

population-based database of more than 170,000 patients in over 53 family practice clinics in southwestern Ontario, Canada were analyzed. These records contained chart-abstracted information such as visit diagnosis, BP, medications and consultation notes. The records from 10,120 adult non-diabetic patients who were diagnosed with hypertension and were initiated on treatment in 2005 and continued on monotherapy for at least 9 months were included. Hypertension was defined as a BP exceeding 140/90 mmHg, chart entry of a diagnosis of hypertension, or use of anti-hypertensive medication. The proportions of patients reaching target BP (BP less than 140/90 mmHg) were recorded. Due to the well known safety profile of the compounds, a safety analysis was not performed. **RESULTS:** After 9 months of treatment with monotherapy, the proportions of patients reaching target BP are as follows: 28% on ARBs compared to 27% on ACEIs ( $p > 0.05$ ), 26% on CCBs ( $p > 0.05$ ), 21% on BBs ( $p = 0.002$ ), and 19% on diuretics ( $p = 0.001$ ). Within the ARB class, the proportions of patients reaching target BP are as follows: 38% on irbesartan compared to 32% on losartan ( $p = 0.01$ ), 9% on valsartan ( $p = 0.001$ ) and 25% on candesartan ( $p = 0.001$ ). **CONCLUSIONS:** In a real-world setting, similar proportion of patients treated with ARBs, ACEIs and CCBs monotherapy reached target blood pressure. Amongst the ARBs, a greater proportion of irbesartan-treated patients reached target BP. This analysis also shows that less than half of the patients treated with monotherapy reach target BP supporting the need for combination therapy in the management of hypertension in some patients.

## PCV24

#### A SYSTEMATIC REVIEW AND META-ANALYSIS OF RANDOMISED CLINICAL TRIALS REVIEWING ANTI-ARRHYTHMIC DRUGS FOR THE TREATMENT OF ATRIAL FIBRILLATION

Sullivan SD<sup>1</sup>, Orme M<sup>2</sup>, Morais E<sup>1</sup>, Mitchell S<sup>2</sup>

<sup>1</sup>University of Washington, Seattle, WA, USA, <sup>2</sup>Abacus International, Bicester, UK, <sup>3</sup>Sanofi Aventis, Paris, France

**OBJECTIVES:** To describe the methodology of a systematic review and meta-analysis evaluating the efficacy and safety of anti-arrhythmic drugs (AADs) in the treatment of atrial fibrillation (AF). Outcomes of interest included AF recurrence, cardiovascular (CV) morbidity, all-cause mortality, discontinuations, serious adverse events (SAE), persistence/compliance and health related quality of life (HRQoL). **METHODS:** Electronic databases (Cochrane Library, Medline, EMBASE; accessed March 2009) and manual bibliographic searches were conducted to identify relevant randomised clinical trials (RCTs). Comparators of interest included all AADs, rate and rhythm strategies or ablation in comparison with AADs. In addition to dronedarone, the primary AADs of interest were restricted to Class IC (flecainide and propafenone) and Class III (amiodarone and sotalol). Relevant data were extracted by two independent reviewers. Data were analysed on an intention-to-treat basis and meta-analysis performed using the Peto odds ratio (OR)/fixed-effect model. The Bucher method was employed for indirect comparisons. Direct comparisons and/or indirect comparisons via non-active control were conducted where appropriate, in relation to the outcomes of interest. **RESULTS:** In total, 145 separate publications met the pre-defined inclusion criteria and were included in the systematic review. Of these, 71 were related to one of the five AADs of primary interest and were analysed. SAEs were reported in 24 publications, AF recurrence in 44, all-cause mortality in 52 and discontinuations in 62. Data relating to other morbidity outcomes such as hospitalisations or to persistence/compliance and HRQoL were very limited; therefore, meta-analyses were not possible. These findings are consistent with results of a previous Cochrane review (2007). **CONCLUSIONS:** Based on the results of this current systematic review, limited meta-analyses were possible. The majority of studies were designed to assess AF recurrence only; therefore, few publications assessed relevant clinical markers of AF progression or complications such as CV morbidity.

