Table E1: Summary of clinical findings in patients with positive QuantiFERON-TB Gold In-Tube testing and negative chest imaging for pulmonary tuberculosis

Case	Age	Ethnicity	Gender	Pertinent Past Medical History	Neuro-ophthalmic indication for testing	Occupation / TB exposure risk	Pertinent non TB laboratory Tests*	Imaging	Final diagnosis, Treatment, and Outcome
1	34	Hispanic	F	Type II DM	Unexplained Painless, symmetric loss of vision OU for 8 years, dyschromatopsia and OU optic atrophy	Teacher in El Paso, Texas Claims TB exposure Denies prior TB disease		Chest X-ray: negative MRI of brain, orbits 1 year prior: normal MRI of the brain, orbits 2 years prior: possible pituitary microadenoma	Diagnosis: OU optic atrophy from previous pituitary adenoma No treatment provided
2	42	*Not available in records*	M	BCG vaccinated Past positive PPDs; Past negative Chest X-rays	Slow progressive loss of vision and visual disturbance on the rightwith optic atrophy OD	Nurse Denies prior TB disease	Abnormal: High ACE (71) with no other evidence for sarcoidosis	Chest X-ray: negative MRI: optic atrophy OD but no enhancement	Diagnosis: optic atrophy OD INH prophylaxis for 9 months Vision stable with glasses on follow up, no development of active TB
3	75	Chinese	M	Insulin dependent diabetes; ESRD; coronary artery disease; hypertension 50 pack year history of smoking	Painless loss of central vision OU for 1.5 years with optic atrophy OU.	Retired cook Immigrated to the US 39 years prior Denies prior TB disease	ESR (41) and CRP (1.66) with no evidence of giant cell arteritis otherwise	Chest X-ray: negative MRI without contrast negative.	Diagnosis: optic atrophy OU likely due to presumed NAION secondary to vasculopathic risk factors and dialysis Borderline positive PPD with PCP Declined LP No TB treatment given
4	61	African American		Sarcoidosis treated with steroids (41 years prior); Type II DM without background retinopathy; Secondary glaucoma and treated uveitis	Vision loss OS for 11 months immediately following cataract extraction with optic atrophy OS.	Insurance broker and risk manager Denies TB exposure or disease	Normal: Lyme, RPR, FTA-ABS	Chest X-ray: negative MRI brain: T2 change in left optic nerve without active enhancement	Diagnosis: optic atrophy OS likely secondary to prior sarcoidosis or NAION OS.
5	66	Caucasian	M	Bladder cancer 10 years prior, in remission; hypertension; dyslipidemia Received BCG instillations in the urinary bladder, last dose 1 year prior Atorvastatin, Lansoprazole, Fenofibrate, Losartan	Intermittent, stabbing 8/10 retro-orbital left eye pain for 1 month with left ON	Construction worker; prior chemical plant worker Denies prior TB disease	Abnormal: Elevated creatinine (1.5), low eGFR (47), High glucose (115), high ACE (74) Normal: ESR, CRP, FTA-ABS, Liver panel, BNP, coagulation studies, troponin. HgA1C of 6 LP: elevated protein, normal glucose,	CT chest: unremarkable CT brain without contrast: normal MRI FNO: T2 hyperintensity in orbital optic nerves bilaterally MRI FNO 7 months later on Follow up: mild enhancement of L optic nerve, with new loss of volume of intracranial segment of L optic nerve	Diagnosis: optic neuritis OS Patient deemed low-risk for LTBI by PCP; elected for 6 months INH Prescribed steroids for management of ON

							normal WBC/RBC count, negative VDRL CSF cultures and PCR negative (CMV, VZV, HSV, AFB, fungal)		
6	37	Hispanic	M	Neuromyelitis Optica (NMO) with recurrent optic neuritis OD; CN III/VI palsy OD; chronic L hemiparesis Rituximab injections	NMO exacerbation with monoparesis and hypoesthesia in Right lower extremity; bowel retention; bladder incontinence	None noted	Abnormal: NMO blood test positive, , Negative CSF of the PCR for *Mtb*	Chest X-ray: negative (x2) Chest CT: negative MRI orbits: resolution of cisternal and cannalicular left optic nerve enhancement with normal optic nerves MRI: without any acute or new intracranial abnormalities	Diagnosis: NMO exacerbation with optic neuropathy OU Started on INH for 9 months for presumed LTBI given the need for immuno-suppression for NMO with azathioprine and rituximab
7	61	Indian	F	Uveitis (25 years); hypertension; Type II DM; hyperlipidemia, recurrent UTI; cataracts BCG vaccinated	Uveitis OU and retinal vasculitis	Immigrated from India >40 years ago Denies prior history of TB or LTBI	3 AFB sputum cultures Normal WBC = 8.5 ACE, lysozyme, FTA-ABS, HLA-B27, Toxo IgG and IgM negative	CT of chest (2): reticulonodular and ground glass pulmonary opacities primarily in the right middle lobe and lingual, concerning for interstitial lung disease	OU uveitis and retinitis Started on INH for LTBI, with no changes in clinical findings or chest imaging over 9 months
8	29	African American	F	Recurrent uveitis (12 years); Idiopathic Intracranial Hypertension (6 months) Had previously not tolerated oral prednisone therapy well; intended to start infliximab as a steroid sparing agent Topiramate, Gabapentin, Nortriptyline for headaches	Headache, OD>OS panuveitis, and right CN III palsy	None noted	Abnormal: elevated ESR (66); elevated high sensitivity CRP (1.16) LP: elevated protein and glucose; no AFB present; PCR of the CSF negative; WBC count 10.4	Chest X-Ray: negative High-resolution chest CT: normal MRA brain: enhancement of right CN III with pontine and midbrain lesions MRA head: no changes from MRI brain; new enhancement of uvea OD with improved enhancement of uvea OS, consistent with uveitis history	Diagnosis: Neuro-sarcoidosis Started on INH No clinical suggestion that the ocular findings were related to TB
9	40	African American	F	Acute onset vision loss (1 year prior) due to optic atrophy OS Bilateral numbness ascending to the thighs	Loss of vision OS 1 year prior, with stable visual acuity since initial loss	Denies prior TB exposure, treatment, or disease	Normal: ACE, Anti-dsDNA, Lyme, ANA, Vit B6 and B12 WBC = 12	Chest X-ray: negative MRI brain w/wo contrast: normal EMG: normal	Diagnosis: optic atrophy OS with presumed ON. Prescribed INH prophylaxis

