

Safety Reference Guide for Exercise for People with Cancer

Reference: Santa Mina DS, Langelier D, Adams SC, Alibhai SMH, Chasen M, Campbell KL, Oh P, Jones JM, Chang E. Exercise as part of routine cancer care. *Lancet Oncol.* 2018 Sep;19(9):e433-e436

Absolute Contra-indications

- unstable angina, arrhythmia, hypertension or heart failure
- acute embolus/infarct, acute systemic infection with fever
- dissecting aneurysm
- acute myocarditis or pericarditis

Discontinue exercise if there are adverse cardiorespiratory signs or symptoms: moderately severe angina, dizziness or pre-syncope, cyanosis or pallor – Call Code Blue

Relative Contra-indication	Exercise modification
Gain physician clearance	
Platelets <20 × 10 ⁹ /L	<ul style="list-style-type: none"> • Functional mobility exercises only • Minimise fall or impact risk • Emphasise normal breathing (avoid Valsalva manoeuvre) • monitor bruising and bleeding
Haemoglobin <80 g/L	<ul style="list-style-type: none"> • Low to moderate intensity only
White blood cell <2.0 × 10 ⁹ /L:	<ul style="list-style-type: none"> • Avoid group exercise • Light to moderate intensity exercise only • Reinforce importance of sanitisation and hand-washing Clean all equipment before use
Neutrophils <1.5 × 10 ⁹ /L	<ul style="list-style-type: none"> • Avoid group exercise • Light to moderate intensity exercise only • Reinforce importance of sanitisation and hand-washing Clean all equipment before use
Blood glucose <5.5 mmol/L	<ul style="list-style-type: none"> • Recommend 5–30 g carbohydrate consumption before exercise
Resting Blood pressure Systolic blood pressure >200 mmHg or diastolic blood pressure >110 mmHg after two measurements, 5 min apart Diastolic blood pressure 90–110 mmHg after two measurements, 5 min apart	<ul style="list-style-type: none"> • Monitor for signs and symptoms • Repeat blood pressure measurements frequently during session
Resting heart rate <60 bpm after two measurements, 5 min apart >120 bpm after two measurements, 5 min	<ul style="list-style-type: none"> • Exercise as tolerated • Monitor closely
Resting O2 saturation ≤88%	<ul style="list-style-type: none"> • Discontinue exercise if desaturation to this level occurs during a session • 88-94% Exercise as tolerated, monitor signs and symptoms of fatigue and exertion, repeat SpO₂
Sudden or severe pain, swelling or dysfunction	<ul style="list-style-type: none"> • Avoid exercise of the affected region • Doctor's clearance required to resume exercise of the affected region or if general exercise exacerbates symptoms