

Table 1. Reported effects of metformin on different types of cancer cell lines

Type of cancer	Proposed mechanisms of action	Author (ref. number)
Breast	Arrest in G1 and S phases	Zakikhani M et al (28)
	Cyclin D1 and Cyclin E reduction	Liu B et al (69)
	MAPK and Akt inhibition	Alimova IN et al (70)
	mTOR and EGFR expression decrease	
	S6 kinase inhibition	
Gliomas	Arrest in G1 phase	Isakovic A et al (26)
	Activation of caspase cascade	Vucicevic L (61)
Prostate	Arrest in G1 phase	Ben Sahra I et al (29)
	Cyclin A and cyclin B reduction	Ben Sahra I et al (29)
	mTOR activity inhibition	Zakikhani M et al (50)
Colon	Beta oxidation of fatty acids	Buzzai M et al (27)
	Autophagy	Algire C et al (83)
	S6 kinase inhibition	