LEAD clinic = Li-Fraumeni Syndrome Education and Early Detection clinic

1 Offspring of a parent with LFS or personal and/or family history of LFS-associated cancers including adrenocortical carcinomas, breast cancer, central nervous system tumors, osteosarcomas, and soft-tissue sarcomas. Additional LFS-associated cancers include leukemia, lymphoma, gastrointestinal cancers, cancers of head and neck, kidney, larynx, lung, skin (e.g., melanoma), ovary, pancreas, prostate, tests, and thyroid. See CRIT-7 LFS testing criteria within the NCCN guidelines.

2 If genetic test results do not clearly indicate whether the TP53 mutation is germline, mosaic or somatic in nature, refer to Li-Fraumeni Syndrome Screening - Adult algorithm for process of confirmatory testing

3 See Screening Guidelines on Page 2

4 Patient Education - Li-Fraumeni Syndrome Education and Early Detection (LEAD) Pediatric Screening Program

5 See Physical Activity, Nutrition, and Tobacco Cessation algorithms; ongoing reassessment of lifestyle risks should be a part of routine clinical practice

Cancer screening may be tailored based on personal and family history, per discussion with Genetic Counselor
# Li-Fraumeni Syndrome Education and Early Detection (LEAD) – Pediatric Screening Guidelines

**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.

## Li-Fraumeni Syndrome Education and Early Detection (LEAD) – Pediatric Screening Guidelines

<table>
<thead>
<tr>
<th>Cancer</th>
<th>0-1 Year</th>
<th>1-10 Years</th>
<th>10-20 Years</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>General</td>
<td>Physical exam/targeted review of systems&lt;br&gt;• Neurological exam</td>
<td>Physical exam/targeted review of systems&lt;br&gt;• Neurological exam</td>
<td>Physical exam/targeted review of systems&lt;br&gt;• Neurological exam&lt;br&gt;• Skin</td>
<td>Every 6 months</td>
</tr>
<tr>
<td>Adrenocortical Tumor (ACT) and Others</td>
<td>• Education of signs and symptoms (virilization, Cushing’s syndrome, hypertension)&lt;br&gt;• Testosterone, DHEAS, ACTH</td>
<td>• Education of signs and symptoms (virilization, Cushing’s syndrome, hypertension)&lt;br&gt;• Testosterone, DHEAS, ACTH</td>
<td>• Education of signs and symptoms (virilization, Cushing’s syndrome, hypertension)&lt;br&gt;• Testosterone, DHEAS, ACTH</td>
<td>• Every 6 months (until 10 years old)&lt;br&gt;• Annually (10-20 years old)</td>
</tr>
<tr>
<td>Ultrasound of abdomen and pelvis</td>
<td>Ultrasound of abdomen and pelvis</td>
<td>MRI whole body</td>
<td>Every 6 months for ultrasound&lt;br&gt;Annually for MRI whole body</td>
<td></td>
</tr>
<tr>
<td>Brain</td>
<td>• Education of signs and symptoms (vomiting, headaches, vision changes)&lt;br&gt;• MRI¹ brain</td>
<td>• Education of signs and symptoms (vomiting, headaches, vision changes)&lt;br&gt;• MRI¹ brain</td>
<td>• Education of signs and symptoms (vomiting, headaches, vision changes)&lt;br&gt;• MRI¹ brain</td>
<td>Annually</td>
</tr>
<tr>
<td>Sarcoma (begin at 2-3 years – based on family history/clinical judgement)</td>
<td>N/A</td>
<td>MRI whole body</td>
<td>MRI whole body</td>
<td>Annually</td>
</tr>
<tr>
<td>Leukemia/Lymphoma</td>
<td>• Education of signs and symptoms (anemia, pallor, fatigue, bruising, petechiae)&lt;br&gt;• CBC with differential, lactate dehydrogenase</td>
<td>• Education of signs and symptoms (anemia, pallor, fatigue, bruising, petechiae)&lt;br&gt;• CBC with differential, lactate dehydrogenase</td>
<td>• Education of signs and symptoms (anemia, pallor, fatigue, bruising, petechiae)&lt;br&gt;• CBC with differential, lactate dehydrogenase</td>
<td>• Every six months (until 10 years)&lt;br&gt;• Annually (10-20 years old)</td>
</tr>
<tr>
<td>Melanoma</td>
<td>N/A</td>
<td>N/A</td>
<td>Refer to Dermatology service as necessary</td>
<td>Annually</td>
</tr>
</tbody>
</table>

¹ First MRI with contrast; thereafter without contrast if previous MRI normal and no new abnormality

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**Approved by the Executive Committee of the Medical Staff on 12/14/2022**
SUGGESTED READINGS


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Li-Fraumeni Syndrome Screening - Pediatric

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DEVELOPMENT CREDITS

This screening algorithm is based on majority expert opinion of the Pediatric 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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