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## QUALITY OF CARE AND OUTCOMES ASSESSMENT

**AMIODARONE AND SOTALOL IN ATRIAL FIBRILLATION: TREATMENT PERSISTENCE AND OCCURRENCE OF ADVERSE EVENTS IN THE REAL-WORLD SETTING**

ACC Poster Contributions

Ernest N. Morial Convention Center, Hall F

Monday, April 04, 2011, 3:30 p.m.-4:45 p.m.

Session Title: Quality of Care: Atrial Fibrillation

Abstract Category: 44. Quality of Care

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Authors: *Michael H. Kim, Paula J. Smith, Mehul Jhaveri, Jay Lin, David Klingman, Northwestern University, Chicago, IL, sanofi-aventis U.S., Bridgewater, NJ*

**Background:** Amiodarone (A) and sotalol (S) are widely used for the management of atrial fibrillation (AF), but their long-term use is complicated by the risk of extra-cardiac toxicities (A) and ventricular proarrhythmia (S), which may affect patient compliance. However, few data are available on real-world treatment persistence and AE frequencies among AF patients on A or S.

**Methods:** In this retrospective cohort study, patients aged  $\geq 18$  years with a pharmacy claim for oral A or S between 2004 and 2007 were identified from the US MarketScan<sup>®</sup> claims databases. Eligibility criteria also included  $\geq 1$  inpatient or outpatient claims with an AF diagnosis  $< 90$  days before or on the day of the earliest pharmacy claim ("index") and  $\geq 12$  months' continuous enrollment before and following the index claim. Treatment persistence was assessed post-index. Frequencies of prespecified AEs and AF-related hospitalization were compared pre- vs post-index.

**Results:** Of 3,459 eligible AF patients, 2,392 (mean age 72.2 years; 63% male) received A and 1,067 (mean age 67.5 years; 60% male) received S. Persistence 12 months post-index was higher with S (53.2%) than A (30.6%;  $P < 0.001$ ). Cardiovascular AEs increased post- vs pre-index with A and S (Table). AF-related admissions declined post-index with A, but rose with S.

Potential adverse event (% patients)	Amiodarone (n=2,392)		Sotalol (n=1,067)	
	Pre-index	Post-index	Pre-index	Post-index
AF-related hospitalization	4.9	3.6*	5.6	8.0*
Cardiovascular AEs	43.1	55.8***	31.0	44.2***
Torsade de pointes	7.0	8.2*	5.1	5.9
Bradycardia	7.1	10.9***	9.1	14.4***
QT interval prolongation	12.1	17.1***	10.9	18.1***
Atrioventricular block	1.7	2.6*	2.2	2.0
Ventricular tachycardia	1.3	1.6	0.9	2.2*
Heart failure	30.7	40.7***	14.2	17.4**
Inpatient cardiovascular AEs	22.1	22.4	12.5	16.1*
Pulmonary AEs	2.4	4.1***	2.0	2.3
Neurological AEs	2.2	2.2	1.8	1.5
Endocrinological AEs	1.1	2.9***	1.7	2.5
Gastrointestinal AEs	1.1	1.6	0.5	0.9
Ophthalmological AEs	1.2	2.8***	1.6	0.9

\*  $P \leq 0.05$  post- vs pre-index  
\*\*  $P \leq 0.01$  post- vs pre-index  
\*\*\*  $P \leq 0.001$  post- vs pre-index

**Conclusions:** Patients experience a high AE burden (particularly CV) with A and S and many discontinue treatment during the first year. Potential differences exist in AF-related hospitalization rates with A and S.