GLI2-dependent c-MYC upregulation mediates resistance of pancreatic cancer cells to the BET bromodomain inhibitor JQ1

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Supplementary Material
SUPPLEMENTARY FIGURE LEGENDS

Figure S1: **JQ1-resistant pancreatic cancer cells are resistant to the BET inhibitor I-BET151.**
Parental (CD18-P) and JQ1-resistant (CD18-JQ1R) pancreatic cancer cells were grown in three-dimensional collagen gels and fresh serum-containing medium supplemented with DMSO or I-BET151 was added every other day for 4 days. The effect on colony size was examined by phase contrast microscopy, and size of the individual colonies measured. *, p < 0.05. The results are representative of three independent experiments.

Figure S2: **JQ1-resistant pancreatic cancer cells demonstrate decreased cell-matrix adhesion associated with increased ZEB1 expression.**
(a) CD18-P and CD18-JQ1R cells were seeded onto collagen I (Col I)-coated tissue culture plates and allowed to adhere at 37°C for 10 minutes. Adherent cells were photographed and counted. (b) CD18-P and CD18-JQ1R cells were analyzed for collagen-binding α2- and β1-integrin expression by FACS analysis. (c) CD18-P and CD18-JQ1R cells plated for 24 hours onto collagen-coated tissue culture plates were analyzed for pFAK(Y397) and total FAK by Western blotting. (d, e) CD18-JQ1R cells growing on tissue culture plastic were transfected with control siRNA (siCtrl) or ZEB1-specific siRNA (siZEB1) for 72 hours. The transfected cells were re-plated onto collagen I (Col I)-coated tissue culture plates and allowed to adhere at 37°C for 10 minutes. Adherent cells were photographed and counted. The effect of ZEB1 knockdown on collagen-binding α2- and β1-integrin expression was evaluated by FACS analysis. *, p < 0.05. The results are representative of three independent experiments.
Figure S1

IBET-151 [µM]

0 0.25 0.5 1

CD18-P

CD18-JQ1R

Avg. Colony Size (AU)

IBET-151 [µM] 0 0.25 0.5 1

CD18-P

CD18-JQ1R

IBET-151 [µM] 0 0.25 0.5 1

Avg. Colony Size (AU)

* * *
Figure S2

(a) Col I Adhesion

(b) 

\[ \alpha_2\text{-integrin} \quad \beta_1\text{-integrin} \]

(c) 

Log Fluorescence Intensity

CD18-P  CD18-JQ1R

Relative Adhesion

0.0  0.5  1.0  1.5

CD18-P  CD18-JQ1R

(d) Col I Adhesion

siCtrl  siZEB1

Relative Adhesion

siCtrl  siZEB1

CD18-JQ1R

(e) 

\[ \alpha_2\text{-integrin} \quad \beta_1\text{-integrin} \]

Log Fluorescence Intensity