

A Patient-Derived Xenograft Model of Dedifferentiated Endometrial Carcinoma: A Proof-Of-Concept Study for the Identification of New Molecularly Informed Treatment Approaches

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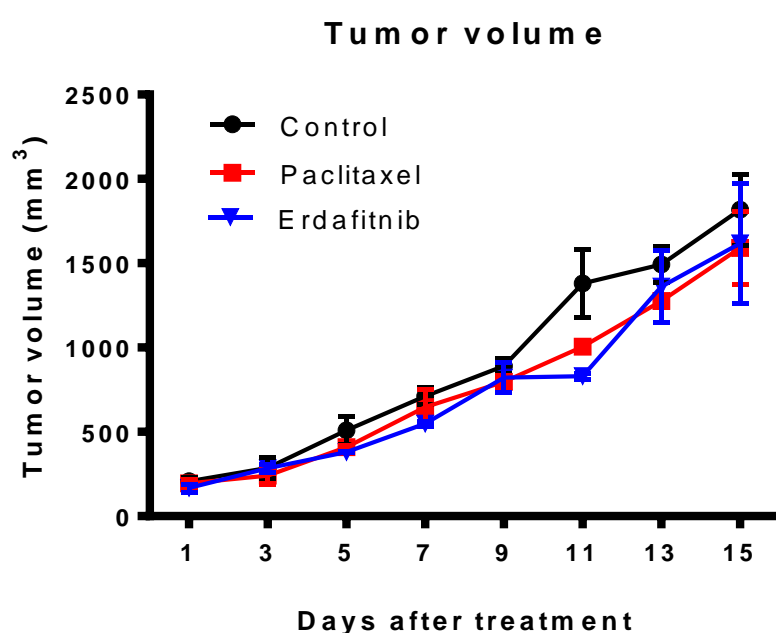


Figure S1. Tumor volume analysis of druggable molecular target in PDX-mLung. PDX-mLung mice were randomized (n = 2 per group) to receive standard platinum-based drug paclitaxel (10 mg/kg given intraperitoneally one day per week), and the fibroblast growth factor receptor inhibitor erdafitinib (15 mg/kg given orally five days per week).

