ARTICLE:

- **Citation:** Outpatient versus inpatient treatment in patients with pulmonary embolism: a meta-analysis. Wendy Zondag. ERJ July 1, 2013 vol. 42 no. 1 134-144
- **Country:** Netherlands
- **Funding Sources:** not disclosed

PURPOSE:

- **Research Question(s):** To study the safety of outpatient treatment in low risk patients with acute PE compared with inpatient treatment
- **Hypothesis:** Meta-analysis; no hypothesis

DESIGN:

- **Study Design:** Meta-analysis
- **Dependent / outcome Variable(s):** Safety of outpatient vs inpatient treatment of PE. Pooled incidences of recurrent VTE, major bleeding and all cause mortality at 3 months
- **Independent / research Variable:** inpatient vs outpatient treatment setting

SETTING / SUBJECTS:

- **Research Setting:** Inpatient vs outpatient
- **Subjects:**
  - **Study population:** Low risk patients with acute PE
  - **Inclusion / Exclusion criteria:**
    - Inclusion: randomized controlled trials or cohort studies included patients acute symptomatic, proven PE.
    - Had to be treated with anticoagulants at home or discharged <3 days
    - Separate outcome parameters for DVT vs PE in studies
    - Low risk inpatient cohorts as comparison
Number (control / intervention groups): Outpatient group- 1657
- Early discharge- 256
- Inpatient- 383

Demographics: mean age 47-67; 30-58% male; malignancy ranged 1-100%

METHODS:
- Interventions: None.
- Study Groups: Inpatient vs outpatient
- Data Collection: Two investigators primary authors selected articles.

DATA ANALYSIS:
- Statistics Used: logistic regression method with random effect; meta-analysis, subgroup analysis of studies with low malignancy incidence
- What, if any, variables were controlled for?: subgroup analysis to adjust for low proportions of malignancy

RESULTS:
- Brief answers to research questions: Conclusions by author equivalent risks of bleeding and death in patients treated as outpatient or early discharge compared to standard of low risk inpatients with acute PE.

- Other possible explanation for findings: discussion and conclusions answer the meta-analysis primary question
- Limitations: relatively small early discharge and inpatient cohort size compared to low risk outpatient treatment. Still have limited level of evidence to draw from as only 2 RCT were included and mix of prospective and retrospective cohorts.

IMPLICATIONS FOR PRACTICE:
- Applicable to this clinical practice: Further support for use of outpatient treatment of low risk PE in appropriately selected patients.

- Feasible (cost, resources, etc): Feasible, safe and cost effective

- Clinically Relevant: relevant to our practice and CDU protocol

LEVEL OF EVIDENCE / DECISION FOR USE:
- Ready for use

- Level of Evidence: IIb