Criado por:
Time MaChiron
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MaChiron Image Classification Report

Experiment train_500ep_v3 (22/10/2023 11:57:57)

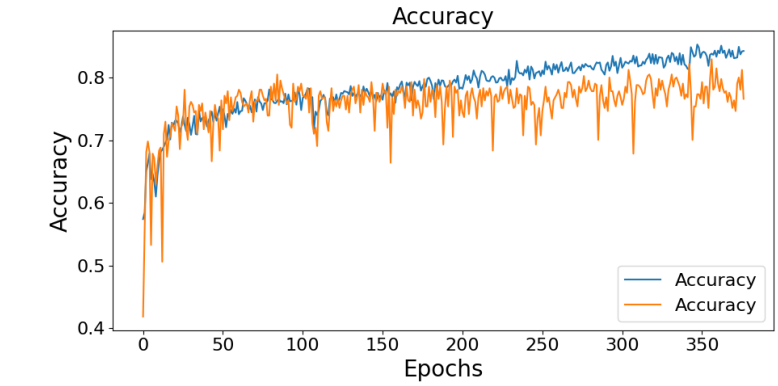
Global Summary

Name	Value
Dataset	fitzpatrick_ddi_pad_v1
Execution Name	train_500ep_v3
Date	22/10/2023 11:57:57
Total Train Time	5 hours
Train Epochs	377

Subsets Summary

Subset	Image Count	Imbalance Ratio	Accuracy	Macro Avg AUC	Macro Avg F1	Macro Avg YJ
Train	1642	1.41	0.84	0.91	0.84	0.68
Validation	411	1.40	0.80	0.88	0.80	0.62
Test	514	1.41	0.78	0.83	0.78	0.56

Learning Curve



Train configuration

Name	
data	/home/luma/Documents/workspace/data/derm/experimentos/fitzpatrick_ddi_pad_v1/spli
output	/home/luma/Documents/workspace/data/derm/experimentos/fitzpatrick_ddi_pad_v1/train_
test_data	/home/luma/Documents/workspace/data/derm/experimentos/fitzpatrick_ddi_pad_v1/sp
val_split	
epoch	
batch	
image_height	
image_width	
image_crop_min_height	
image_crop_max_height	
image_crop_min_width	
image_crop_max_width	
seed	
early_stop	
MODEL_TYPE	
CONV_LAYERS	
CONV_INIT	
DENSE_SIZE	
CONV_KERN	
OPTIMIZER	
LEARN_RATE	
FLIP_H	
FLIP_V	
ROTATE	
ZOOM	
BATCH_NORM	
DROPOUT	
L1	
L2	
val_data	
config_file	/home/luma/Documents/workspace/data/derm/experimentos/fitzpatrick_ddi_pad_v1/train_example_con
image_side	
label_type	
k	
tune_set	
image_folder	

Name	
continue	
N_GPUS	
IMG_CHANNELS	
TRAIN_PARAMS	
NON_TRAIN_PARAMS	
MAX_MODEL_PARAMS	50
email	

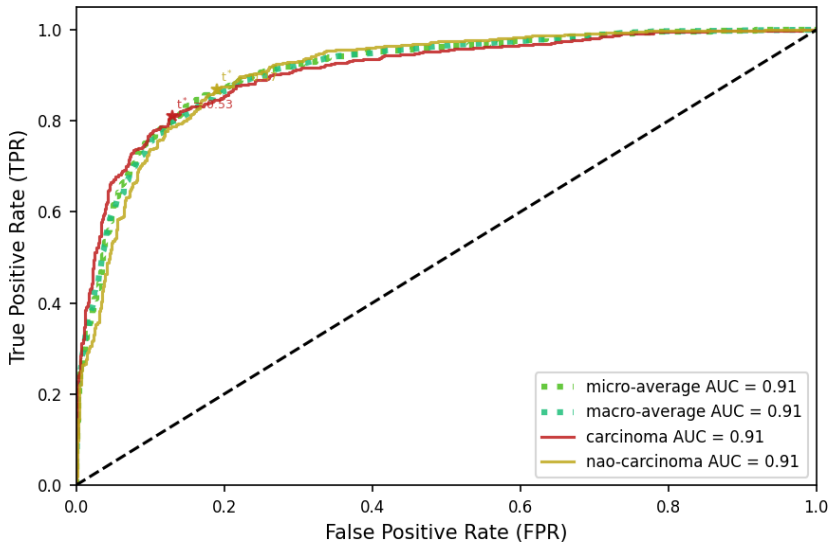
System Details

Name	Value
OS-Version	Ubuntu 22.04.3 LTS
Kernel	Linux 5.14.0-1058-oem
CPU	12th Gen Intel(R) Core(TM) i5-12500H - Qtd: 0-15
RAM	78GB
GPU	NVIDIA GeForce RTX 3050 Laptop GPU - 4.0 GB

