Alice,

I have a friend who is diagnosed with leukemia. I would like to know what it is and what the survival rate for leukemia is.

— Good friend

Answer

Dear Good friend,

Your friend is lucky to have someone like you who wants to learn more about what they’re going through. Leukemia is a general term for several types of cancers that affect blood-forming tissues and usually cause problems with white blood cell production. The cancerous cells uncontrollably divide until abnormal cell copies begin to crowd out the non-cancerous cells in the bone marrow. Diagnosis of leukemia is determined through some combination of a physical exam, blood work, and bone marrow testing. The survival rate of those diagnosed with leukemia really depends on the type with which they’re diagnosed (more on this later).

Good friend, you don't mention what type of leukemia your friend has, but it may help to know that there are four major types (there are also other, rarer types of leukemia; you may want to check out the Leukemia & Lymphoma Society [2] for more detailed information on these other types). The major types are classified by how rapidly the disease progresses and by which type of white blood cell is affected. In acute leukemia, the abnormal cells are immature blood cells called blasts. These cells don't work properly and multiply quickly. The disease progresses very rapidly, and therefore, treatment is typically fast and intense. In chronic leukemia, the abnormal blood cells are more mature, multiply more slowly, and can still function for a period of time. Disease progression is much slower than in acute (sometimes folks can go years without noticing any symptoms).

On to the blood cells: the two types of white blood cell that can be affected are lymphoid cells (lymphocytes) and myeloid cells. Leukemia of the lymphoid cells is called lymphocytic leukemia and affects cells that form the lymphatic tissues. These tissues are part of the body’s immune system. Leukemia of the myeloid cells is known as myelogenous leukemia. This type involves
cells that develop into red and white blood cells and platelet-producing cells.

Symptoms vary depending on the type of leukemia, but more common symptoms can include:

- Weight loss without trying
- Sweating excessively, especially at night
- Fatigue
- Recurrent nosebleeds
- Enlarged lymph nodes, liver, or spleen
- Bruising or bleeding easily
- Bone pain
- Frequent infections

Together, the speed of progression and the affected cell type comprise four types of leukemia. Each type of leukemia has a different population that it typically affects. Further, according to data from the National Cancer Institute and American Cancer Society, they also have different five-year survival rates:

- Acute myelogenous leukemia (AML) is the most common type of acute leukemia in adults. It can, however, affect children too. The five year survival rate is about 28 percent overall and 65 to 70 percent for children under the age of 15.
- Acute lymphocytic leukemia (ALL) is the most common type in children, but it can also occur in adults. The five year survival rate is around 69 percent overall and 90 percent for those younger than 15 years of age.
- Chronic myelogenous leukemia (CML) is usually seen in adults. The five year survival rate is about 69 percent.
- Chronic lymphocytic leukemia (CLL) is the most common type of chronic leukemia in adults. The five year survival rate is about 85 percent.

When it comes to treatments, there are several different treatment options available. They can include chemotherapy, medications that target the cancer cells, biological therapy, radiation therapy, and stem cell or bone marrow transplants. The treatments used depend on the type of leukemia, how far the disease has progressed, and the age and health of the patient. Your friend will be able to work with their health care provider to decide on the best course of action. But, there's some action you can take during this time, too: social support can also be a vital component of your friend's treatment and recovery. Simply being there and listening to their concerns, fears, and anything else they want to share can be a HUGE help!

If you want even more information, you might consider talking with your own health care provider, talking with your friend, or checking out another great resource — the National Cancer Institute [3].

Alice!
Category:
General Health [4]
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Related questions
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Medical Services (Morningside) [10]
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Source URL: https://goaskalice.columbia.edu/answered-questions/leukemia-1

Links
[8] https://goaskalice.columbia.edu/answered-questions/paternal-grandmother-%E2%80%93-breast-cancer-link-0