A retrospective multicenter study of the prognostic impacts of platelet augmentation and antiplatelet therapy on hepatoblastoma

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Abstract

Background: Hepatoblastoma (HB) combined with secondary thrombocytosis is a common clinical condition. There is still no consensus on the need for antiplatelet therapy in patients with both HB and secondary thrombocytosis. **Methods:** We conducted a retrospective study of 229 children with HB who visited and were followed up at three hospitals from July 2013 to July 2019. Kaplan-Meier analysis was used to calculate overall survival (OS), the log-rank test was used to compare the survival rate between groups, and a multivariate Cox proportional hazards model was constructed to estimate the hazard ratios (HRs) of independent prognostic factors. **Results:** The one-year, three-year, and five-year OS of 229 children was 90.9, 83.0, and 79.7%, respectively. Multivariate analysis revealed that age >96 months, metastasis, antiplatelet therapy, and AFP<100ng/ml were independent risk factors for OS, while tumor rupture and PLT >450x10 ^{9}/L were not. Among the intermediate-risk children in the high platelet group, the survival rate after antiplatelet therapy was 52.3±6.1%, which was significantly lower than that following non-antiplatelet therapy (82.6±5.1%) (P=0.036). **Conclusion:** Our findings confirm that secondary thrombocytosis is not an independent risk factor of OS in HB. We don't recommend antiplatelet therapy for children with hepatoblastoma combined with secondary thrombocytosis.

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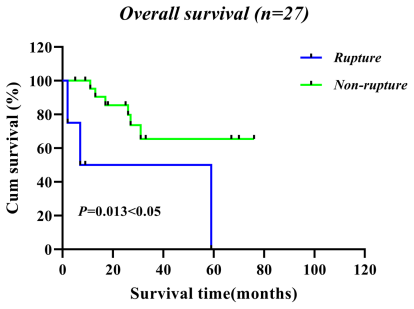

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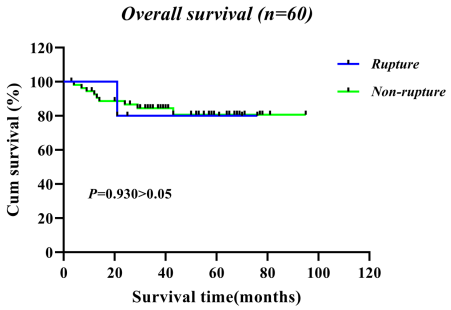

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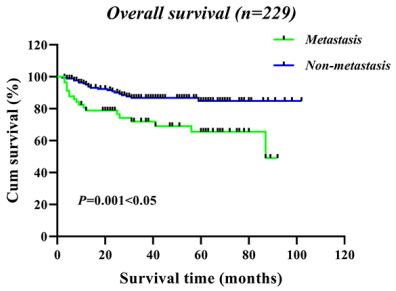

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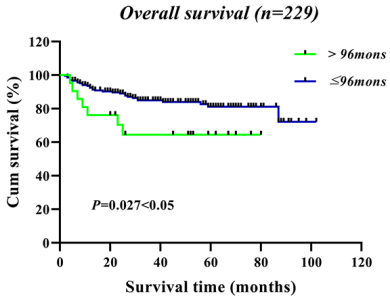

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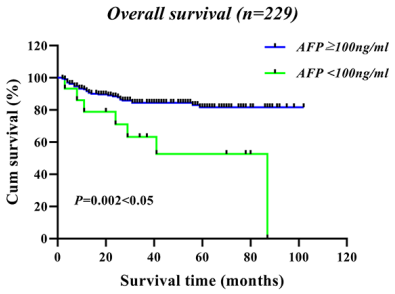

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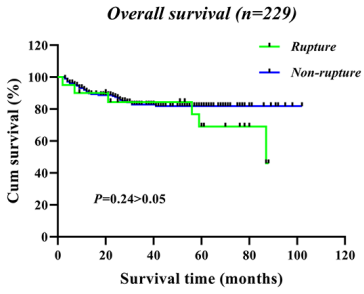

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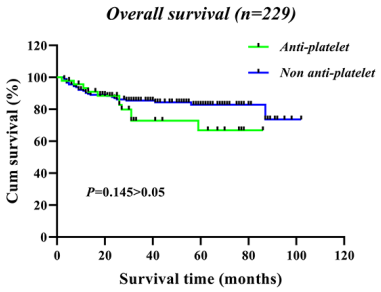

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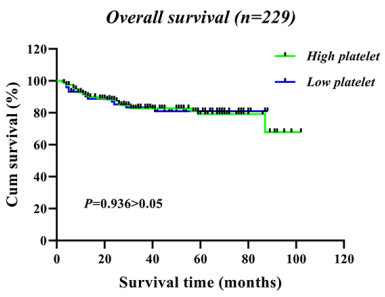