Train Metrics

Class	Acc	#Label	#Pred	Recall	Precision	F1	AUC_ROC	Opt_t	TPR	FPR	YoudJ
carcinoma	0.84	681	697	0.82	0.80	0.81	0.91	0.53	0.81	0.13	0.68
nao-carcinoma	0.84	961	945	0.86	0.87	0.86	0.91	0.47	0.87	0.19	0.68
Macro_Avg	0.84	1642	1642	0.84	0.84	0.84	0.91	NA	0.84	0.16	0.68
Weighted_Avg	0.84	1642	1642	0.84	0.84	0.84	0.91	NA	0.85	0.17	0.68

Train ROC Curve

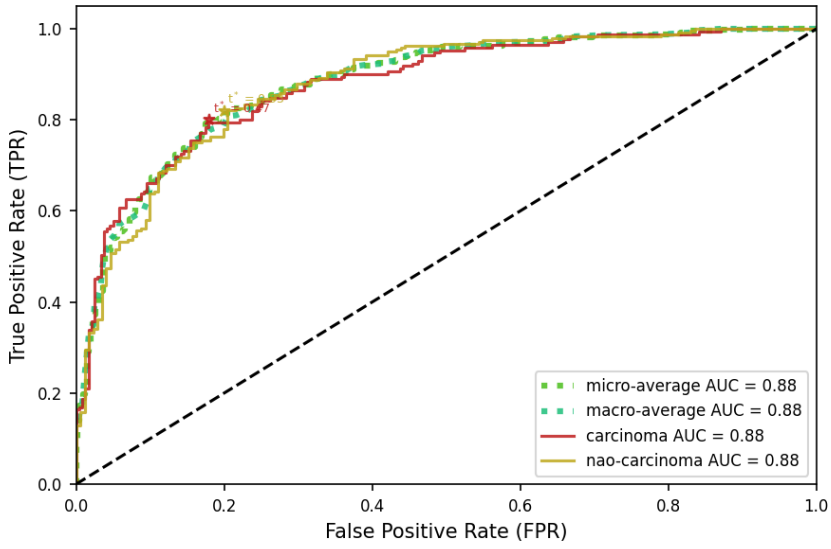


Train Confusion Matrix by Percentage

Validation Metrics

Class	Acc	#Label	#Pred	Recall	Precision	F1	AUC_ROC	Opt_t	TPR	FPR	YoudJ
carcinoma	0.8	171	174	0.77	0.76	0.77	0.88	0.47	0.80	0.18	0.62
nao-carcinoma	0.8	240	237	0.82	0.84	0.83	0.88	0.53	0.82	0.20	0.62
Macro_Avg	0.8	411	411	0.80	0.80	0.80	0.88	NA	0.81	0.19	0.62
Weighted_Avg	0.8	411	411	0.80	0.80	0.80	0.88	NA	0.81	0.19	0.62

