DIAGNOSTIC CHECKLIST

	Assessment	Findings Suggestive of Plasminogen Deficiency Type 1 (PLGD-1)	Comments
☐	Patient History / Clinical Evaluation	• Recurrent ear infections; hearing loss • Gum growths/lesions • History of eyelid growths (pseudomembranous lesions)1; history of frequent eye infections; • Asthma; hoarseness of voice; recurrent coughing; trouble breathing; recurrent pneumonia • GI symptoms: recurrent stomach ulcers, IBD • Poor wound healing; juvenile colloid milia • Symptoms of hydrocephalus (neonates only) or diagnosis of Dandy-Walker malformation • Female dysmenorrhea or infertility of unknown cause	• PLGD-1 is the most common cause of ligneous conjunctivitis (LC)[1] • LC is the most common symptoms in PLGD-1, followed by ligneous gingivitis[1] • Other symptom locations include the ears, nose, respiratory tract, gastrointestinal tract, urinary tract, and female reproductive tract[1] • A history of, or current findings of, the symptoms listed at left should suggest evaluation for the diagnosis of PLGD-1
☐	Family medical history	Confirmed diagnosis of PLGD-1 in a first degree relative (parents, siblings)	Evaluate all siblings regardless of symptoms PLGD-1 is inherited in an autosomal recessive fashion Carriers will have lower levels of plasminogen activity, but will likely be asymptomatic Siblings may be asymptomatic but be affected
☐	Plasminogen activity functional assays 4 • Chromogenic assay • Clot lysis time	Activity level less than normal for the individual lab where test was run	Activity level ≤ 45% was used as the cut off for clinical trials, however affected patients have been noted to have levels higher than this cut off value
☐	Plasminogen antigen assays	Antigen level less than normal for the individual lab where test was run	• Antigen assays together with activity assays distinguish PLGD-1 from PLGD-2: **Activity** **Antigen** **PLGD-1** Low Low **PLGD-2** Low Normal • Patients with PLGD-1 will be symptomatic, however patients with PLGD-2 do not develop lesions and will not need treatment
☐	Molecular Genetic Test***	Mutations in PLG gene	Genetic testing **is NOT required** as part of the diagnostic evaluation for PLGD-1; there is yet no known correlation between genetic mutation and symptom development or disease severity
☐	Lesion Biopsy***	• Eroded epithelium with fibrin-rich deposits[1] • Granulation tissue[1]	Surgical interventions, including lesion biopsy, **should NOT be performed** as part of a diagnostic evaluation, as these interventions can worsen patient symptoms, cause rapid lesion recurrence after intervention, and contribute to permanent scarring or end organ damage

*** NOT Required for Diagnosis

References: 1. Schuster V, Seregard S. Ligneous conjunctivitis. Surv Ophthalmol. 2003;48(4):369-88. 2. Martin-Fernandez L, Marco P, Corrales I, et al. The unravelling of the genetic architecture of plasminogen deficiency and its relation to thrombotic disease. Sci Rep. 2016;6:39255. doi: 10.1038/srep39255. 3. Plasminogen deficiency. Indiana Hemophilia & Thrombosis Center website. https://www.ihtc.org/plasminogen-deficiency. Accessed January 30, 2022. 4.Plasminogen (PLG). DiaPharma website. https://diapharma.com/plasminogen-plg. Accessed January 30, 2022. 5.Schuster V, Hügle B, Tefs K. Plasminogen deficiency. J Thromb Haemost. 2007; 5(12):2315-22. 6. Tefs K, Gueorguieva M, Klammt J, et al. Molecular and clinical spectrum of type plasminogen deficiency: A series of 50 patients. Blood. 2006;108(9):3021-6. 7. Shapiro AD, Menegatti M, Palla R, et al. An international registry of patients with plasminogen deficiency (HISTORY). Haematologica. 2020;105(3):554-561.