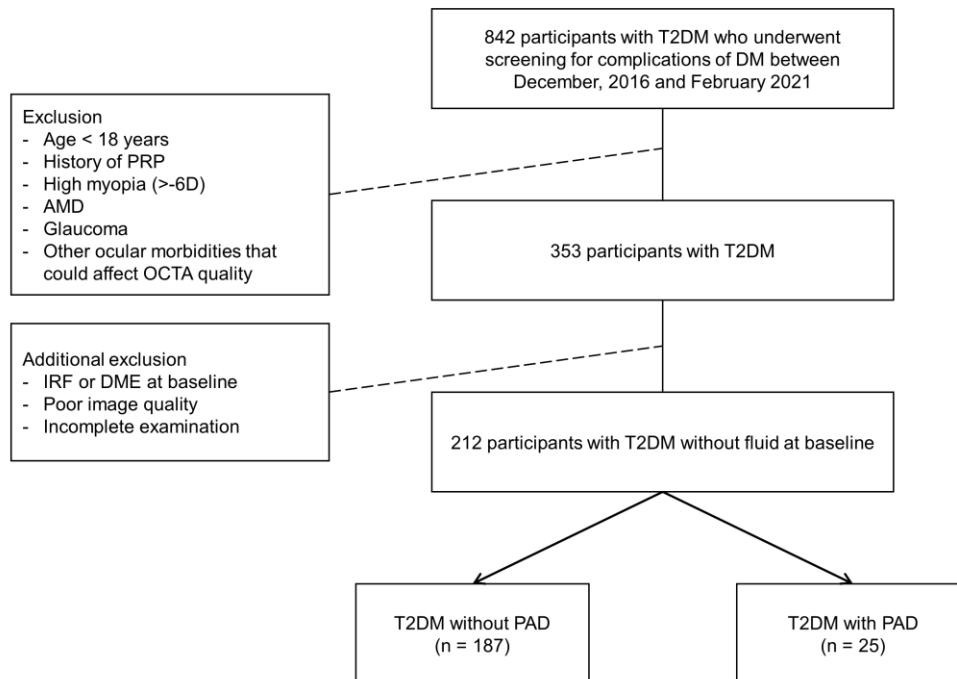
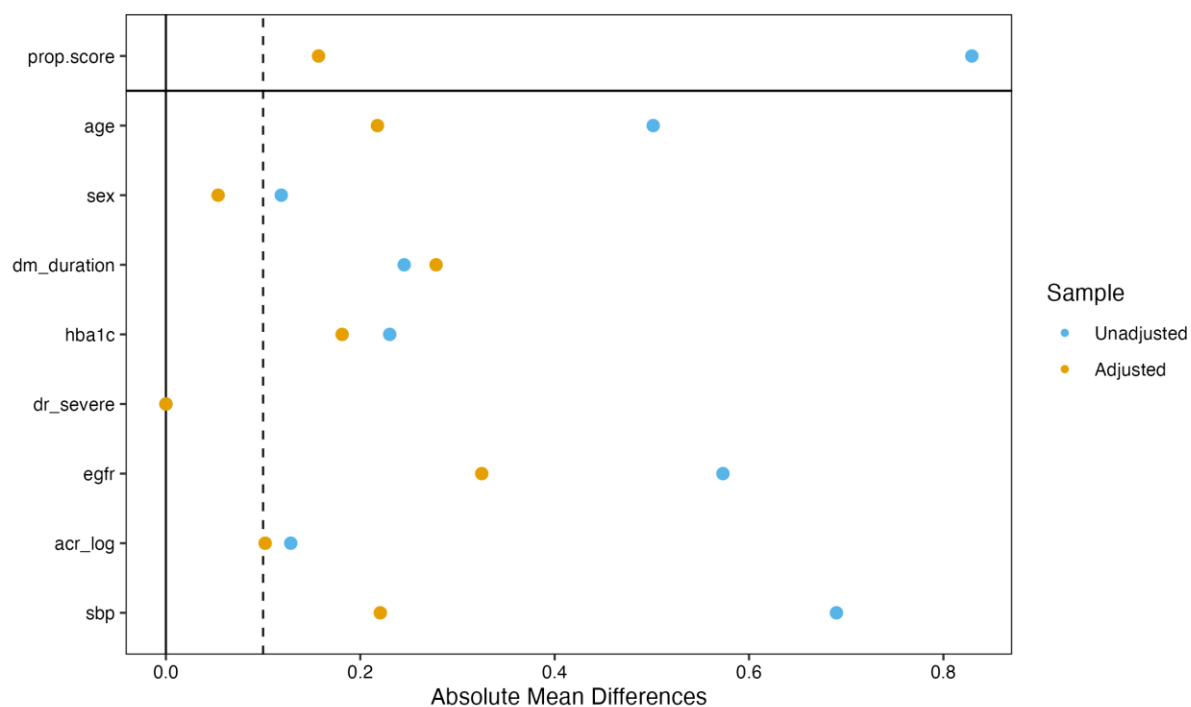


