

**Table S1.** Diagnostic performance for individual detection of referable DR and AMD of RetCAD v.1.3.0 and observers compared with reference standard in the DR-AMD dataset.

		RetCAD		Obs. 1		Obs. 2		Obs. 3		Obs. 4	
<b>DR (527 images)</b>		<b>R</b>	<b>NR</b>	<b>R</b>	<b>NR</b>	<b>R</b>	<b>NR</b>	<b>R</b>	<b>NR</b>	<b>R</b>	<b>NR</b>
<b>RS</b>	<b>R</b>	98	10	59	49	64	44	81	27	65	43
	<b>NR</b>	38	381	6	413	10	409	13	406	8	411
		<b>SE (%)</b>		91.7		54.6		59.3		75.0	
		<b>(95% CI)</b>		(85.3-98.0)		(40.4-67.3)		(45.6-72.1)		(63.2-86.4)	
		<b>SP (%)</b>		90.9		98.6		97.6		96.9	
		<b>(95% CI)</b>		(86.7-96.7)		(96.7-100.0)		(95.4-99.5)		(94.4-99.0)	
<b>AMD (489 images)</b>		<b>R</b>	<b>NR</b>	<b>R</b>	<b>NR</b>	<b>R</b>	<b>NR</b>	<b>R</b>	<b>NR</b>	<b>R</b>	<b>NR</b>
<b>RS</b>	<b>R</b>	61	9	57	13	39	31	60	10	58	12
	<b>NR</b>	33	386	18	401	5	414	15	404	21	398
		<b>SE (%)</b>		88.6		81.4		55.7		85.7	
		<b>(95% CI)</b>		(83.8-100.0)		(66.7-94.3)		(39.0-72.4)		(73.3-96.8)	
		<b>SP (%)</b>		92.1		95.7		98.8		96.4	
		<b>(95% CI)</b>		(84.3-95.2)		(92.9-98.1)		(97.1-100.0)		(93.7-98.6)	

For individual detection of referable DR: 527 images with referable DR and control cases. For individual detection of referable AMD: 489 images with referable AMD and control cases.

Abbreviations: DR, Diabetic retinopathy; AMD, Age-related macular degeneration; RS, Reference standard; Obs., Observer; R, Referable; NR, Non-referable; C, Control; SE, Sensitivity; SP, Specificity; CI, Confidence interval.