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# Adjuvant CDK 4/6 Inhibition for High Risk DDLPS

Luke V. Selby, Valerie P. Grignol  
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Transatlantic Australasian Retroperitoneal  
Sarcoma Working Group



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# Disclosures



- None



# Background

- RP Liposarcoma is a recurrent disease
- CDK 4/6 inhibitors have activity in liposarcoma
  - Few studies examining adjuvant CDK 4/6i following surgery



ORIGINAL ARTICLE – SARCOMA

## **Adjuvant Palbociclib May be Associated with Delayed Recurrence in Completely Resected Retroperitoneal Liposarcoma: Results of a Single-Institution Retrospective Cohort Study**

Luke V. Selby, MD, MS<sup>1,2</sup>, Emma C. Clark, MS<sup>4</sup>, David A. Liebner, MD<sup>3</sup>, James L. Chen, MD<sup>3</sup>, Gabriel Tinoco, MD<sup>3</sup>, Elizabeth Bashian, MD<sup>4,5</sup>, Joal D. Beane, MD<sup>1</sup>, Raphael E. Pollock, MD, PhD<sup>1</sup>, and Valerie P. Grignol, MD<sup>1</sup> 

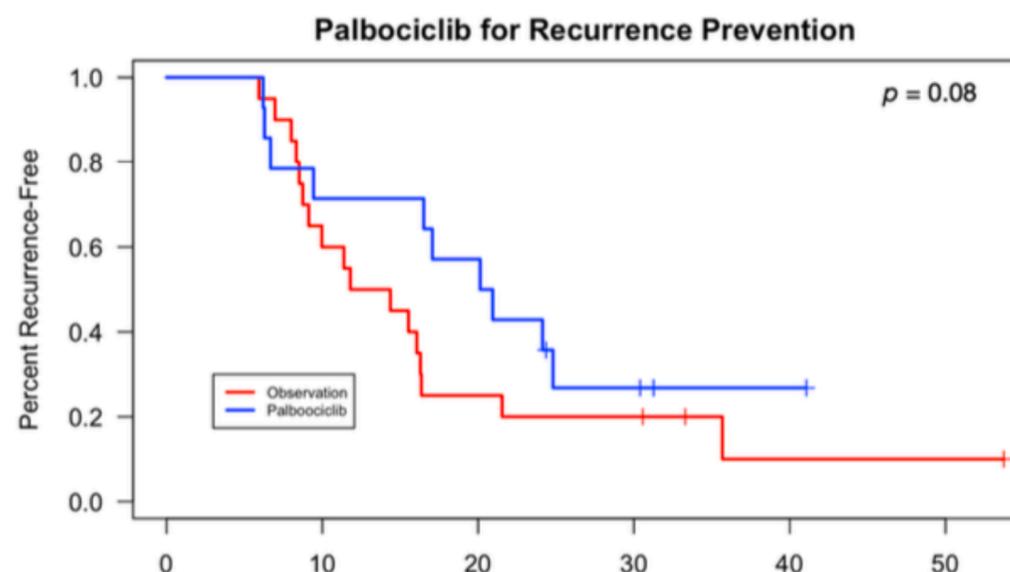
- Retrospective single institution case series of patients with RP liposarcoma who received observation or adjuvant CDK 4/6 inhibitor (Palbociclib)
  - Primary surgery or 1st recurrence
- Primary outcome: time to treatment change following surgery
  - Time from surgery to subsequent intervention for recurrent disease
  - Surgery, radiation, or systemic therapy (other than adjuvant Palbociclib)



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Number at risk	Months from Surgery until Treatment Change					
	0	10	20	30	40	50
Observation	20	12	5	4	1	1
Palbociclib	14	10	8	3	1	0

**FIG. 1** Time-to-treatment change for patients treated with adjuvant palbociclib for recurrence prevention or postoperative observation following retroperitoneal liposarcoma resection



# SSO 2026

- 53 primary resections
  - 33 grade 2/3 DDLPS, 13 of whom received CDK 4/6 inhibition
  - All patients underwent comprehensive complete gross resection
  