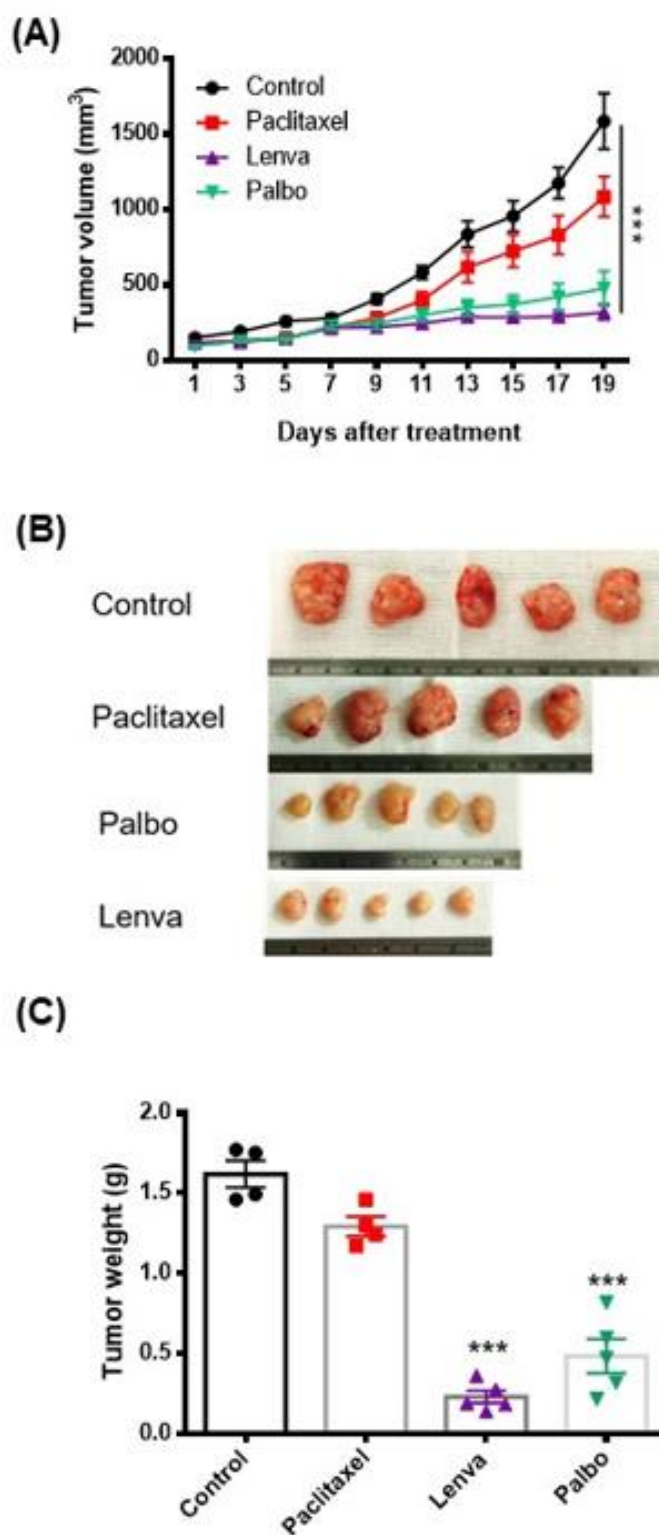


Figure S2. Identification of druggable molecular targets in PDX-mLung. PDX-mLung mice were randomized ($n = 5$ per group) to receive standard platinum-based drug paclitaxel (10 mg/kg given intraperitoneally one day per week), the fibroblast growth factor receptor inhibitor lenvatinib alone (10 mg/kg given orally five days per week), and the cell cycle inhibitor palbociclib alone (100 mg/kg given orally five days per week). **(A)** Tumor volume, **(B)** gross tumors, and **(C)** tumor weight changes of mice *** $p < 0.0001$.

