

LIFEFEST 2026

Nashville



**Current and Emerging Research & Trials in Liposarcoma:
Refining How and When We Operate**

Dr. Elizabeth Lilley



Brigham and Women's Hospital
Founding Member, Mass General Brigham

SARCOMA CLINICAL TRIALS

Refining How and When We Operate

Ongoing surgical trials in soft tissue and retroperitoneal sarcoma

Elizabeth J. Lilley, MD, MPH | LifeFest 2026 | Nashville, TN



HARVARD MEDICAL SCHOOL
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A History Lesson

- Trial at the National Cancer Institute from 1975 to 1981
- 27 randomized to limb saving surgery + XRT vs. 16 to amputation
- **Results:**
 - Local recurrence more common in limb saving surgery (15% vs 0%)
 - No difference in 5-year DFS (78% amputation vs 71% limb-sparing)
 - No difference in 5-year overall survival (88% vs 83%)



Why surgery trials matter

Surgery is the backbone of cure in sarcoma, but important questions remain open.



How aggressive should the operation be?

The extent of resection is still debated for many tumors.



What do we add around surgery?

Chemotherapy, radiation, or immunotherapy? before or after.



When is repeat surgery worth it?

For cancer that comes back, the benefit of re-operating is unclear.

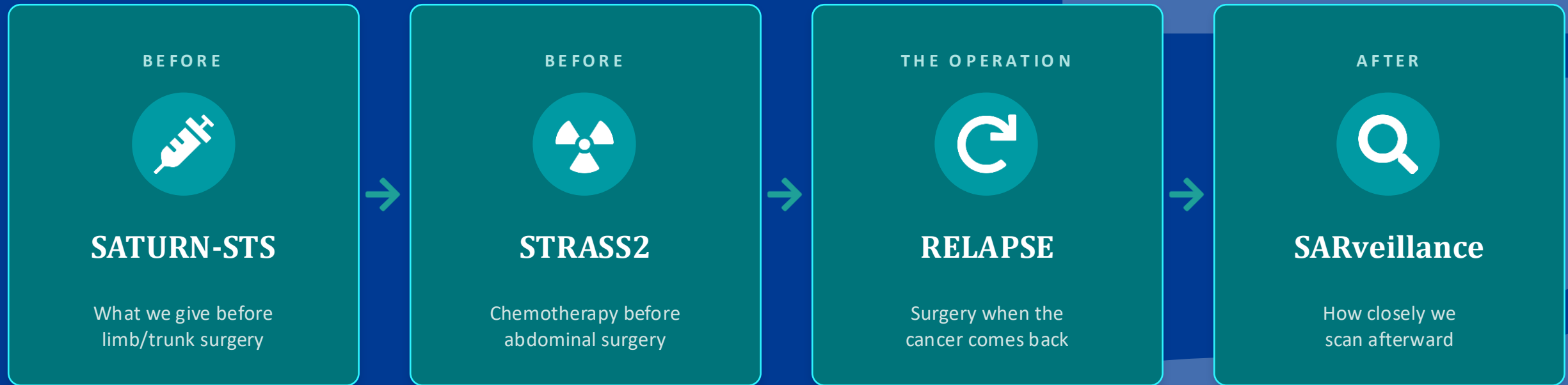


How closely do we watch afterward?

The right intensity of follow-up scanning is not yet established.

Four surgical questions, four trials

The arc of the surgical journey — before, during, and after the operation



PHASE II · MD ANDERSON · NCT07049848

SATURN-STS

High-risk soft tissue sarcoma of the arms, legs, or trunk

THE SURGICAL QUESTION

Surgery is the step that removes the tumor. Can adding immunotherapy around the operation improve the chance it stays gone?

Extremity & truncal STS · surgically resectable

How the treatment is layered around surgery

- 1 Before surgery — chemo + immunotherapy**
Atezolizumab (an immunotherapy) is given with doxorubicin chemotherapy.
- 2 Before surgery — radiation + immunotherapy**
Radiation is delivered alongside continued atezolizumab to further treat the tumor bed.
- 3 Surgery**
The tumor is removed with the goal of clear margins.
- 4 After surgery — immunotherapy**
Atezolizumab continues, aiming to help the immune system clear any remaining cells.



