Efficacy and safety of dronedarone after recent cardioversion in patients with atrial fibrillation/flutter: a post-hoc analysis of the EURIDIS/ADONIS trials

Authors:
M Thind¹, HJ Crijns², GV Naccarelli³, JA Reiffel⁴, V Corp Dit Genti⁵, M Wieloch⁶, A Koren⁷, PR Kowey¹, ¹Lankenau Heart Institute - Wynnewood, Pennsylvania - United States of America, ²Maastricht University Medical Center and CARIM - Maastricht - Netherlands (The), ³Penn State University College of Medicine - Hershey, Pennsylvania - United States of America, ⁴Columbia University - New York, New York - United States of America, ⁵Sanofi-Aventis - Paris - France, ⁶Sanofi-Aventis, Paris, France; Skåne University Hospital - Malmö - Sweden, ⁷Sanofi - New York, New York - United States of America.

Topic(s):
Atrial Fibrillation - Treatment

Citation:
Sanofi, New York, New York, United States of America

Background: Cardioversion is commonly performed prior to antiarrhythmic drug initiation for atrial fibrillation/flutter (AF). There are limited data describing baseline differences in patients requiring cardioversion to maintain sinus rhythm compared to those who do not. Likewise, response to antiarrhythmic drugs, including dronedarone, specifically in patients requiring cardioversion has not been well defined.

Purpose: To evaluate efficacy and safety of dronedarone versus placebo in patients with non-permanent AF who had cardioversion within 5 days prior to randomization in EURIDIS/ADONIS.

Methods: To qualify for enrolment in EURIDIS/ADONIS patients were required to be in sinus rhythm for at least 1 hour preceding randomization. Of 1237 patients randomized (2:1 dronedarone to placebo), 364 needed cardioversion for study entry (dronedarone 243, placebo 121). AF recurrence was evaluated by ECG obtained during study visits, scheduled transtelephonic monitoring, or at symptom recurrence.

Results: Cardioversion patients were more likely to have rheumatic heart disease, valvular heart disease, any structural heart disease, and heart failure. Nonetheless, the median time to 1st AF recurrence was longer for dronedarone versus placebo both in cardioversion patients (50 versus 15 days, hazard ratio 0.76, 95% CI 0.59, 0.97) and no cardioversion patients (150 versus 77 days, hazard ratio 0.76, 95% CI 0.64, 0.90), as was time to 1st symptomatic recurrence (cardioversion: 347 versus 87 days, hazard ratio 0.65, 95% CI 0.49, 0.87; no cardioversion: 288 versus 120 days, hazard ratio 0.74, 95% CI 0.62, 0.90) (Figure 1). There was a trend towards fewer 1st AF hospitalizations within 12 months for dronedarone versus placebo (7.8 versus 12.4%, hazard ratio 0.60, 95% CI 0.31, 1.18 in cardioversion patients; 8.4 versus 10.4%, hazard ratio 0.74, 95% CI 0.47, 1.17 in no cardioversion patients). In cardioversion patients, rates of treatment-emergent adverse events with dronedarone versus placebo were 64 versus 66%, serious treatment-emergent adverse events were 19 versus 26%, permanent discontinuations were 9 versus 6%, and deaths were 0 versus 1%.

Conclusions: 1) Cardioversion-requiring patients have more baseline structural heart disease and overall shorter time to AF recurrence. 2) Dronedarone effectively delayed 1st AF recurrence versus placebo in patients with or without recent cardioversion. 3) Safety of dronedarone in cardioversion patients was similar to placebo and overall observations from EURIDIS/ADONIS despite baseline differences in comorbidities.
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1 Lankenau Heart Institute - Wynnewood, Pennsylvania - United States of America, 2 Maastricht University Medical Center and CARIM - Maastricht - Netherlands (The), 3 Penn State University College of Medicine - Hershey, Pennsylvania - United States of America, 4 Columbia University - New York, New York - United States of America, 5 Sanofi-Aventis - Paris - France, 6 Sanofi-Aventis, Paris, France; Skåne University Hospital - Malmö - Sweden, 7 Sanofi - New York, New York - United States of America.

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