

Supplementary Materials

Artificial Intelligence-Based Uveitis Diagnosis Through Retinal Vasculature Analysis:

A Paradigm Shift in Ocular Tuberculosis

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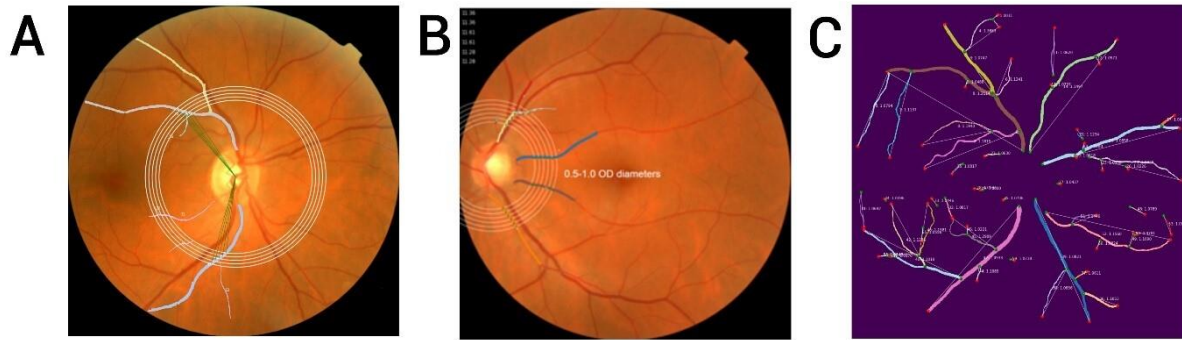
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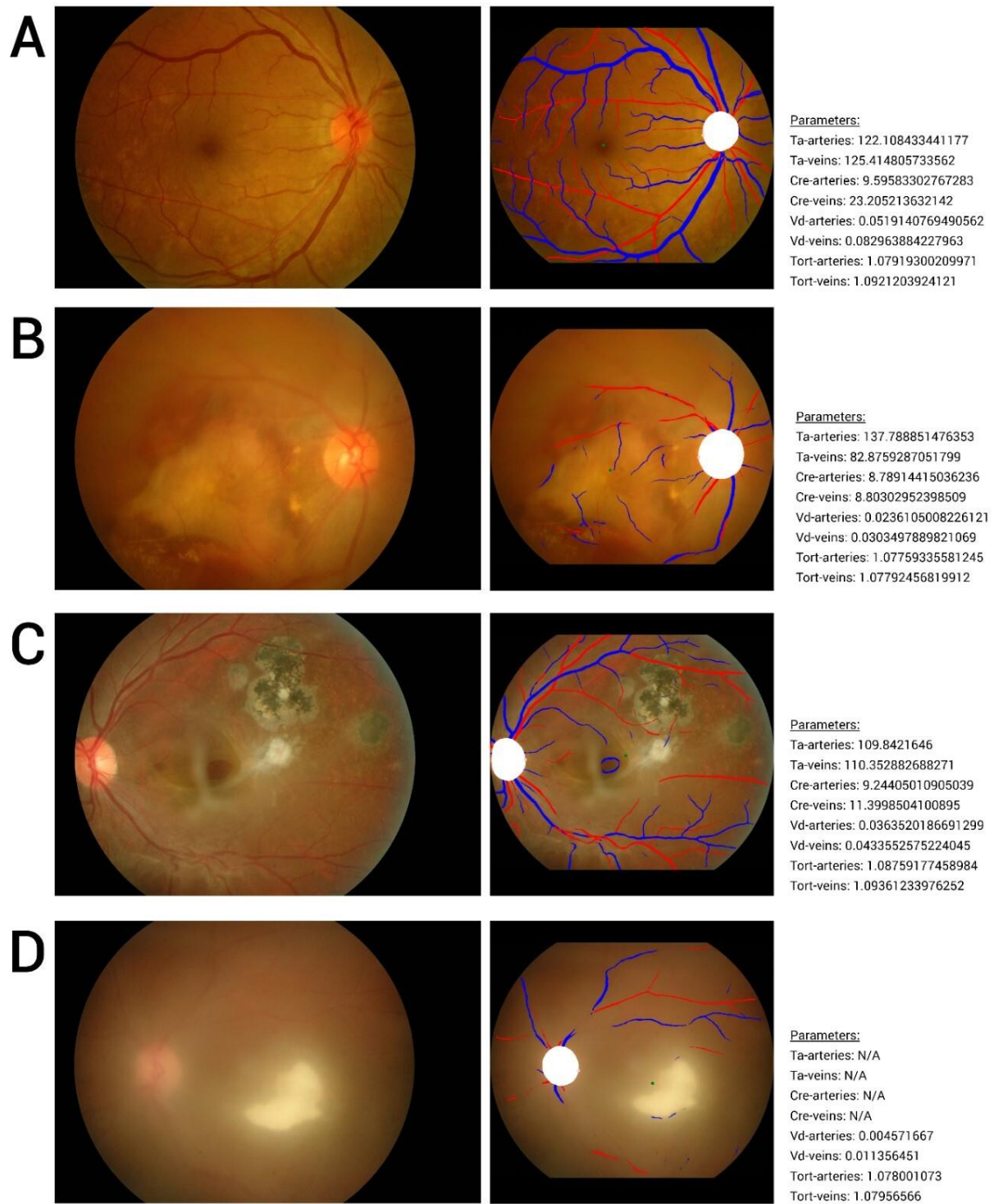
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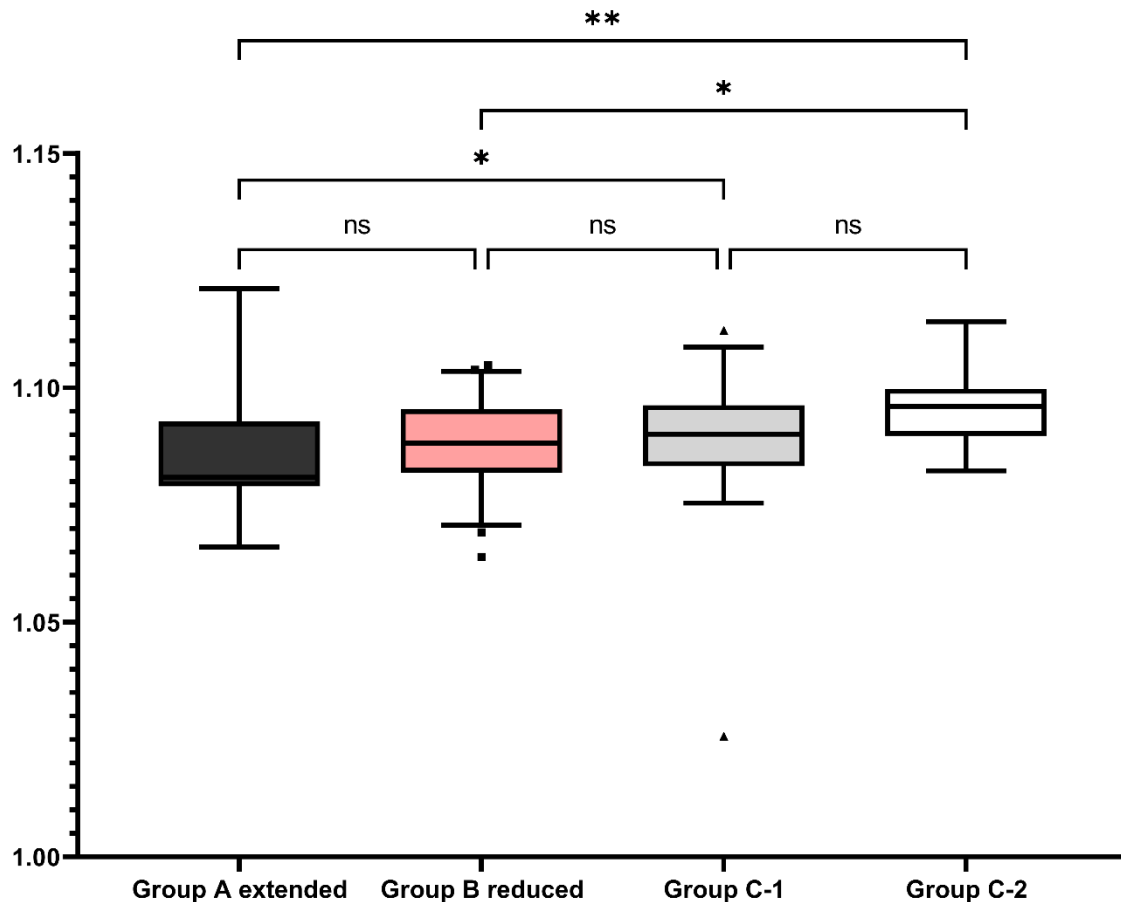


