

Supplementary figure 1. NRG1 expression is reduced by Notch1 inhibition: K457 melanoma cells expressing a specific shRNA against Notch1 (shN1-2) show a significant reduction in both Notch1 and NRG1 mRNA.

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Supplementary figure 2. Notch1 occupancy of the three putative CSL-Notch1 binding sequences in the NRG1 promoter region: ChIP analysis showing association of Notch1 to the CSL hexamer at position -3805 Kb. The sites at -0.403 Kb and -2.7 Kb show absence of binding. The ChIP assay was performed on K457 cells.



Supplementary figure 3. NRG1 knock down inhibits melanoma growth. A) qRT-PCR on SKMel2 and SKMel24 cells expressing shGFP (control) or shNRG1-3 and shNRG1-5, showing 70% and 75% or 70% and 80% inhibition of NRG1 mRNA in SKMel2 and SKMel24, respectively, with either shNRG1-3 or -5. Growth curves for SKMel2 (B) and SKMel24 (C) showing significant inhibition when NRG1 expression is knock down. **D)** qRT-PCR on K457 cells. The growth of K457cells is inhibited both in vitro (E) and in vivo (F) by depletion of NRG1 in a manner that correlates with the level of inhibition of NRG1 by the different shNRG1 sequences employed. differences in in vitro growth are statistically significant (P<0.01, Student's T test) as calculated by comparing the last time point, except for SK-Mel24 in which the comparison was done at the 4 day time point due to overgrowth of the control (shGFP) at day 6. Tumor growth differences are statistically significant (shGFP vs shNRG1-3, P=0.01; shORG1-5, P=0.01; shNRG1-5, P=0.02, Student's T test).



Supplementary figure 4. Melanoma growth inhibition by the concomitant treatment with lapatinib and a GSI inhibitor. WM266-4, K457 and SK-Mel2 human metastatic melanoma cells were treated for four days in culture with the EGFR/ERBB2 inhibitor Lapatinib (20 μ M), and the GSIs dibenzazepine (DBZ at 10 μ M) or RO4929097 (RO at 10 μ M), either alone or in combination. All treatments significantly reduced cell growth except for RO4929097 on K457 cells. The highest level of inhibition was observed with lapatinib in combination with a GSI. Growth was evaluated by the crystal violet staining. Significance was calculated by the Student's T test.