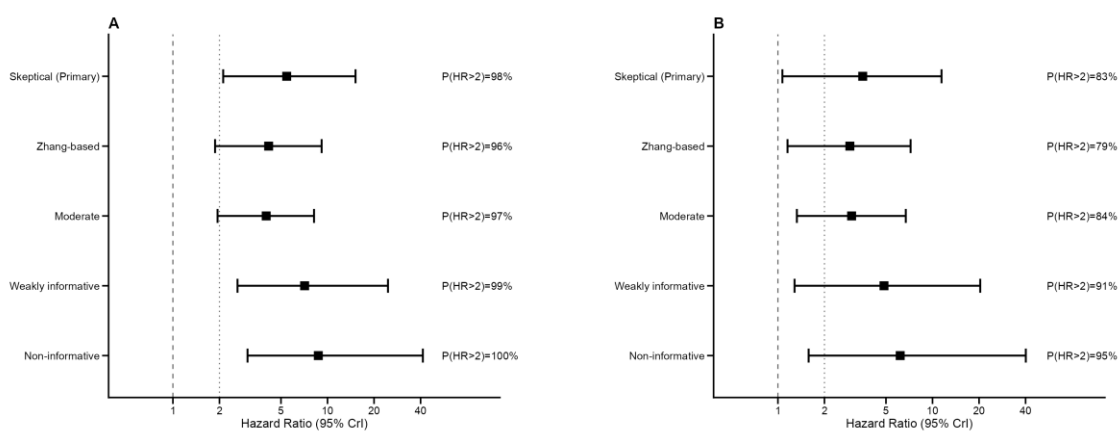
Supplementary material



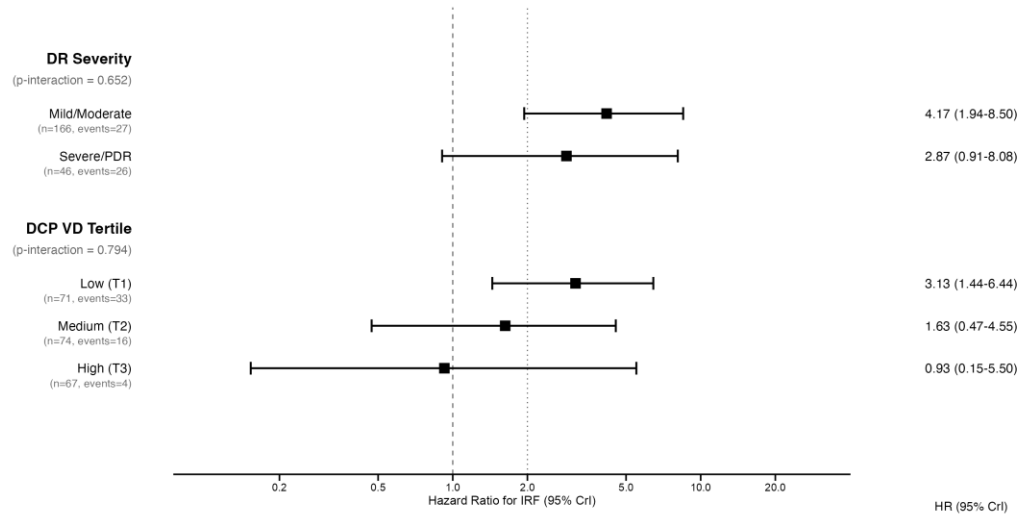
Supplementary Figure 1 Study flow chart. Patient selection for the retrospective cohort (N=212 eyes).



