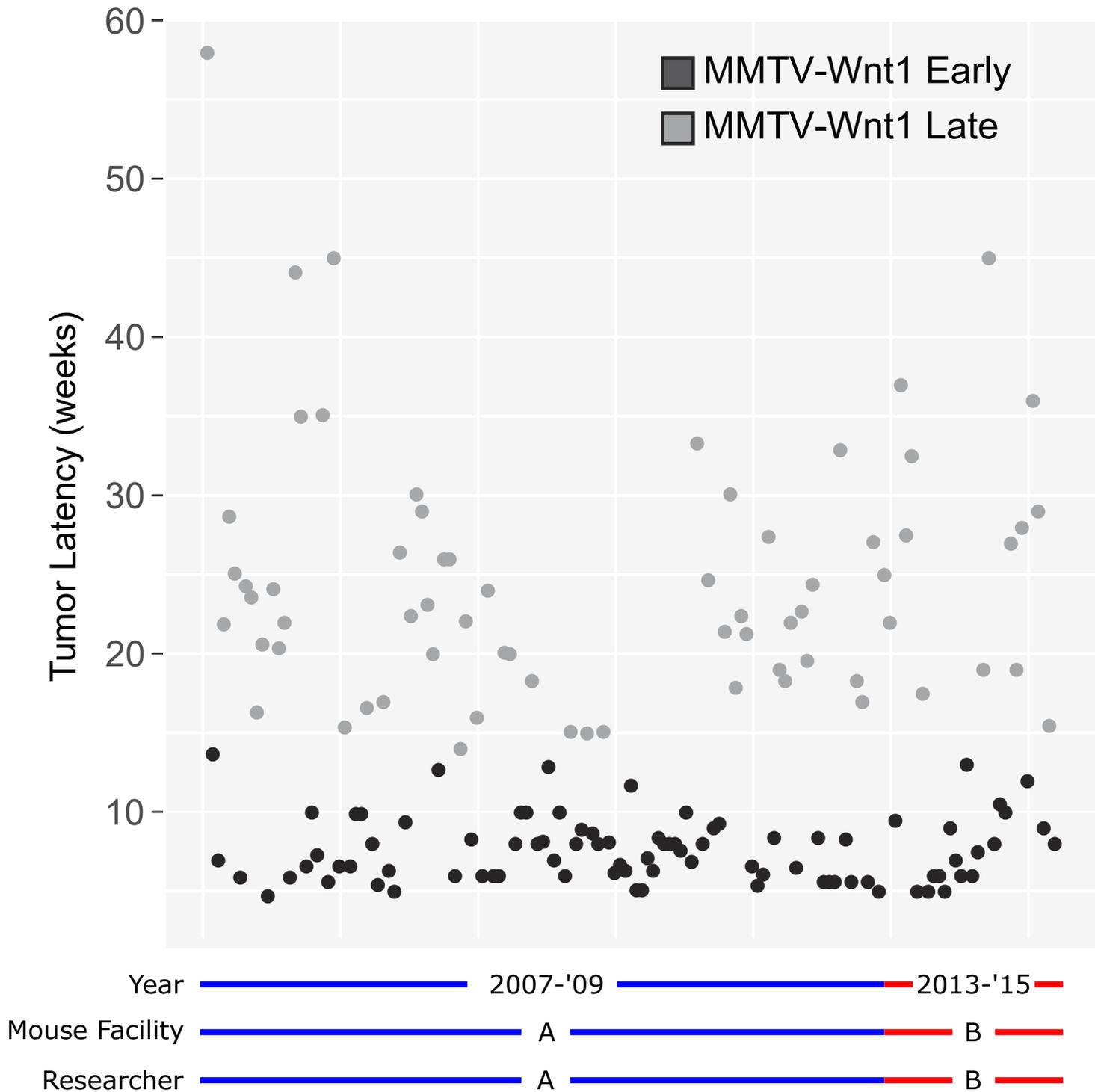


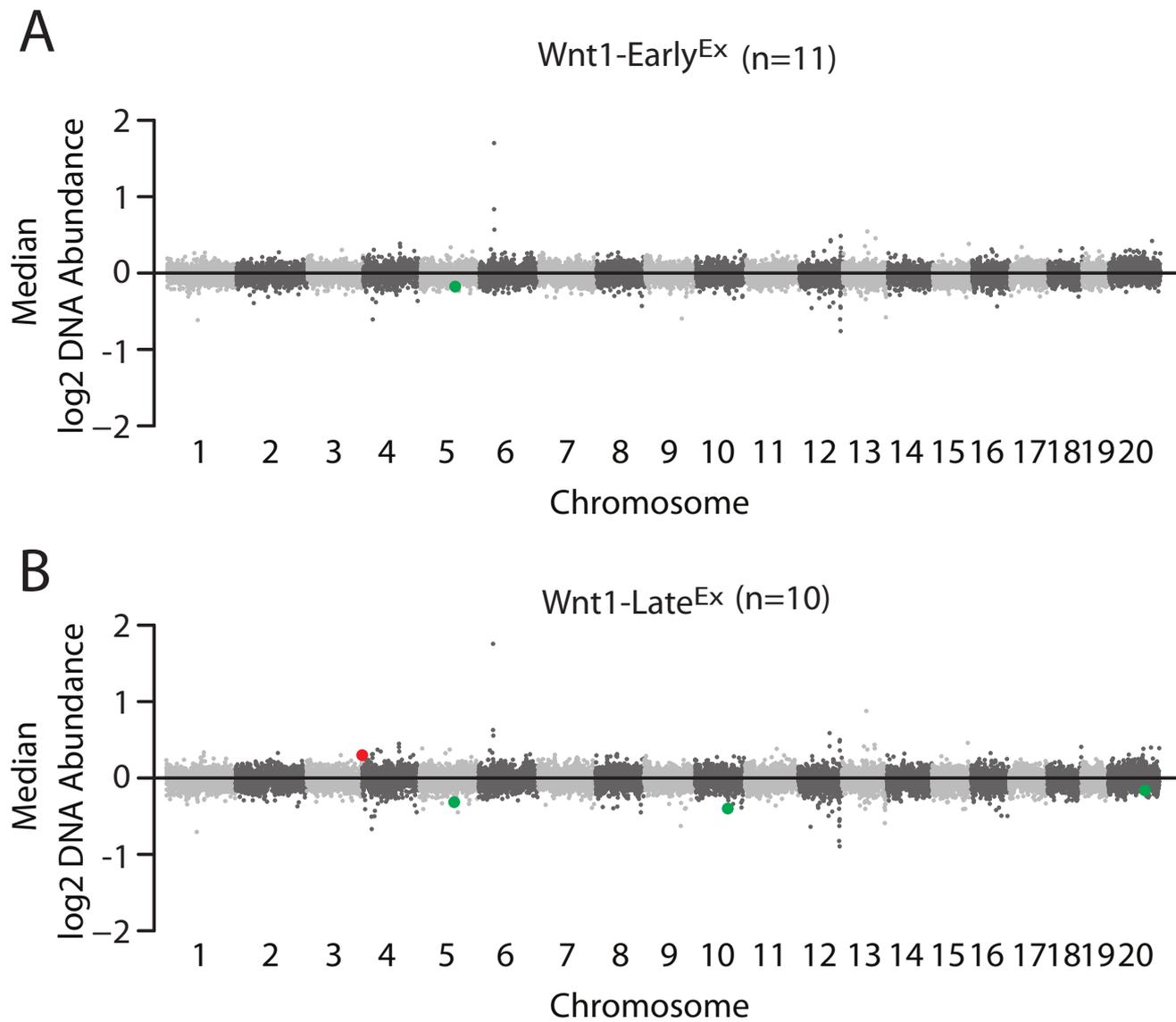
Figure S1

MMTV-Wnt1 Primary Tumor Latency Ordered by Mouse Birth Date (Oldest to Youngest)



**Figure S1: MMTV-Wnt1 Primary Tumor Latency Ordered by Mouse Birth Date**

Displayed is a scatterplot of primary tumor latency ordered by mouse birth date with older birth dates on the left and younger birth dates on the right. Below the graph is a general breakdown of which year the mouse was born, which facility they were housed, and which researcher was the primary caregiver. Tumor latency did not correlate with birth order, mouse facility, or researcher.

