Table 1
Set of constitutive parameters (bulk modulus κ and shear moduli μ_1 and μ_2) used in finite element simulations of cancerous cells.

	κ [kPa]	μ_1 [kPa]	μ_2 [kPa]
Plasma membrane	39.7333	0.41	0.422
Cytoplasm	39.7333	0.41	0.422
Nuclear envelope	239.989	2.41	2.422
Nucleoplasm	239.989	2.41	2.422
Nucleolus	719.967	7.23	7.266
ECM	248.333	5.0	5.0

Table 2
Set of constitutive parameters (bulk modulus κ and shear moduli μ_1 and μ_2) used in finite element simulations of healthy cells. Values are derived based on a stiffening of cell constituents by 80% and a simultaneous decrease in stiffness of the ECM by 80%.

	κ [kPa]	μ_1 [kPa]	μ_2 [kPa]
Plasma membrane	71.5199	0.738	0.7596
Cytoplasm	71.5199	0.738	0.7596
Nuclear envelope	431.98	4.338	4.3596
Nucleoplasm	431.98	4.338	4.3596
Nucleolus	1295.94	13.014	13.0788
ECM	198.666	4.0	4.0