Online supplement for

Impact of sex and sex hormones on pathophysiology and progression of

aortic stenosis in a murine model

Hormones measurement:

Before sacrifice, blood samples were obtained from all mice. Testosterone was measured in intact males and in castrated males supplemented by testosterone. 17β -estradiol was measured in intact females and ovariectomized females supplemented by 17β -estradiol.

The level of hormones was comparable between intact animals and supplemented animals:

Table: Blood level of testosterone and 17β-estradiol

	IM	CMT	IF	OFE	p-value
Testosterone (ng/ml)	2.65 ± 1.38	2.12 ± 0.89	-	-	0.42
17β-estradiol (pg/ml)	-	-	5.34 ± 2.50	5.10 ± 3.70	0.88

Figure S1: Echocardiographic evaluation of LV function

Panels A and B show the cardiac index and **Panels C and D** the fractional shortening at 12 and 36 weeks in male (**Panel A and C**) and female (**Panel B and D**) mice

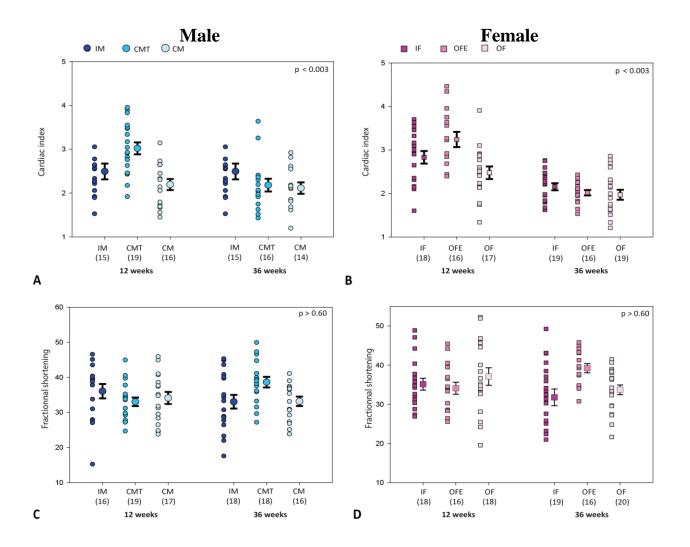


Figure S2: Digital droplet PCR results for gene expression assays of aortic valves RNA samples from each group, at 12 and 36 weeks

Panel A shows Bone morphogenetic protein 2 (BMP2), **Panel B** B-cell lymphoma 2 (BCL2), **Panel C** Caspase 3 and **panel D** bone gamma-carboxyglutamate protein (BGLAP) genes

