

Supplementary Table S9. Secondary Analyses at a patient level (all patients included)

Results	Reference standard	Diagnostic parameter	n/N	Estimate (95% CI)	
SECA2A	Ophthalmic graders referral ^a for PDR based on ultra-wide field fundus images + Ophthalmic graders referral for DME based on SD-OCT images	Ophthalmologist face-to-face clinical evaluation using slit-lamp	Sensitivity (%)	258/270	96% (92–97%)
		biomicroscopy to assess active PDR and	Specificity (%)	41/124	33% (25–42%)
		Ophthalmologist face-to-face clinical evaluation using slit-lamp	Positive likelihood ratio	..	1.43 (1.26–1.62)
		biomicroscopy with the addition of SD-OCT scans to assess active DME in either eye	Negative likelihood ratio	..	0.13 (0.07–0.25)
	Ophthalmic graders referral for PDR based on 7-field ETDRS fundus images + Ophthalmic graders referral for DME based on SD-OCT images	Ophthalmologist face-to-face clinical evaluation using slit-lamp	Sensitivity (%)	253/266	95% (92–97%)
		biomicroscopy to assess active PDR and	Specificity (%)	27/124	22% (15–30%)
		Ophthalmologist face-to-face clinical evaluation using slit-lamp	Positive likelihood ratio	..	1.22 (1.10–1.34)
		biomicroscopy with the addition of SD-OCT scans to assess active DME in either eye	Negative likelihood ratio	..	0.22 (0.12–0.42)
Additional 4	Ophthalmic graders identified active PDR based on ultra-wide field fundus images + Ophthalmic graders identified active DME based on SD-OCT images	Ophthalmologist face-to-face clinical evaluation using slit-lamp	Sensitivity (%)	245/263	93% (89–96%)
		biomicroscopy to assess active PDR and	Specificity (%)	56/117	48% (39–57%)
		Ophthalmologist face-to-face clinical evaluation using slit-lamp	Positive likelihood ratio	..	1.79 (1.50–2.13)
		biomicroscopy with the addition of SD-OCT scans to assess active DME in either eye	Negative likelihood ratio	..	0.14 (0.09–0.23)

	Ophthalmic graders identified active PDR based on 7-field ETDRS fundus images + Ophthalmic graders identified active DME based on SD-OCT images	Ophthalmologist face-to-face clinical evaluation using slit-lamp biomicroscopy to assess active PDR and Ophthalmologist face-to-face clinical evaluation using slit-lamp biomicroscopy with the addition of SD-OCT scans to assess active DME in either eye	Sensitivity (%)	242/260	93% (89–96%)
			Specificity (%)	45/117	38% (30–48%)
			Positive likelihood ratio	..	1.51 (1.31–1.75)
			Negative likelihood ratio	..	0.18 (0.11–0.30)
SECA2B	Ophthalmic graders referral for PDR based on ultra-wide field fundus images + Ophthalmic graders referral for DME based on SD-OCT images + Visual Acuity	Ophthalmologist face-to-face clinical evaluation using slit-lamp biomicroscopy to assess active PDR and Ophthalmologist face-to-face clinical evaluation using slit-lamp biomicroscopy with the addition of SD-OCT scans to assess active DME in either eye	Sensitivity (%)	263/271	97% (94–99%)
			Specificity (%)	26/124	21% (15–29%)
			Positive likelihood ratio	..	1.23 (1.12–1.35)
			Negative likelihood ratio	..	0.14 (0.07–0.30)
	Ophthalmic graders referral for PDR based on 7-field ETDRS fundus images + Ophthalmic graders referral for DME based on SD-OCT images + Visual Acuity	Ophthalmologist face-to-face clinical evaluation using slit-lamp biomicroscopy to assess active PDR and Ophthalmologist face-to-face clinical evaluation using slit-lamp biomicroscopy with the addition of SD-OCT scans to assess active DME in either eye	Sensitivity (%)	262/270	97% (94–98%)
			Specificity (%)	20/124	16% (11–24%)
			Positive likelihood ratio	..	1.16 (1.07–1.25)
			Negative likelihood ratio	..	0.18 (0.08–0.41)
SECA2C	Ophthalmic graders referral for PDR	Ophthalmologist face-to-face clinical	Sensitivity (%)	174/178	98% (94–99%)
			Specificity (%)	30/217	14% (10–19%)

based on ultra-wide field fundus images + Ophthalmic graders referral for DME based on SD-OCT images + Visual Acuity	evaluation using slit-lamp biomicroscopy to assess active PDR and Ophthalmologist face-to-face clinical evaluation using slit-lamp biomicroscopy with the addition of SD-OCT scans to assess active DME in either eye requiring treatment	Positive likelihood ratio	..	1.13 (1.07–1.20)
		Negative likelihood ratio	..	0.16 (0.06–0.45)
Ophthalmic graders referral for PDR based on 7-field ETDRS fundus images + Ophthalmic graders referral for DME based on SD-OCT images + Visual Acuity	Ophthalmologist face-to-face clinical evaluation using slit-lamp biomicroscopy to assess active PDR and Ophthalmologist face-to-face clinical evaluation using slit-lamp biomicroscopy with the addition of SD-OCT scans to assess active DME in either eye requiring treatment	Sensitivity (%)	174/177	98% (95–99%)
		Specificity (%)	25/217	12% (8–16%)
		Positive likelihood ratio	..	1.11 (1.06–1.17)
		Negative likelihood ratio	..	0.15 (0.05–0.48)

Note: SECA = secondary analysis; SD-OCT = spectral domain optical coherence tomography; DME = Diabetic macular edema; PDR = proliferative diabetic retinopathy; ETDRS = Early treatment diabetic retinopathy study.

Reference standard for DME = Ophthalmologist face-to-face clinical evaluation using slit-lamp biomicroscopy with the addition of SD-OCT scans; reference standard for PDR = Ophthalmologist face-to-face clinical evaluation using slit-lamp biomicroscopy; Visual Acuity = If visual acuity <6/12 it was considered the patient should be referred to the ophthalmologist.

^a grader referral for DME/PDR = “active” + “unsure” + “ungradable”