- Outcomes
  - Time to recurrence
  - Time to treatment change

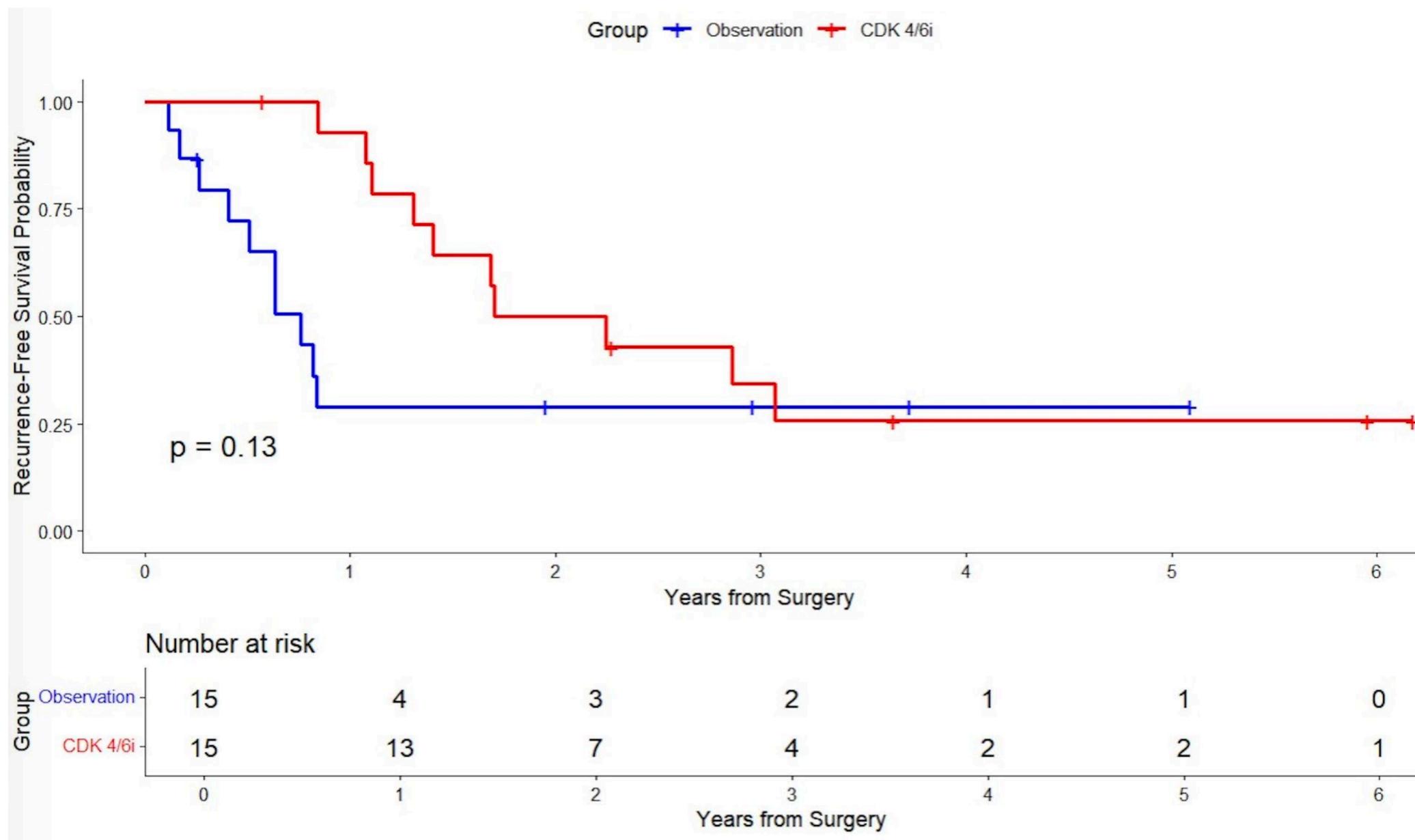


# Demographics – Primary Resections

	Post-Operative Observation (n = 38)	Adjuvant CDK4/6 Inhibition (n = 15)	p-value
Age	63.3 (14.2)	62.3 (10)	0.78
BMI	31.3 (8.2)	30.4 (7.7)	0.71
Tumor Size	23.8 (11.3)	30 (16.6)	0.20
% DDLPS	20 (53%)	13 (87%)	0.02*
FNCLCC Grade 2	9 (24%)	6 (47%)	
FNCLCC Grade 3	9 (24%)	7 (47%)	
Neoadjuvant Radiation	7 (18%)	1 (6.7%)	0.42
Neoadjuvant Systemic	1 (2.6%)	2 (13%)	0.19
Sarcuator 5-year Disease Free Survival	58.3 (23.6)	36.5 (24.3)	0.007*



# Matched Time to Recurrence





# Proposal

- Prospective multi-institutional trial comparing CDK 4/6 inhibition to standard observation following comprehensive resection of “high risk” RP liposarcoma
  - Primary outcome: Time to Recurrence
  - Secondary outcome: Time to treatment change, AEs, QOL, translational analysis of biopsy proven recurrence
- Primary endpoint: 2 years



# Inclusion Criteria

- Medically fit patients who underwent comprehensive resection of RP liposarcoma and within 90 days of surgery are medically fit for oral CDK 4/6 inhibition
  - Cross-sectional imaging and labs prior to intervention and Q3 months
  - Stratify based on neoadjuvant radiation and systemic therapy



Adult Patients with Primary  
DDLPS who Underwent Compartmental En-Bloc  
Resection without residual disease

Close Clinical Observation

1:1 Randomization

Adjuvant CDK 4/6 Inhibition

Time to radiographically confirmed recurrence.  
Time to treatment change.  
QOL / Systemic therapy associated symptoms.  
Translational correlative analyses on primary tumor and biopsied recurrences.



# Limitations

- Sample size estimated ~150-200 patients for an RCT
  - ~60 for a single arm study with historical controls
    - Matching from institutional databases and RESAR
- If single arm, what effect size would you need to convince you?