Validation ROC Curve

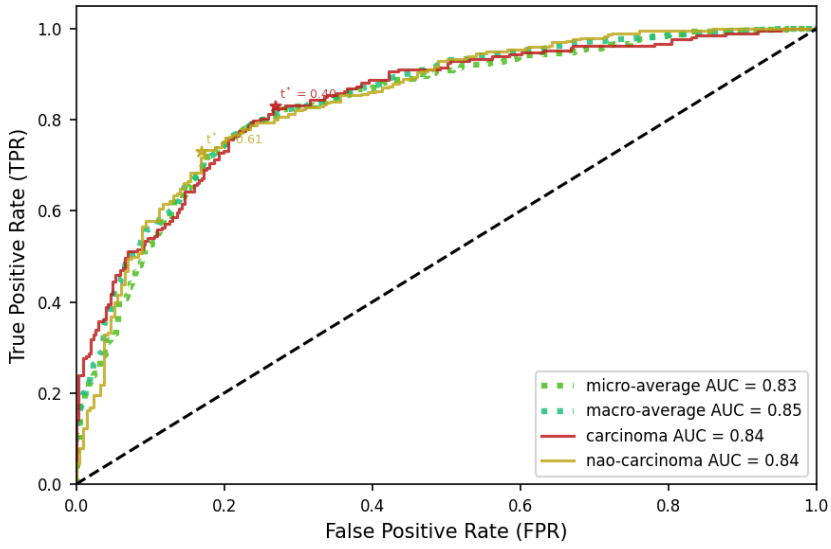


Validation Confusion Matrix by Percentage

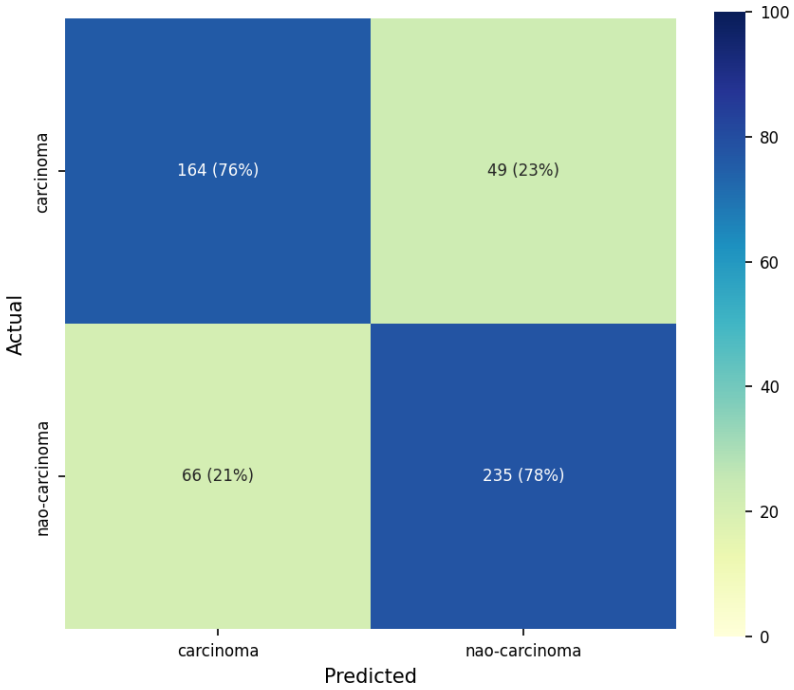
Test Metrics

Class	Acc	#Label	#Pred	Recall	Precision	F1	AUC_ROC	Opt_t	TPR	FPR	YoudJ
carcinoma	0.78	213	230	0.77	0.71	0.74	0.84	0.4	0.83	0.27	0.56
nao-carcinoma	0.78	301	284	0.78	0.83	0.80	0.84	0.61	0.73	0.17	0.56
Macro_Avg	0.78	514	514	0.78	0.77	0.77	0.85	NA	0.78	0.22	0.56
Weighted_Avg	0.78	514	514	0.78	0.78	0.78	0.83	NA	0.77	0.21	0.56

Test ROC Curve



Test Confusion Matrix by Percentage

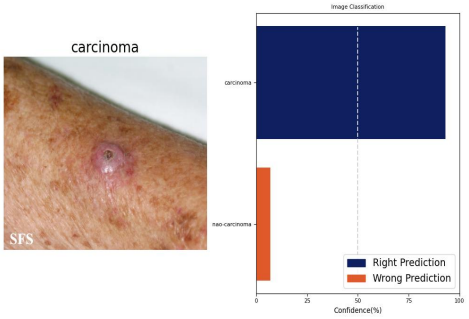

164 (76%)
49 (23%)
66 (21%)
235 (78%)
carcinoma
nao-carcinoma
Actual
carcinoma
nao-carcinoma
Predicted
100
80
60
40
20
0

