



# Clinical characteristics and 3-month outcomes in cancer patients with incidental *versus* clinically suspected and confirmed pulmonary embolism

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Shareable abstract (@ERSpublications)

In cancer patients with incidental pulmonary embolism the risk of venous thromboembolism recurrences or major bleeding are similar, with a lower mortality <https://bit.ly/36AvqSy>

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## Abstract

**Background** Current guidelines suggest treating cancer patients with incidental pulmonary embolism (PE) similarly to those with clinically suspected and confirmed PE. However, the natural history of these presentations has not been thoroughly compared.

**Methods** We used the data from the RIETE (Registro Informatizado de Enfermedad TromboEmbólica) registry to compare the 3-month outcomes in patients with active cancer and incidental PE *versus* those with clinically suspected and confirmed PE. The primary outcome was 90-day all-cause mortality. Secondary outcomes were PE-related mortality, symptomatic PE recurrences and major bleeding.

**Results** From July 2012 to January 2019, 946 cancer patients with incidental asymptomatic PE and 2274 with clinically suspected and confirmed PE were enrolled. Most patients (95% *versus* 90%) received low-molecular-weight heparin therapy. During the first 90 days, 598 patients died, including 42 from PE. Patients with incidental PE had a lower all-cause mortality rate than those with suspected and confirmed PE (11% *versus* 22%; OR 0.43, 95% CI 0.34–0.54). Results were consistent for PE-related mortality (0.3% *versus* 1.7%; OR 0.18, 95% CI 0.06–0.59). Multivariable analysis confirmed that patients with incidental PE were at lower risk of death (adjusted OR 0.43, 95% CI 0.34–0.56). Overall, 29 (0.9%) patients developed symptomatic PE recurrences, and 122 (3.8%) had major bleeding. There were no significant differences in PE recurrences (OR 0.62, 95% CI 0.25–1.54) or major bleeding (OR 0.78, 95% CI 0.51–1.18).

**Conclusions** Cancer patients with incidental PE had a lower mortality rate than those with clinically suspected and confirmed PE. Further studies are required to validate these findings, and to explore optimal management strategies in these patients.