10	29	African American	M	No significant PMH Family history of sickle cell anemia No current medications	Painful loss of vision for 10 days in the left eye with optic neuropathy	Oil field worker in South Texas Denies prior TB disease	LP: 12 cm opening pressure; normal glucose, protein, ACE; negative VDRL. Normal: ANCA, ACE, RPR, Bartonella	Chest X-ray: negative MRI : normal	Diagnosis: ON OS
11	54	Indian	F	Diplopia (2 years prior); Bell's palsy (1 year prior); Hypercholesterolemia; Rheumatic fever (44 years prior) Ptosis and diplopia have resolved per patient after steroid treatment (Prednisone) No current medications	Pain over right eye and scalp tenderness; Numbness over right frontal lobe	No occupation noted Denies prior TB disease	Normal: Thyroid panel and antibodies, ANA, RF, myasthenia panel, B12, folate, ANCA, ACE, BUN, Creatinine, RPR, FTA-ABS, HgA1c, ESR (8)	Chest X-ray: negative MTRA: left superior hypophyseal ICA aneurysm with probable 1.5 mm right superior hypophyseal ICA aneurysm with no change compared to prior study MRA neck: high grade stenosis of left vertebral artery CTA: negative EMG/NCV: Abnormal: significant decremental response suggesting Nm junction defect affecting facial nerve, but not limbs	Diagnosis: Likely Ophthalmoplegic migraine Recommended migraine treatment followed by propranolol prophylaxis and follow up
12	62	Ghanaian	M	Mild exposure to cassava root >35 years prior Illicit alcohol consumption including moonshine 40 years prior, with no onset of vision loss during that time No current medications	Cataract and decreased vision OD for 5 years with optic atrophy OU	Works as an engineer in research Immigrated from Ghana 35 years prior Denies prior TB disease	Abnormal: Absolute Eosinophilia (508) Normal: ACE, B12, Folate, RPR	Chest X ray: negative MRI OU optic atrophy and chiasm atrophy	Diagnosis: Optic Atrophy OU

* excluding positive QuantiFERON testing (see Table 3)

ACE: Angiotensin Converting Enzyme
AFB: Acid-Fast Bacilli
ANA: Antinuclear antibody
ANCA: Anti-neutrophil cytoplasmic antibody
Anti-dsDNA: Anti-double-stranded-DNA antibody
BCG: Bacillus Calmette–Guérin
BNP: B-type Natriuretic Peptide
BUN: Blood urea nitrogen
CMV: Cytomegalovirus
CRP: C-Reactive Protein
CSF: Cerebrospinal fluid
CT: Computed tomography
DM: Diabetes Mellitus
EMG: electromyogram
ESR: Erythrocyte Sedimentation Rate
ESRD: End stage renal disease
FTA-ABS: Fluorescent treponemal antibody absorption
HgA1c: Hemoglobin A1c
HSV: Herpes Simplex Virus
ICA: Internal carotid artery
INH: Isoniazid
LP: Lumbar puncture
LTBI: Latent tuberculosis infection
MRA: Magnetic Resonance Angiography
MRI: Magnetic Resonance Imaging
MRI FNO: Magnetic Resonance Imaging of the Face, Neck, and Orbit
Mtb: *Mycobacterium tuberculosis*
NAION: Non-Arteritic Anterior Ischemic Optic Neuropathy
NCV: Nerve conduction velocity
Nm: Neuromuscular
OD: Oculus dexter (Right eye)
ON: Optic neuritis
OS: Oculus sinister (Left eye)
OU: Oculus uterque (both eyes)
PCP: Primary Care Physician
PCR: Polymerase Chain Reaction
PPD: Purified Protein Derivative (TB skin test)
RBC: Red blood cell
RPR: Rapid plasma reagin
RF: Rheumatoid factor
TB: Tuberculosis
US: United States
UTI: Urinary tract infection
VDRL: Venereal Disease Research Laboratory test
VZV: Varicella Zoster Virus
WBC: White blood cell