Edoxaban versus warfarin in atrial fibrillation patients with low, mid and high body weight: analysis of outcomes in the engage af TIMI 48 trial

Authors:
G Boriani¹, CT Ruff², JF Kuder², M Shi³, H Lanz⁴, EM Antman², E Braunwald², RP Giugliano², ¹University of Modena & Reggio Emilia - Modena - Italy, ²Brigham and Womens Hospital, TIMI Study Group - Boston - United States of America, ³Daiichi Sankyo, Inc. - Basking Ridge, NJ - United States of America, ⁴Daiichi Sankyo Europe GmbH - Munich - Germany,

On behalf: ENGAGE AF-TIMI 48

Topic(s):
Anticoagulants

Citation:
Background: The impact on outcomes of oral anticoagulants in pts at extremes of body weight have not been well-characterized.

Aim: To analyse the outcomes of pts with atrial fibrillation (AF) enrolled in ENGAGE AF-TMI 48 randomized to warfarin (W) targeting INR 2.0-3.0, higher (HDE) or lower dose regimens of edoxaban (LDE), focusing on subgroups of patients at the extremas of weight.

Methods and Results: Among 21105 pts enrolled in the trial we identified 3 subgroups: 1082 with low body weight (LBW) (<5th percentile, <55kg), 2153 with mid body weight (MBW) (45-55th percentile, 80-84 kg), and 1093 patients with high body weight (HBE) (>95th percentile, >120 kg). Baseline characteristics differed markedly (LWB pts were older and more likely Asian, women, with prior TIA/stroke, renal dysfunction) resulting in a trend towards higher rates of stroke/systemic embolism (SSE: 6.5% vs 4.7% in MBW vs 1.6% in HBW) and major bleeding (MB: 9.3% vs 7.7% in MBW vs 6.5% in HBW) in the warfarin arm. The risks of SSE (Pint = 0.52) were similar between W and HDE regardless of body weight, while the relative reduction in MB was greatest in LBW patients (HR reduction 45%, 23%, 1% across weight groups; Pint = 0.35) (Figure). Net clinical outcomes (SEE/major bleeding/death) tended to be most favourable for LBW pts (HR 0.67 [0.50-0.90]; Pint 0.084) (Figure).

Conclusions: In ENGAGE AF-TIMI 48 the profile of AF pts with LBW markedly differed suggesting a more fragile clinical status. Use of dose-adjusted edoxaban, as compared to W, was associated with similar efficacy regardless of weight, while bleeding and net outcomes were most favourable in LBW pts.
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1 University of Modena & Reggio Emilia - Modena - Italy, 2 Brigham and Women's Hospital, TIMI Study Group - Boston - United States of America, 3 Daiichi Sankyo, Inc. - Basking Ridge, NJ - United States of America, 4 Daiichi Sankyo Europe GmbH - Munich - Germany

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