

BRINGING PERSONALIZED CARE TO YOUR PATIENTS

HILTON SAN DIEGO BAYFRONT SAN DIEGO | MARCH 14-16, 2019



News Briefing: Highlights from the 2019 Multidisciplinary Thoracic Cancers Symposium

Improved Overall Survival with Local Consolidative Therapy in Oligometastatic Non-Small Cell Lung Cancer: Results from a Cohort of 194 Patients with Synchronous Disease

Kyle G. Mitchell¹, Ahsan Farooqi², Ethan B. Ludmir², <u>Erin M. Corsini</u>¹, Ara A. Vaporciyan¹, Stephen G. Swisher¹, John V. Heymach³, Jianjun Zhang³, Daniel R. Gomez², and Mara B. Antonoff¹

¹Department of Thoracic and Cardiovascular Surgery, The University of Texas MD Anderson Cancer Center ²Division of Radiation Oncology, The University of Texas MD Anderson Cancer Center ³Department of Thoracic Head and Neck Medical Oncology, The University of Texas MD Anderson Cancer Center



Disclosure for Dr. Corsini

- Employer: The University of Texas MD Anderson Cancer Center
- I have nothing to disclose.

Oligometastatic NSCLC

Advanced NSCLC

- Frequently present at diagnosis
- Associated with dismal prognosis

Oligometastatic state: limited disease burden¹

- Distinct tumor biology^{2,3}
- Spectrum of associated outcomes

Synchronous, Few Metastases Synchronous, Many Metastases

¹Hellman J Clin Oncol 1995; ²Wong Cancer 2016; ³Lussier PLoS One 2011; Figure: Gomez 2016



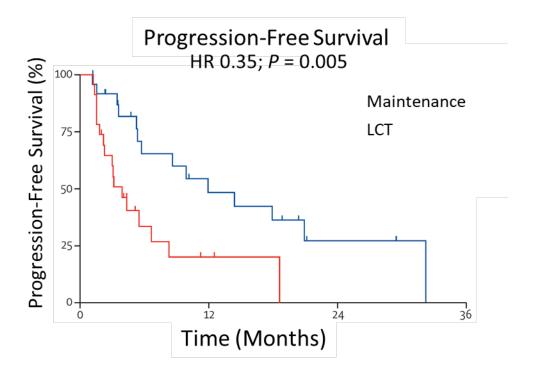
Oligometastatic NSCLC

Advanced NSCLC

- Frequently present at diagnosis
- Associated with dismal prognosis

Oligometastatic state: limited disease burden¹

- Distinct tumor biology^{2,3}
- Spectrum of associated outcomes



¹Hellman J Clin Oncol 1995; ²Wong Cancer 2016; ³Lussier PLoS One 2011; Figure: Gomez 2016



Objectives and Hypothesis

Objectives: In synchronous oligometastatic (≤ 3 sites) NSCLC

- Characterize survival outcomes associated with LCT
- Define subgroups deriving greatest therapeutic benefit

Hypothesis: Local consolidative therapy → improved overall survival

Clinicopathologic Characteristics (N=194)

Variable	N (%) or Median (IQR)
Age (years)	62 (57-69)
Sex (M)	111 (57%)
Histology	
Adenocarcinoma	149 (77%)
Squamous	34 (18%)
NSCLC NOS	11 (6%)
Thoracic Stage	
1	37 (19%)
II	42 (22%)
Ш	115 (59%)

Variable	N (%) or Median (IQR)		
# of Metastatic Sites			
1	57 (29%)		
2	103 (53%)		
3	34 (18%)		
Location of Metastases			
Brain	86 (44%)		
Bone	51 (26%)		
Adrenal	36 (19%)		
Liver	7 (4%)		

Clinicopathologic Characteristics (N=194)

Variable	N (%) or Median (IQR)
Age (years)	62 (57-69)
Sex (M)	111 (57%)
Histology	
Adenocarcinoma	149 (77%)
Squamous	34 (18%)
NSCLC NOS	11 (6%)
Thoracic Stage	
	37 (19%)
	42 (22%)
III	115 (59%)

Variable	N (%) or Median (IQR)		
# of Metastatic Sites			
1	57 (29%)		
2	103 (53%)		
3	34 (18%)		
Location of Metastases			
Brain	86 (44%)		
Bone	51 (26%)		
Adrenal	36 (19%)		
Liver	7 (4%)		

Comprehensive LCT to all sites (cLCT):

121 (62%)

Subcomprehensive or No LCT to metastases (no LCT):

73 (38%)

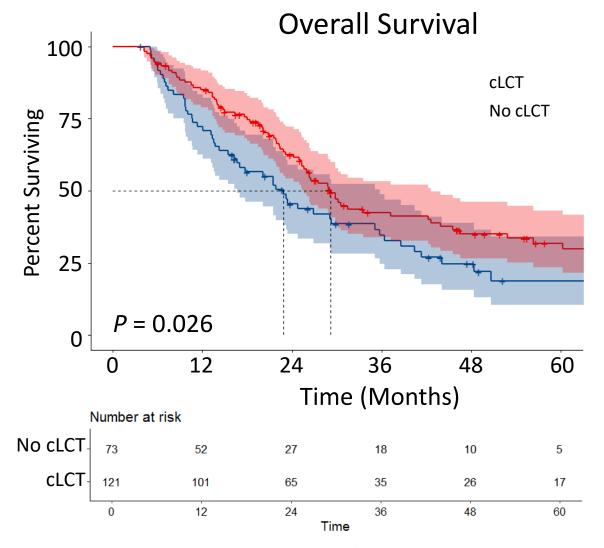


Survival Outcomes (N=194)