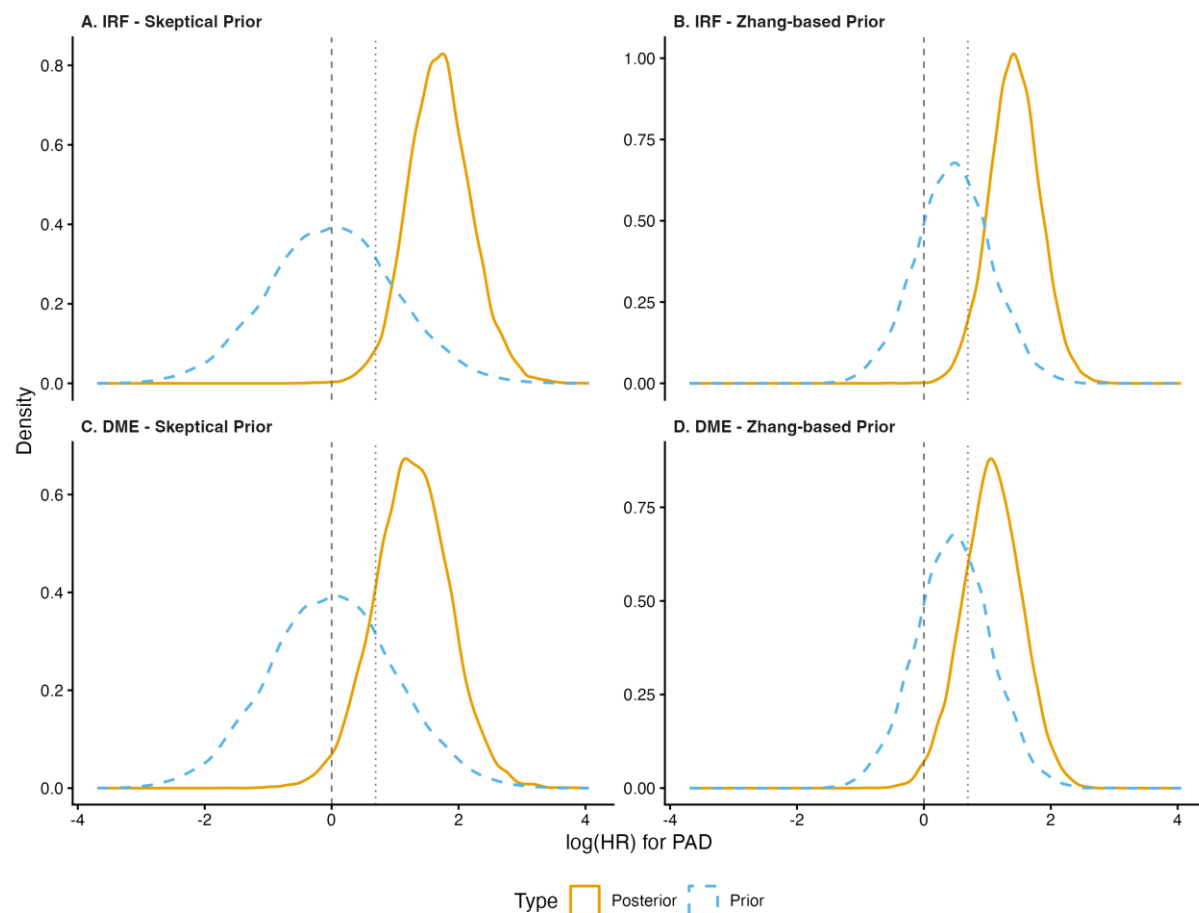
Supplementary Figure 2 IPTW covariate balance. Absolute SMD before and after weighting. Dashed line = 0.1 threshold.