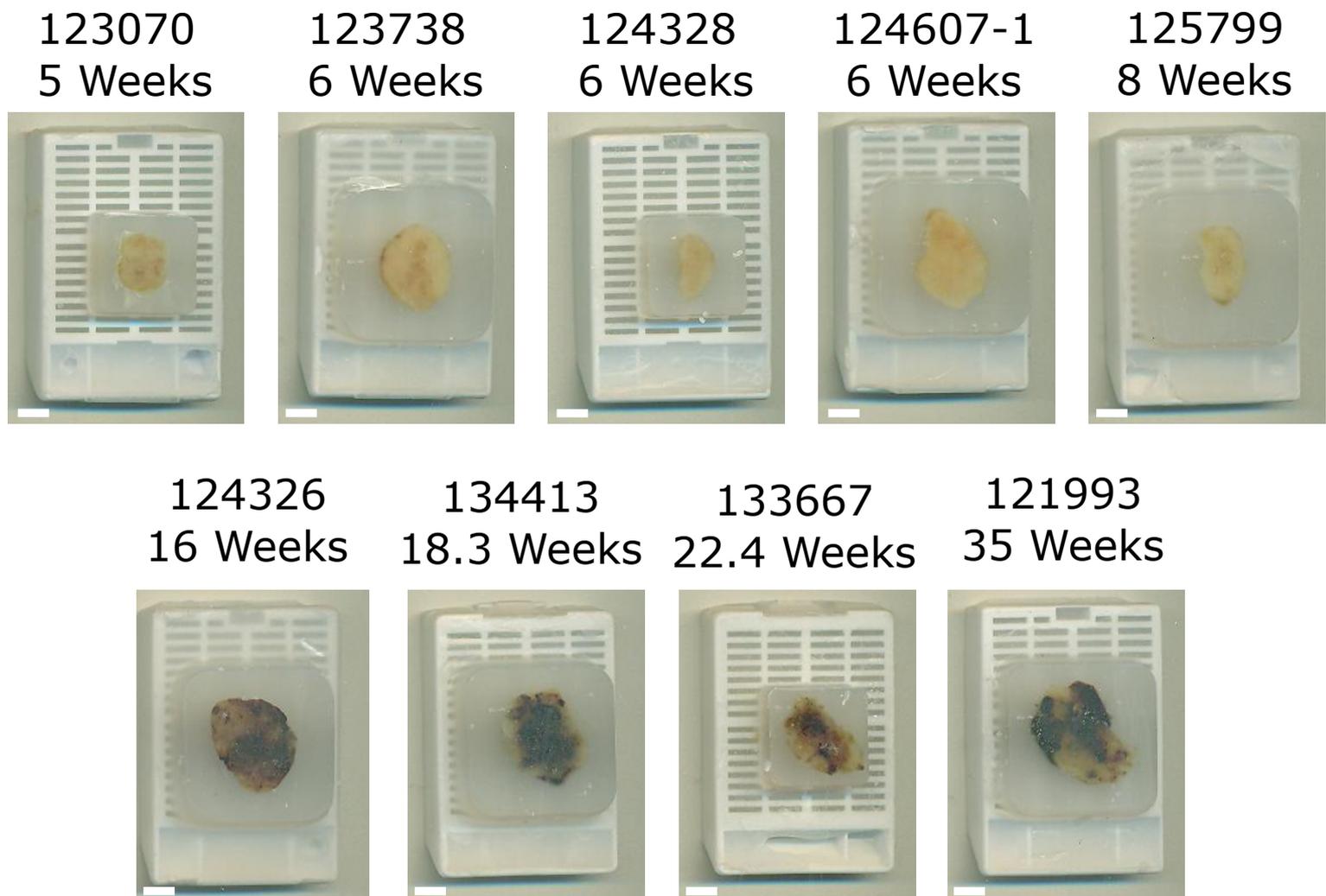


**Figure S2: Wnt1-Early<sup>Ex</sup> and Wnt1-Late<sup>Ex</sup> have similar DNA copy number landscapes**

Displayed in genomic order are the median class DNA copy number levels for **A.** 11 Wnt1-Early<sup>Ex</sup> and **B.** 10 Wnt1-Late<sup>Ex</sup> tumors. A two class SAM was performed between Wnt1-Early<sup>Ex</sup> and Wnt1-Late<sup>Ex</sup> tumors to identify class specific DNA events. Statistically significant events (FDR of 0%) are highlighted by red dots for amplified regions and green dots for deleted regions.