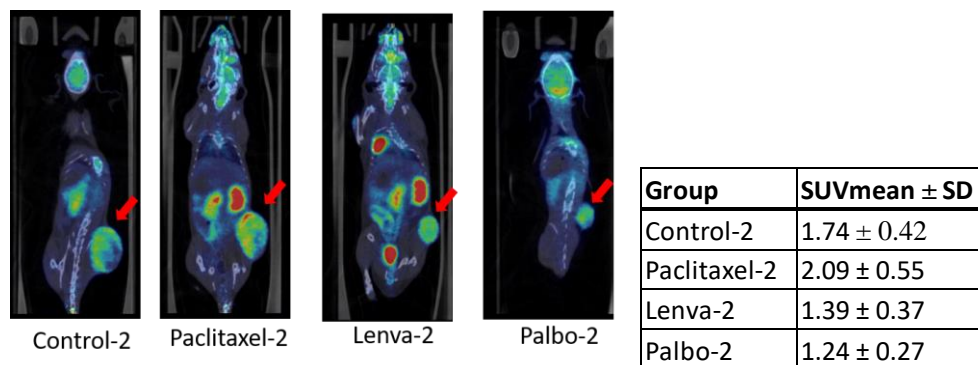
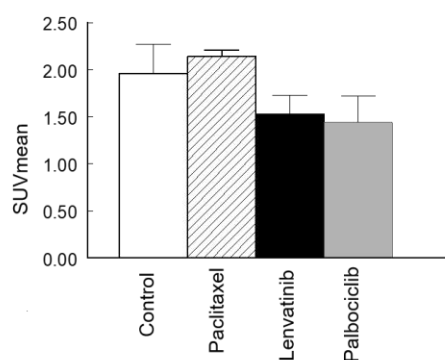
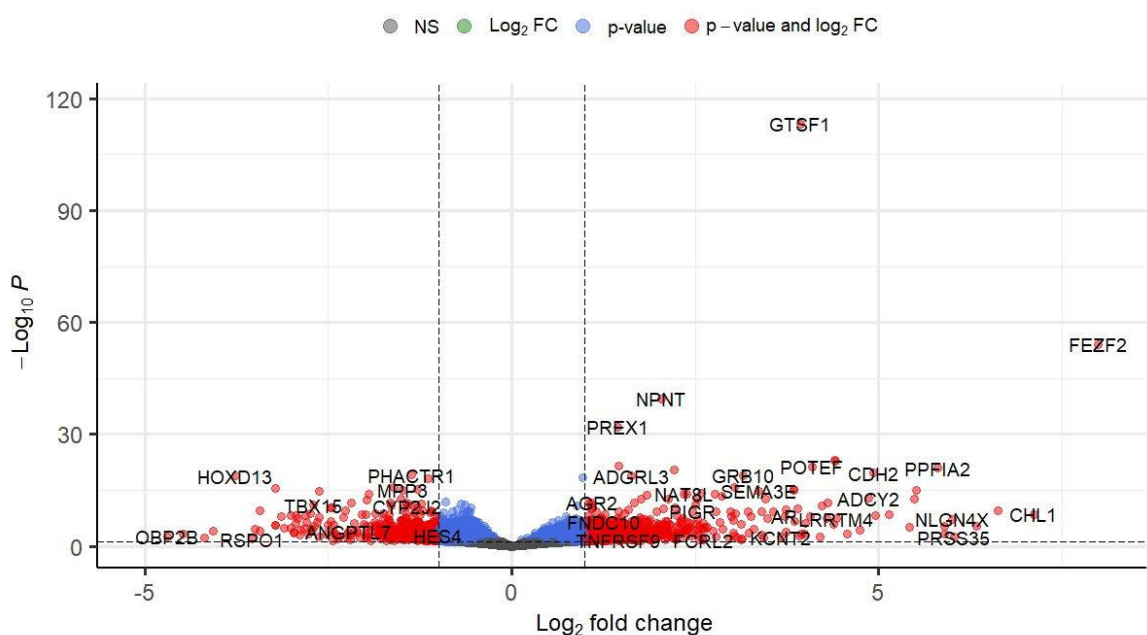
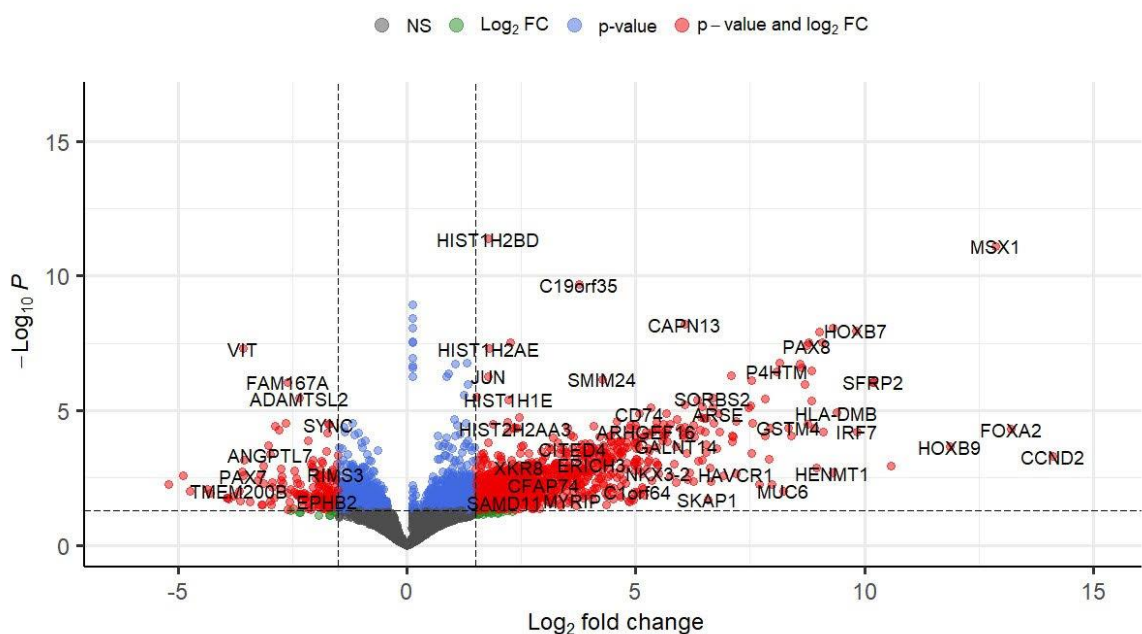
(A)**(B)**

Figure S3. In vivo drug responses were observed using animal ^{18}F -FDG PET imaging. **(A)** Whole-body ^{18}F -FDG PET imaging was used to monitor tumor growth (red arrow) by calculating mean standardized uptake values (SUVmean) **(B)** Data shown represent mean \pm standard error and were derived from representative PET Imaging of PDX-mLung mice ($n = 2$ per group). Lenva: lenvatinib; Palbo: Palbociclib.

