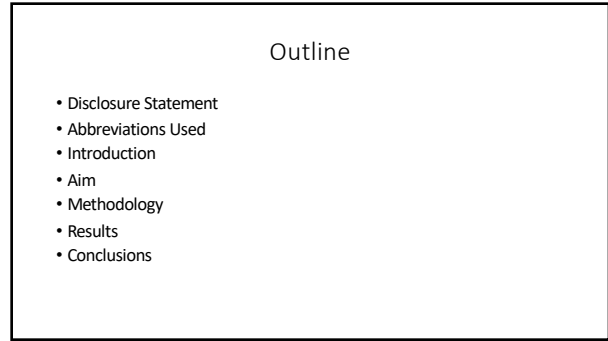
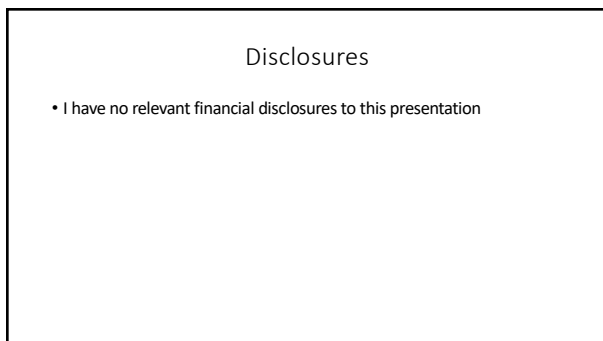




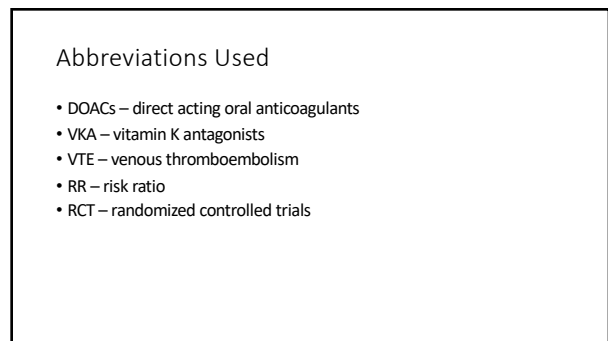
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## Introduction

- DOACs have become the standard of care in treatment of acute VTE per recent CHEST guidelines
- Prior RCTs of the DOAC cite superior efficacy and safety compared to VKAs in the treatment of acute VTE across all subgroups
- Prior meta-analysis suggests age-related difference in safety of DOACs compared to VKA in elderly patients treated for acute VTE but not efficacy
- Given the small number of elderly patients (>75) included in this prior meta-analysis, it is unclear whether there are age-related differences in efficacy also.

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## Aim

- To evaluate the effect of age on the efficacy and safety of DOACs used in the treatment of acute VTE in elderly (> 65 years old) vs. non-elderly (< 65 years old) patients.

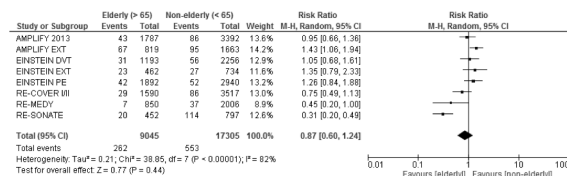
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## Methodology

- Systematically searched multiple databases (PubMed, Medline, Scopus)
- Included randomized controlled trials that used DOACs for treatment of venous thromboembolism and reported outcomes by age
- Pooled RRs for the outcome of recurrent VTE and bleeding using random effects model

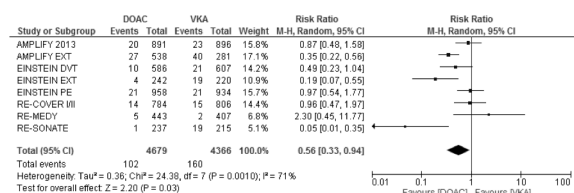
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## Result 1: Incidence of Recurrent VTE



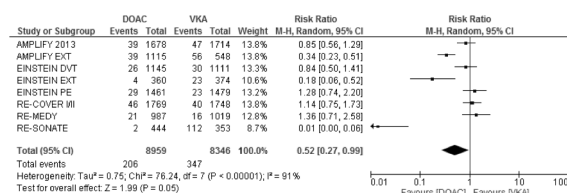
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## Result 2: Efficacy in Elderly Patients



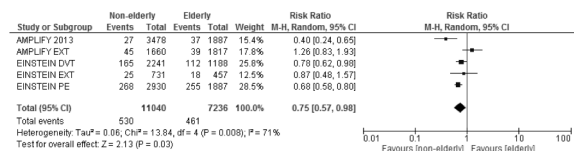
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## Result 3: Efficacy in Non-Elderly Patients



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## Result 4: Bleeding



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## Conclusions

- No clinically significant difference in incidence of recurrent VTE in elderly vs. non-elderly patients
- DOAC use is associated with greater efficacy compared to VKA for treatment of VTE in elderly vs. non-elderly patients
- DOAC use is associated with significantly less major and clinically relevant non-major bleeding in non-elderly patients
- Significant heterogeneity between studies suggest further trials may be required to more adequately assess the benefit vs. risk of DOAC use in elderly patients.

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