

Figure S1. The comparison of PDGFR activation between *in vitro* and *in vivo*. (A) Tumor lysates prepared from mice in Fig. 5 and from AXT cells cultured with or without 2  $\mu$ M nintedanib for 13 h and immunoblot analysis of p-PDGFR and PDGFR $\alpha$  was performed. (B) Tumor lysates prepared from AXT cells cultured with indicated concentration of nintedanib for 24 h, and the expression level of PDGFR $\alpha$  was evaluated. The relative (fold) values of the phosphorylated form of (A) PDGFR or (B) PDGFR $\alpha$  against the corresponding control value normalized against the intensities of the  $\alpha$ -Tubulin bands are shown. p-, phosphorylated.

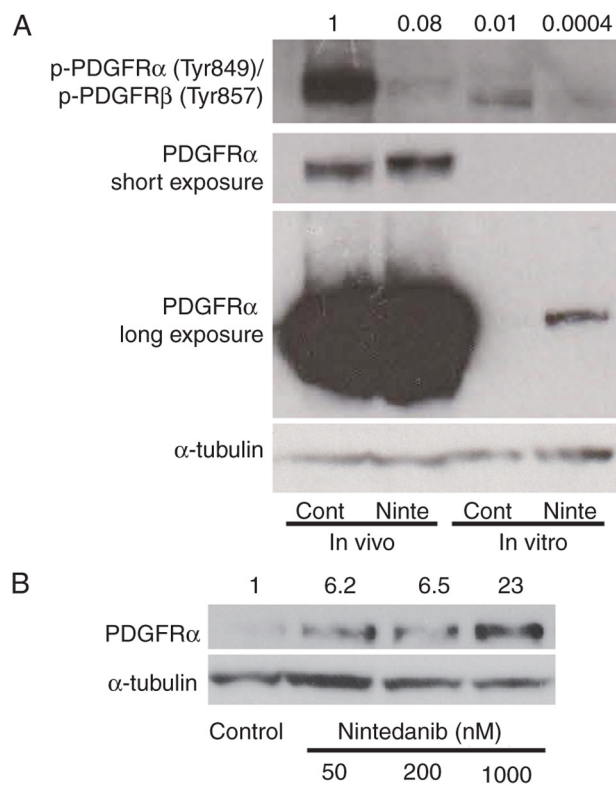


Figure S2.  $\alpha$ SMA positive cells *in vivo*. (A) Immunohistochemistry of CD31 and  $\alpha$ SMA in an AXT-derived osteosarcoma serial section in control mice developed according to the schedule in Fig. 4A. Black arrows indicate vasculatures encircled by CD31 single positive endothelial cells. Red arrows indicate blood vessels with CD31 and  $\alpha$ SMA double positive endothelial cells. Boxed regions highlight the magnified images. (B) Immunohistochemistry using tumors in nintedanib-treated mice as in (A). (C) Representative immunofluorescent staining by a confocal microscopy using an AXT-derived osteosarcoma in a control mouse developed according to the schedule in Fig. 4A. Boxed regions highlight the magnified images.  $\alpha$ SMA,  $\alpha$ -smooth muscle actin.

