

**PCV38**  
**HOSPITALIZATION AND MORTALITY IN ADVANCED-AGE PATIENTS WITH ATRIAL FIBRILLATION/ATRIAL FLUTTER BUT WITHOUT HEART FAILURE IN THE UNITED STATES**

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**OBJECTIVES:** The ATHENA trial demonstrated that in patients with atrial fibrillation (AF) and/or atrial flutter (AFL), dronedarone decreased the risk of CV hospitalizations or death from any cause by 24% ( $P < 0.001$ ). In this retrospective cohort study, we evaluated hospitalizations/mortality in three subgroups of real world US insured AF/AFL patients without heart failure (HF): 1) patients aged  $\geq 65$  years (with or without CV risk factors); 2) ATHENA-like patients ( $\geq 70$  years and  $\geq 1$  CV risk factor); and 3) ATHENA-like patients  $\geq 75$  years. **METHODS:** Data for patients with evidence of non-transient AF and/or AFL in 2005 were drawn from the US MarketScan<sup>®</sup> databases from Thomson Reuters. Patients also had to have  $\geq 12$  months' continuous enrollment pre- and post-AF/AFL index diagnosis (except for inpatient death). **RESULTS:** In the AF/AFL  $\geq 65$  years, ATHENA  $\geq 70$  years, and ATHENA  $\geq 75$  years groups, 55,774 (52.2% men), 32,262 (46.2% men) and 24,587 (43.6% men) patients, respectively, were identified. Mean follow up was 24 months in all 3 groups. Across the 3 groups, more than half of patients had  $\geq 1$  hospital admission (51.9%, 52.7%, and 54.5%, respectively) and almost 30% a hospitalization with a primary CV diagnosis (27.2%, 28.2%, and 28.7%, respectively). Inpatient deaths were reported in 1592 (2.9%) AF/AFL  $\geq 65$  years, 919 (2.8%) ATHENA  $\geq 70$  years, and 798 (3.2%) ATHENA  $\geq 75$  years patients. Deaths during hospitalizations for CV causes were reported in 516 (0.9%), 327 (1.0%), and 273 (1.1%) patients, respectively. **CONCLUSIONS:** There was a similar rate of hospitalization and mortality between the two ATHENA-like groups and the AF/AFL  $\geq 65$  year group. The three patient groups studied were frequently hospitalized for all causes and CV events. Dronedarone may therefore be of benefit to a large number of ATHENA-like AF/AFL patients in a real-world setting. Further studies should evaluate dronedarone in a broader range of AF/AFL patients aged  $\geq 65$  years.

**PCV39**  
**RETROSPECTIVE CLAIM DATABASE ANALYSIS OF THE IMPACT OF THE ASCOT-TYPE PROFILE ON ALL-CAUSES MORTALITY AND CARDIOVASCULAR EVENTS IN HYPERTENSIVE PATIENTS WITHOUT KNOWN CORONARY HEART DISEASE IN A MEDITERRANEAN POPULATION IN SPAIN**

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**OBJECTIVES:** Mediterranean populations are traditionally considered to be associated with lower incidence of cardiovascular events (CVE). However, this lower incidence could not be homogeneous throughout different patient strata. The hypertensive ASCOT-type profile could have a different CV risk than other hypertensive subjects without that profile event in Mediterranean settings. The goal of this retrospective study was to compare the incidence of CVE and all-causes mortality in hypertensive patients with ASCOT-type profile with that of the rest hypertensive subjects. **METHODS:** A retrospective analysis was carried out in BSA claim database. Hypertensive patients without known cardiovascular disease on antihypertensive therapy included in the database during year 2006 were followed for two consecutive years to ascertain incidence of all-causes mortality and/or any CVE included peripheral artery disease. CVE included any of the following: coronary heart disease, acute myocardial infarction (AMI), angina, stroke, transient ischemic attack (TIA), peripheral artery disease, any CVE. Blood biochemistry parameters were also recorded. Patients with ASCOT-BPLA and ASCOT-LLA type profiles were identified and compared with non-ASCOT-type profile hypertensive subjects. Incidences of event, relative risk and rate of events were assessed. A Cox-proportional regression model was fitted to ascertain crude hazard ratios. **RESULTS:** A total of 11,104 were included in the analysis;  $68.0 \pm 11.4$  years, 41.6% males. More than 73% of subjects fulfilled criteria for ASCOT-type profile. All-causes mortality were higher but not statistically significant in ASCOT-BPLA and LLA compared with non-ASCOT-type; HR (95% CI) = 1.3 (0.8–1.9) and 1.6 (0.9–2.8), respectively. However, any-coronary event rates were significantly higher in ASCOT-type; 3.1 (2.2–4.4,  $p < 0.001$ ) and 2.1 (1.3–3.4,  $p < 0.05$ ), and also cerebrovascular disease; 1.6 (1.2–2.2,  $p < 0.05$ ) and 1.5 (1.0–2.3,  $p = 0.05$ ), respectively. **CONCLUSIONS:** Hypertensive patients on treatment with ASCOT-type profile are more likely to have any coronary or cerebrovascular events than those hypertensive patients without ASCOT profile in a Mediterranean setting in Spain.