PHASE III • EORTC / TARPSWG

STRASS 2 – 1809

*Highest metastatic risk retroperitoneal
(abdominal) sarcomas*

THE SURGICAL QUESTION

For high-grade tumors, can chemotherapy given before the operation make surgery more successful compared to surgery alone?

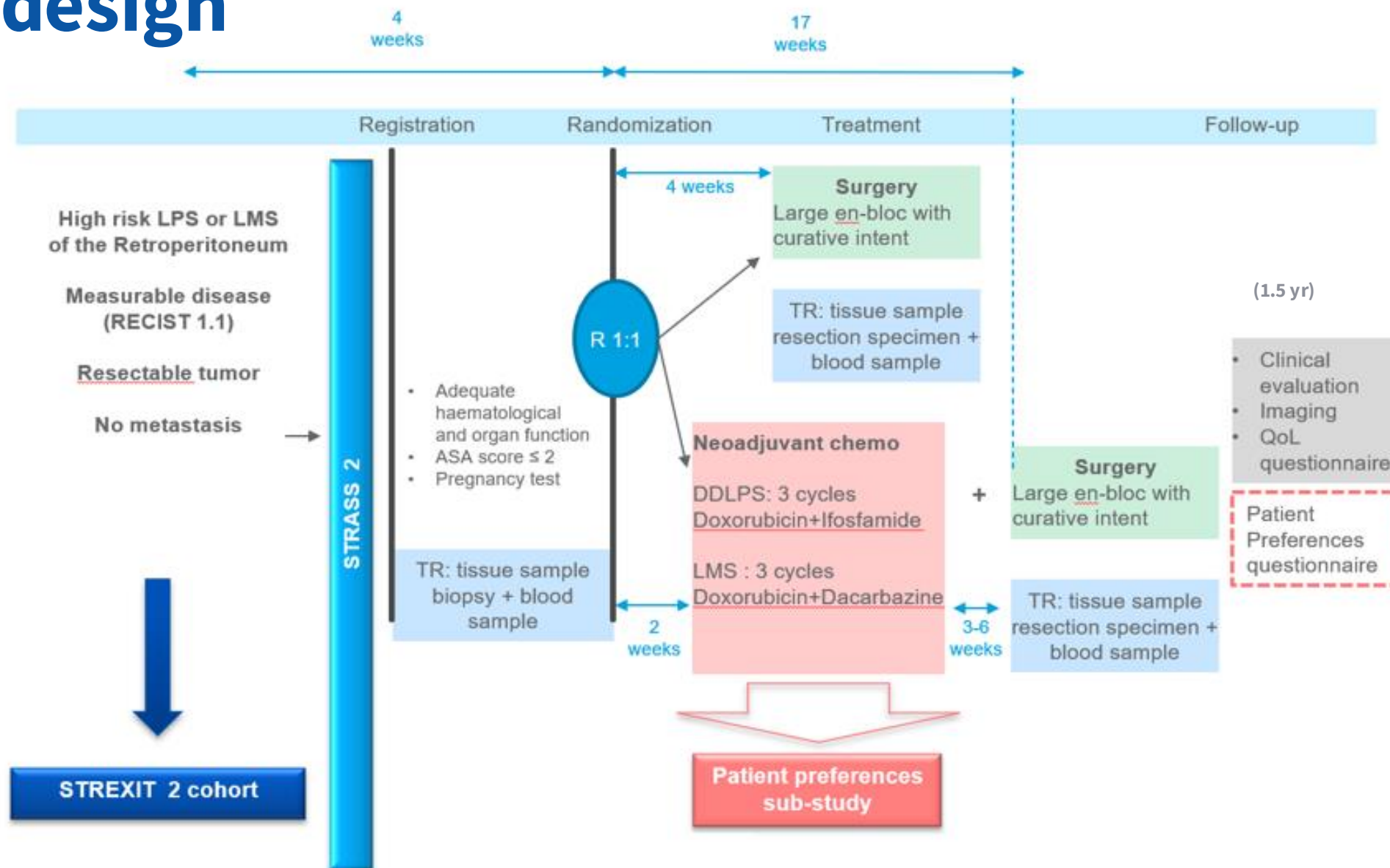
High-grade liposarcoma & leiomyosarcoma

What the trial compares

- 1 Two groups, chosen at random**
Patients are randomly assigned to one of two approaches so the groups can be fairly compared.
- 2 Group A — chemo, then surgery**
Chemotherapy is given first to try to control disease before the operation.
- 3 Group B — surgery alone**
Surgery is done up front, the current standard for many patients.
- 4 Building on STRASS1**
The earlier STRASS trial tested radiation and did not show a broad benefit; STRASS2 tests chemotherapy.

