Clinical criteria for the diagnosis of PTEN hamartoma tumor syndrome

Major criteria

- Breast cancer
- Endometrial cancer (epithelial)
- Thyroid cancer (follicular)
- Gastrointestinal hamartomas (including ganglioneuromas, but excluding hyperplastic polyps; ≥3)
- Lhermitte-Duclos disease (adult)
- Macrocephaly (≥97 percentile: 58 cm for females, 60 cm for males)
- Macular pigmentation of the glans penis
- Multiple mucocutaneous lesions (any of the following):
  - Multiple trichilemmomas (≥3, at least one biopsy proven)
  - Acral keratoses (≥3 palmoplantar keratotic pits and/or acral hyperkeratotic papules)
  - Mucocutaneous neuromas (≥3)
  - Oral papillomas (particularly on tongue and gingiva), multiple (≥3) OR biopsy proven OR dermatologist diagnosed

Minor criteria

- Autism spectrum disorder
- Colon cancer
- Esophageal glycogenic acanthosis (≥3)
- Lipomas (≥3)
- Mental retardation (IQ ≤ 75)
- Renal cell carcinoma
- Testicular lipomatosis
- Thyroid cancer (papillary or follicular variant of papillary)
- Thyroid structural lesions (eg, adenoma, multinodular goiter)
- Vascular anomalies (including multiple intracranial developmental venous anomalies)
## Diagnostic criteria interpretation

**In an individual:**
- Three or more major criteria, but one must include macrocephaly, Lhermitte-Duclos disease or gastrointestinal hamartomas
  - OR
  - Two major and three minor criteria

**In a family where one individual meets revised PTEN hamartoma tumor syndrome diagnostic criteria or has a PTEN mutation:**
- Any two major criteria with or without minor criteria
  - OR
  - One major criteria and two minor criteria
  - OR
  - Three minor criteria