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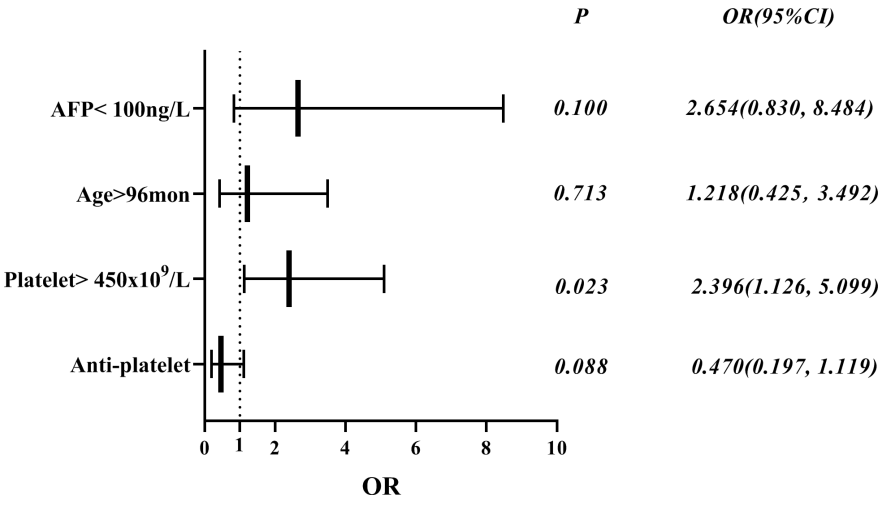

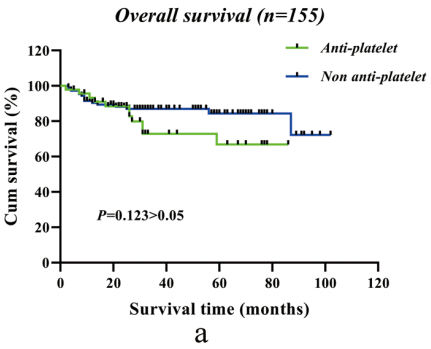

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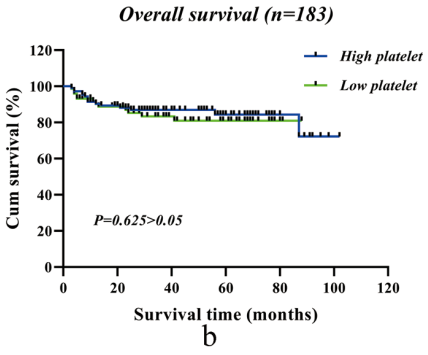

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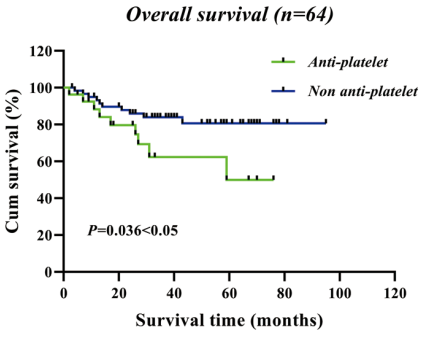

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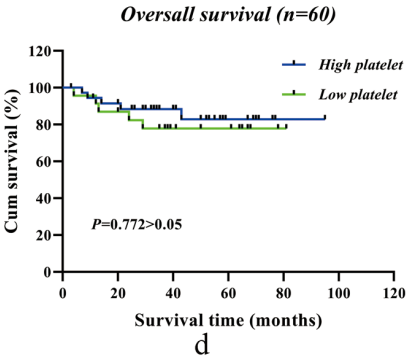

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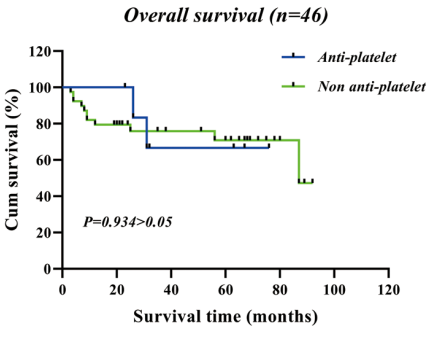

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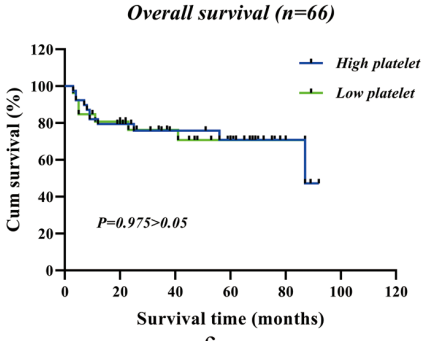

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