

# Summary of the cancer surveillance protocol for individuals with *PTEN* hamartoma tumour syndrome (PHTS)

This guideline has been drawn from the best available evidence and the consensus of experts in this area, and it is regularly updated to reflect changes in evidence.

Clinicians are encouraged to follow these recommendations, facilitating evidence-based follow-up for individuals with PHTS.



**European  
Reference  
Network**

for rare or low prevalence  
complex diseases



**Network**  
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Syndromes (ERN GENTURIS)



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|                         | Surveillance                                         | Interval                                                                               | From age | Strength*                                           |
|-------------------------|------------------------------------------------------|----------------------------------------------------------------------------------------|----------|-----------------------------------------------------|
| Breast cancer           | MRI                                                  | as for <i>BRCA1</i> **                                                                 | 25       | Strong                                              |
|                         | Mammography                                          | as for <i>BRCA1</i> **                                                                 | 40 **    | Strong                                              |
|                         | Risk reducing surgery offered                        | Yes                                                                                    | 25       | Strong                                              |
| Thyroid cancer          | Ultrasound (US)                                      | Yearly, frequency decreases to every 2-3 years after 2 USs with no suspicious findings | 10-18    | Surveillance: strong, Age: weak, Interval: moderate |
| Endometrial cancer      | Ultrasound (endometrial biopsy can be considered)    | Yearly                                                                                 | 35-40    | Moderate                                            |
| Renal cancer            | Baseline imaging                                     | No further surveillance unless required by baseline outcome                            | 35-40    | Moderate                                            |
| Colorectal cancer (CRC) | Baseline colonoscopy preferably in expert centre     | No further surveillance unless required by baseline outcome or CRC family history      | 35-40    | Strong                                              |
| Skin melanoma           | Baseline skin examination by dermatologist or expert | No further surveillance unless required by baseline outcome                            | 30       | Moderate                                            |

\* This grading is based on published articles and expert consensus, see chapter 8.1: strong – expert consensus AND consistent evidence, moderate – expert consensus WITH inconsistent evidence AND/OR new evidence likely to support the recommendation, weak – expert majority decision WITHOUT consistent evidence.

\*\* Most national guidelines for *BRCA1* surveillance recommend yearly surveillance with MRI and mammography every 1-2 years.