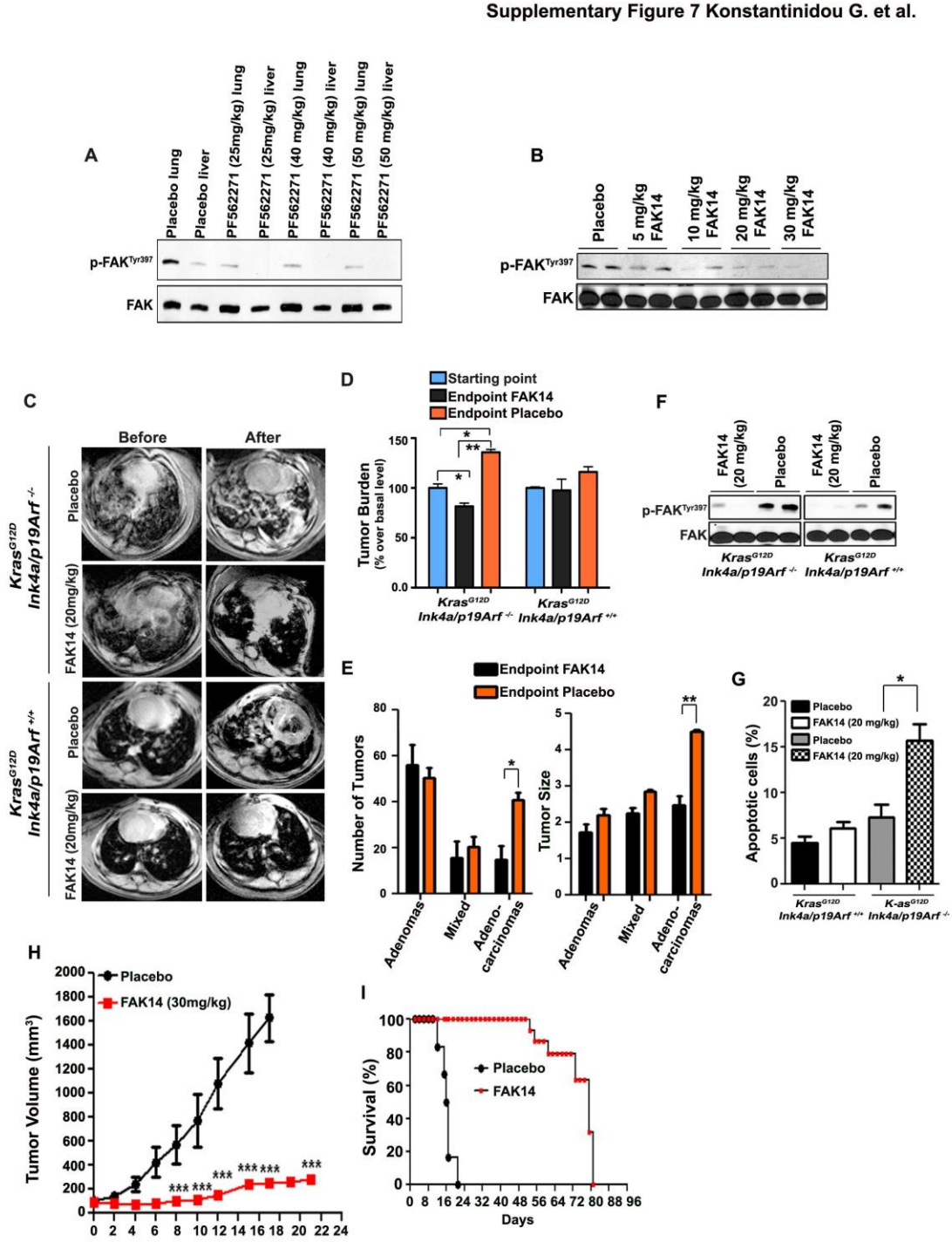

Supplementary Figure S7. Pharmacological inhibition of FAK results in suppression of NSCLC *in vivo*. (A) Immunoblot showing effective p-FAK^{Tyr397} inhibition in lungs and livers, 2h after treatment with PF562271 via oral gavage. Each lane represents a lung

lysate from a single mouse. **(B)** Immunoblot showing effective dose-dependent inhibition of p-FAK^{Tyr397}, 2h after administration of FAK14 inhibitor via intra-peritoneal injection. Each lane represents a lung lysate from a single mouse. **(C)** Representative axial magnetic resonance imaging (MRI) of *Kras^{G12D};Ink4a/Arf$^{-/-}$* and *Kras^{G12D};Ink4a/Arf$^{+/+}$* mouse lungs before and after treatment with FAK14 inhibitor. The treatment started after 10 weeks of Kras^{G12D} induction (in order to obtain high-grade tumors) and continued for 10 days. **(D)** MRI quantification of lung tumor burden from panel (C). The tumor burden is presented as a percentage change over basal level (pretreatment group). Mean and s.e.m., n=4/group. **P*<0.05, ***P*<0.003. **(E)** Tumor number, size and grade of individual lung tumors from *Kras^{G12D};Ink4a/Arf$^{-/-}$* mice treated with FAK14 inhibitor (study endpoint). The lungs were assessed on H&E stained slides. Mean and s.e.m; n=4/group. **P*<0.03, ***P*<0.003. **(F)** Immunoblot showing effective inhibition of p-FAK^{Tyr397} in representative lungs of mice 2h after administration of FAK14 inhibitor. Each lane represents a lysate from a single mouse. **(G)** Percentage of apoptotic cells 2 days upon initiation of treatment with FAK14. Mean and s.e.m. **P*<0.03. A total of 200 cells were scored/slide for at least 3 replicates. Genotypes are indicated. **(H)** Tumor volume of A427 cells grown as xenografts in nude mice, treated as indicated. The treatment with FAK14 inhibitor was started when the tumors reached 150 mm^3 and was given every day for a total of 10 days. Mean and s.d, n=5. ****P*<0.001. The mice were sacrificed when the tumors reached 2000 mm^3. **(I)** Kaplan-Meier curve of A427 xenografts treated as indicated; n=5. The treatment with FAK14 inhibitor (30mg/kg) was started when the tumors reached 150mm^3 and was given every day for a total of 10 days. The mice were sacrificed when the tumors reached 2000 mm^3.