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(intrathecal)

(cognitive impairment)

(hypothalamus)

(osteoporosis)

)

(

(Hypothyroidism)

(Hyperthyroidism)

(glaucoma)
(cataracts)

conductive)

(carboplatin)

(cisplatin)

(hearing loss

(Gentamicin)
(Edecrin)

(Lasix)

(Tobramycin)

(Testosterone)

(Cardiovascular System)

(anthracyclines)

(cardiovascular)

(echocardiogram)

) (fibrosis)

(pneumonitis)

(

(bleomycin)

(pneumonitis)

(fibrosis)



)

(

%12 %3

(Cyclophosphamide)

(Etoposide)

(cranial radiation)

(Gliomas)

(thyroid cancer)

9100

% 2.8
hereditary)

(Osteosarcoma)

% 22.1

% 14.1

(retinoblastoma

(1)

(alkylating agents)

% 6.5

% 9.2

(Sarcomas)

(2)

(Total-body irradiation)

13 % 8.3

(3)

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- 1 - MA Tucker, GJ D'Angio, and JD Boice Jr et al. Bone sarcomas linked to radiotherapy and chemotherapy in children N Engl J Med 1987. 317: 588-593.
 - 2 - JF Kuttlesch Jr , LH Wexler, and RB Marcus et al. Second malignancies after Ewing's sarcoma: radiation dose-dependency of secondary sarcomas J Clin Oncol 1996. 14: 2818-2825.
 - 3 - S Bhatia, NKC Ramsay, and M Steinbuch et al. Malignant neoplasms following bone marrow transplantation Blood 1996. 87: 3633-3639.
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2007-12-16 :

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