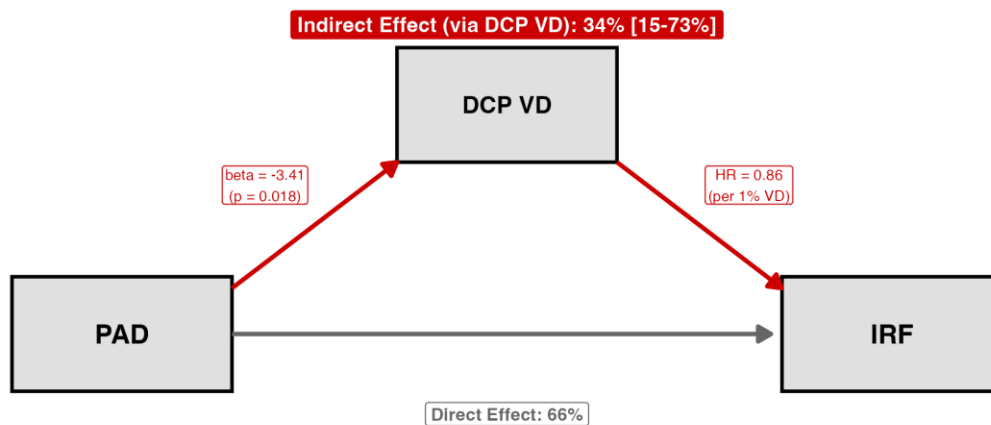
Supplementary Figure 3 Prior sensitivity analysis. Bayesian HR estimates under five priors for (A) IRF and (B) DME. $P(HR > 2)$ shown for each prior.



Supplementary Figure 4 Subgroup analysis for IRF by PAD status. Bayesian hazard ratios stratified by DR severity (p-interaction=0.652) and DCP VD tertiles (p-interaction=0.794).



Supplementary Figure 5 Posterior distributions for PAD effect. Prior (dashed) versus posterior (solid) for (A) IRF-skeptical, (B) IRF-Zhang, (C) DME-skeptical, (D) DME-Zhang. Vertical lines: $\log(\text{HR})=0$ and $\log(2)$.



Supplementary Figure 6 Mediation analysis of PAD effect on IRF. DCP VD mediated 34% [95% CI: 15%–73%] of the total effect; 66% remained direct.

Supplementary Table 1 Descriptive subgroup summaries by age group, sex, and baseline diabetic retinopathy stage

Panel A. Age and sex summaries

Category	Subgroup	Eyes, n (% of 212)	PAD, n (%)	IRF, n (%)	DME, n (%)
Overall	All eyes	212 (100.0%)	25 (11.8%)	53 (25.0%)	15 (7.1%)
Age group	<50	45 (21.2%)	3 (6.7%)	12 (26.7%)	4 (8.9%)
Age group	50-59	69 (32.5%)	3 (4.3%)	11 (15.9%)	4 (5.8%)
Age group	60-69	77 (36.3%)	17 (22.1%)	25 (32.5%)	6 (7.8%)
Age group	>=70	21 (9.9%)	2 (9.5%)	5 (23.8%)	1 (4.8%)
Sex	Female	73 (34.4%)	6 (8.2%)	24 (32.9%)	6 (8.2%)
Sex	Male	139 (65.6%)	19 (13.7%)	29 (20.9%)	9 (6.5%)

Panel B. Baseline diabetic retinopathy stage and retinal outcomes

Baseline DR stage	Eyes, n (% of 212)	IRF, n (%)	DME, n (%)
No DR	25 (11.8%)	2 (8.0%)	1 (4.0%)
Mild NPDR	94 (44.3%)	11 (11.7%)	1 (1.1%)
Moderate NPDR	47 (22.2%)	14 (29.8%)	3 (6.4%)
Severe NPDR	36 (17.0%)	19 (52.8%)	5 (13.9%)
PDR	10 (4.7%)	7 (70.0%)	5 (50.0%)

Abbreviations: DR, diabetic retinopathy; NPDR, non-proliferative diabetic retinopathy; PDR, proliferative diabetic retinopathy; PAD, peripheral arterial disease; IRF, intraretinal fluid; DME, diabetic macular edema. Percentages are within each subgroup. PAD by baseline DR stage is not repeated because Table 1 summarizes baseline DR by PAD. Counts are eye-level; patient-level dependence was handled analytically.

