Treatment Approaches for Stage IIIa(N2) Lung Cancer

Frank Detterbeck MD
Thoracic Surgery, Yale University
Yale Thoracic Oncology Program

No conflicts to disclose with respect to this presentation
## Disclosures

<table>
<thead>
<tr>
<th>Company</th>
<th>Role Description</th>
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<tbody>
<tr>
<td>Medela</td>
<td>Research Grant (chest drainage device)</td>
</tr>
<tr>
<td>Olympus</td>
<td>Data Safety Monitoring board</td>
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<tr>
<td>Covidien</td>
<td>Research advisory board participation</td>
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<tr>
<td>Lilly</td>
<td>Lectures on 7\textsuperscript{th} edition Lung Cancer Stage classification system in the past</td>
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“If it bleeds… I can kill it!”

“The answer to cancer”
"Thank God we all made it out in time... 'Course now we're equally screwed."
Fact:
Survival is the same for ChemoRT and for Chemo/RT/Surgery
Bi- vs Tri-Modality Tmt of Stage III

Overall Survival

Surgery (n = 167)
RT (n = 165)

Van Meerbeck JNCI 2007;99:442-50
Intergroup 0139/RTOG 9309
Overall Survival by Treatment Arms

Logrank p = 0.24
Hazard ratio = 0.87 (0.70, 1.10)
Odds Ratio at 5 yrs 0.63 (0.36-1.1)
Stage III: Ch/RT vs Ch/RT/Surg

Intergroup 0139
• Is overall survival the same?
• Is one curve flatter than the other?

Is the glass:
Half
Full
or
Half
Empty?
Fact:

We have identified **prognostic** factors, (most are applicable only retrospectively) These ARE NOT **predictive** that surgery is beneficial
Schematic of types of patients included in studies using different treatment approaches:

- **Palliative Treatment (PS ≥ 2)**
- **Curative-Intent Chemo-RT**
- **Neoadjuvant + Surgery**
- **Primary Surgery (occult N2)**

IIIa (N2) – It’s a Spectrum of Patients!
Fate of Patients selected for Trimodality Tmt

402 Good-risk patients, N2 at EBUS/Mediastinoscopy
Thought to be good candidates for Trimodality Tmt

Fate of Patients selected for Trimodality Tmt

402 Good-risk patients, N2 at EBUS/Mediastinoscopy selected for **Trimodality** Tmt

Ref: Cerfolio ATS 2008;86:912-20
Fact:
Surgery causes Morbidity And Mortality
INT 0139: Pneumonectomy Pts vs Matched CT/RT Subset

% Overall Survival

logrank p = NS

0 12 24 36 48 60
Months

45% 36% 24%

ChRT/S

ChRT
# Op. Mortality of Neoadj → Pneumonectomy

<table>
<thead>
<tr>
<th>Study</th>
<th>N (pneum)</th>
<th>Ind Tmt</th>
<th>% Mort</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stamatis 02</td>
<td>127</td>
<td>Ch</td>
<td>7</td>
</tr>
<tr>
<td>Alifano 08</td>
<td>113</td>
<td>Ch</td>
<td>6</td>
</tr>
<tr>
<td>Doddoli 05</td>
<td>100</td>
<td>Ch</td>
<td>12</td>
</tr>
<tr>
<td>Martin 01</td>
<td>97</td>
<td>Ch</td>
<td>11</td>
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<td>Van Schil 05</td>
<td>69</td>
<td>Ch</td>
<td>7</td>
</tr>
<tr>
<td>Matsubara 04</td>
<td>68</td>
<td>Ch</td>
<td>4</td>
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<tr>
<td>Mansour 07</td>
<td>60</td>
<td>Ch</td>
<td>7</td>
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<tr>
<td>Albain 05</td>
<td>54</td>
<td>Ch/RT</td>
<td>26</td>
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<tr>
<td>Gudbjartson 08</td>
<td>35</td>
<td>Ch/RT</td>
<td>0</td>
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<tr>
<td>Daly 06</td>
<td>30</td>
<td>Ch/RT</td>
<td>13</td>
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<tr>
<td>Perrot 05</td>
<td>27</td>
<td>Ch</td>
<td>4</td>
</tr>
<tr>
<td>Roberts 01</td>
<td>20</td>
<td>Ch</td>
<td>0</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td><strong>8</strong></td>
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Inclusion Criteria: Studies of ≥20 pts 2000-08
Are there any Answers?
Treatment of Stage III NSCLC

Role of Trimodality is based on flawed arguments
- Retrospective selection
- Inappropriate application of subset results to the whole

But: Trimodality and Bimodality are the same
- So if the patient really wants it, it is OK
- **IF** your periop morbidity/mortality is minimized
- **IF** you can achieve a complete resection
- **IF** you can manage the distant disease