Figure S3

### Examples of MMTV-Wnt1 Primary Tumor Gross Pathology by Tumor Latency



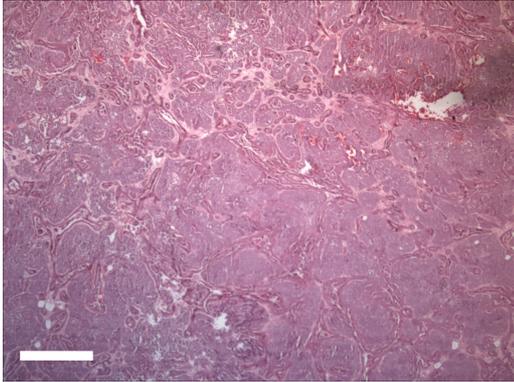
**Figure S3: MMTV-Wnt1 Primary Tumor Gross Pathology by Tumor Latency**

Displayed are images of nine primary MMTV-Wnt1 tumors in paraffin blocks. As visually evident, MMTV-Wnt1 tumors with later latency are more vascularized/bloodier than tumors with earlier latency. The white scale bar is 5 mm in length.

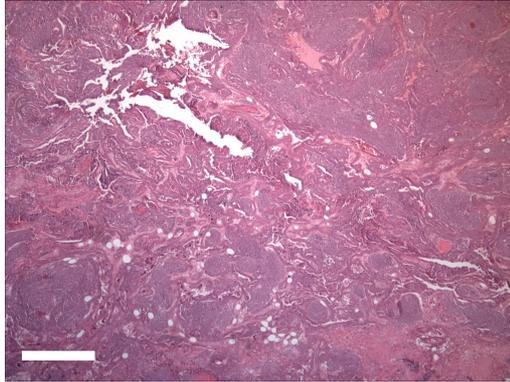
Figure S4

Examples of MMTV-Wnt1 Primary Tumor  
H&E Stains by Tumor Latency

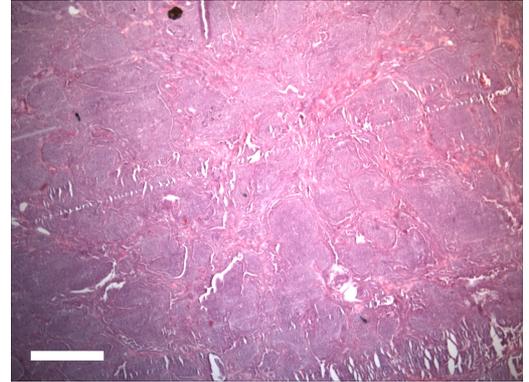
123070  
5 Weeks



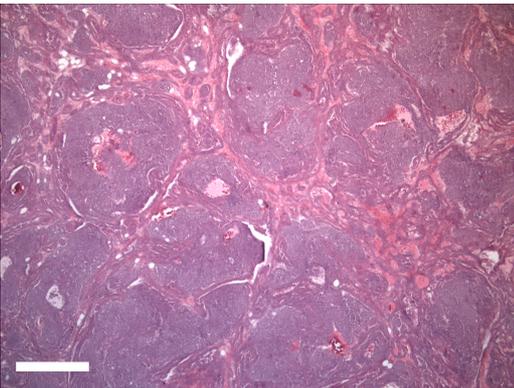
123738  
6 Weeks



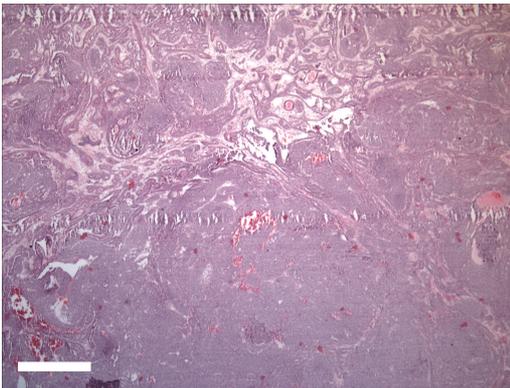
124328  
6 Weeks



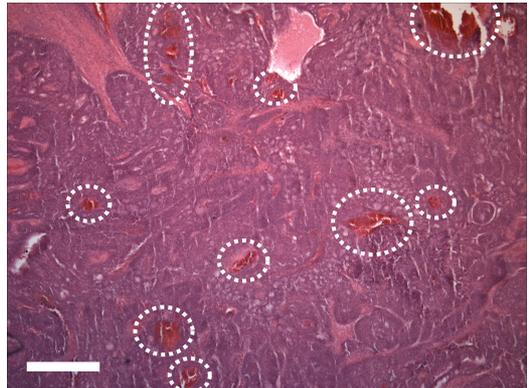
124607-2  
6 Weeks



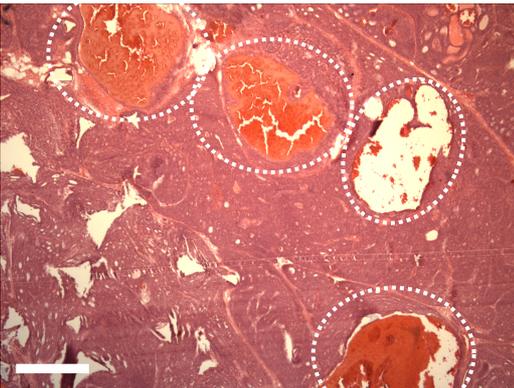
125799  
8 Weeks



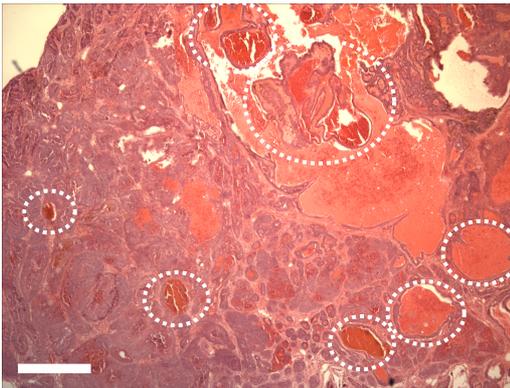
124326  
16 Weeks



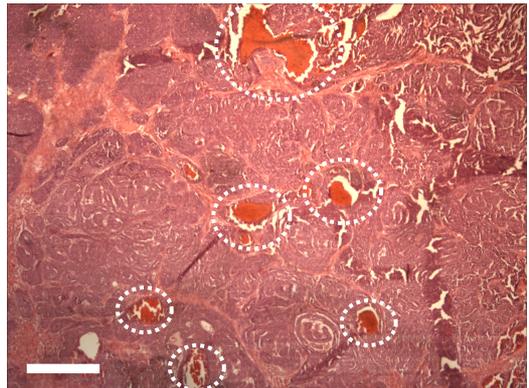
134413  
18.3 Weeks



133667  
22.4 Weeks



121993  
35 Weeks

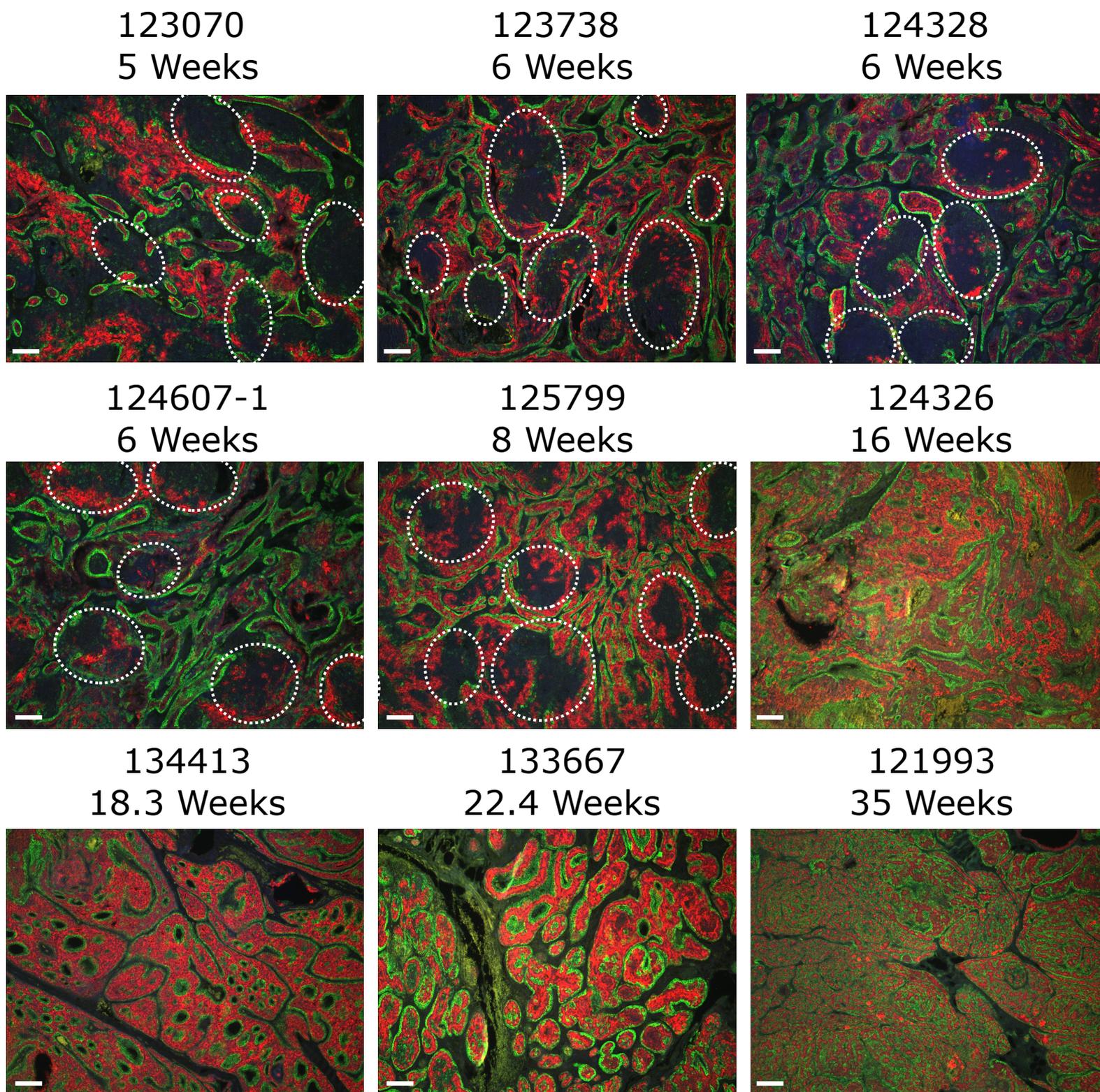


**Figure S4: MMTV-Wnt1 Primary Tumor H&E Stains by Tumor Latency**

Displayed are images of nine primary MMTV-Wnt1 tumors stained with H&E. As visually evident, MMTV-Wnt1 tumors with later latency have more evidence of large blood vessels (highlighted with dashed, white circles) than tumors with earlier latency. The white scale bar is 0.5 mm in length.

