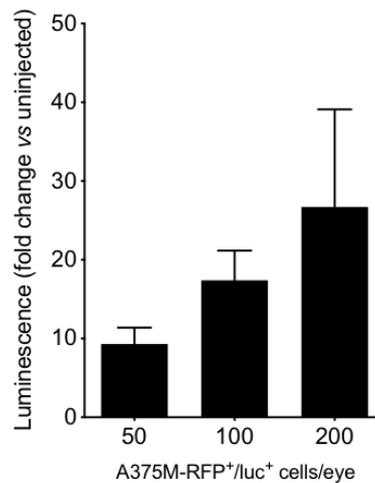
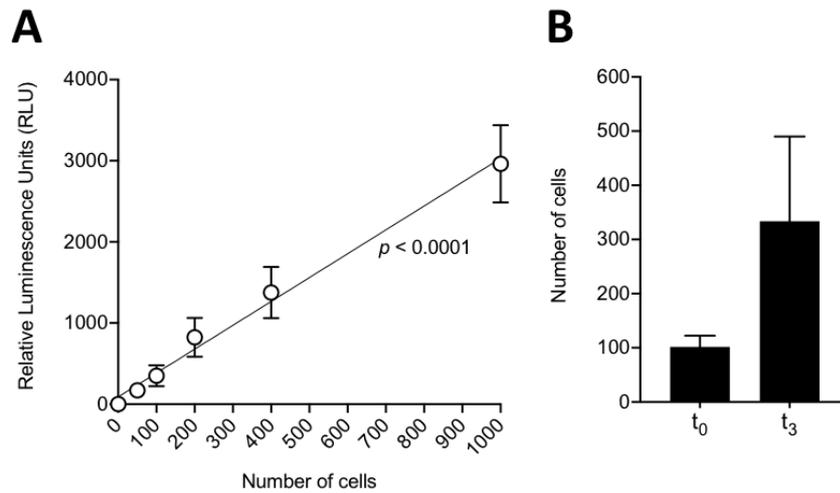


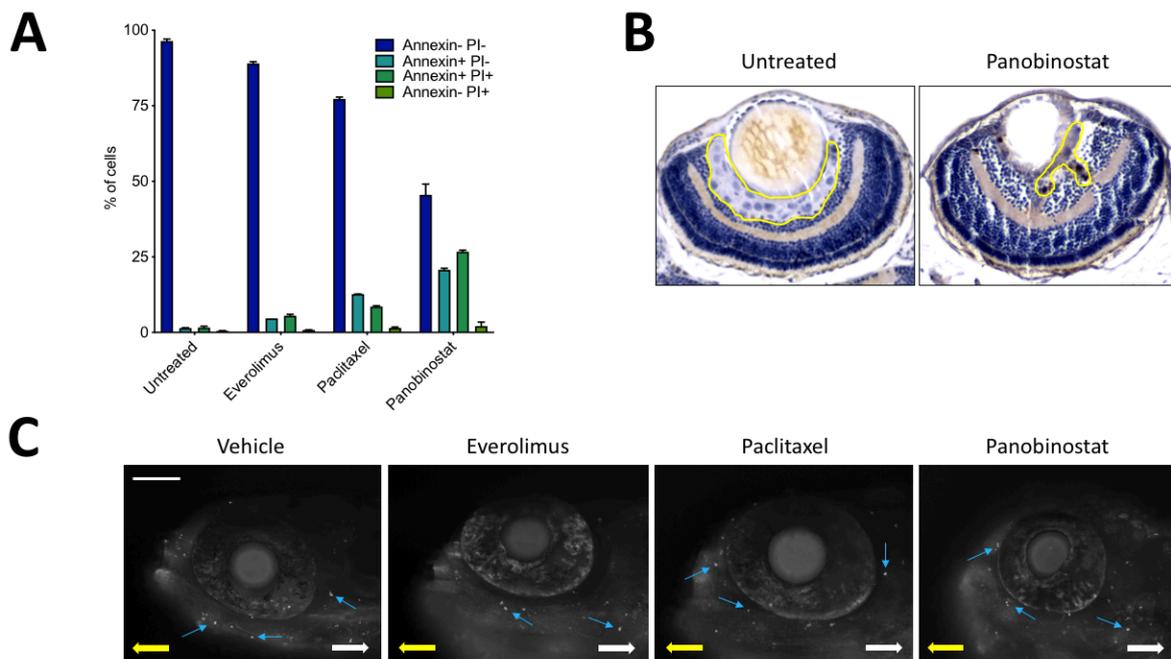
**Figure S1.** Fluorescence-based quantification of the growth of murine melanoma B16-BL6-DsRed<sup>+</sup> xenografts. Murine melanoma B16-BL6-DsRed<sup>+</sup> cells (100 cells/embryo) were injected in the posterior side of the developing eye of transgenic Tg(*kdr1*:EGFP) zebrafish embryos at 48 hpf. **A)** Maximum intensity projection of the z-stacks of B16-BL6-DsRed<sup>+</sup> cell grafts assessed at 1 h ( $t_0$ ), 1 day ( $t_1$ ) and 4 days ( $t_4$ ) post implantation. **B)** DsRed<sup>+</sup> tumor area was quantified by FIJI software at  $t_0$ ,  $t_1$  and  $t_4$  post implantation (n=8). \* $p < 0.05$  vs  $t_0$ , ANOVA.