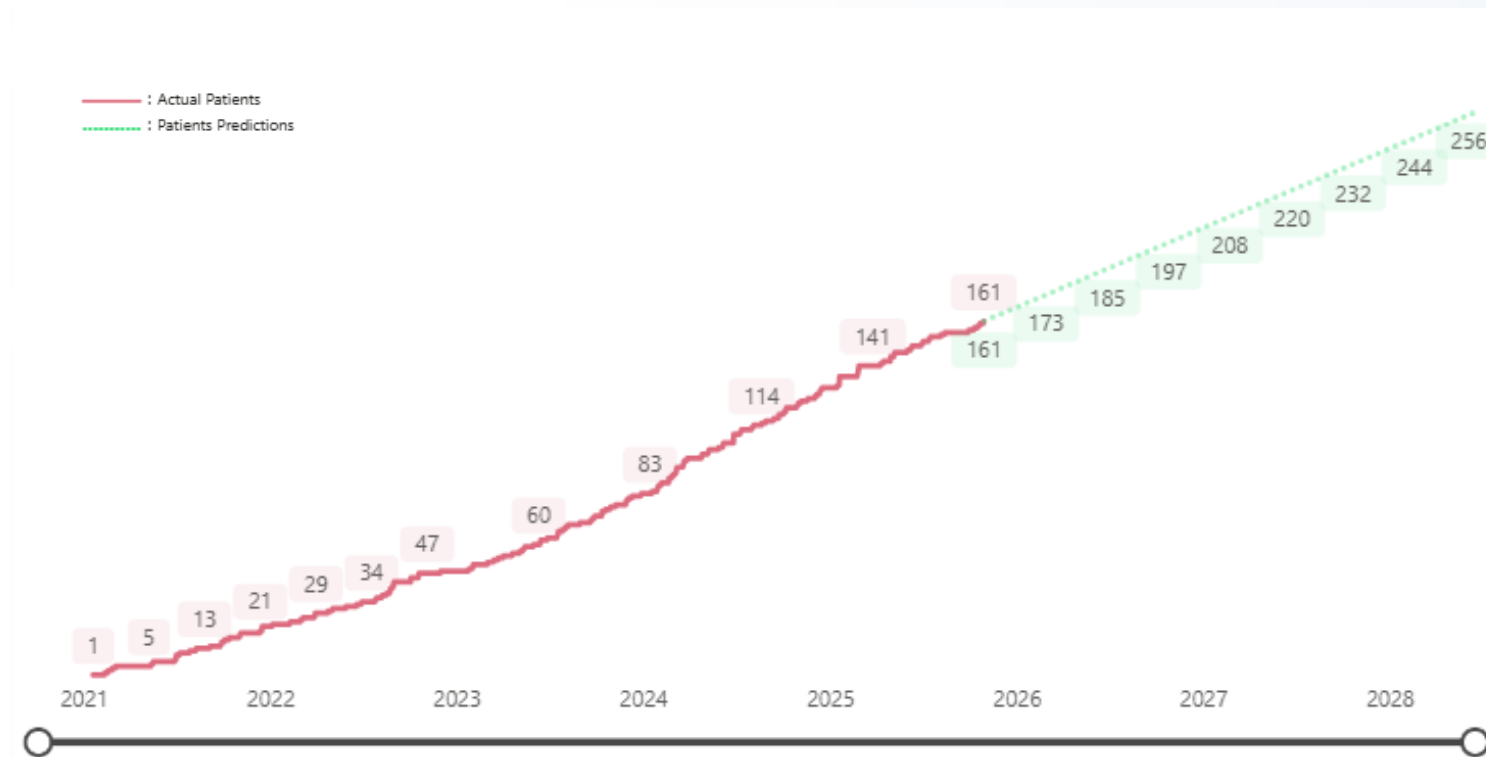


Study design



Accrual STRASS 2 – (through 3 Feb 2026)

Total patients enrolled (STREXIT2)	Total patients enrolled (STRASS2)
188	167



ReLaPSe

Curative-intent treatment outcomes in patients with first localized, resectable recurrent retroperitoneal well-differentiated and/or dedifferentiated liposarcoma.

THE SURGICAL QUESTION

For a local recurrence, who truly benefits from another operation and what is the best treatment approach?

First local recurrence · international collaboration

Why this trial is needed

1

A real evidence gap

There is limited data to guide treatment decisions for recurrent sarcomas and wide practice variation.

2

Observational prospective study

Treatment decision (surgery alone vs. preoperative RT +/- chemotherapy followed by surgery) is per the institutional team recommendation.

3

Patient-reported outcomes

Patients will complete quality of life questionnaires at 4 or 5 different time points

4

Aiming for real answers

The goal is dependable evidence to guide a difficult, individual decision that reflects clinical outcomes (RFS) and quality of life.



Eligibility Criteria

INCLUSION CRITERIA	EXCLUSION CRITERIA
Adult patients (greater than 18 years)	Unresectable disease
Well-differentiated and/or dedifferentiated liposarcoma of RP space or pelvis	Anticipated R2 resection
First recurrence following previous R0/R1 resection	Extent of disease not fully accessible to RT
No distant metastasis on CT/MRI within one month	Contraindications to RT
Tumor confirmed to have likely R0/R1 resection, and all disease deemed treatable by RT	Myxoid liposarcoma histology
No prior RT for the RP liposarcoma	Sarcomas originating from bone or abdominal/gynecological viscera
No concurrent active malignancy	Pregnant patients



PATIENT-PREFERENCE TRIAL ·
NCT06480396

SARveillance

Follow-up scanning after retroperitoneal sarcoma surgery

THE SURGICAL QUESTION

After the operation, does more frequent scanning actually improve outcomes — or can we safely scan less?

~650 patients · open at Dana-Farber · QoL + survival

How it works

1

After a complete resection

Enrolls patients whose primary abdominal or pelvic sarcoma has been fully removed.

2

Higher vs. lower intensity scans

Compares more frequent imaging against a less frequent schedule.

3

Your choice is respected

Those who prefer not to be randomized can still choose their own schedule and take part.