**PCV40**  
**ACUTE MYOCARDIAL AND CEREBRAL INFARCTION REGARDING TO SEASONAL, WEEKLY AND DAILY VARIATION IN CASE OF HUNGARY**

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**OBJECTIVES:** The aim of our study was to observe whether a seasonal change or weekly variation can be shown in the incidence of an acute myocardial infarction (AMI) and a cerebral infarction between 2005 and 2007 in Hungary. **METHODS:** We have analyzed myocardial (N = 44,105) and cerebral infarction (N = 151,678) patients attended in clinics and hospitals in Hungary during the three years examined.

Data were collected from the database of the National Social Security Fund (OEP) based on the International Classification of Diseases. **RESULTS:** Based on our results, a weekly and a seasonal variation can be seen in the onset of a myocardial and cerebral infarction. With regard to seasonal variation, there was a significant difference between the number of events for each season (AMI:  $\text{kh}i2 = 78,923$ ,  $p < 0.001$  Cerebral inf.:  $\text{kh}i2 = 11,1397$ ,  $p < 0.05$ ), and the peak period of myocardial and cerebral infarction was found during the months of spring, the lowest number of events was during the summer. In case of sexes, we found difference only in the seasonal variation in case of the number of AMI and cerebral infarction events AMI:  $\text{kh}i2 = 8,671$ ,  $p < 0.05$ ; Cerebral inf.:  $\text{kh}i2 = 29,277$ ,  $p < 0.001$ ). The weekly peak period of infarction and cerebral circulatory disturbance was found on the first day of the week, on Monday, with a gradually decreasing tendency towards the end of the week. **CONCLUSIONS:** The decrease of the number of events is higher from Friday to Sunday. In summary, the results of our study show that the incidence of an acute myocardial and a cerebral infarction show characteristic variation with regard to seasons and the days of the week.

**PCV41**  
**ESTIMATION OF PERSONS ELIGIBLE FOR ICD/CRT THERAPY IN WESTERN EUROPE UNDER THE CURRENT ESC GUIDELINES: A SYSTEMATIC REVIEW OF THE LITERATURE**

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**OBJECTIVES:** In 2008 the European Society of Cardiology (ESC) published guidelines on the use of implantable cardiac devices (ICDs) and cardiac resynchronization therapies (CRTs) for primary and secondary prevention of heart failure and sudden cardiac arrest. An understanding of the number of persons in Western Europe that would be eligible for these therapies under the new guidelines is currently lacking. The objective of this study was to estimate the prevalence of eligible persons for ICD and CRT in Western Europe according to the ESC guidelines. **METHODS:** A comprehensive systematic review of the literature was undertaken to identify relevant prevalence data. Medline, Embase, PubMed, CRD York and The Cochrane Library databases were searched from 1990 to August 2008. Grey literature sources were also searched. Population-based epidemiological studies that included prevalence or incidence estimates of persons eligible for implantation of CRT or ICD devices according to the current 2008 ESC guidelines were included. Two reviewers independently extracted data from the included studies using a standard template. **RESULTS:** A total of 1583 unique articles were retrieved. No one study reported data that met the full eligibility criteria for ICDs or CRTs as outlined by the ESC guidelines. Fifteen studies met partial criteria and were included for review. General population prevalence estimates of persons with individual risk factors such as; LVEF  $\leq 35\%$ , NYHA class II, III or IV, QRS prolongation (QRS  $\geq 120$ ms), 40 days post MI and survivors of ventricular fibrillation were retrieved from the literature. Preliminary modelling of this data identified significant gaps in the published estimates. **CONCLUSIONS:** A comprehensive systematic review of the literature has highlighted the lack of general population estimates for persons eligible for ICDs or CRTs according to the most recent guidelines. Further modelling of this data in combination with estimates from primary data sources is warranted.

**PCV42**  
**CONFORMATION OF BLEEDING QUANTITY MEASURED AFTER HEART OPERATIONS ACCORDING TO METEOROLOGICAL AND ASTRONOMICAL FACTORS**

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**OBJECTIVES:** Different meteorological factors can play a role in the occurrence of cardiovascular diseases. Whether certain meteorological and astronomical factors, and the periodical change influence the bleeding quantity after heart operation. **METHODS:** Retrospective analysis was made on the University of Pécs Cardiotherapy Clinic among patients went through heart operation (n = 611) between 2007.01.01 and 2007.12.31. in Hungary. Statistical tests:  $\text{kh}i2$  test, variance analysis (ANOVA), Pearson-Spearman correlation coefficient examination was made. Data processing was done with SPSS 15.0 and MS Excel programs. **RESULTS:** No connection was found between the examined meteorological factors and the quantity of total bleeding but on the other hand we found connection between the energy of the solar flares and the daily average bleeding ( $p = 0.025$ ). Significant values were found between the periodical change and total bleeding ( $p = 0.03$ ). **CONCLUSIONS:** Postoperative bleeding is influenced by many factors: antecedents of patients, atmosphere and cosmic factors, perioperative medication, operative data, surgical technique. The examined factors do not affect the bleeding quantity, on the other hand certain astronomical factors do. The energy of the solar flare showed a negative correlation with bleeding. The periodical change influences postoperative bleeding among patients with open heart operation.