



# Rhabdomyosarcoma and Its Risk Factors in Adults

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### Abstract

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**Keywords:** Rhabdomyosarcoma; Soft tissue sarcoma; Translocation-driven neoplasms

### Introduction

Soft tissue sarcomas account for approximately 7% of childhood

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**Citation:**

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disorders are more likely than their unaffected peers to develop RMS. The most common syndromes in children with ERMS include Li-Fraumeni syndrome (germline mutation of the TP53, a tumor suppressor) [9]. Neurofibromatosis type I (NF1 gene deletion); Costello syndrome (HRAS mutation); Noonan syndrome (germline genetic variant that activates the RAS-MAPK pathway); Beckwith-Wiedemann syndrome and DICER1 syndrome (reproductive cell DICER1 mutation). However, based on small clinical studies, it is estimated that only about 5% of patients with RMS have a concomitant germline susceptibility syndrome. Interestingly, predisposition syndrome seems to occur more frequently in her ERMS patients than in ARMS patients [10]. This finding appears to be in contrast to experimental studies showing that germline loss of a specific tumor suppressor promotes PAX3-FOXO1-driven neoplasia in a genetically engineered mouse model.

**Environmental Risk Factors**