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Supplemental Data

Role of Interleukin-1 in Radiation-Induced Cardiomyopathy

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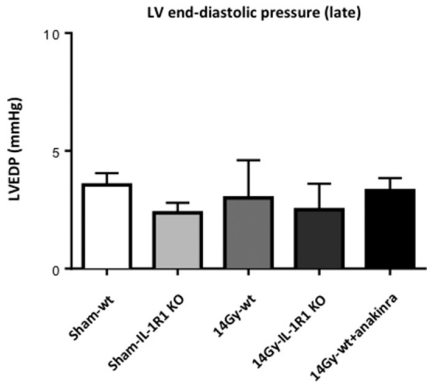
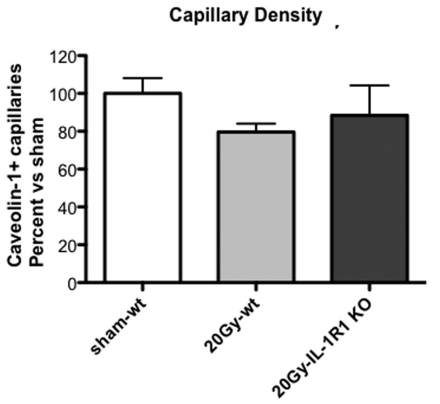
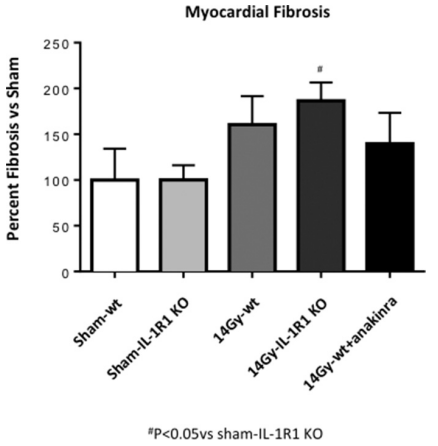


Supplementary Figure S1. Hemodynamic measurements. Left Ventricular End Diastolic Pressure (LVEDP) measure in the groups of mice irradiated with 14Gy XRT. XRT=Radiation therapy; Gy=Gray; IL-1R1 KO=Interleukin-1 receptor type I Knock out mice; wt=wild type.



Supplementary Figure S3. Capillary density. Quantification of the caveolin-1 staining used to evaluate capillary density, in 20 Gy irradiated mice 4 months after receiving XRT treatment. XRT=Radiation therapy; Gy=Gray; IL-1R1 KO=Interleukin-1 receptor type I Knock out mice; wt=wild type.



Supplementary Figure S2. Myocardial fibrosis. Total amount of interstitial collagen measured 6 months (14Gy) after XRT. XRT=Radiation therapy; Gy=Gray; IL-1R1 KO=Interleukin-1 receptor type I Knock out mice; wt=wild type.

Supplementary Table S1. Left ventricular diameters at 4 months.

	LVEDD (mm)	LVESD (mm)
Sham-wt	3.4±0.1	2.2±0.1
Sham-IL-1R1 KO	3.3±0.1	2.2±0.1
20Gy-wt	3.3±0.1	2.3±0.1
20Gy-IL-1R1 KO	3.2±0.1	2.1±0.1
20Gy-*wt*+anakinra	3.1±0.5	2.1±0.3

LVEDD=left ventricular end diastolic diameter; LVESD=left ventricular end systolic diameter; IL-1R1 KO=Interleukin-1 receptor type 1 Knock Out mice; Gy=Gray.

Supplementary Table S2. Hemodynamic parameters 14Gy.

	LVPSP (mmHg)	LVEDP (mmHg)	+dP/dt (mmHg/s)	-dP/dt (mmHg/s)
wt-14Gy	58.0±2.5*	3.0±1.6	3833±895	-3383±722
IL-1R1 KO-14Gy	62.7±5.6	2.1±0.8	4758±713	-3731±494
wt-14Gy+anakinra	58.4±3.5	3.3±0.5	2600±268	-2329±359

LVPSP=left ventricular peak systolic pressure; LVEDP=left ventricular end diastolic pressure; IL-1R1 KO=Interleukin-1 receptor type 1 Knock Out mice; Gy=Gray. *P<0.05 vs sham-*wt*.