

4.21 Logistic Regression

2. Logistic Regression - Optimized Model

Note—Beta (β) indicates regression coefficients



Risk Factor	β	Odds Ratio (95% CI)	P
Intercept	-11.6433	0.0002480016	8.49e-12
ClumpThickness	0.8761	3.5527088997	1.17e-05
MaginalAdhesion	0.4561	2.1364558512	0.003182
BareNuclei	0.5655	2.3622081536	0.000164
BlandNucleoli	0.7220	3.4600175464	0.006422
NormalNucleoli	0.3746	1.9056826404	0.006583



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BareNuclei	0.51636		0.000164
BlandNucleoli	0.7220	0.4600175464	0.006422
NormalNucleoli	0.3746	1.9056826404	0.006583

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4.22 Evaluation Results

Logistic Regression - Full
Model Except Mitosis:

Actual/ Predicted	benign	malignant
benign	128	7
malignant	1	69

Logistic Regression -
Optimized Model:

Actual/ Predicted	benign	malignant
benign	129	6
malignant	1	69

