



**Figure 4 ; figure supplement 1: Effect of the blockade of NO synthesis (L-NNA), cyclooxygenase (indomethacin) and EETs production (MSPPOH) on flow-mediated dilation.**

Flow-mediated dilation (FMD) was determined in pressurized mesenteric resistance arteries isolated from male *Esr1*<sup>+/+</sup> (A), *Esr1*<sup>-/-</sup> (B), C451A-WT (C), C451A-ER $\alpha$  (D), AF2<sup>o</sup>WT and AF2<sup>o</sup>ER $\alpha$  mice (D), before and after addition of the NO synthesis blocker L-NNA (100  $\mu$ M, 30 minutes), then of the combination of L-NNA plus indomethacin (indo, 10  $\mu$ M, 30 minutes) and the combination of L-NNA plus indomethacin plus MSPPOH (10  $\mu$ M, 30 minutes). Means  $\pm$  the SEM are shown (n = 3 to 12 per group, see details in source data 4).

\*\*\*P < 0.001, two-way ANOVA for repeated measurements: effect of L-NNA, effect of L-NNA+indo and effect of L-NNA+indo+MSPPOH versus untreated arteries within each group (panel A,C,E,F).

NS: two-way ANOVA for repeated measurements: L-NNA versus L-NNA+indo, L-NNA versus L-NNA+indo+MSPPOH, L-NNA+indo versus L-NNA+indo+MSPPOH in each group.