

# Expression, genomic patterns predict sarcoma progression

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The Complexity Index in Sarcoma and Genomic Index prognostic signatures are valid independent methods of assessing synovial sarcoma prognosis, according to a study published online Jan. 14 in the *Journal of Clinical Oncology*.

(HealthDay)—The Complexity Index in Sarcoma (CINSARC) and Genomic Index prognostic signatures are valid independent methods of assessing synovial sarcoma (SS) prognosis, according to a study published online Jan. 14 in the *Journal of Clinical Oncology*.

Pauline Lagarde, of the Institut Bergonié in Bordeaux, France, and colleagues examined whether expression and genomic prognostic signatures related to chromosome integrity in [sarcomas](#) and [gastrointestinal stromal tumors](#) (CINSARC and Genomic Index) could predict outcomes in SS. In a training/validation approach, 100 patients with primary untreated SS tumors underwent expression and genomic profiling.

The researchers found that CINSARC and Genomic Index exhibited significant independent and validated prognostic values. Fourteen genes in the CINSARC signature were identified through comparing [expression profiles](#) of tumors with or without metastasis; and in an independent cohort, *KIF14* and *CDCA2*, were validated as prognostic markers. Metastasis was associated with genome complexity in both adult and pediatric SS; the adult genome was more frequently rearranged, and, accordingly, metastasis did not develop in pediatric patients who had an even genomic profile.

"To conclude, this study offers results that are meaningful for understanding the metastatic potential of sarcomas in general, and particularly in SS for which this study provides a biologic explanation for the distinct aggressiveness of pediatric and adult SS," the authors write.

**More information:** [Abstract](#)  
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