## PCV25

#### THE EFFECT OF ANTI-ARRHYTHMIC DRUG THERAPY ON ALL-CAUSE AND CARDIOVASCULAR MORTALITY IN ATRIAL FIBRILLATION PATIENTS: A SYSTEMATIC REVIEW AND META-ANALYSIS

Mitchell S<sup>1</sup>, Orme M<sup>2</sup>, Eckert L<sup>2</sup>, Reynolds M<sup>3</sup>

<sup>1</sup>Abacus International, Bicester, UK, <sup>2</sup>Sanofi-Aventis, Paris, France, <sup>3</sup>Beth Israel Deaconess Medical Center, Boston, MA, USA

**OBJECTIVES:** Atrial fibrillation (AF) is a potentially life-threatening arrhythmia. After restoration of a normal sinus rhythm, AF recurrence may be prevented with anti-arrhythmic drugs (AADs). The objective of this review was to evaluate the efficacy of a novel AAD (dronedarone) and existing AADs with respect to mortality outcomes. **METHODS:** A systematic literature review was conducted of randomised clinical trials (RCTs) investigating the use of AADs in patients with AF. All-cause mortality and CV mortality data were extracted. Direct and indirect comparisons adopted an intention-to-treat basis using Peto odds ratios (OR) with a fixed effect or Bucher model, respectively. **RESULTS:** The majority of published data considered dronedarone, amiodarone, sotalol, flecainide or propafenone (32 publications). Peto ORs for all-cause mortality at 12 months with 95% confidence intervals (CI) for direct and indirect comparisons via non-active control were calculated. In comparisons with non-active control, the risks of all-cause mortality were as follows: a significant increase with sotalol (OR 2.72 [1.16, 6.38]); an increased trend with amiodarone and flecainide, and a decreased trend, with a narrow CI, with dronedarone (OR 0.85 [0.66, 1.09]). Indirect comparison demonstrated that dronedarone was associated with lower odds of all-cause mortality; this reached statistical significance versus sotalol (OR 3.2 [1.32, 7.78]). Indirect analysis of amiodarone versus dronedarone (OR 2.38 [0.80, 7.07]) is consistent with the head-to-head DIONYSOS study (calculated OR 2.32

[0.52, 10.32]). In both indirect and direct analyses, CIs for propafenone were too wide to interpret the results. Only one publication reported CV mortality data and this considered dronedarone. Therefore, meta-analyses were not possible. **CONCLUSIONS:** Clinical trial CV mortality data are limited. All-cause mortality does not appear to be significantly reduced via the use of AADs. Despite this, the novel AAD, dronedarone, was associated with lower all-cause mortality risk than those observed with existing AADs or non-active control.

## PCV26

#### PRACTICE PATTERNS AND QUALITY OF LIFE IN PATIENTS WITH ACUTE CORONARY SYNDROME IN THE NORDIC COUNTRIES: RESULTS FROM THE ANTIPLATELET TREATMENT OBSERVATIONAL REGISTRY II (APTOR II)

James S<sup>1</sup>, Norrbacka K<sup>2</sup>, Paget MA<sup>3</sup>, Goedicke J<sup>4</sup>, Tangelder M<sup>5</sup>, Schmitt C<sup>2</sup>

<sup>1</sup>Akademiska Sjukhuset, Uppsala, Sweden, <sup>2</sup>Eli Lilly and Company Ltd, Windlesham, Surrey, UK, <sup>3</sup>Eli Lilly and Company Ltd, Surenes, France, <sup>4</sup>Eli Lilly and Company Ltd, Bad Homburg, Germany, <sup>5</sup>Eli Lilly and Company Ltd, Solna, Sweden

