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Continuing Medical Education (CME) Questions

HLA alleles, mutations, and outcomes in immune AA

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Zaimoku Y, Patel BA, Adams SD, Shalhoub R, Groarke EM, Lee AAC, Kajigaya S, Feng X, Rios O, Eager H, Alemu L, Quinones Raffo D, Wu CO, Flegel WA, Young NS. HLA associations, somatic loss of HLA expression, and clinical outcomes in immune aplastic anemia. *Blood*. 2021;138(26):2799-2809.

1. **Your patient is a 62-year-old man with immune aplastic anemia (AA). According to the genetic study of patients with immune AA by Zaimoku and colleagues, which of the following statements about somatic loss of HLA class I alleles is correct?**
   - ☐ HLA class I allele loss was detected in half of patients tested
   - ☐ *HLA-B*14:02* was the allele most frequently lost
   - ☐ HLA class I allele loss was associated with pretreatment blood parameters
   - ☐ Missense mutations were detected only in HLA allele–lacking cells
2. **According to the genetic study of patients with immune AA by Zaimoku and colleagues, which of the following statements about HLA allele frequencies is correct?**
   - ☐ *HLA-A*02:01* was overrepresented in AA
   - ☐ *HLA-B*07:02* was overrepresented in younger patients
   - ☐ *HLA-B*08:01* was overrepresented in older patients
   - ☐ *HLA-B*14:02* was overrepresented in AA
3. **According to the genetic study of patients with immune AA by Zaimoku and colleagues, which of the following statements about correlations of HLA alleles and HLA loss with clinical presentation and outcome after immunosuppressive therapy (IST) is correct?**
   - ☐ Only *HLA-B*14:02* genotype correlated significantly with high-risk clonal evolution
   - ☐ The findings do not support use of HLA typing in AA to help with management and prognostic modeling
   - ☐ In AA and in cancer generally, HLA allele loss is frequent and represents escape from immune surveillance
   - ☐ Clones with HLA loss in immune AA were subclones of secondary myeloid malignancies

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