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Integrative oncology – Leaving no one behind
Geriatric and oncological predictors of survival and chemotherapy toxicities in elderly patients with metastatic Non Small Cell Lung Cancer: an analysis of ESOGIA trial

Florence Canouï-Poitrine, Sonia Zebachi, Elena Paillaud Christos Chouaid, Romain Corre

CEpiA (Clinical Epidemiology and Ageing), Paris-Est Creteil University
Henri-Mondor Teaching Hospital, Assistance Publique-Hôpitaux de Paris
Creteil, France
CONFLICT OF INTEREST DISCLOSURE

I have no potential conflict of interest to report
Background, Objective and Methods

• Increasing incidence of Non Small Cell Lung Cancer (NSCLC) in older subjects
• High selection and low rate of older patients included in cancer trials
• Heterogeneity of older patients with cancer
• Discrepancy of frailty classification

Selection of patients who will benefit of systemic treatment with favorable efficacy/tolerance remain challenging

We aim to identify **predictive factors for death and chemotherapy** toxicity in an homogeneous population of older patients with metastatic Non Small Cell Lung Cancer (NSCLC) including in the ESOGIA trial

• Multicenter randomized controlled superiority trial in **493** older patients (≥ 70 years) with stage IV NSCLC
• Treatment allocation (carboplatin-based doublet or single agent) according **Performance status and Age** on the VERSUS according **Geriatric Assesment-based** allocation of the same chemotherapies or exclusive supportive care
Survival - Median of survival: 5.4 months [4.9-5.9]

Severe chemotherapy toxicity (CTCAE grade 3,4 or 5)

<table>
<thead>
<tr>
<th>Variable</th>
<th>OR 1</th>
<th>95 % CI</th>
<th>P</th>
<th>OR 1</th>
<th>95 % CI</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>IADL score ≥ 1 vs 0</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1.79</td>
<td>0.99 - 3.24</td>
<td>0.053</td>
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<tr>
<td>Charlson comorbidity index ≥ 2 vs 0-1</td>
<td>1.88</td>
<td>1.03 - 3.44</td>
<td>0.04</td>
<td>1.94</td>
<td>1.06 - 3.56</td>
<td>0.033</td>
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<tr>
<td>Falls during last year Yes vs No</td>
<td>2.09</td>
<td>0.93 - 4.70</td>
<td>0.076</td>
<td>-</td>
<td>-</td>
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<tr>
<td>No. of chemotherapy cycles = 4 vs &lt; 4</td>
<td>0.54</td>
<td>0.34 - 0.85</td>
<td>0.008</td>
<td>0.55</td>
<td>0.35 - 0.88</td>
<td>0.012</td>
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</tbody>
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Multivariate Cox model adjusted for treatment regimen, number of cycles and center and stratified for randomization arm. Harell’C: 0.87

Multivariate Logistic Regression model adjusted on the randomization arm, type of treatment and center. Harell’C: 0.64
Conclusion

• Geriatric and biological parameters have high predictive ability for short and middle death prediction in older patients (≥ 70 years) with stage IV NSCLC

• Conversely, geriatric parameters are moderate predictors for toxicity risk in older patients with stage IV NSCLC
Thank you for your attention