



Correction

Correction: Niscola et al. Acute Myeloid Leukemia in Older Patients: From New Biological Insights to Targeted Therapies. *Curr. Oncol.* 2024, 31, 6632–6658

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In the original publication [1], there was a mistake in the legend for Figure 1. The caption incorrectly attributes the figure to reference [5] instead to reference [3], and uses the term “adapted”, which is not appropriate in this context and should be “reprinted”.

The correct legend appears below. The authors state that the scientific conclusions are unaffected. This correction was approved by the Academic Editor. The original publication has also been updated.

Figure 1. Effects of critical mutations on cellular function and pathophysiology of AML. In the cytoplasm, isocitrate is converted to alpha-ketoglutarate (A-KG). However, *IDH1* mutations reduce A-KG to D-2-hydroxyglutarate (D-2-HG), an oncometabolite. D-2-HG then travels to the nucleus and inhibits *TET2*, blocking DNA demethylation. Additionally, D-2-HG is created via reduction in the mitochondria by mutant *IDH2* enzymes from Krebs cycle-generated A-KG. *IDH1* inhibitors target the cytoplasmic reduction of A-KG to D-2-HG, while *IDH2* inhibitors target the same process in the mitochondria. *NPM1*, which generally resides in the nucleolus and minimally binds *XPO1*, can travel to the nucleoplasm in stress conditions. In the nucleoplasm, it inhibits *HDM2*, which is significant because *HDM2*'s normal function is to inhibit *TP53*. Thus, by inhibiting *HDM2*, *NPM1* can increase *TP53*, which has important implications for cell regulation in stressful conditions. Mutant *NPM1* (*NPM1c*) has a higher affinity to *XPO1* and is prone to nuclear export, leading to critical protein export from the nucleus. Additionally, the consequent result of mutant *NPM1* and *XPO1-NPM1c* can increase *HOX* expression. Furthermore, *NPM1c* and *KMT2Ar* interact with menin, facilitating leukemogenic cellular changes, which can be targeted via menin inhibition. Reprinted from Figure 1 in Ref. [3].



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Reference

1. Niscola, P.; Gianfelici, V.; Catalano, G.; Giovannini, M.; Mazzone, C.; Noguera, N.I.; de Fabritiis, P. Acute Myeloid Leukemia in Older Patients: From New Biological Insights to Targeted Therapies. *Curr. Oncol.* **2024**, *31*, 6632–6658. [[CrossRef](#)] [[PubMed](#)]

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