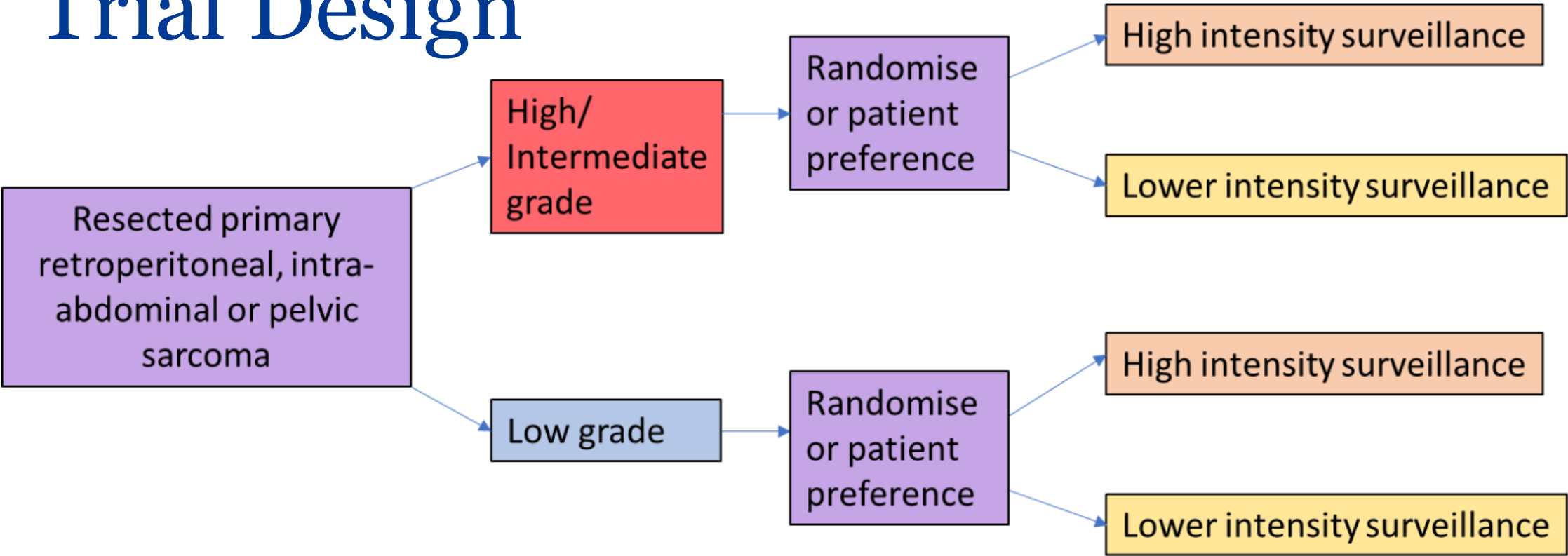
4

Measures what matters to patients

Looks at quality of life and survival — including scan-related anxiety and burden.



Trial Design



HIGH-INTENSITY RADIOLOGICAL SURVEILLANCE		LOW-INTENSITY RADIOLOGICAL SURVEILLANCE	
High/Intermediate Grade	Low Grade	High/Intermediate Grade	Low Grade
CT q 3-4m years 1-2 CT q 6m years 2-5	CT q 6m years 1-2 CT q 12m years 2-5	CT q 6m years 1-2 CT q 12m years 2-5	CT q 12m years 1-2 CT q 18m years 2-5
<i>(schedule 1)</i>	<i>(schedule 2)</i>	<i>(schedule 2)</i>	<i>(schedule 3)</i>



One surgical journey, studied end to end

Together, these trials refine every stage around the operation.



Before surgery

SATURN-STS · STRASS2

What we give first to set surgery up for success



The operation

RELAPSE

The role and timing of surgery when cancer returns



After surgery

SARveillance

How closely we watch — and re-operate if needed



Rare cancers need teamwork. All of these trials rely on multi-institutional and international collaboration — sarcoma is rare, and no single center could answer these questions alone.

What this means for you



Eligibility is specific

Whether a trial fits depends on your tumor's type, location, grade, and any prior treatment.



Ask your care team

The best way to know is to ask whether any open trial matches your situation.



Participation is voluntary

Taking part is always your choice — and standard surgical care remains available either way.



Trials shape tomorrow's care

Each answers a question that helps the next patient facing the same decision.

Thank you to everyone here, LRG, and the patients around the world who participate in research



Mass General Brigham

Your sarcoma care team

The best source for whether a trial is right for you

ClinicalTrials.gov

Public registry of the trials discussed today and many others

Advocacy groups

Support, education, and connection with others

Elizabeth Lilley, MD, MPH

Patient Inquiries – 617-525-8473 (Sunny Xu – my right-hand woman!)

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Thank you to our sponsors for supporting our mission to present high-quality education, engagement & support to the liposarcoma community!

