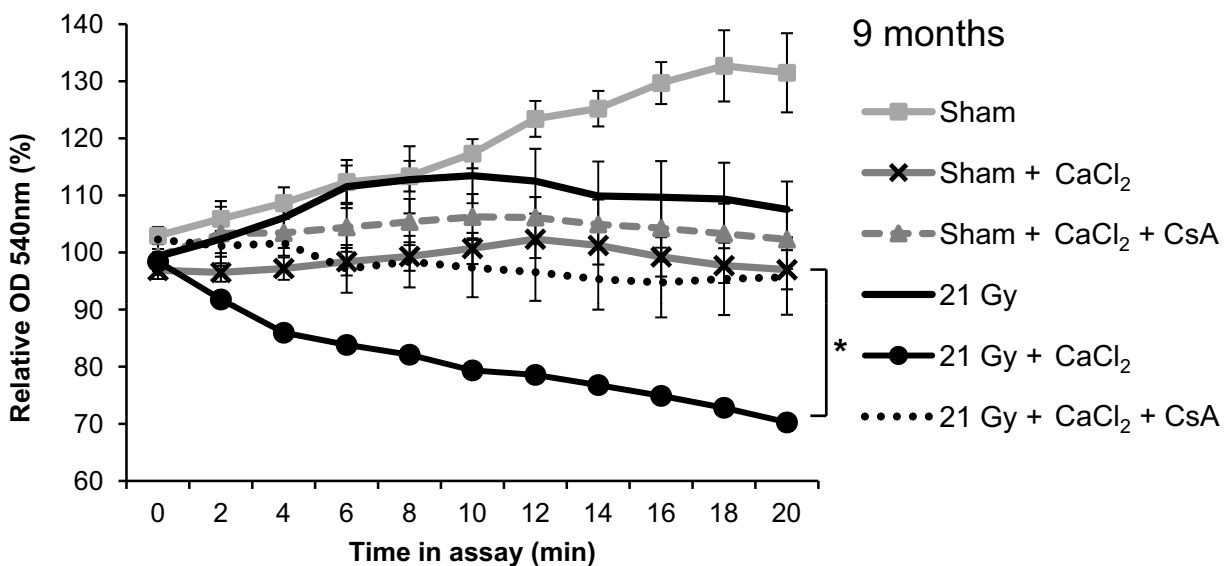


### Supplementary Figure 1.

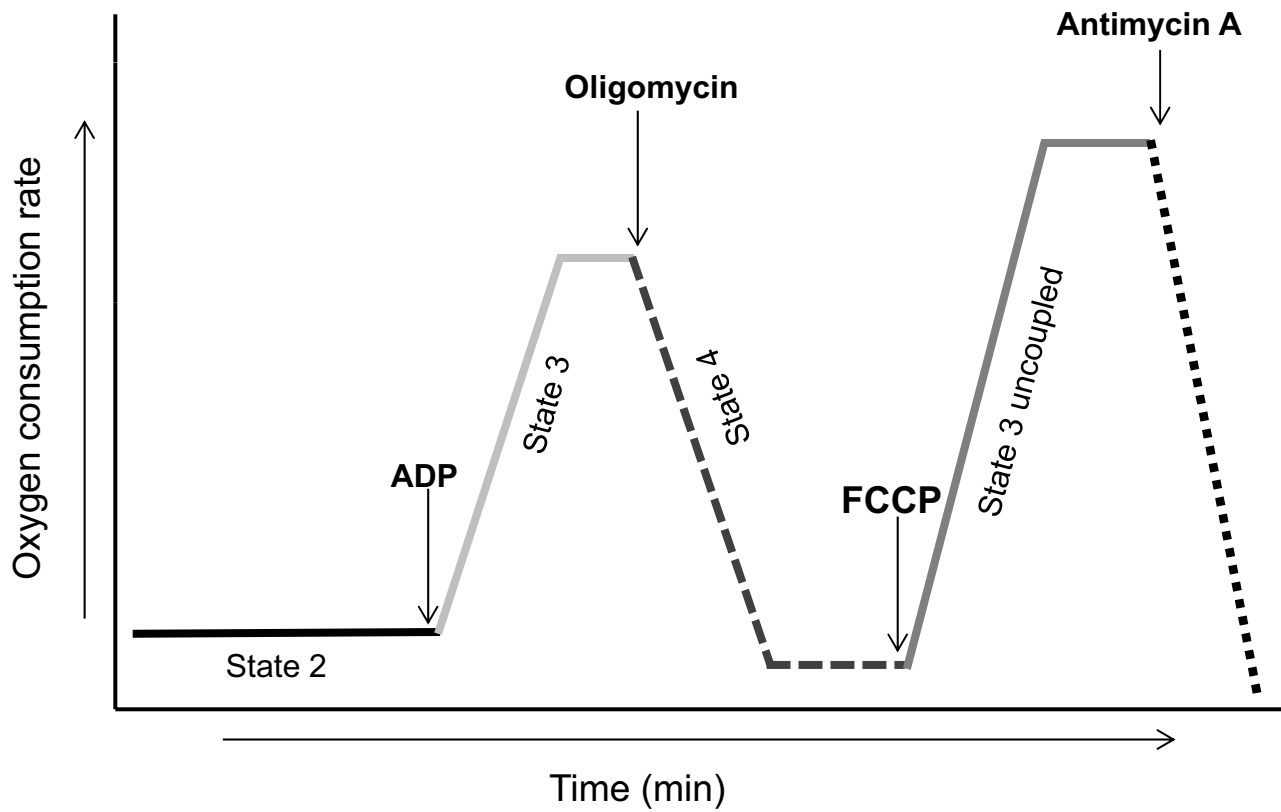
**C**



**D**

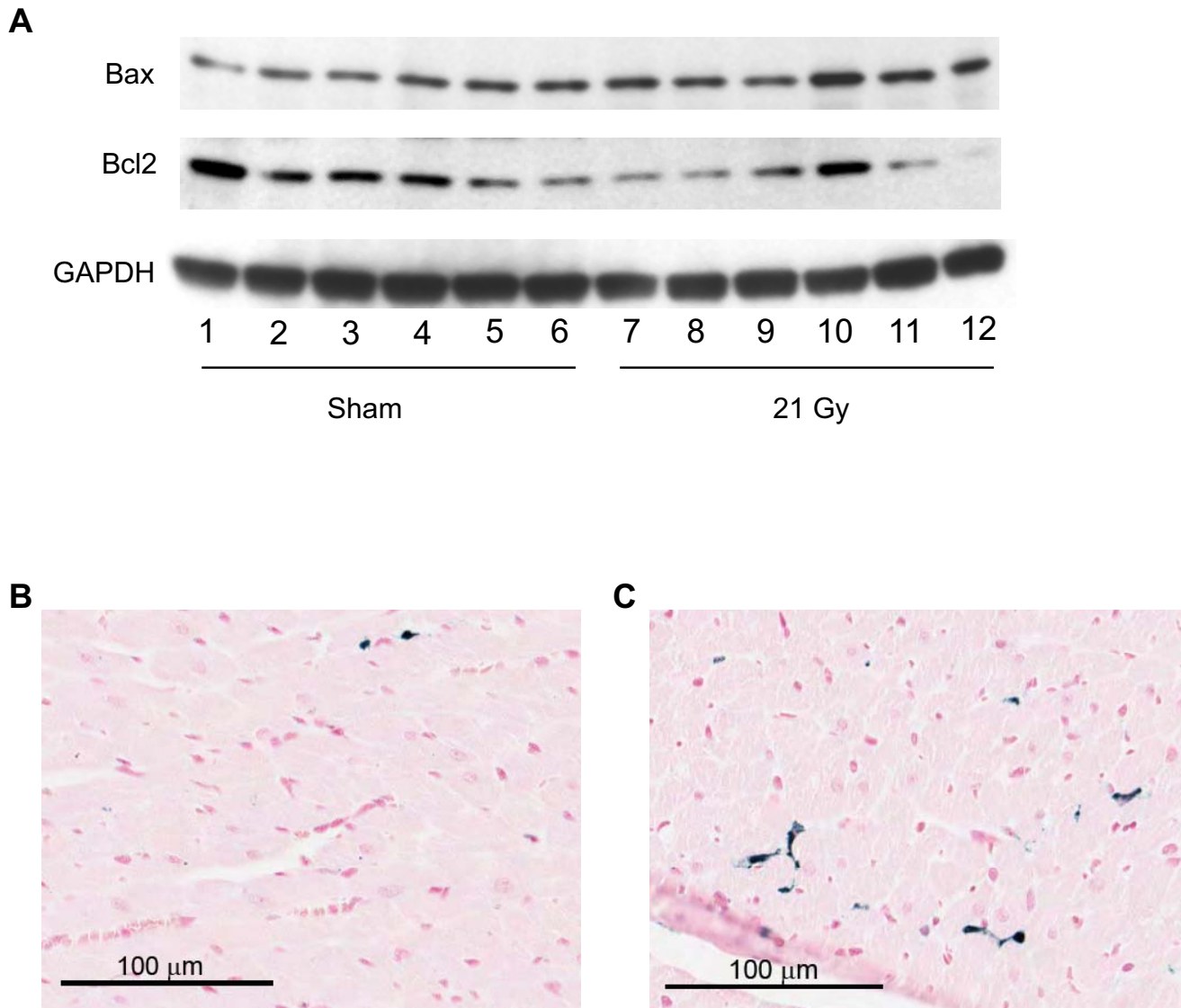


## Supplementary Figure 2.



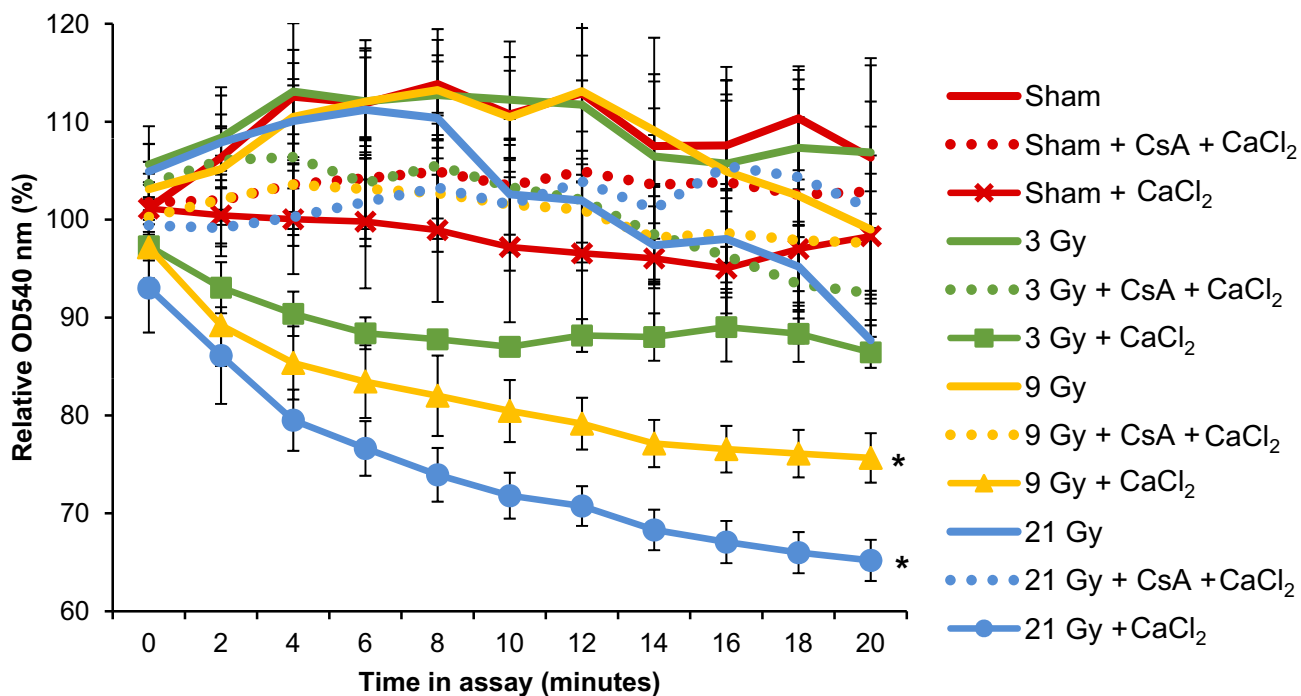
**Supplementary Figure 2.** Diagram of the measurements of oxygen consumption at state 2, state 3, and state 4 respiration.

### Supplementary Figure 3.



**Supplementary Figure 3.** A) Representative immunoblot showing protein levels of Bax and Bcl2 in left ventricular lysates at 6 months after sham-irradiation (lanes 1 through 6) or local heart irradiation (lanes 7 through 12); B) Representative CardioTACS™ staining at 2 weeks after sham-irradiation, 20X magnification, and C) Representative CardioTACS™ staining at 2 weeks after local heart irradiation with 21 Gy, 20X magnification. Apoptotic nuclei are stained blue.

### Supplementary Figure 4.



**Supplementary Figure 4.** Dose-dependent effect of radiation on the susceptibility of mPTP opening in mitochondria isolated from left ventricular samples at 2 weeks after local heart irradiation with a single dose of 3 Gy, 9 Gy, or 21 Gy. Average  $\pm$  sem, n=4. \*p<0.05 when compared to sham-irradiated control.