

The following table represents a compilation of both clinical experience and the published research on the impact of common cancer treatments on menstruation. Generally, studies have not focused on other measures of reproductive capacity, such as hormone levels or follicle counts which may more accurately reflect reproductive capacity.

| Degree of Risk | Treatment Protocol | Common Usage |
|---|---|---|
| High Risk >80% of women develop amenorrhea post-treatment | Whole abdominal or pelvic radiation doses ≥ 6 Gy in adult women Whole abdominal or pelvic radiation doses ≥ 15 Gy in pre-pubertal girls ≥ 10 Gy in post-pubertal girls TBI radiation doses CMF, CEF, CAF x 6 cycles in women 40 + Cyclophosphamide 5 g/m ² in women 40+ Cyclophosphamide 7.5 g/m ² in girls < 20 Alkylating chemotherapy (e.g., cyclophosphamide, busulfan, melaphan) conditioning for transplant Any alkylating agent (e.g., cyclophosphamide, ifosamide, busulfan, BCNU, CCNU) + TBI or pelvic radiation Protocols containing procarbazine: MOPP, MVPP, COPP, ChIVPP, ChIVPP/EVA, BEACOPP, MOPP/ABVD, COPP/ABVD Cranial/brain radiation ≥ 40 Gy | Multiple cancers Wilms' tumor, neuroblastoma, sarcoma, Hodgkin lymphoma Bone marrow transplant/stem cell transplant (BMT/SCT) Breast cancer Multiple cancers Non-Hodgkin lymphoma (NHL), neuroblastoma, acute lymphoblastic leukemia (ALL), sarcoma BMT/SCT BMT/SCT, ovarian cancer, sarcoma, neuroblastoma, Hodgkin lymphoma Hodgkin lymphoma Brain tumor |
| Inter-mediate Risk ~30-70% of women develop amenorrhea post-treatment | CMF or CEF or CAF x 6 cycles in women 30-39 AC in women 40+ Whole abdominal or pelvic radiation 10-<15 Gy in prepubertal girls Whole abdominal or pelvic radiation 5-<10 Gy in postpubertal girls Spinal radiation ≥ 25 Gy | Breast cancer Breast cancer Wilms' tumor Wilms' tumor, neuroblastoma Spinal tumor, brain tumor, neuroblastoma, relapsed ALL or NHL |
| Low Risk <20% of women develop amenorrhea post-treatment | AC in women 30-39 CMF, CEF, or CAF x 6 cycles in women under 30 Non-alkylating chemotherapy: ABVD, CHOP, COP AC (anthracycline, cytarabine) Multi-agent therapies | Breast cancer Breast cancer Hodgkin lymphoma, NHL Acute myeloid leukemia (AML) ALL |
| Very Low/ No Risk Negligible effect on menses | MF (methotrexate, 5-FU) Vincristine (used in multi-agent therapies) Radioactive Iodine | Breast cancer Leukemia, Hodgkin lymphoma, NHL, neuroblastoma, rhabdomyosarcoma, Wilms' tumor, Kaposi's sarcoma Thyroid cancer |
| Unknown Risk | Paclitaxel, docetaxel (Taxanes used in AC protocols) Oxaliplatin Irinotecan Bevacizumab (Avastin) Cetuximab (Erbitux) Trastuzumab (Herceptin) Erlotinib (Tarceva) Imatinib (Gleevec) | Breast cancer Ovarian cancer Colon cancer Colon, non-small cell lung Colon, head & neck Breast cancer Non-small cell lung, pancreatic Chronic myeloid leukemia (CML), gastrointestinal stromal tumor (GIST) |