Figure S5

### Examples of MMTV-Wnt1 Primary Tumor Krt5 and Krt8/18 Stains by Tumor Latency



**Figure S5: MMTV-Wnt1 Primary Tumor Krt5 and Krt8/18 Stains by Tumor Latency**

Displayed are images of nine primary MMTV-Wnt1 tumors stained with DAPI, Krt5, and Krt8/18 antibodies. As visually evident, MMTV-Wnt1 tumors with earlier latency have more evidence of large regions that stain positive for DAPI but not Krt5 or Krt8/18 (highlighted with dashed, white circles) than tumors with later latency. The white scale bar is 0.1 mm in length.

**Table S1: Pathology Review of MMTV-Wnt1 Tumor H&E Slides**

Hematoxylin and eosin-stained (H&E) slides from nine MMTV-Wnt1 tumors were reviewed by a breast pathologist. The primary architectural pattern and secondary patterns or other prominent findings (e.g., blood lakes, necrosis) were recorded.

[Click here to Download Table S1](#)

**Table S2: 2-Class Pathway Signature SAM (Wnt1-Early vs All Mouse Tumors)**

A 2-class SAM analysis was performed comparing pathway signatures between Wnt1-Early tumors and all other mouse tumors. Pathways with higher expression in Wnt1-Early tumors have a SAM fold change greater than 1. Pathways with lower expression in Wnt1-Early tumors have a SAM fold change less than 1.

