

Variable	Type	Brief Description	Unit
Tumoral Tissue Volume	Stock	Collective volume of the prostatic tumor tissue	Liter
Healthy Tissue Volume	Stock	Collective volume of the prostatic healthy tissue	Liter
PSA Level	Stock	Prostate specific antigen (PSA) level in blood serum	ng/mL
Nutrient Level	Stock	Nutrient level in tissue that is used for vital functions and proliferation of cells	Gram
BMI	Constant	Body Mass Index (BMI) of the individual (Binary)	Dimensionless
Smoking	Constant	Smoking status of the individual (Binary)	Dimensionless
Family History (FH)	Constant	Previous cancer history status of the individual's family (Binary)	Dimensionless
Physical Activity (PA)	Constant	Physical activity level of the individual (Binary)	Dimensionless
Sexual Activity (SA)	Constant	Sexual activity status of the individual (Binary)	Dimensionless
Age	Stock	Real-time age of the individual	Dimensionless
BMI Effect on Tumor Growth	Auxiliary	The conditional probability which states BMI effect on the tumor growth	Dimensionless
Smoking Effect on Tumor Growth	Auxiliary	The conditional probability which states smoking effect on the tumor growth	Dimensionless
Smoking Effect on Cancer Onset	Auxiliary	The conditional probability which states smoking effect on the cancer onset	Dimensionless
Family History on Cancer Onset	Auxiliary	The conditional probability which states FH effect on the cancer onset	Dimensionless
Physical Activity on Cancer Onset	Auxiliary	The conditional probability which states PA effect on the cancer onset	Dimensionless
Sexual Activity on Cancer Onset	Auxiliary	The conditional probability which states SA effect on the cancer onset	Dimensionless
Age Effect on Tumor Growth	Auxiliary	The conditional probability which states age effect on the tumor growth	Dimensionless
Age Effect on Cancer Onset	Auxiliary	The conditional probability which states age effect on the cancer onset	Dimensionless
Age Effect on Prostate Growth	Auxiliary	The conditional probability which states age effect on prostate growth	Dimensionless
Randomness	Auxiliary	Random uniform distribution which adds a random dimension to the model	Dimensionless
Fraction of Free PSA	Auxiliary	Free PSA fraction of the PSA level	Dimensionless
Free PSA in Serum	Auxiliary	Free PSA level in blood serum	ng/mL
Tumoral Tissue PSA Production Rate	Auxiliary	The rate in which healthy tissues produce PSA	ng/(ml*I*day)
Healthy Tissue PSA Production Rate	Auxiliary	The rate in which healthy tissues produce PSA	ng/(ml*I*day)
Apoptosis of Tumor Cells	Flow	The rate in which tumor cells die	l/day
Proliferation of Tumor Cells	Flow	The rate in which tumor cells proliferate	l/day
Apoptosis of Healthy Cells	Flow	The rate in which healthy cells die	l/day

Apoptosis of Healthy Cells	Flow	The rate in which healthy cells proliferate	l/day
Nutrient Supply	Flow	Nutrient that is supplied to tissues	g/day
Nutrient Decay	Flow	Amount of the decayed nutrient	g/day
PSA Decay	Flow	Amount of the decayed PSA	ng/(ml*day)
PSA Production Rate	Flow	The total production rate of PSA	ng/(ml*day)