**Additional Files**

**Additional file 1:** Percentage metamorphosis in Pacific oyster larvae 19 dpf after 24 h continuous exposure to NO pathway inhibitors SMIS, AGH, 7-NI, L-NAME, L-NNA and ODQ.

**Additional file 2:** Percentage metamorphosis in Pacific oyster larvae after 3 h, 6 h and 14 h exposure to NO pathway inhibitors SMIS, AGH, 7-NI and ODQ.

**Additional file 3:** cGMP immunostaining in whole-mount stained 14 dpf and 15 dpf larvae and sections of 16 dpf larvae.

**Additional file 4:** Immunostaining larvae and spat with anti-cGMP-PAb, anti-uNOS PAb, non-specific and negative control for sections and whole-mount larvae as well as Western blot analysis.