**Figure S2.** Luciferase-based quantification of human melanoma A375M-RFP<sup>+</sup>/luc<sup>+</sup> xenografts. Human melanoma A375M-RFP<sup>+</sup>/luc<sup>+</sup> cells (50, 100, and 200 cells/embryo) were injected in the posterior side of the developing eye of transgenic Tg(*kdr1*:EGFP) zebrafish embryos at 48 hpf. One h after grafting, eyes were enucleated and A375M-RFP<sup>+</sup>/luc<sup>+</sup> bioluminescence signal was quantified and compared to basal levels measured in non-injected contralateral eyes.



**Figure S3.** Luciferase-based quantification of murine melanoma B16-LS9-luc<sup>+</sup> xenografts. **(A)** Murine melanoma B16-LS9-luc<sup>+</sup> cells (0, 50, 100, 200, 400, and 1000 cells) were added to non-injected embryos and then the bioluminescence signal in the lysates was quantified. The values, subtracted of the blank, were plotted to obtain a calibration curve. **(B)** B16-LS9-luc<sup>+</sup> cells were injected in the posterior side of the developing eye of transgenic Tg(*kdrl*:EGFP) zebrafish embryos at 48 hpf. The cell luminescence signal was quantified at  $t_0$  and  $t_3$  in the lysates of the whole embryos and the number of cells extrapolated from the calibration curve. Data are mean  $\pm$  SD (n=21 and 26 for  $t_0$  and  $t_3$ , respectively).



**Figure S4.** Everolimus, paclitaxel and panobinostat effect on cell apoptosis. **(A)** Cytofluorimetric analysis of apoptosis induced in 92.1-RFP<sup>+</sup>/luc<sup>+</sup> cells after 72 h of treatment with 60 nM everolimus, 140 nM paclitaxel, or 20 nM panobinostat. **(B)** Immunohistochemical analysis of zebrafish embryo eyes at 4 days ( $t_4$ ) after orthotopic injection of 92.1-RFP<sup>+</sup>/luc<sup>+</sup> cells. Cleaved caspase 3 is detected in brown. Tumor area is highlighted in yellow. **(C)** 0.4 pmoles/embryo of everolimus, paclitaxel, panobinostat or the corresponding volume of DMSO were injected in the eye of zebrafish embryos. Apoptosis was evaluated at  $t_4$  by acridine orange staining. White and yellow arrows indicate embryo orientation: white arrow, posterior side; yellow arrow, anterior side. Blue arrows show some representative zebrafish embryo apoptotic cells positive to the staining. Scale bar: 100  $\mu$ m.