

Study	Algorithm or statistic model	Description	Sensitivity (recall)	Specificity	Accuracy	PPV (precision)	NPV	AUC-ROC	IoU	Dice Coefficient	Correlation coefficient	RMSE	Time consumption
Chen	KNN	Validation			0.55								
	Naïve Bayes	Validation			0.64								
	Random Forest	Validation			0.73								
	SVM	Validation			0.64								
	KNN	Testing (revised)	0.89		0.9	0.85							
	Naïve Bayes	Testing (revised)	0.9		0.89	0.85							
	Random Forest	Testing (revised)	0.92		0.9	0.86							
	SVM	Testing (revised)	0.91		0.91	0.87							
	ResUNet (segmentation)								0.51	0.69			
	KNN (w/ segmentation)	Correlation (testing and ground-truth)									0.59		
	Naïve Bayes (w/ segmentation)	Correlation (testing and ground-truth)									0.62		
	Random Forest (w/ segmentation)	Correlation (testing and ground-truth)									0.62		
	SVM (w/ segmentation)	Correlation (testing and ground-truth)									0.6		
	KNN (w/out segmentation)	Correlation (testing and ground-truth)									0.58		
	Naïve Bayes (w/out segmentation)	Correlation (testing and ground-truth)									0.6		
Morita	Random Forest (w/out segmentation)	Correlation (testing and ground-truth)									0.62		
	SVM (w/out segmentation)	Correlation (testing and ground-truth)									0.6		
	Inception V3 (CNN)	This study	0.91	0.86	0.9			0.97					
	Self-organizing map (artificial neural network)	This study	1		0.87	0.6		0.84					
Park	TR	Conventional parameter	0.67		0.87	0.67		0.73					
	T1/2max	Conventional parameter	0.67		0.67	0.33		0.75					
	RS	Conventional parameter	1		0.8	0.5		0.68					
	Spatial-temporal networks (CNN, RNN)	10-fold cross validation	0.7			0.83		0.93					
Zhang	SI-CNN	This study						0.87					
	SIm-CNN	This study						0.89					
	B-mode	Other metric						0.69					
Zha	CNN-LSTM single patient	This study	0.91		0.91								
	GNB single patient	Other metric	0.76		0.75								
	CNN single patient	Other metric	0.87		0.86								
	RNN single patient	Other metric	0.76		0.73								
	CNN-LSTM cross patient	Training	0.99		0.997								
	CNN-LSTM cross patient	Testing	0.94		0.89								
Garcia-Martinez	Computer vision algorithm, in vitro	This study	0.87	0.96	0.95								
	Computer vision algorithm, in vivo	This study	0.72	0.93	0.88								
	Tonmoy Ghosh, in vitro	Other metric	0.96	0.92	0.92								
	Tonmoy Ghosh, in vivo	Other metric	0.91	0.49	0.6								
	Yixuan Yuan, in vitro	Other metric	0.996	0.83	0.84								
	Yixuan Yuan, in vivo	Other metric	0.93	0.5	0.61								
Wei	Thermal injury detection	This study				0.63		0.95					
	Bleeding detection	This study				0.34		0.82					
Hua	RGB + optical flow		0.8			0.84			0.7				
	RGB		0.45			0.72							
	Optical flow		0.28			0.28							
	Same model laparoscope		0.95-0.99	0.91-0.995	0.91-0.99								
Okamoto	Different model laparoscope		0.93-1	0.86-1	0.86-1								
	Hemorrhage detection		.45-1	0.33-1									0.1-0.6 sec
Jo	Deep learning network	This study		0.85								358	
	Control	Control										489	
	Control	Control										431	
Pangal	SOCALNet		1	0.66	0.85	0.79	1						

PPV positive predictive value, NPV negative predictive value, AUC-ROC aread under curve-receiver operator characteristics, RMSE root mean squre error