Figure S4. The regeneration checkpoint selectively restricts imaginal tissue growth. (A) Growth reduction and developmental delay of undamaged eye imaginal discs in larvae with targeted tissue damage in the wings (Bx>eiger) and control larvae (Bx>GFP). Eyes were isolated at 104hr AED and stained with rhodamine-labeled phalloidin. Brackets highlight the progression of the morphogenetic furrow in each disc. Scale bar = 100 μm. (B) Measurement of eye imaginal disc size following nutrient restriction (NR) or multiple distinct activators of the regeneration checkpoint including: targeted irradiation with 25 Gy (shielded), expression of pro-inflammatory signal (Bx>eiger), expression of NOS in the PG (phm>NOS), wing-targeted expression of dilp8 (rn>dilp8), and wing-targeted neoplastic transformation (Bx>avirRNAi). Larvae were raised at 25°C and eye imaginal discs were isolated at 104hr AED for measurement of all experiments except for the following: rn>GFP and rn>dilp8, raised at 29°C and eye discs were dissected and measured at 80hr AED to maximize dilp8 overexpression and the systemic growth phenotype. phm>LacZ and phm>NOS larvae were raised at 21°C and eye discs were dissected and measured at 142hr AED to reduce NOS overexpression and permit analysis of third instar growth phenotypes. (C) The regeneration checkpoint does not restrict larval growth. Bx>eiger and control larvae isolated at 104hr AED. Scale bar = 1 mm. (D) Measurement of larval growth. Larvae were raised and isolated for measurement as the same conditions in B. Statistical analysis: B and D, mean +/- SD. * p<0.05, ** p<0.01, ****p<0.001 calculated by two-tailed Student’s t-test.