

PERSISTENT EXCESS RISK OF SECOND PRIMARY MALIGNANCIES IN FOLLICULAR LYMPHOMA SURVIVORS: SITE-SPECIFIC AND LATENCY-BASED FINDINGS FROM SEER, 2000–2022



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INTRODUCTION:

Follicular lymphoma is an indolent non-Hodgkin lymphoma associated with prolonged survival, repeated treatment exposure, and chronic immune dysregulation. These factors may increase the risk of second primary malignancies. Characterizing the burden and pattern of second cancers in follicular lymphoma survivors is essential for developing risk-adapted survivorship strategies

METHOD:

This retrospective cohort study used SEER 17-registry data from 2000 to 2022. Adults aged ≥18 years with microscopically confirmed first primary follicular lymphoma were included if they survived at least 2 months after diagnosis. Second primary malignancies were identified using SEER multiple-primary rules. Standardized incidence ratios and 95% confidence intervals were calculated by comparing observed cancers with expected rates from the general population matched by age, sex, race, and calendar year. Risks were evaluated overall, by cancer site, and across latency intervals.

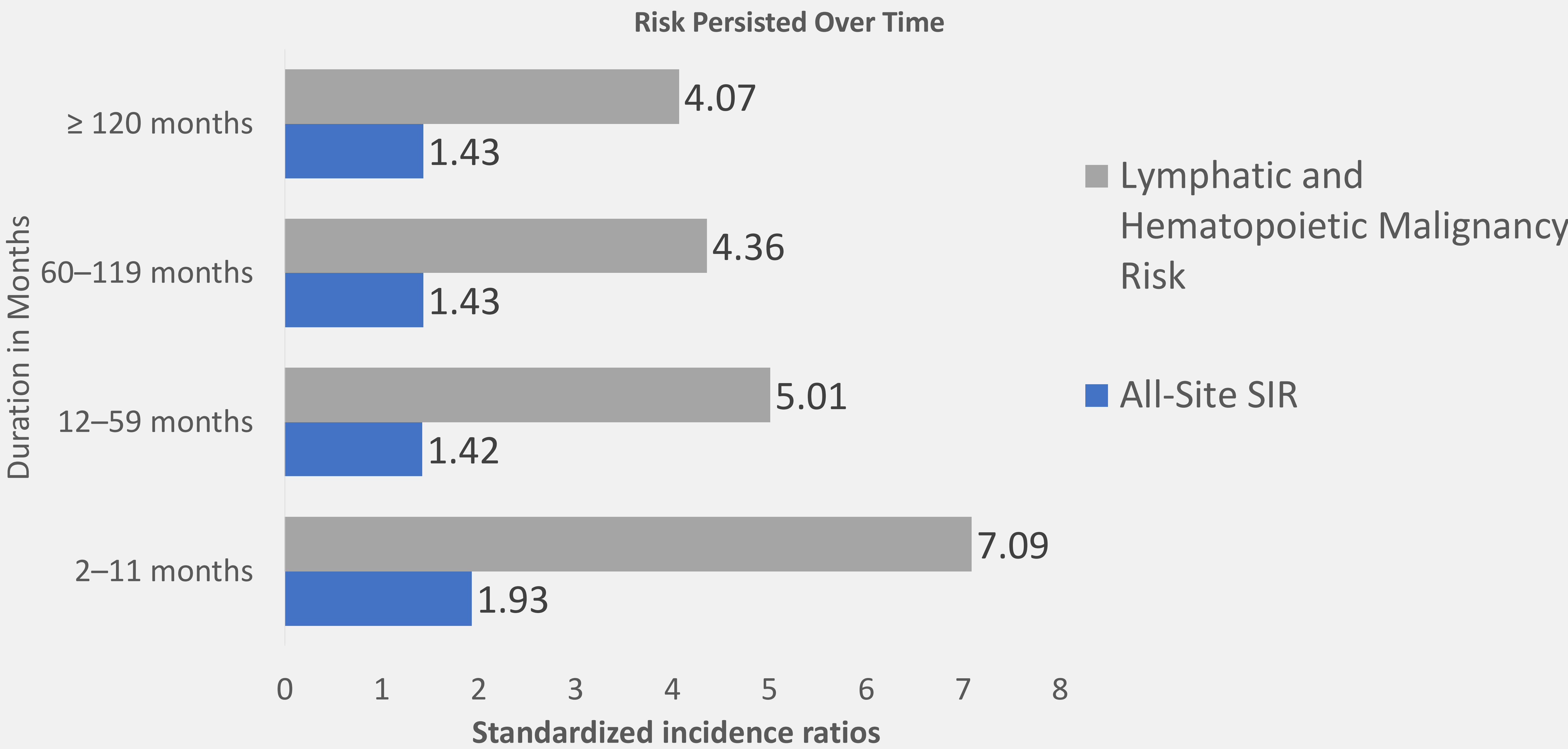
Cancer Category	Standardized incidence ratios
Solid tumors (all)	1.12
Respiratory (lung & bronchus-driven)	1.43
Kidney	1.34
Thyroid	2.08
Lymphatic & hematopoietic malignancies	4.74
Acute myeloid leukemia (AML)	4.87

RESULTS

Follicular lymphoma survivors developed 2,819 second primary malignancies compared with 1,915.52 expected cases, yielding an overall SIR of 1.47.

CONCLUSION:

Follicular lymphoma survivors experience a substantial and durable excess risk of second primary malignancies, particularly hematologic cancers and acute myeloid leukemia. The persistence of elevated risk beyond 10 years highlights the need for long-term surveillance and structured survivorship care.



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