Supplementary Materials:

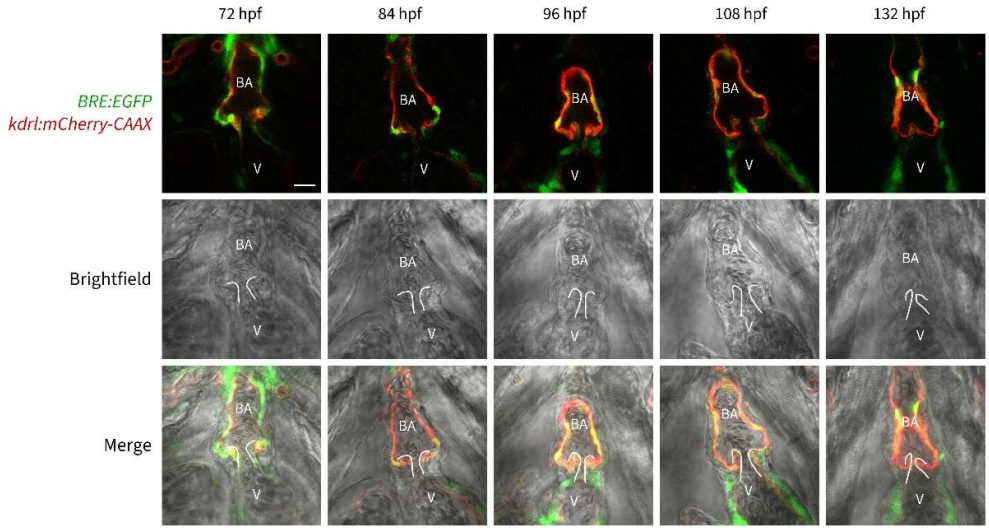


Figure S1. BMP signaling activity during zebrafish arterial valve development. *Tg(BRE:EGFP; kdrl:mCherry-CAAX)* double transgenic zebrafish were used to report BMP signaling activity (EGFP) and label endothelial cells (mCherry). EGFP is expressed in valvular primordia and leaflets. White lines outline the arterial valve primordia and leaflets. V, ventricle; BA, bulbus arteriosus. Scale bars: 20 μm.

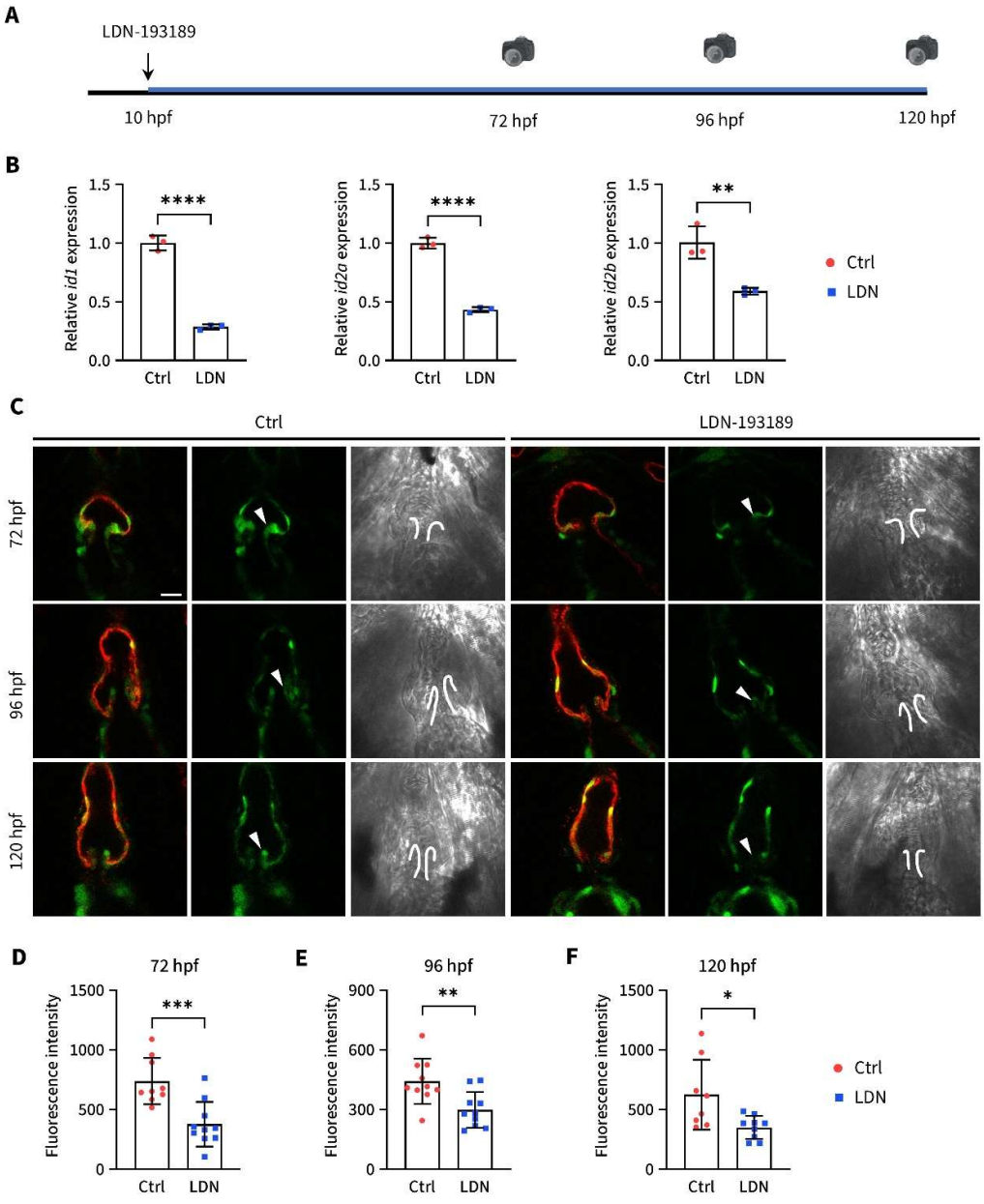


Figure S2. LDN-193189 inhibits BMP signaling in the zebrafish arterial valve. (**A**) Schematic representation of the embryo treatment with LDN-193189. (**B**-**D**) Quantitative RT-PCR analysis of known BMP target genes *id1* (**B**), *id2a* (**C**), and *id2b* (**D**) in dissected embryonic hearts at 96 hpf following treatment. The statistical analysis was performed using unpaired Student's t-test. (**E**) Representative confocal images of arterial valves in *Tg(BRE:EGFP; kdrl:mCherry-CAAX)* embryos treated with or without LDN-193189. Scale bar: 20 µm. (**F**-**H**) Quantification of *BRE:EGFP* fluorescence intensity in the arterial valve at 72 hpf (**F**), 96 hpf (**G**), and 120 hpf (**H**). The statistical analyses were performed using the unpaired Student's t-tests.