

What are the most widely recognized treatment-related risk factors for secondary AML in children?

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Good afternoon my name is Andy Kolb and I'm a pediatric oncologist who is frequently asked, "What are the most widely recognized treatment-related risk factors for secondary AML?" Treatment-related risk factors for secondary AML relate to exposure to prior therapies. The drugs that place patients most at risk are drugs like etoposide and then high doses of alkylator therapy. Combination treatment, so using those drugs in combination can also increase the risk, and it's really about dose intensity and dose duration.

Cumulative doses as well as the duration of exposure. I think it's also important to note that secondary AML can arise, even without a prolonged exposure. We see children with secondary AML after exposure to therapy for rheumatologic diseases, so treatment with drugs like azathioprine and mercaptopurine. We can see the reports of AML clones evolving early in the course of treatment, not just at the end of therapy. Dose and duration will increase risk but certainly, we see secondary acute myeloid leukemia can develop across the spectrum of exposure and duration of the exposure.