

Thromboembolism After Treatment With Four-Factor Prothrombin Complex Concentrate or Plasma for Warfarin-Related Bleeding

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HIGHLIGHTS



No significant adjusted difference in the 45-day risk of thromboembolism was observed post-treatment with 4F-PCC compared to plasma



4F-PCC-mediated reversal was associated with a **similar short-term risk of thromboembolic complications** as plasma



4F-PCC

treated cohort had a **lower adjusted risk of death within 45 days post-treatment** compared with a historical plasma-treated cohort

INTRODUCTION



Long-term VKA-treated patients may be predisposed to thromboembolic events (TEEs)



Acute VKA reversal in these patients may increase short-term TEE risk, which can vary with the treatment strategy

STUDY CHARACTERISTICS

Objective

45-day risk of thromboembolic events in 4F-PCC vs plasma-treated adults with warfarin-associated major bleeding

Study design

Multicenter observational study

Primary outcome

Occurrence of acute TEE

Patient population

Matched adults ≥18 years of age

Exposure

4F-PCC or plasma treatment for acute VKA reversal

RESULTS

Figure 1. Primary analysis: Risk of TEE among patients with no recent TEE history

Multivariable association of 4F-PCC vs plasma therapy with risk of thromboembolism at 7, 14, and 45 days post-treatment

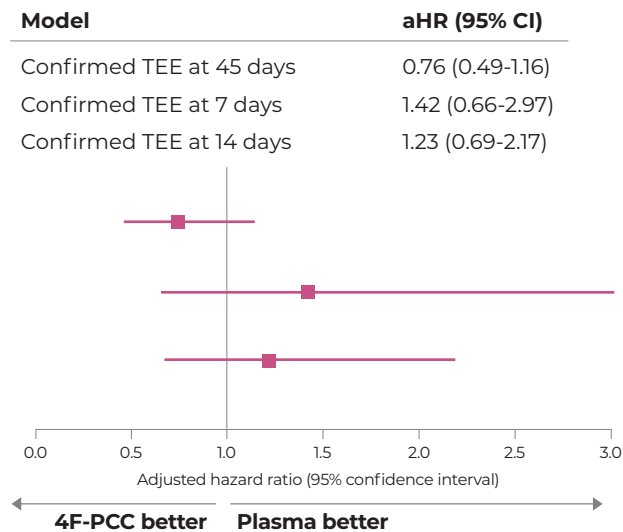
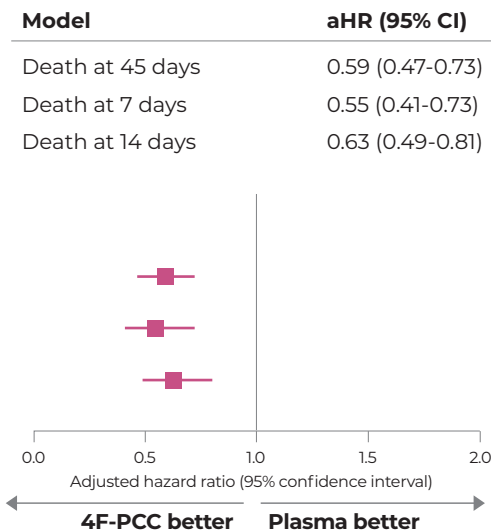


Figure 2. Secondary analyses: Mortality risk among patients with no recent TEE history

Multivariable association of 4F-PCC vs plasma therapy with risk of death at 7, 14, and 45 days post-treatment



Among 1119 4F-PCC treated patients, the **overall risk of TEEs was 3.5%**



45-day risk of thromboembolic events was similar in both groups



144 deaths and 206 deaths were identified among 4F-PCC and plasma patients, respectively



Lower adjusted risk of all-cause death at 45 days post-treatment with 4F-PCC was reported (aHR 0.59 [95% CI, 0.47-0.73])

Reference

Go AS, Leong TK, Sung SH, et al. *J Thromb Thrombolysis*. 2022;54(3):470-479.

Abbreviations

4F-PCC: four-factor prothrombin complex concentrate; aHR: adjusted hazard ratio; TEE: thromboembolic event; VKA: vitamin K antagonist.



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