**OBJECTIVES:** To explore variation in management of acute coronary syndromes (ACS), the commonest cardiac cause of hospital admission, and to measure quality of life (QoL) with the EQ-5D health state index at discharge. **METHODS:** A prospective, international, observational study recruited ACS patients undergoing percutaneous coronary intervention (PCI), April–November 2008, capturing practice patterns, resource use and QoL. **RESULTS:** 496 eligible ACS-PCI patients, 56% with unstable angina or non-ST-elevation MI (UA/NSTEMI) and 44% ST-elevation MI (STEMI) from Sweden (240), Finland (104), Norway (78) and Denmark (74) were included. The median age was 64 years (IQR: 56–72), 75% were male. 84% of patients got an aspirin loading dose (median 300 mg) and 95% got clopidogrel (41% received  $\leq 300$  mg, 59% received 600 mg). Admission and discharge medications were: aspirin 35 and 97%, clopidogrel 10 and 98%, statins 33 and 89%, beta-blockers 35 and 83%. At admission 32% of patients used an ACE inhibitor, and there was some variation at discharge: Sweden and Finland: 73%, Norway 45%, Denmark 37%. Almost all patients (97%) had stents implanted. In Sweden 80%, in Finland 68%, in Norway 64%, and in Denmark 6% of patients got bare metal stents (BMS) only. Time from hospital admission to PCI: median 1 day (IQR 1–3 days) for UA/NSTEMI patients, (81% 3 days or less; Sweden-90%, Finland-82%, Norway-71%, Denmark-57%). Almost all (97%) STEMI patients were treated within one day from admission. Total stay was median 4 days (IQR: 3–6) for both cohorts. The median (IQR) QoL at hospital discharge was overall: 0.85 (0.69–1.00), Sweden: 0.85 (0.73–1.00), Norway: 0.80 (0.69–1.00), Denmark: 0.87 (0.69–1.00), Finland: no data available. **CONCLUSIONS:** The use of pharmacotherapy in the Nordic countries was high. There was substantial variation in management of ACS patients for use of BMS. The QoL of patients at discharge was high in all countries.

## PCV27

#### COUNTRY-SPECIFIC DIFFERENCES IN 12-MONTH PATTERNS OF ANTIPLATELET USE IN ACS PATIENTS UNDERGOING PCI IN 2007–08: RESULTS FROM THE ANTIPLATELET TREATMENT OBSERVATIONAL REGISTRY (APTOR)

Zeymer U<sup>1</sup>, Ferrieres J<sup>2</sup>, Iniguez A<sup>3</sup>, Schmitt C<sup>4</sup>, Sartral M<sup>5</sup>, Belger M<sup>6</sup>, Bakhai A<sup>7</sup>

<sup>1</sup>Klinikum Ludwigshafen, Ludwigshafen, Germany, <sup>2</sup>CHU Rangueil, Toulouse, France, <sup>3</sup>Hospital Meixoeiro, Vigo, Spain, <sup>4</sup>Eli Lilly and Company, Windlesham, Surrey, UK, <sup>5</sup>Eli Lilly and Company Ltd, Surenes, France, <sup>6</sup>Eli Lilly and Company Ltd, Windlesham, Surrey, UK, <sup>7</sup>Barnet & Chase Farm NHS Trust, Barnet, UK

**OBJECTIVES:** Current European Society of Cardiology Guidelines recommend dual antiplatelet therapy for 12 months for all patients with acute coronary syndrome (ACS). Here we describe the 12-month antiplatelet treatment patterns in ACS patients undergoing percutaneous coronary intervention (PCI), and explore variations between three European countries. **METHODS:** The Antiplatelet Treatment Observational Registry (APTOR) is a prospective, international observational study that recruited ACS patients undergoing PCI in 2007–08, capturing practice patterns, resource use and QoL. **RESULTS:** A total of 1525 ACS-PCI patients were recruited: 38% patients presented with ST-elevation myocardial infarction (STEMI), 37% with non-ST elevation MI (NSTEMI), and 25% with unstable angina (UA). Follow-up data up to 12 months are available for a total of 1335 (88%) patients. 97% of STEMI patients and 93% of UA/NSTEMI patients reported using clopidogrel and aspirin after hospital discharge; overall clopidogrel use was 94% at discharge, 93% at 30 days, 78% at 6 months, and 71% at 12 months. Dual clopidogrel and aspirin use at 12 months was overall: France 73%, Spain 69%, UK 63%; for STEMI patients, it was: France 74%, Spain 66%, UK 61%; for UA/NSTEMI patients: France 72%, Spain 71%, UK 64%; for patients with at least one drug eluting stent (DES): France 82%, Spain 82%, UK 81%; for patients with bare metal stent (BMS) only: France 68%, Spain 38%, UK 52%. **CONCLUSIONS:** These prospective data show some variations in the use of antiplatelet therapy between three European countries. While in patients with DES, one year use of dual oral antiplatelet therapy was similar across countries, in patients receiving a BMS only there was considerable variation between the countries. Antiplatelet prescription cards should be considered.