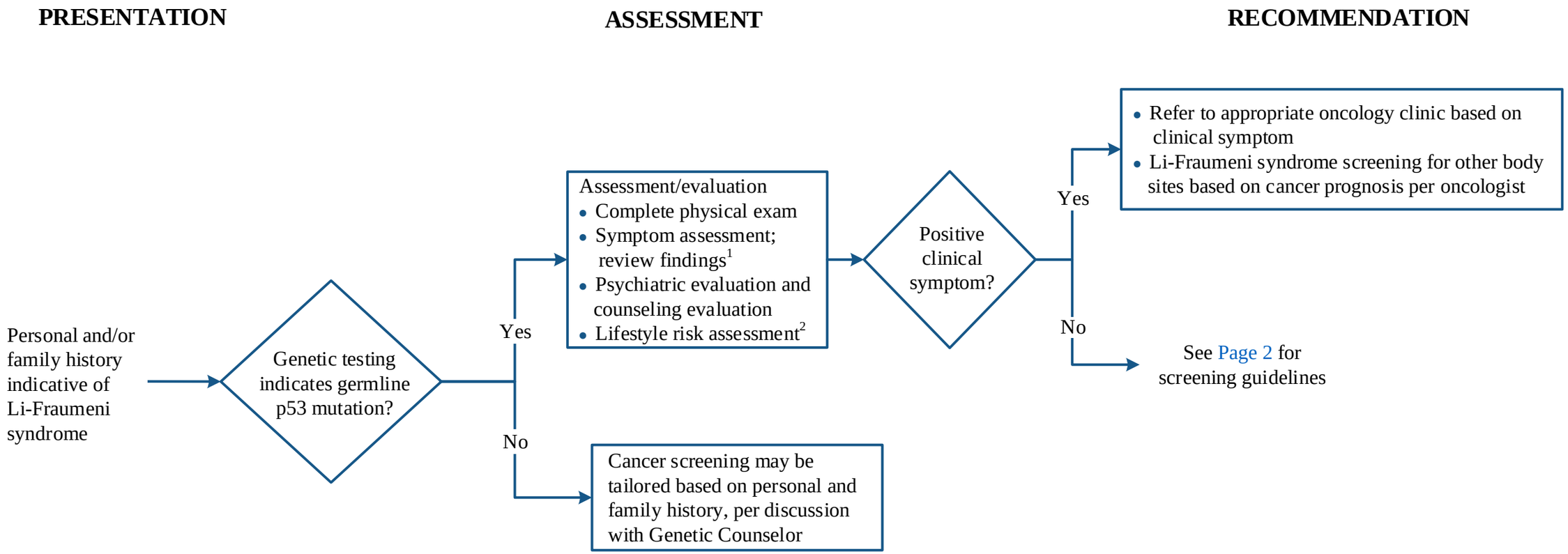
Li-Fraumeni Syndrome Screening - Adult

Disclaimer: *This algorithm has been developed for MD Anderson using a multidisciplinary approach considering circumstances particular to MD Anderson's specific patient population, services and structure, and clinical information. This is not intended to replace the independent medical or professional judgment of physicians or other health care providers in the context of individual clinical circumstances to determine a patient's care.*

Note: Screening is only intended for asymptomatic individuals. Individuals undergoing Li-Fraumeni Syndrome screening should have a 10-year life expectancy and no co-morbidities that would limit the diagnostic evaluation or treatment of any identified problem. The screening technique should be performed with a consistent technique and process.



[1]Patient Education - Li-Fraumeni Syndrome Education and Early Detection (LEAD) Adult Screening Program
[2]See Physical Activity, Nutrition, and Tobacco Cessation algorithms; ongoing reassessment of lifestyle risks should be a part of routine clinical practice

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Li-Fraumeni Syndrome Education and Early Detection (LEAD) - Adult Screening Guidelines

Cancer	Exams and Tests	How Often
General	A complete physical exam and check of these body systems • Brain • Thyroid	Every 6 months
Adrenocortical Tumor (ACT)	• Whole body MRI[1] • Blood tests: DHEA-S, ACTH, testosterone	Annually
Breast (begin at age 20-25 years old)	Clinical breast exam by doctor	Every 6 months
	Mammogram and MRI[1]	Annually
	Consider surgical removal of both breasts to prevent cancer (bilateral prophylactic mastectomy). For women treated for breast cancer, screening of remaining breast tissue should continue.	Age and patient appropriate
Brain	Brain MRI[1]	Annually
Colon (begin at age 25 years old)	• Colonoscopy • Esophagogastroduodenoscopy (EGD)	Every 2-5 years
Leukemia/Lymphoma	Blood tests: CBC with differential	Annually
Melanoma	Skin exam – See Skin Cancer Screening algorithm	Annually
Ovarian (females begin at age 35 years old)	Refer to a doctor who specializes in high risk ovarian cancer screening – See Ovarian Cancer Screening algorithm	See Ovarian Cancer Screening algorithm
Pancreas	Refer to a doctor who specializes in high risk pancreatic cancer screening – See Pancreatic Cancer Screening algorithm	See Pancreatic Cancer Screening algorithm
Sarcoma	Whole body MRI	Annually

[1]The whole body MRI and brain MRI are both performed on an annual basis, staggered with a six month interval in between. The breast MRI should be performed at the same time as the brain MRI (but on different days due to the contrast dose).

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SUGGESTED READINGS

Kratz, C. P., Achatz, M. I., Brugières, L., Frebourg, T., Garber, J. E., Greer, M. L. C., ... & Mullighan, C. G. (2017). Cancer Screening Recommendations for Individuals with Li-Fraumeni Syndrome. *Clinical Cancer Research*, 23(11), e38-e45.

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DEVELOPMENT CREDITS

This screening algorithm is based on majority expert opinion of the Li-Fraumeni Syndrome work group at the University of Texas MD Anderson Cancer Center. It was developed using a multidisciplinary approach that included input from the following:

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