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Title: Dear colleagues: D-dimer is not always necessary – Reduce the cost of your hospitals!

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Body: Introduction: Pulmonary embolism (PE) is a major international health problem and may be fatal. Its overestimation may enhance the cost of the hospitals, but underestimation risk the patient's life as well. D-dimer has high sensitivity but low specificity for detection of PE. Objectives: To evaluate the effectiveness of D-dimer in patients with PE and its impact in the budget of our hospital. Materials and Methods: This is a retrospective study of 150 patients with PE confirmed by Angio-CT from January - May 2011. All patients of this group had high risk factors, clinical signs of PE and high score in clinical probability according to Geneva and Wells. D-dimer was performed in all of patients. Results: There were 105 male and 45 female. D-dimer was positive in 102 cases (68 %), and negative in 48 cases (12%). Discussion: The cost of D-dimer for 1 patient in Albania is 12€, for 150 patients is 1800€. Is evident: in 12% of cases D-dimer was negative in patients with confirmed PE. In the other group, the clinical data and high score clinical probability are sufficient as indication for the angio-CT. So, further laboratory examinations, including D-dimer may be avoided, especially in developing countries, where the cost of these tests is high for the hospitals. D-dimer is necessary in low and medium clinical probability cases. Conclusion: In patients with high risk factors and a clear anamnesis of PE, D-dimer is not necessary. Avoiding it may reduce the hospital expenses.