Blood Values and Exercise Guidelines

Physical Therapy at SCCA

Sometimes it is not safe to exercise during cancer treatment, especially if you have a blood cancer. Your blood values for platelets (called platelet count), hematocrit, and hemoglobin tell us what type of exercise is safe for you. This handout explains exercise guidelines you should follow based on the range of your blood tests.

Exercise guidelines based on platelet* counts

Platelet count range	Exercise guideline
50,000 – 100,000	Cardiovascular exercises and strength training with weights/elastic tubing are okay. **Do not exercise** if you have any signs of bleeding (i.e. from the nose). Contact your care team if you have any signs of bleeding.
20,000 – 49,999	**If you have no signs of bleeding**, cardiovascular exercise and strength training with weights/elastic tubing are OK as long as you are not straining or holding your breath. Straining can increase your blood pressure and risk for stroke or major bleeding. **Talk to your physician before getting a massage.** Gentle comfort massage is typically okay as long as your skin is not fragile or prone to easy bruising for other reasons (such as chronic steroid medications). Deep tissue massage is **not** okay.
Less than 20,000	You may have an increased risk of bleeding with certain types of exercise The bleeding could become serious and even life threatening. **Do not** do any intense cardiovascular exercise (power walking, running, cycling, dancing, etc.) or strength training with weights or elastic tubes.
10,000 – 19,999	Strength training **without** weights/elastic tubing or strain, and cardiovascular exercise **without** strain are OK if you are steady on your feet and have no signs of bleeding.
Less than 10,000	**Do not** do any cardiovascular exercise and strength training until your platelets are in a safer range. You may walk around your room and go to the bathroom with help from a caregiver if you are steady on your feet and have no sign of bleeding.

* Platelets are a type of cell found in your blood that help your blood clot.

Exercise guidelines based on hematocrit (Hct) and hemoglobin (Hgb)**

Exercising when your Hct and Hgb are too low may cause shortness of breath, muscle fatigue, or dizziness.

Hct/Hgb range	Exercise guideline
Hct less than 25% **Hgb less than 8.0**	Talk to your doctor, physical therapist, or occupational therapist about what type of exercise is safe for you. They may recommend restrictions in strength training or cardiovascular exercise. When your Hct or Hgb are below these ranges, you may need a red blood cell transfusion. It can be difficult to predict how much a transfusion will increase the level of Hct and Hgb, so a follow-up blood count is recommended.

**Hematocrit is the number of red blood cells in your body. Hemoglobin is the amount of oxygen your blood can carry.