Group	N	MST	95% CI	
Comprehensive LCT	121	29 months	25-42 months	
No cLCT	73	23 months	16-35 months	

Group	N	1yOS	3yOS	5yOS
Comprehensive LCT	121	85%	43%	32%
No cLCT	73	72%	35%	19%

Median follow-up duration 52 months (IQR 48-66)

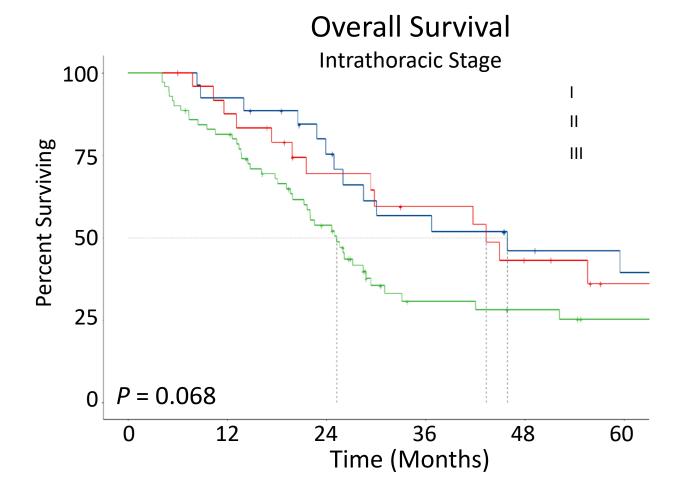




Survival Outcomes Among Patients Undergoing cLCT (N=121)

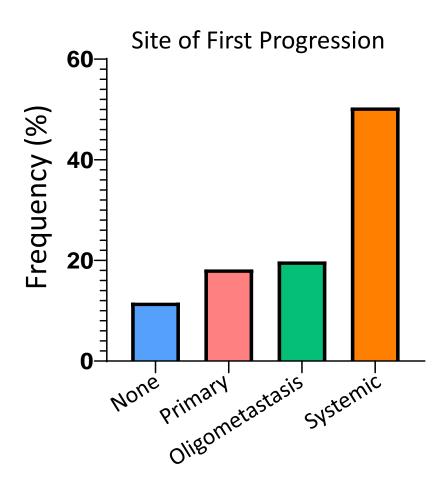
Associated with poorer survival:

- Squamous histology
- Higher intrathoracic stage
- Bone metastases

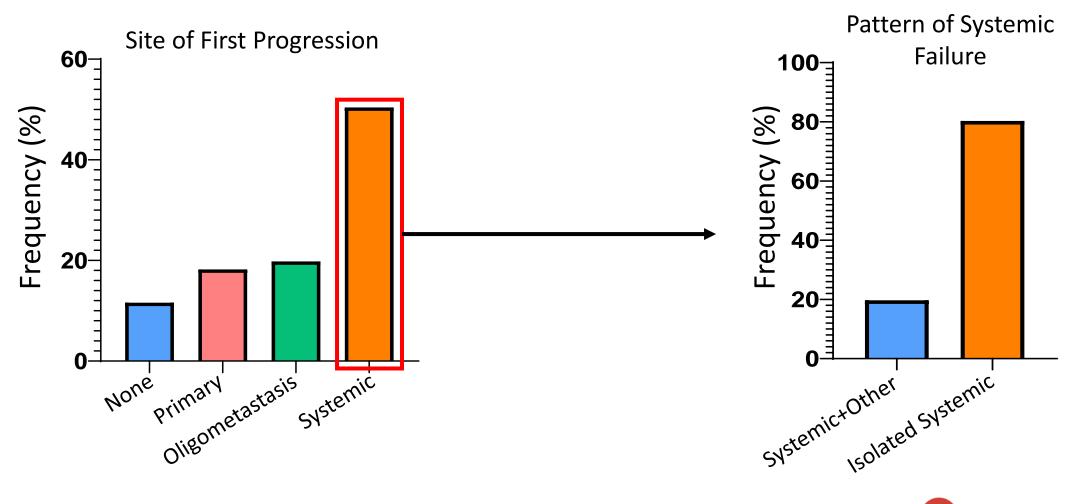




Patterns of Treatment Failure (cLCT, N=121)



Patterns of Treatment Failure (cLCT, N=121)



Conclusions

- Local consolidative therapy to all sites of disease associated with improved overall survival
 - 3-year OS: 43%
 - 5-year OS: 32%
- Best outcomes: Adenocarcinoma, thoracic stage I/II, no bone metastases
- Further work needed to characterize in context of contemporary systemic therapies

Interview Requests & Other Questions

press@astro.org

703-286-1600

Slides and a recording of this briefing will be available online: www.astro.org/thoracicpress