[Click here to Download Table S2](#)

**Table S3: 2-Class Pathway Signature SAM (Wnt1-Late vs All Mouse Tumors)**

A 2-class SAM analysis was performed comparing pathway signatures between Wnt1-Late tumors and all other mouse tumors. Pathways with higher expression in Wnt1-Late tumors have a SAM fold change greater than 1. Pathways with lower expression in Wnt1-Late tumors have a SAM fold change less than 1.

[Click here to Download Table S3](#)

**Table S4: 2-Class Pathway Signature SAM (Wnt1-Early vs Wnt1-Late)**

A 2-class SAM analysis was performed comparing pathway signatures between Wnt1-Early and Wnt1-Late tumors. Pathways with higher expression in Wnt1-Early tumors have a SAM fold change greater than 1. Pathways with higher expression in Wnt1-Late tumors have a SAM fold change less than 1.

[Click here to Download Table S4](#)

**Table S5: Drug Treatment Data**

Wnt1-Early and Wnt1-Late tumors were randomized into one of two treatment groups: untreated or erlotinib (an EGFR inhibitor). Drug treatment was initiated when primary tumors reached a width between ~5-10 mm. The percent change in tumor volume after 14 days of treatment was compared to the untreated control group to measure drug response.

[Click here to Download Table S5](#)