Who needs surveillance? Premature ovarian dysfunction risk in CAYA cancer survivors Increased risk after alkylating agents vs. no alkylating agents Increased risk after higher alkylating agent dose vs. lower dose Increased risk after cyclophosphamide vs. no cyclophosphamide Increased risk after higher cyclophosphamide dose vs. lower dose Increased risk after procarbazine vs. no procarbazine Level C
Increased risk after alkylating agents vs. no alkylating agents Increased risk after higher alkylating agent dose vs. lower dose Increased risk after cyclophosphamide vs. no cyclophosphamide Increased risk after higher cyclophosphamide dose vs. lower dose No studies
Increased risk after higher alkylating agent dose vs. lower dose Increased risk after cyclophosphamide vs. no cyclophosphamide Increased risk after higher cyclophosphamide dose vs. lower dose No studies
Increased risk after <i>cyclophosphamide</i> vs. no cyclophosphamide Increased risk after higher <i>cyclophosphamide</i> dose vs. lower dose No studies
Increased risk after higher cyclophosphamide dose vs. lower dose No studies
Increased risk after higher <i>procarbazine</i> dose vs. lower dose No studies
Risk after multiple alkylating agents and other chemotherapeutic agents vs. single No studies
alkylating agents
Risk after other alkylating agents* No studies
Risk after <i>platinum agents</i> [†] No studies
Increased risk after radiotherapy potentially exposing the ovaries vs. no
radiotherapy
Increased risk after higher dose of radiotherapy potentially exposing the ovaries Level A
vs. lower dose
Increased risk after radiotherapy potentially exposing the ovaries and alkylating Level C
agents vs. either treatment in the same dose alone
Increased risk after treatment at older age vs. younger age Level B
Risk after unilateral oophorectomy No studies
What surveillance modality should be used?
Diagnostic value endocrine measurement and ovarian ultrasound to detect premature ovarian
dysfunction in CAYA cancer survivors
Diagnostic value of AMH No studies
Diagnostic value of antral follicle count No studies
Prognostic value endocrine measurements and ovarian ultrasound to predict POI in CAYA cancer
survivors
Prognostic value of FSH No studies
Prognostic value of oestradiol No studies
Prognostic value of AMH No studies
Prognostic value of antral follicle count No studies
Diagnostic value endocrine measurements to detect POI in general population
Diagnostic value of AMH No studies
Prognostic value endocrine measurements to predict POI in general population
Prognostic value of AMH No studies
Prognostic value endocrine measurements to predict menopause and ovarian reserve in general
population
AMH predicts time to menopause Expert opinion
AMH correlates with ovarian reserve Expert opinion
At what frequency should surveillance be performed?
POI risk in CAYA cancer survivors
Changes in POI risk (deterioration or recovery of gonadal function) during the No studies
fertile life span

Abbreviations: AMH, anti-Müllerian hormone; CAYA, childhood adolescent and young adult; FSH, follicle stimulating hormone; Level A, high level of evidence; Level B, moderate/low level of evidence; Level C, very low level of evidence.

^{*} Busulfan, chlorambucil, mechloretamine, ifosfamide, melphalan, thiotepa, carmustine (BCNU), lomustine (CCNU).

[†] Carboplatin, cisplatin.