Example Images

Train - carcinoma

Correct Prediction

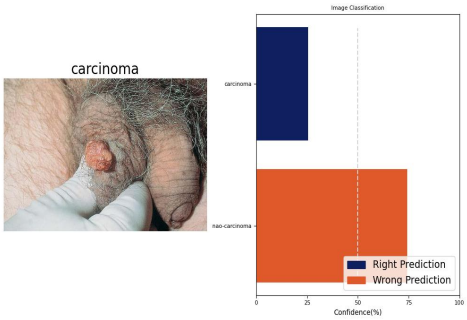
name: image_14169.jpg



Incorrect Prediction

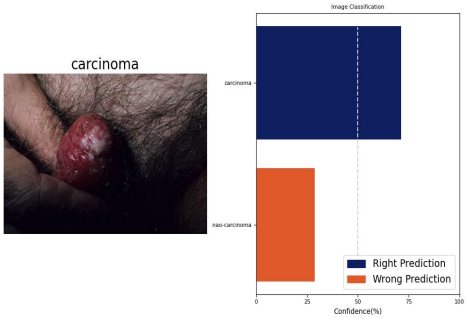
name: image_10398.jpg

pred



Correct Prediction

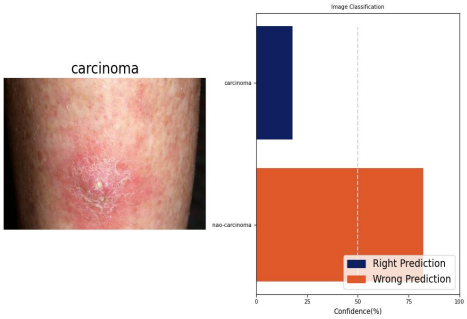
name: image_3550.jpg



Incorrect Prediction

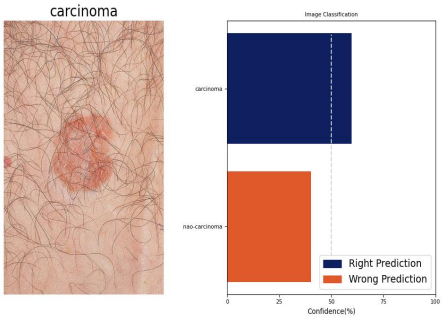
name: image_2101.jpg

pred



Correct Prediction

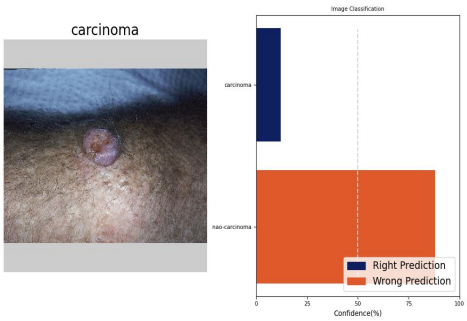
name: image_8929.jpg



Incorrect Prediction

name: image_5450.jpg

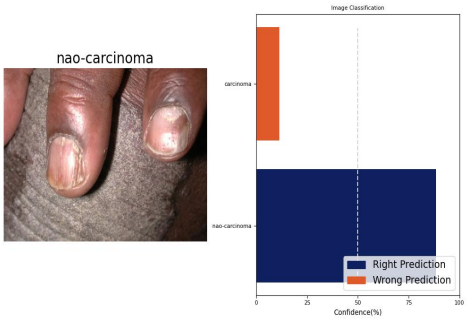
pred



Train - nao-carcinoma

Correct Prediction

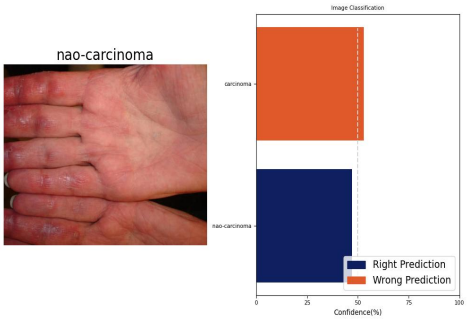
name: image_4852.jpg



Incorrect Prediction

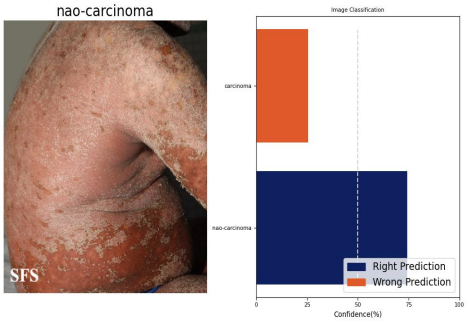
name: image_10897.jpg

pred



Correct Prediction

