

Conclusions and quality of the evidence for the risk and risk factors for pulmonary function impairment among childhood, adolescent, and young adult cancer survivors diagnosed up to age 30

		Obstructive*	Restrictive*	Hyperinflation*	Diffusion capacity*
HSCT	Yes/no	= Very low ³¹	= Very low ³¹	↑ Very low ³¹	No study
	Age	↑ Low ^{32,33}	= Very low ^{33,37}	NS	↑ Very low ^{32,33,34}
	GvHD	↑ Very low ^{35,36}	↑ Very low ³⁵	NS	↑ Low ³⁴
	Infection	NS	NS	NS	NS
	TBI	= Very low ^{34,36}	↑ Very low ^{34,36}	NS	↑ Moderate ³⁴
Cyclophosphamide	Yes/no	↑ Very low ⁴⁶	↑ Very low ^{1,46}	NS	= Low ¹
	Higher dose	= Very low ^(Green 2015)	↑ Very low ^(Green 1998)	NS	NS
	Age	NS	NS	NS	NS
Methotrexate	Yes/no	NS	NS	NS	NS
	Higher dose	NS	= Very low ⁴²	NS	NS
	Age	NS	NS	NS	NS
Gemcitabine		NS	NS	NS	NS
Bleomycin	Yes/no	↓ Very low ^{31,38,39}	=Very low ^{1,2,31,38,39}	↓ Very low ^{31,38}	= Very low ^{1,2,38,39}
	Higher dose	=Very low ³¹	↑ Very low ³¹	= Very low ³¹	= Very low ^{45,49,53}
	Age	NS	NS	NS	NS
Busulfan	Yes/no	NS	= Very low ²	NS	= Very low ²
	Higher dose	NS	NS	NS	NS
	Age	NS	NS	NS	NS
Nitrosourea	Yes/no	NS	= Very low ²	No study	= Very low ²
	Higher dose	NS	NS	NS	NS
	Age	NS	NS	NS	NS
Radiotherapy	Yes/no	↑ Very low ^{31,40,46,51,52}	↑ Very low ^{1,31,40,46,51,52}	↑ Very low ^{31,51,52}	↑ Very low ^{1,40,454,46,51,52}
	Higher dose	↑ Very low ^{3,38,50}	↑ Very low ^{2,3,38,47,50}	↑ Very low ³⁸	↑ Very low ^{2,3,38,47,50}
	Field	NS	NS	NS	NS
	Age	= Very low ^{38,48,50}	= Very low ^{38,48,50}	= Very low ³⁸	= Very low ^{38,48,50}
	Radiosensitizer	NS	NS	NS	NS

Surgery	Yes/no	↑ Very low ^{31,38,39,40}	↑ Very low ^{1,31,38,39,40}	= Very low ^{31,38}	= Very low ^{1,38,39,40}
	Resection volume	NS	NS	NS	NS
	Age	NS	NS	NS	NS
Combinations	Surgery and chemotherapy	NS	No case in bleomycin plus surgery arm (bleomycin only as reference) ¹	NS	= Very low ¹
	Surgery and radiotherapy	= Very low ⁴⁰	= Very low ^{1,40}	NS	↑ Very low ^{1,40}
	Radiotherapy and chemotherapy	↓ Very low ⁴¹	= Very low ^{1,41}	NS	↑ Very low ^{1,41}
Smoking	Yes/no	= Very low ⁴⁰	= Very low ⁴⁰	NS	= Very low ⁴⁰
	(Ex-)smoker vs. smoker	↑ Very low ⁴³	= Very low ^{2,41,43}	NS	= Very low ^{2,43,44,45}
	Higher dose (pack years)	NS	NS	NS	NS
	Environmental exposure	NS	NS	NS	NS
	Cannabis	NS	NS	NS	NS

Explanation for categorisation of risk factors: ↑ increased risk; ↓ decreased risk; = no increased risk, inconsistent or not significant findings.

GvHD, Graft versus Host Disease; TBI, Total Body Irradiation; HSCT, Haematopoietic Stem Cell Transplantation; NS, No Study.

*Categorisation of pulmonary function parameters by publication in Table 1.