

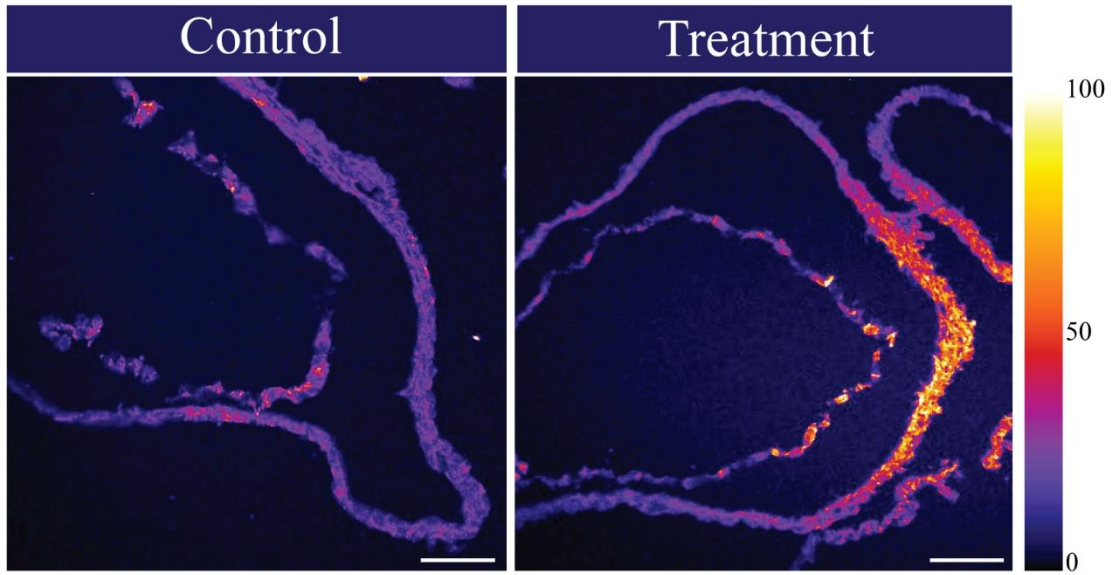
# Supplementary Material

corresponding to:

## **Cyclooxygenase-2 plays a crucial role during myocardial patterning of developing chick**

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**Figure S1. Localization of Cl.Caspase3 in control and treated embryo of day 2 (HH12). The expression of Cl.Caspase3 shown in red-yellow color in heart region of embryo at 40X.**



**Table S1. COX activity assay for control and treatment group of embryos.**

<b>Days of isolation</b>	<b>Activity (nmoles/min/ml)</b>	
	<b>Control</b>	<b>Treatment</b>
Day 2	0.837±0.0231	0.2768±0.00156***
Day 3	0.681±0.0114	0.3055±0.00145***

Enzyme activity are expressed as Mean±SEM, n=3 with 30 eggs per group per day;

\*p≤0.05; \*\*p≤0.01; \*\*\*p≤0.001.

**Table S2. Transcript levels of day 2 control and etoricoxib treated embryos.**

<b>Gene</b>	<b>Fold change</b>
WNT11	0.4365±0.0523**
GATA4	1.5510±0.2639
GATA5	0.0010±6.40924E-05***
GATA6	0.0020±0.0009***
TBX20	1.7421±0.2441
MYOCD	0.0010±7.81147E-05***
HAND2	0.0008±0.0003***
SHH	6.8062±0.0782***
BMP4	0.0044±0.0006***
PCNA	1.3416±0.0276**
CASP3	27.6380±3.7487*

mRNA expression pattern of the genes involved in regulation of morphogenesis of heart in etoricoxib treated day 2 embryo. Fold changes are expressed as Mean±SEM. Fold change values for control embryo is 1.0 for all the genes, n=3 with 30 eggs per group per day; \*p≤0.05; \*\*p≤0.01; \*\*\*p≤0.001.

**Table S3. Transcript levels of day 3 control and etoricoxib treated embryos**

<b>Gene</b>	<b>Fold change</b>
WNT11	0.1520±0.0095***
GATA4	0.0042±0.0003***
GATA5	6.3628±1.2148*
GATA6	0.0045±0.0008***
TBX20	0.0119±0.0001***
MYOCD	1.4298±0.1344
HAND2	0.0133±0.0030***
SHH	0.0189±0.0015***
BMP4	0.0138±0.0024***
PCNA	0.0039±0.0002***
CASP3	7.7777±0.3395**

mRNA expression pattern of the genes involved in regulation of morphogenesis of heart in etoricoxib treated day 3 embryo. Fold changes are expressed as Mean±SEM. Fold change values for control embryo is 1.0 for all the genes, n=3 with 30 eggs per group per day; \*p≤0.05; \*\*p≤0.01; \*\*\*p≤0.001.

**Table S4. Spot densitometry analysis of the western blot bands on day 2 and day 3 embryos.**

<b>Protein</b>	<b>Band intensity in arbitrary units</b>			
	<b>DAY 2</b>		<b>DAY 3</b>	
	<b>Control</b>	<b>Treatment</b>	<b>Control</b>	<b>Treatment</b>
Shh	79.5858±1.1635	35.6279±0.4523***	72.6819±2.3640	61.5498±0.9568**
MyoCD	35.9690±0.6264	33.4221±0.5584*	65.9210±0.5056	59.0426±0.7206***
PCNA	57.8709±2.0021	43.9562±1.0054**	73.1841±1.8388	51.2015±1.7802***
Cl.Caspase3	71.9451±0.4546	106.7004±3.4319***	64.7411±0.7768	78.9790±0.4428***

The values are expressed as Mean±SEM; n=3 with 30 eggs per group per experiment;

\*p≤0.05, \*\*p≤0.01, \*\*\*p≤0.001.