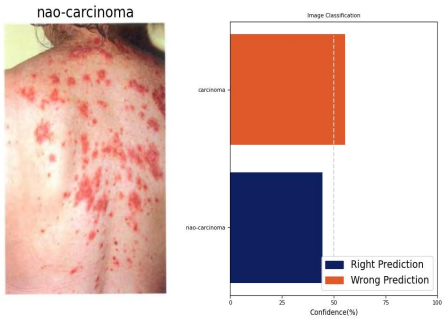
name: image_16429.jpg



Incorrect Prediction

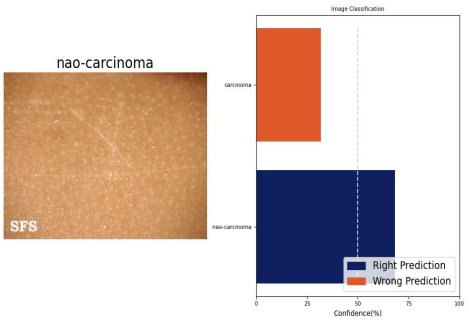
name: image_9491.jpg

pred



Correct Prediction

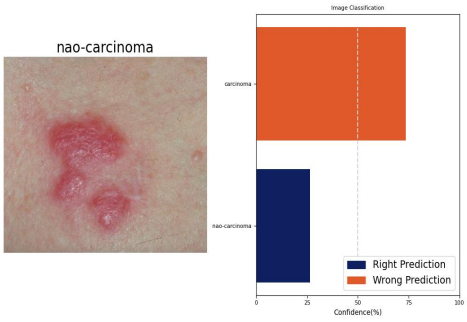
name: image_14229.jpg



Incorrect Prediction

name: image_9338.jpg

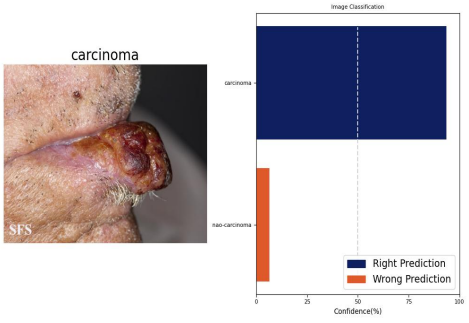
pred



Validation - carcinoma

Correct Prediction

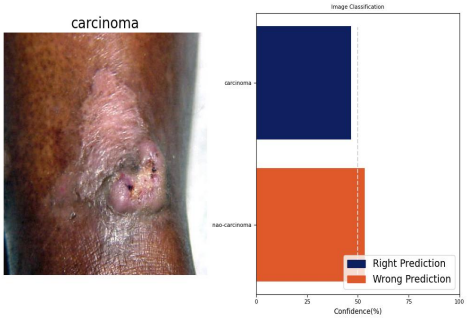
name: image_16149.jpg



Incorrect Prediction

name: image_8916.jpg

pred



Correct Prediction

name: image_16039.jpg

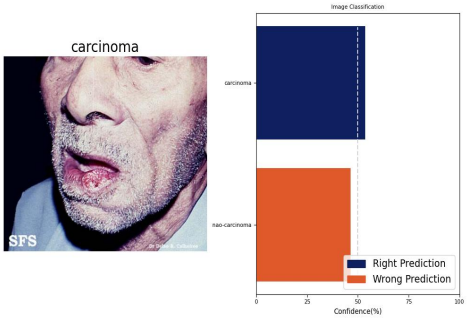
Incorrect Prediction

name: image_2392.jpg

pred

Correct Prediction

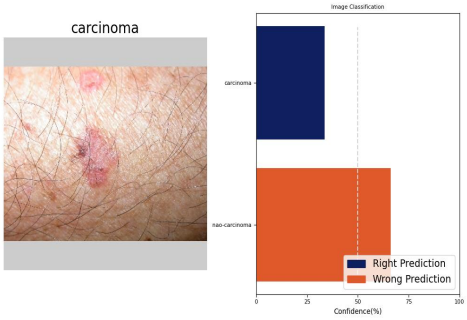
name: image_13609.jpg



Incorrect Prediction

name: image_7192.jpg

