SUPPLEMENTARY TABLE LEGENDS

Table S1. PF-06463922 is potent against *ALK*-mutated NB cell lines *in vitro*. Mean (n=3) IC_{50} values (± SD) for crizotinib and PF-06463922 are listed for 10 NB cell lines harboring the indicated *ALK* aberrations, plus one NSCLC cell line (NCI-H3122). Fold increases in the IC_{50} values with crizotinib over those measured for PF-06463922 are also listed in the right-most column.

SUPPLEMENTARY FIGURE LEGENDS

Supplemental Figure 1. PF-06463922 is well tolerated in mice. Average mouse body weight over 6-9 weeks of continuous treatment with vehicle (black curves and diamonds), 100 mg/kg/day crizotinib (blue curves and triangles), or 10 mg/kg/day PF-06463922 (red curves and squares) for mice with: **A**, COG-N-453x PDXs; **B**, Felix-PDX xenografts; **C**, SH-SY5Y xenografts; and **D**, NB-1643 xenografts.

Supplemental Figure 2. *In vivo* effects of crizotinib and PF-06463922 on event-free survival (EFS) in neuroblastoma PDX and xenograft models. Female CB17 SCID mice bearing: **A,** COG-N-453x (ALK-F1174L); **B,** Felix-PDX (ALK-F1245C); **C,** SH-SY5Y (ALK-F1174L); and **D,** NB-1643 (ALK-R1275Q) were treated with vehicle (black curves and diamonds), 100 mg/kg/day crizotinib (blue curves and triangles), or 10 mg/kg/day PF-06463922 (red curves and squares). EFS is plotted for the period during treatment (as in Fig. 2) and for a period of 4-7 weeks after cessation of therapy. Remarkably, no discernible tumor growth could be detected in any of the PF-06463922-treated mice during the period of monitoring.

Supplemental Figure 3. *In vivo* efficacy studies comparing PF-06463922 treatment at 10 mg/kg/day (5 mg/kg BID) and 3 mg/kg/day (1.5 mg/kg BID) with crizotinib treatment at 100 mg/kg QD in: **A**, Felix-PDX xenografts and **B**, SH-SY5Y xenografts. Tumor volumes are

plotted over 6 weeks of continuous treatment (Median ± S.E.M., n=10 for each data point), as are Kaplan-Meier survival curves. A mixed-effects linear model was used to assess statistical significance analysis of tumor growth delay, and EFS Kaplan-Meier curves were compared by using log-rank test, * $p<0.05$ (see Table 1).