(A)

Lenvatinib vs. Control*EnhancedVolcano*

(B)

Palbociclib vs. Control*EnhancedVolcano*

(C)

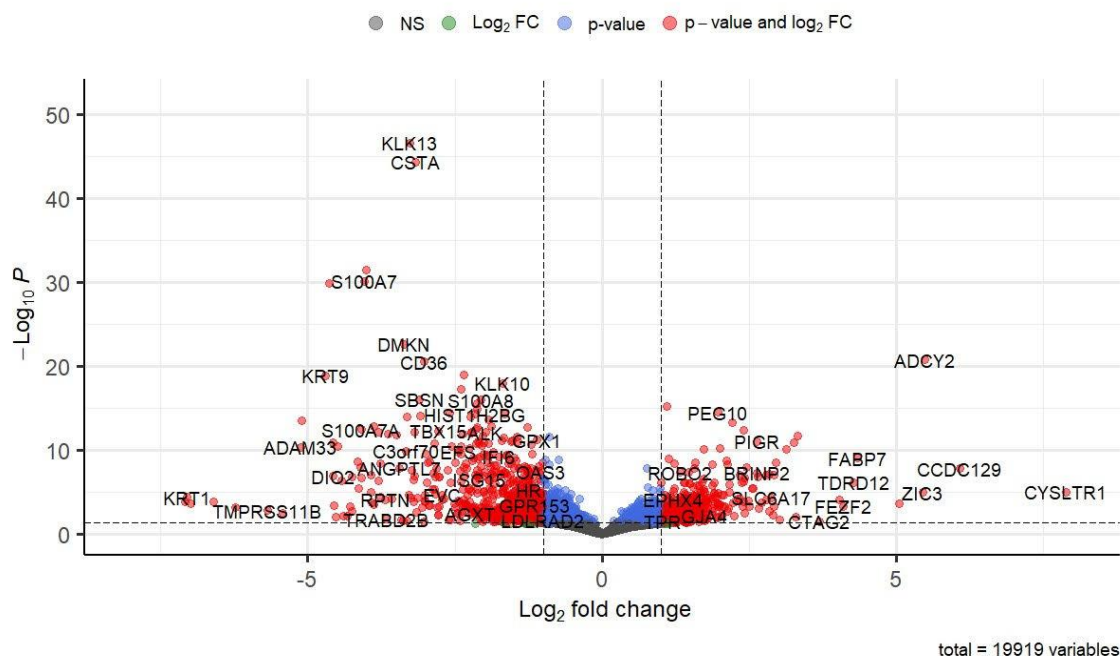
Palbociclib+Lenvatinib vs. Control*EnhancedVolcano*

Figure S4. Differentially expressed genes of PDX-mLung treated with different drugs. **(A)** PDX-mLung treated with lenvatinib. Total number of significant differentially expressed (DE) genes are 1342 with log2 fold change (FC) ≥ 1 and adjusted p value < 0.05 . **(B)** PDX-mLung treated with palbociclib. Total number of significant DE genes: 1384 with log2 FC ≥ 1.5 and adjusted p value < 0.05 . **(C)** PDX-mLung treated with lenvatinib and palbociclib. Total number of significant DE genes: 1178 with log2 FC ≥ 1 and adjusted p value < 0.05 . Raw gene count of all tumor samples is provided in Supplementary Table S3.

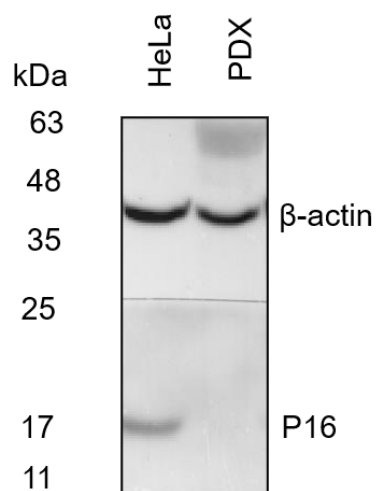
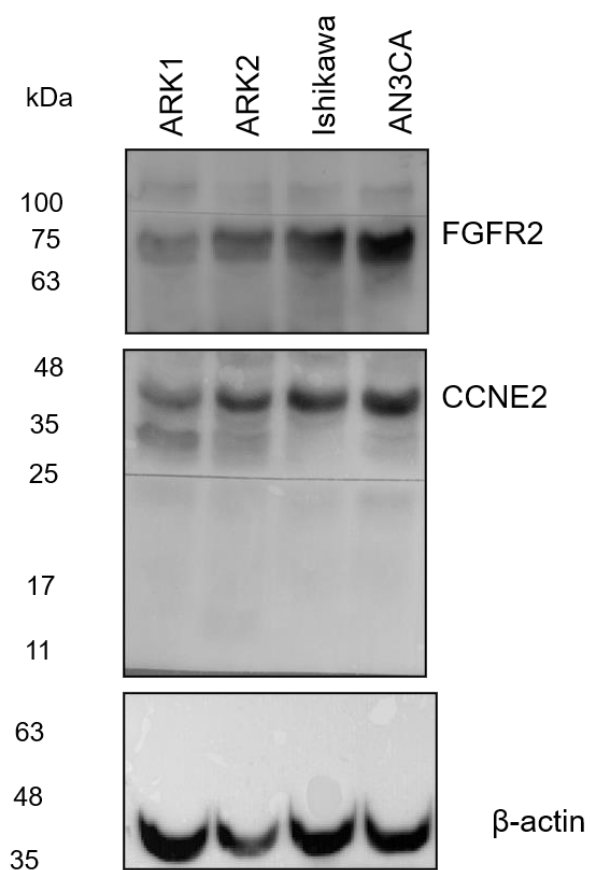
Figure 2G**Figure 5B**

