

LAB TESTS

The guidelines described below are designed to help guide the decision of whether exercise and activity are appropriate. Physical therapists must recognize abnormal lab values that contraindicate exercise and activity to avoid potentially dangerous effects of physical therapy intervention. Also important is the ability of the therapists to recognize abnormal values that require modification of intervention, but do not necessarily constitute a reason to cancel a session. These guidelines are not designed to make decisions for the therapists about individual cases.

Test	Normal	Activity Guidelines
Hemoglobin (Hgb g/dL)	13.8-18.0 male 11.5-16.6 female	< 8 - Do not get out of bed, no exercise permitted 8-10 - Be concerned, light exercise permitted >10 - Resistive exercise as tolerated permitted
Hematocrit (Hct %)	41-52 male 37-47 female	< 25 - No exercise permitted 25-30 - Light exercise is permitted >30 - May do resistance exercise as tolerated
White Blood Cell (WBC # x 10 ³ /μL)	5.0-11.0	> 20.0 - No exercise permitted >11.0 - Use caution with exercise 5.0-11.0 - Light exercise progress to resistive exercise as tolerated <5.0 - With temp/fever, no PT due to risk of infection <4.0 - No exercise permitted
Platelets (# x 10 ³ μL)	150-400	<10 - Consider cancelling PT, contact MD for activity guidelines 10-20 - Functional activity only (light ADL and ambulation) 20-50 - AROM and functional activity permitted <50 - No resistance, ambulation and ADL permitted 50-80 - Light resistance exercise, ambulation and ADL permitted 80-150 - Moderate resistance exercise, ambulation and ADL permitted >150 - Exercise and activity without restrictions
Clotting time: INR	Reference range: 0.9-1.1 Therapeutic range: 2-3	>5 - Bed-rest due to high risk of bleeding, contact MD for activity guidelines >3.5 - Check before any rehabilitation, high risk of bleeding, activity modification required <2.0 - Exercise permitted
Sodium (mmol/L)	135-145	Abnormal causes mental status changes, confusion, weakness, coma. No specific activity guidelines Consider < 125 and > 150 = danger zone
Potassium (mEq/L)	3.5-5.0	Abnormal can cause weakness, muscular irritability Cleared for PT after levels corrected Consider <3.2 and >5.1 = danger zone
Chloride (mEq/L)	95-108	Abnormal causes increase extracellular volume and HTN No specific activity guidelines Consider > 108 do not exercise
Calcium (mmol/L) (mg/dL)	2.15-2.50 8.6-10.0	<1.75 and >3.75 mmol/L or <7 and >12 mg/dL - Abnormal causes tetany, arrhythmias, paralysis, coma, death