

## Diagnosis and Treatment of Malignant Pleural Mesothelioma (MPM) Care Pathway and its cost analysis

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MPM is one of the most serious professional cancer with a high frequency in subjects previously exposed to asbestos. Several trials have been made or are ongoing to define an effective therapy to allow a longer survival and to reduce its burdensome management by the health systems. The few MPM Care Pathways (CP), which have been suggested by groups of experts of scientific community, are only a list of practicable interventions without the structure of a pathway so the aims of this paper are the declination of possible cases of a MPM CP and the quantification of the costs using a regional consensus CP, verifying its application.

The diagnostic and therapeutic procedures of the regional CP were defined starting to a sample of 34 patients treated in public regional hospitals for MPM, diagnosed in 2015, and having at least a one year follow up. The costs were attributed

using the regional price list for outpatient health activities and the DRG for hospitalized activities. The formed cost accounting model was applied in order to calculate the cost for the public regional administration. Last, the obtained results were discussed with surgical thoracic surgeons of the three regional university hospitals.

The developed cost accounting model has identified three cases of a MPM CP. They present a common diagnostic phase (7.246,90€) following by three possible treatments, differently combinable between them: surgery (10.808,00€), chemotherapy (164,00€ + drug cost for access) and observation (41,00€). The cost will be due to the specific combination of the three treatments plus the diagnostic phase, predictable according to patient's age and staging, which can afford each patient affected by MPM.

The contribution of the cost accounting model applied to the consensus regional CP for MPM allows to assess the care's appropriateness of the cases actually treated. It could be used also for CPs of other diseases and as a method for institutional financing of the route.

### Key messages:

- Relevance of a shared Care Pathway realisation for a rare, highly lethal and complex professional disease.
- An accurate and scientific costs analysis model to a C is an innovation.