Supplementary Table 2 Comparison of clinical parameters of patients with type 2 diabetes mellitus developing diabetic macular edema within 6 months

	Patients with T2DM		<i>P-value</i>
	No DME (< 6 months) (N=196)	DME (< 6 months) (N=15)	
Age, yrs	57.6 $\pm$ 9.4	55.3 $\pm$ 12.8	0.364
Sex, male (%)	132 (67.3%)	7 (43.8%)	0.102
Smoking status, n (%)			0.267
Never	104 (53.1%)	9 (56.2%)	
Current	47 (24.0%)	4 (25.0%)	
Ex-smoker	45 (23.0%)	3 (18.8%)	
Smoking, pack-yrs	10.1 $\pm$ 15.0	9.2 $\pm$ 14.7	0.839
Duration of DM, yrs	17.7 $\pm$ 8.1	16.4 $\pm$ 7.7	0.530
Medication			0.717
Insulin only	1 (0.5%)	0 (0.0%)	
OHA	128 (65.3%)	12 (75.0%)	
Insulin + OHA	67 (34.2%)	4 (25.0%)	
HTN, n (%)	89 (45.4%)	5 (31.2%)	0.404
DR stage			0.001
No DR	23 (11.7%)	2 (12.5%)	
Mild NPDR	94 (48.0%)	0 (0.0%)	
Moderate NPDR	41 (20.9%)	6 (37.5%)	
Severe NPDR	31 (15.8%)	5 (31.2%)	
PDR	7 (3.6%)	3 (18.8%)	
Presence of PAD, n (%)	19 (9.7%)	6 (37.5%)	0.005
Biological parameters			
HbA1c	7.8 $\pm$ 1.2	7.7 $\pm$ 1.0	0.953

Fasting glucose	146.8 ± 48.1	144.8 ± 44.0	0.871
Total_cholesterol	144.7 ± 34.4	140.1 ± 39.4	0.607
Triglyceride	133.6 ± 75.5	112.1 ± 43.1	0.087
HDLc	44.9 ± 11.3	43.0 ± 7.2	0.348
LDLc	90.4 ± 28.3	89.8 ± 31.9	0.928
Creatinine	1.0 ± 0.8	0.9 ± 0.3	0.221
eGFR	81.2 ± 21.6	81.7 ± 22.2	0.932
Clinical parameters			
BMI, kg/m ²	25.6 ± 3.6	26.8 ± 5.0	0.364
SBP, mmHg	132.9 ± 18.1	139.1 ± 19.8	0.197
DBP, mmHg	75.0 ± 10.5	80.6 ± 15.1	0.168
Visual acuity, logMAR	0.07 ± 0.09	0.07 ± 0.09	0.886
OCTA parameters			
SCP fovea VD, %	15.2 ± 4.8	14.7 ± 4.3	0.685
SCP parafoveal VD, %	46.3 ± 3.8	43.8 ± 4.6	0.015
DCP fovea VD, %	28.4 ± 6.2	27.3 ± 6.5	0.507
DCP parafoveal VD, %	49.5 ± 3.9	47.7 ± 3.6	0.079
Signal strength	68.3 ± 6.7	66.7 ± 9.5	0.521
OCT parameters			
CFT, μm	250.2 ± 21.8	260.2 ± 37.2	0.305
PFT, μm	314.9 ± 17.1	322.2 ± 18.7	0.103
Inner retinal CFT, μm	69.7 ± 12.5	75.5 ± 16.3	0.081
Inner retinal PFT, μm	127.6 ± 10.0	130.8 ± 11.1	0.226

CFT = central foveal thickness; DCP = deep capillary plexus, DM = diabetes; DR = diabetic retinopathy; FAZ = foveal avascular zone; HTN = hypertension; logMAR = logarithm of the minimum angle of resolution; NPDR = non-proliferative diabetic retinopathy; OCTA = optical coherence tomography angiography; PAD = peripheral arterial disease; PDR = proliferative diabetic retinopathy; PFT = parafoveal thickness; SCP = superficial capillary plexus; VD = vascular density

