**FACTORS ASSOCIATED WITH GLOBAL MORTALITY IN COPD BETWEEN 2006 AND 2011: FRENCH CLAIMS DATA**

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**BACKGROUND**

- A good understanding of factors related to death in COPD could improve disease management.
- The role of patient- and management-related factors on global mortality was investigated in COPD.

**RESULTS**

**Global mortality**

- 27.5% of the initial population had died by the end of the follow-up
- Deaths occurred at a regular rate during the six-year follow-up
- Annual death rate 2006/2011 = 4.6%

**Personal characteristics**

- Significant associations observed with age and male gender (Fig 1-2).
- Conversely, a lower risk of death observed in case of free-access-to-care status (Fig 3).

**Long-term disease status respiratory condition and past hospital admissions**

- Risk of death increased significantly during the follow-up with the total number of days of COPD-related hospitalizations in 2005 (Fig 4).
- Significant influence of long-term diseases status for respiratory symptoms (Fig 5).

**Long-term disease status for co-morbid conditions**

- Patients with long-term disease status for cardiovascular, diabetes or cancer conditions are more likely to die during the follow-up (Fig 6).

**CONCLUSIONS**

In this cohort of COPD patients, the cumulated number of days in hospital due to COPD a given year was a strong predictor of the risk of death between 2006 and 2011.

Associated cancer and cardiovascular diseases also markedly impacted COPD global mortality.

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**METHODS**

A cohort

**Co-factors**

- age
- gender
- dispensing level of inhaled bronchodilator therapy in 2005
- free-access-to-care status
- long-term disease status (diabetes, respiratory, cardiovascular, cancer, and mental diseases)
- COPD-related hospitalization in 2005

**Models**

- Cox multivariate models used to predict global mortality from 2006 to 2011
- A stepwise selection process.

**Probability of death between 2006 and 2011 (n=4,800)**

**Table 1: Risk of death by any cause between 2006 and 2011 (Cox Model, stepwise regression, N=4,580)**

<table>
<thead>
<tr>
<th>Age (years)</th>
<th>OR (95% CI)</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>60-74</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td>50-59</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td>None</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td>&gt;10 days</td>
<td>1.00</td>
<td>1.00</td>
</tr>
</tbody>
</table>

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**RESULTS**

**Global mortality**

- 4,800 patients
- 50% female
- 66 yrs mean age

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**Personal characteristics**

- Significant associations observed with age and male gender (Fig 1-2).
- Conversely, a lower risk of death observed in case of free-access-to-care status (Fig 3).

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- Risk of death increased significantly during the follow-up with the total number of days of COPD-related hospitalizations in 2005 (Fig 4).
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**Long-term disease status for co-morbid conditions**

- Patients with long-term disease status for cardiovascular, diabetes or cancer conditions are more likely to die during the follow-up (Fig 6).