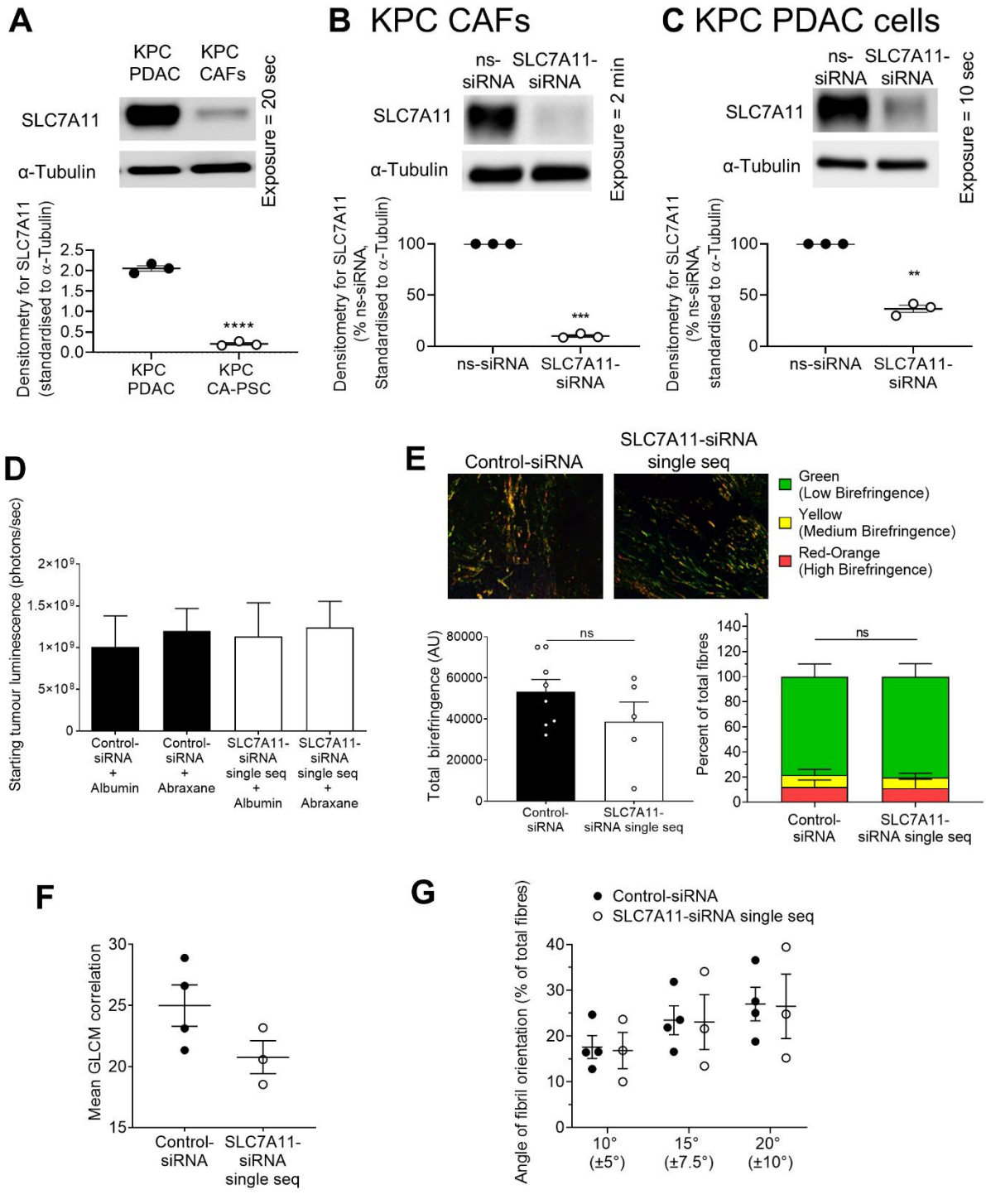
A
KPC PDAC
KPC CAFs
SLC7A11
α-Tubulin
Exposure = 20 sec
Densitometry for SLC7A11 (standardised to α-Tubulin)
****
KPC PDAC
KPC CA-PSC
B KPC CAFs
ns-siRNA
SLC7A11-siRNA
Exposure = 2 min
Densitometry for SLC7A11 (% ns-siRNA, Standardised to α-Tubulin)
***
C KPC PDAC cells
Exposure = 10 sec
**
D
Starting tumour luminescence (photons/sec)
Control-siRNA + Albumin
Control-siRNA + Abraxane
SLC7A11-siRNA single seq + Albumin
SLC7A11-siRNA single seq + Abraxane
E
Control-siRNA
SLC7A11-siRNA single seq
Green (Low Birefringence)
Yellow (Medium Birefringence)
Red-Orange (High Birefringence)
Total birefringence (AU)
ns
Percent of total fibres
F
Mean GLCM correlation
G
Control-siRNA
SLC7A11-siRNA single seq
Angle of fibril orientation (% of total fibres)
10° (±5°)
15° (±7.5°)
20° (±10°)

Figure S4

Figure S4: Confirmation of SLC7A11 knockdown in KPC tumour cells and CAFs and collagen fibril analysis in tumour sections at therapeutic model endpoint. A) Western blot comparing SLC7A11 in KPC PDAC cells and KPC CAFs. B) Western blot and densitometry for SLC7A11 knockdown in KPC CAFs (standardised to α-tubulin). C) As per B, expect KPC PDAC cell extracts were used. Exposure times for luminescence acquisition are shown next to each blot. Circles in B-C indicate replicate experiments (n=3), lines = mean±s.e.m. Student t-test used for (A-C). Asterisks in all graphs indicate significance (**p≤0.01,***p≤0.001,****p≤0.0001). D) Graph shows mean tumour luminescence (+s.e.m.) post-randomisation for therapeutic model of SLC7A11 knockdown (n=7-8 per group). Groups were not significantly different by one-way ANOVA. E) Polarised light analysis of representative regions from picrosirius red stained specimens. Representative photos are shown. Left bar graph shows total birefringence (mean+s.e.m.; Control-siRNA, n=8; SLC7A11-siRNA single seq, n=5). Right bar graph shows the average frequency (mean+s.e.m.; Control-siRNA, n=8; SLC7A11-siRNA single seq, n=5) of low, medium and high birefringence collagen fibrils (higher birefringence = denser fibril). ns = not significant (student t-test). Collagen was detected by second harmonics generation and the maximum intensity projections of 3 representative regions were used per tumour section. F) Grey-level co-occurrence matrix (GLCM) analysis. Graph shows mean correlation per group. Circles indicate individual mice (n=3-4), lines indicate mean±s.e.m. G) Graph shows the % of total fibrils with angles of ± 10^{o}, 15^{o} and 20^{o} deflection from the centre axis. Circles indicate individual mice (n=3-4), lines indicate mean±s.e.m. Student t-test used for (E-F), one-way ANOVA used for (G). Groups were not significantly different.