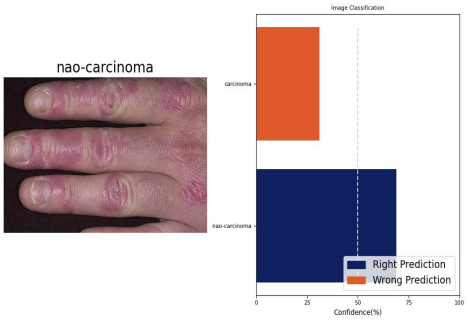
pred



Validation - nao-carcinoma

Correct Prediction

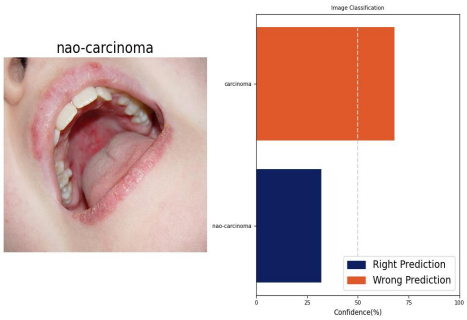
name: image_3146.jpg



Incorrect Prediction

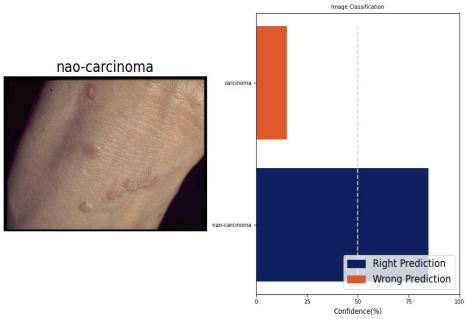
name: image_9469.jpg

pred



Correct Prediction

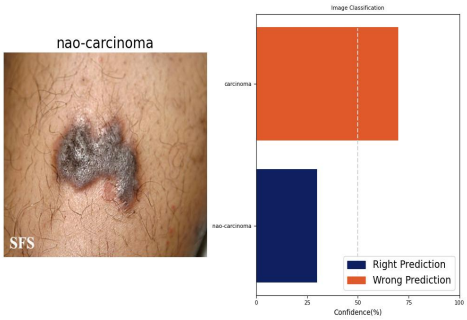
name: image_7577.jpg



Incorrect Prediction

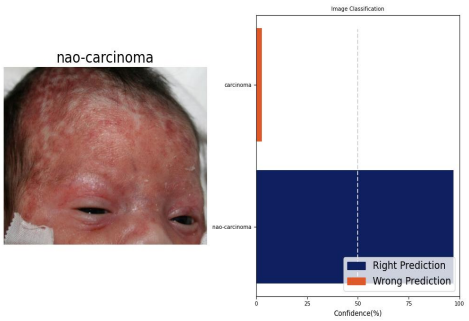
name: image_16396.jpg

pred



Correct Prediction

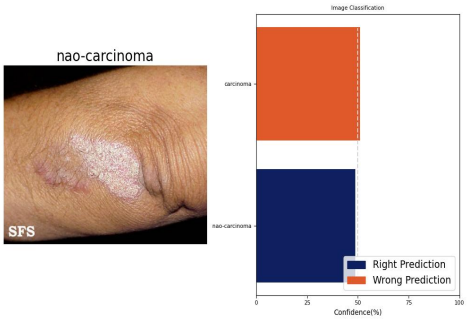
name: image_11541.jpg



Incorrect Prediction

name: image_13056.jpg

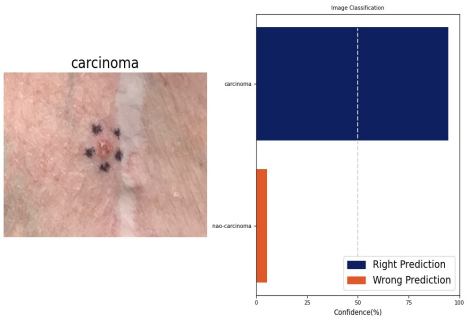
pred



Test - carcinoma

Correct Prediction

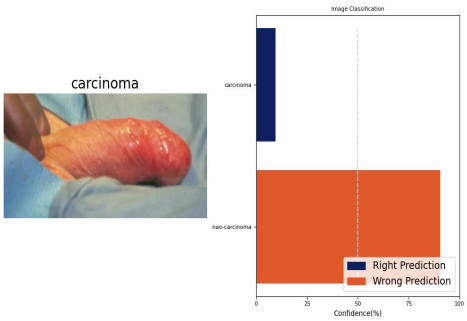
name: 000300.png



Incorrect Prediction

name: image_985.jpg

pred



Correct Prediction

name: image_15049.jpg

