

# Acute Myeloid Leukemia



This NCCN QUICK GUIDE™ sheet summarizes key points from the complete [NCCN Guidelines for Patients®: Acute Myeloid Leukemia](#). These guidelines explain which tests and treatments are recommended by experts in cancer. To view and download the guidelines, visit [NCCN.org/patients](https://www.nccn.org/patients) or, to order printed copies, visit Amazon.com.

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## What is acute myeloid leukemia?



Acute myeloid leukemia (AML) is a fast-growing blood cancer that starts in the blood stem cells of bone marrow. There are many types of AML. Treatment for acute promyelocytic leukemia (APL), non-APL AML, and blastic plasmacytoid dendritic cell neoplasm (BPDCN) are discussed in this book.	<b>7</b>
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## What tests will I need?

General health tests include a medical history, family history, and physical exam.	<b>12</b>
Blood tests count the number of cells and certain chemicals in your body.	<b>14</b>
Tissue tests such as a bone marrow biopsy and aspiration are needed to diagnose AML.	<b>16</b>
Genetic tests look for changes or mutations in your genes.	<b>18</b>
Genetic testing is recommended for anyone diagnosed with AML.	<b>19</b>
Human leukocyte antigen (HLA) typing should be done in all patients with newly diagnosed AML for whom allogeneic (donor) blood stem cell transplant is an option.	<b>20</b>
Imaging tests show which sites have leukemia, infection, or bleeding.	<b>20</b>
A lumbar puncture tests the fluid that surrounds the spine or brain.	<b>21</b>
Heart or cardiac tests evaluate how well your heart works.	<b>22</b>



## What are treatment options?

<b>APL</b>	<ul style="list-style-type: none"> <li>➤ APL occurs when parts of chromosomes 15 and 17 break off and trade places. The result is two fused genes called <i>PML-RARA</i> and <i>RARA-PML</i>. You will be treated for APL if the <i>PML-RARA</i> gene is found.</li> </ul>	<b>37</b>
	<ul style="list-style-type: none"> <li>➤ Unlike other types of AML, APL is treated with all-trans retinoic acid (ATRA). Often, ATRA is combined with arsenic trioxide. These treatments are specific to APL. Gemtuzumab, a targeted therapy, might be given in place of ATRA or arsenic trioxide. Chemotherapy may also be used.</li> </ul>	
<b>AML</b>	<ul style="list-style-type: none"> <li>➤ Most people with leukemia do not have APL. In non-APL AML, treatment is based on risk groups.</li> </ul>	<b>50</b>
	<ul style="list-style-type: none"> <li>➤ The goal of treatment for AML is to put the leukemia into complete remission. In complete remission, the bone marrow and blood cell counts return to normal.</li> </ul>	
	<ul style="list-style-type: none"> <li>➤ AML is not treated the same for everyone. Since AML behaves differently in those 60 years of age and over, age as well as your overall health and genetics will play a role.</li> </ul>	
<b>BPDCN</b>	<ul style="list-style-type: none"> <li>➤ BPDCN is cancer of the immature plasmacytoid dendritic cells, a rare type of immune cell. These blood cells start in the bone marrow and travel to the lymphatic organs like the spleen and lymph nodes. Like skin cancer, those with BPDCN have areas of skin that look abnormal (skin lesions).</li> </ul>	<b>73</b>
	<ul style="list-style-type: none"> <li>➤ Treatment is tagraxofusp-erzs or high-dose chemotherapy followed by stem cell transplant.</li> </ul>	

## How can you decide between options?

<ul style="list-style-type: none"> <li>➤ Don't be shy and ask your doctors questions. They are there to help.</li> <li>➤ Get a second opinion. Even doctors get second opinions!</li> <li>➤ Support groups can be helpful. You can learn a lot from others.</li> <li>➤ Compare the pros and cons of each option.</li> </ul>	<b>81</b>
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