Supplementary Figure 1. Process of retinal vasculature parameters quantification. **A.** Main temporal angle (Ta), **B.** central retinal equivalent (Cre), and **C.** Tortuosity (Tort).
OD = optic disk



Supplementary Figure 2. Example of retinal vasculature annotation and processing in selected cases with different media clarity. Fundus photographs of **(A)** ocular tuberculosis (TB) showing serpiginous-like choroiditis without vitreous haze, **(B)** Ocular TB showing choroidal granuloma with vitreous haze or vitritis, **(C)** Ocular toxoplasmosis with active retina-choroidal lesions with relatively clear vitreous, and **(D)** Ocular toxoplasmosis uveitis with significant vitreous haze or vitritis.

Color notes: red for arteries and blue for veins. Ta = main temporal angle, Cre = central retinal equivalent, Vd = vessel density, Tort = tortuosity, N/A = not applicable



Supplementary Figure 3. Vein tortuosity parameter following reclassification. Extended group A consists additional four eyes originally part of group B.
P values * <0.05 , ** <0.01 , *** <0.001 , **** <0.0001 , ns = not significant

Supplementary Table 1. Breakdown of ocular characteristics in extended* Group A

	With active systemic TB N,%	Without active systemic TB but PCR positive N,%	Without active systemic TB or PCR positive but fulfilled the SUN criteria* N,%
<u>N eyes</u>	12	1	4
Anatomical subtype of uveitis			
Anterior uveitis	0 (0%)	0 (0%)	1 (25%)
Intermediate uveitis	0 (0%)	0 (0%)	0 (0%)
Anterior and intermediate uveitis	0 (0%)	0 (0%)	0 (0%)
Posterior uveitis	7 (58%)	0 (0%)	3 (75%)
Panuveitis	5 (42%)	1 (100%)	0 (0%)
Scleritis/sclerouveitis	0 (0%)	0 (0%)	0 (0%)
Details of clinical manifestation			
Presence of iris nodule	2 (17%)	0 (0%)	1 (25%)
Choroidal granuloma/ tuberculoma	2 (17%)	1 (100%)	0 (0%)
Serpiginous-like choroiditis	1 (8%)	0 (0%)	0 (0%)
Occlusive retinal vasculitis	0 (0%)	0 (0%)	3 (75%)
Others	7 (58%)	0(0%)	0(0%)

PCR = polymerase chain reaction from ocular fluid, SUN = the Standardized Uveitis Nomenclature, TB = tuberculosis

*This extended group A incorporates four eyes that that were originally part of group B