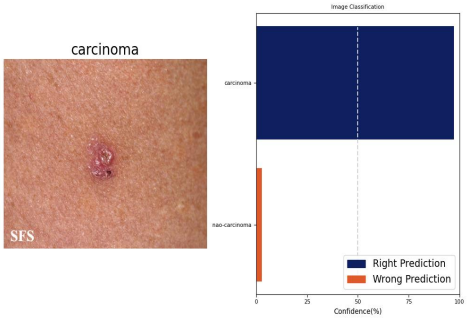
Incorrect Prediction

name: image_5909.jpg

pred

Correct Prediction

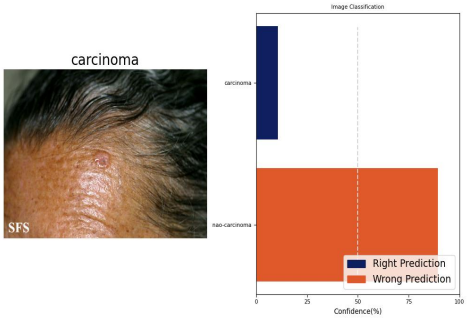
name: image_13337.jpg



Incorrect Prediction

name: image_14216.jpg

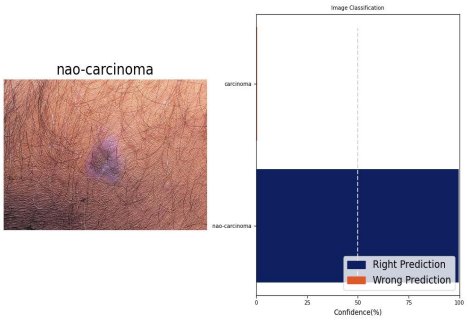
pred



Test - nao-carcinoma

Correct Prediction

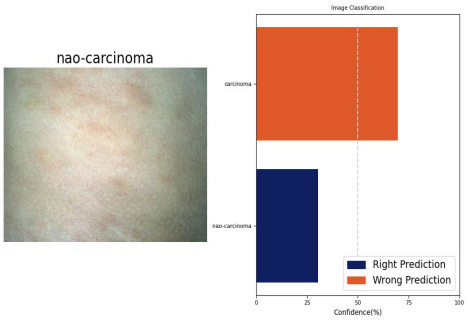
name: image_2833.jpg



Incorrect Prediction

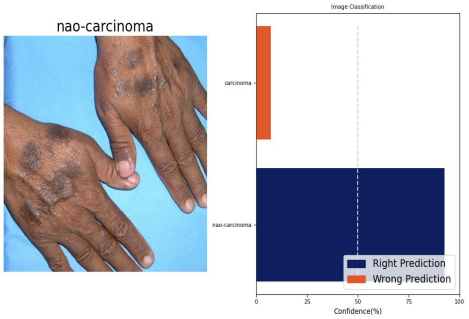
name: image_3755.jpg

pred



Correct Prediction

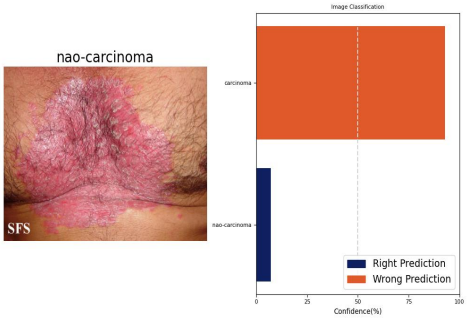
name: image_951.jpg



Incorrect Prediction

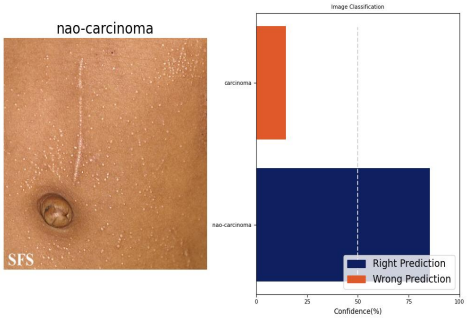
name: image_12898.jpg

pred

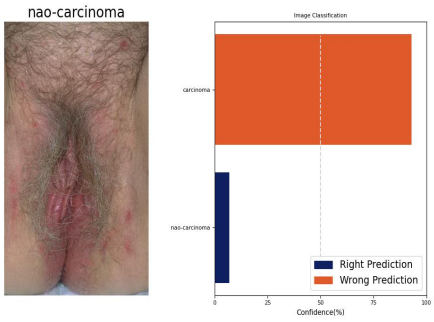


Correct Prediction

name: image_15386.jpg



Incorrect Prediction

name: image_1052.jpg

pred