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Letter to the Editor Regarding “Immune Escape of Relapsed AML Cells after Allogeneic Transplantation”

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Christopher *et al.* compares 15 acute myeloid leukemia patients who relapsed after allogeneic hematopoietic stem-cell transplantation (allo-HSCT) to 20 patients who relapsed after chemotherapy. All patients had exome sequencing on paired samples obtained at initial presentation and at relapse.¹ RNA sequencing was performed on a subgroup. The authors' note relapse after allo-HSCT is not associated with acquisition of unique mutations. However, RNA sequencing revealed dysregulation of immune pathways. One patient acquired *PDL1/PDL2* gene amplification after allo-HSCT. The authors conclude that this finding is not a common mechanism of immune escape in AML after transplantation. We would caution the authors' regarding their conclusion as this is a small sample size (15 patients). A prior study revealed no *PDL1/PDL2* amplifications amongst 1273 AMLs.² Further studies are needed to determine if *PDL1/PDL2* amplification is only seen in AML patients who relapse after allo-HSCT. Hodgkin lymphoma is exquisitely sensitive to PD1 blockade due to the near-universal presence of *PDL1/PDL2* amplification.³ Whether or not patients with AML who relapse after allo-HSCT and show *PDL1/PDL2* amplification respond to immunotherapy warrants investigation.

Works Cited

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