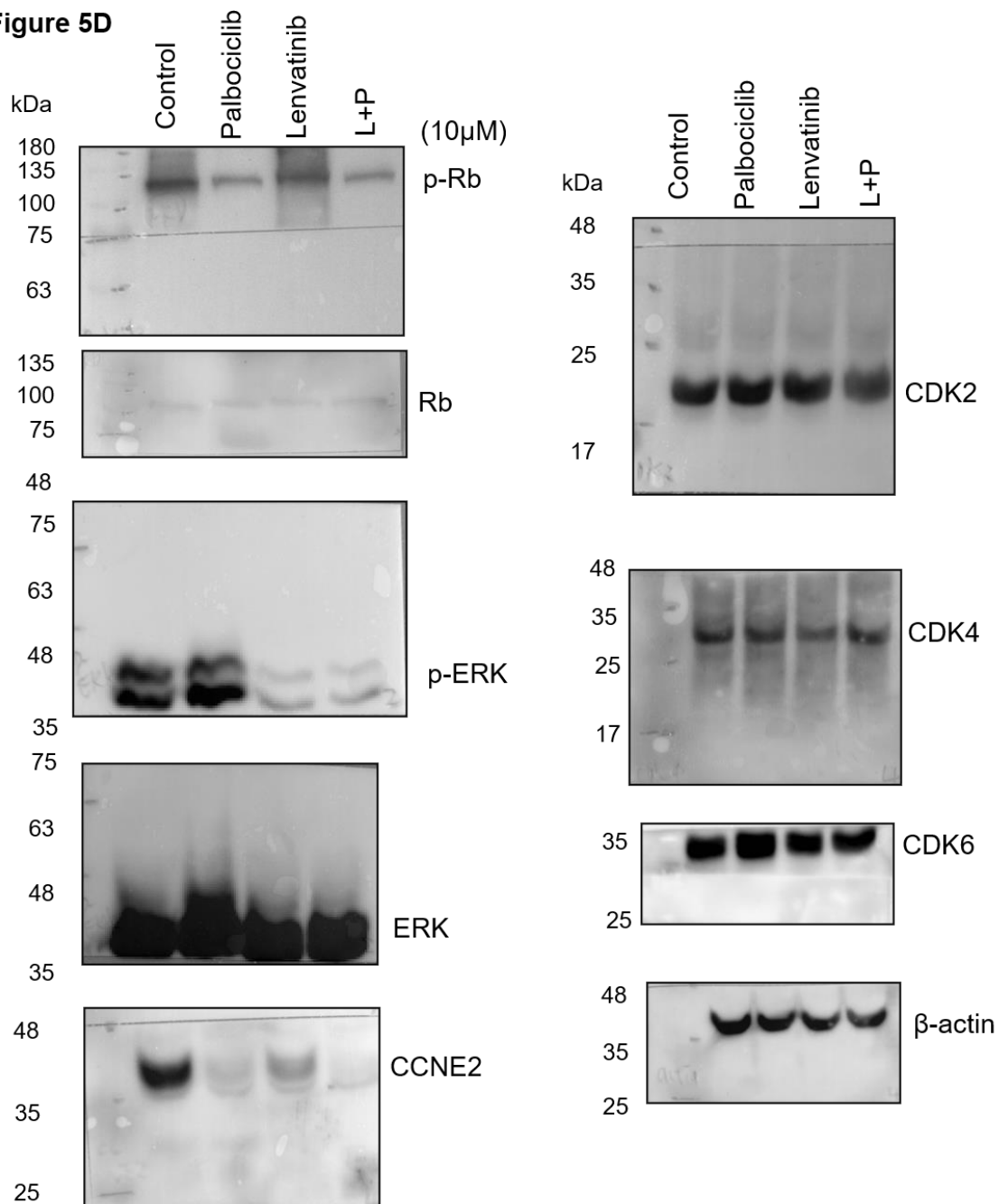
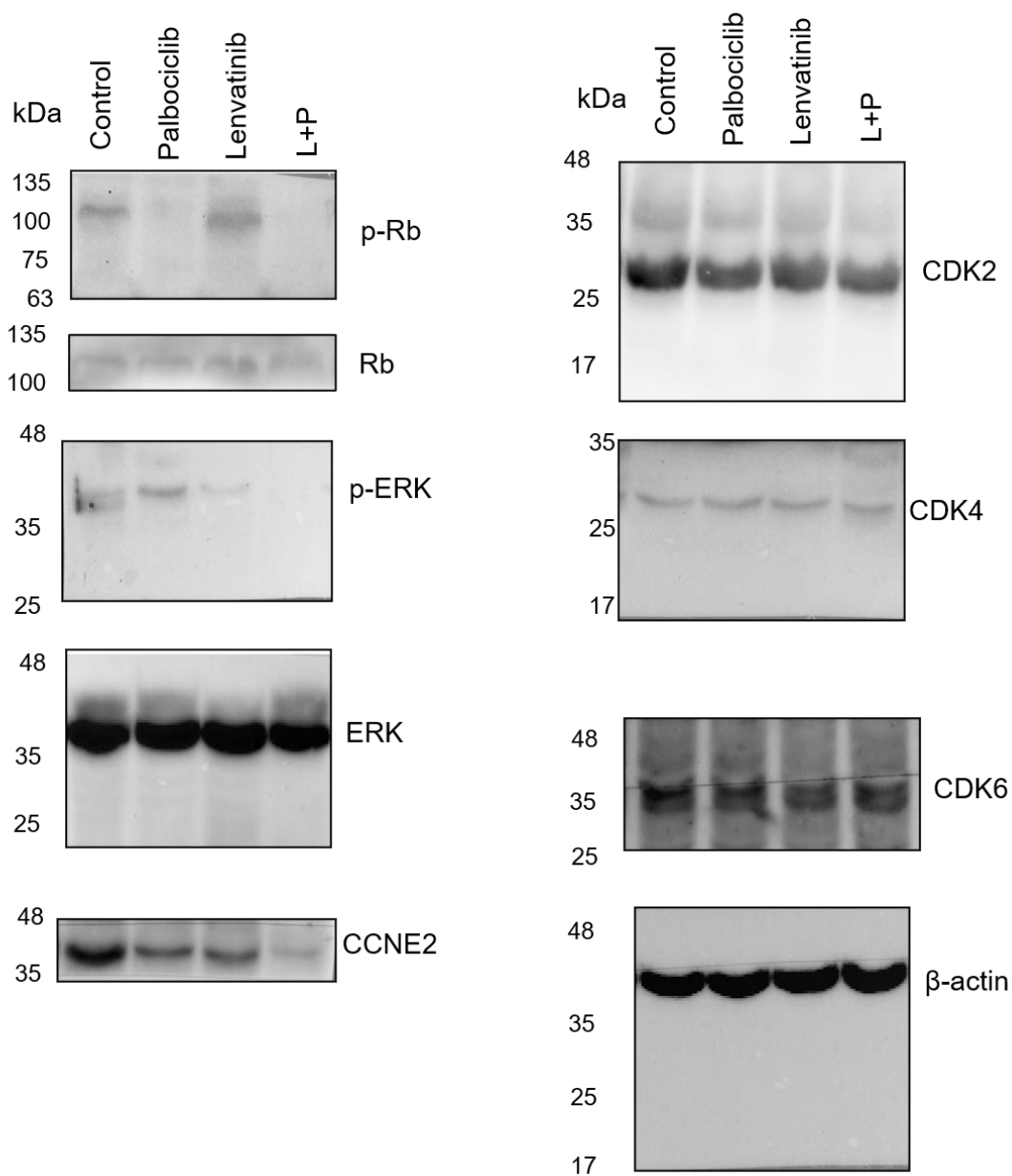
Figure 5D

Figure 5E**Figure S5.** The whole blot showing all the bands with all molecular weight markers on the Western as shown above.