Supplementary Tables:

Highly accurate and precise automated cup-to-disc ratio quantification for glaucoma screening

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Table S1: *Summary of the data block and batch transform parameters for classification and regression tasks.*

i). Data Block:

Parameter	Classification Task	Regression Task
blocks	(ImageBlock, CategoryBlock)	(ImageBlock, RegressionBlock(n_out=1))
get_items	get_image_files	-
splitter	RandomSplitter(valid_pct=0.2)	RandomSplitter(valid_pct=0.2)
get_x	-	get_x
get_y	lambda x: str(parent_label(x))	get_y
item_tfms	Resize (512)	Resize (512)

ii). Batch Transforms

Transformation	Classification Task	Regression Task
aug_transforms	size=224, min_scale=0.75, max_lighting=0.05, do_flip=True, flip_vert=False, max_rotate=15, max_warp=0.0, p_affine=0.8, max_zoom=0.1, p_lighting=0.8	size=224, min_scale=0.75, max_lighting=0.1, do_flip=True, flip_vert=False, max_rotate=15, max_warp=0.1, p_affine=0.8, max_zoom=0.15, p_lighting=0.8
Resize	224, 224	224, 224
Normalize	Normalize.from_stats(*imagenet_stats)	Normalize.from_stats(*imagenet_stats)

Table S2: *The conversion of regression points into classification metrics utilizing variable thresholds.*

Threshold Tolerance (+/-)	Accuracy (%)
0.05	54.06
0.10	85.18
0.15	96.89
0.2	99.20

Table S3: *External validation on publicly available datasets for glaucoma screening at various cut-off thresholds for glaucoma.*

Dataset	Number of Images (Healthy=H, Glaucoma=G)	Cut-off Threshold	Performance Metrics (%)			Predicted ungradable Images	Time Taken (seconds)
			Accuracy	Sensitivity	Specificity		
EyePACS	H=98,172, G=3270	0.5	61.05	93.28	60.00	955	13251.07
Drishti-GS	H=31, G=70	0.5	84.16	90.00	70.97	0	35.63
EyePACS	H=98,172, G=3270	0.6	82.49	72.02	82.83	955	26789.02
Drishti-GS	H=31, G=70	0.6	79.21	78.87	80.65	0	47.37
EyePACS	H=98,172, G=3270	0.7	94.92	30.64	97.01	955	27177.49
Drishti-GS	H=31, G=70	0.7	64.36	50.00	96.77	0	35.46