Primary pancreatic cancers grow silently over years, but metastatic cancers present suddenly & progress rapidly.

Metastatic subclones consume excessive glucose to activate the biosynthetic enzyme Phosphogluconate Dehydrogenase (PGD).

High PGD activity maintains excessive glucose consumption by repressing TXNIP, a negative regulator of glucose import.

PGD activation simultaneously facilitates global reprogramming of the metastatic epigenome through glucose-fueled histone hyperacetylation.