

endogenous cost-effectiveness analysis policies aimed at lowering spending may actually raise it. Second, reimbursement policy based on endogenous cost-effectiveness levels may lead to adoption of more inefficient treatments. Under the standard conditions when producer costs are unobservable, we provide a test for these conditions using data on technology appraisals in the UK 1999-2005.

### THE VALUES OF GENERAL PRACTITIONERS/FAMILY PHYSICIANS SHOULD BE FOSTERED INTO OTHER CLINICIANS: A RESEARCH STUDY

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OBJECTIVES: The paper is to improve the quality of life and health of the peoples of the world by fostering and maintaining high standards of care in general practice/ family medicine and other clinicians. METHODS: By comparing the general practitioners/family physicians with the clinicians of specialities, summarizing the shortcomings of present health care services, the proposals for promoting health care services around the world were suggested.  $\mbox{\bf RESULTS:}$  The article initiates that the values of general practice/family medicine should be fostered into other clinicians when all the clinicians take care of the patients in any conditions, critical or ordinary, by adopting to the values of general practice/family medicine. While the clinicians also take into account of their own specialities. CONCLUSIONS: In applying these proposals, a healthy world and high quality of life of the peoples of the world will come soon! So the quality of life and health of the peoples of the world can be promoted and enhanced.

### Cardiovascular Disorders - Clinical Outcomes Studies

### EXPLORATIVE ANALYSIS ABOUT THE APPROPRIATENESS OF A GPS LONGITUDINAL DATABASE ON EVALUATING ATYPICAL ANTIPSYCHOTICS IN TERMS OF DRUGS ADVERSE EVENTS

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CSD Medical Research S.r.l., Milan, Italy, <sup>2</sup>HE OR Unit - Bristol-Myers Squibb S.r.l., Rome, Italy **OBJECTIVES:** The main objective of this study was to understand the appropriateness of a GPs Longitudinal Database on exploring potential causal associations among therapies and adverse events. We've focused on subjects treated with three of the most widespread atypical antipsychotics drugs known as affecting patients' lipidic profile and cardiovascular and diabetes risk. METHODS: Data were obtained from CSD LPD, an Italian General Practitioner's longitudinal database. Patients with a first prescriptions of Aripiprazole, Olanzapine or Quetiapine during the period January 2005 to December 2009 have been selected. For each patient, the first prescription has been considered as the Index Date. The final study sample was composed of patients that during the following three months had at least another prescription of the same atypical antipsychotic. Patients have been followed-up for a maximum of 12 months starting from three months after the Index Date. RESULTS: Treatment groups were composed of 367 patients for Aripiprazole, 1825 patients for Olanzapine and 3088 patients for Quetiapine. The proportion of patients with an out of range value of Total Cholesterol and LDL was significantly lower in Aripiprazole group. The same trend has been observed for the proportion of patients with at least one recorded diagnosis of cardiovascular events and diabetes. The association between treatment and cardiovascular diagnosis presence was still significant even when performing a multivariate logistic model adjusted for age, gender and presence of a cardiovascular diagnosis during the year before the Index Date (Odds Ratio Olanzapine VS. Aripiprazole: 1.76 [1.08 - 2.85]; Odds Ratio Quetiapine versus Aripiprazole: 1.67 [1.03 - 2.70]). CONCLUSIONS: CSD LPD database resulted to be appropriate in exploring potential causal associations among treatments and potential adverse events both in terms of recorded diagnosis and in terms of recorded laboratory exams values even if, in this case, the sample size was reduced.

## PCV2

### EVALUATION OF THE PROPHYLAXIS PATTERNS AND 90 DAY OUTCOME EVENTS IN HOSPITALIZED MEDICALLY ILL PATIENTS

OBJECTIVES: To compare the prophylaxis patterns, incidence of venous thromboembolism (VTE), major and minor bleeding and readmission over 90 days in hospitalized medically ill patients. METHODS: A retrospective study (January 1, 2005 to December 31, 2007) was conducted using a health insurance claims database. Eligible patients were selected if they were continuously enrolled in their health plan for at least 180 days prior to and 90 days following the index hospital discharge, for which they were hospitalized with a medically ill diagnosis. Prophylaxis use was defined as receiving low molecular weight heparin (LMWH) only, warfarin only, unfractionated heparin (UFH) only, fondaparinux only, LMWH and warfarin, or UFH and warfarin, from the index hospitalization date to 30 days after index hospital discharge and before VTE events. Risk-adjusted venous thromboembolism and major and minor bleeding events among patients with different thromboprophylaxis patterns were compared. RESULTS: In patients who were identified as medically ill (n=12,077), 6,464 (53.52%) received anticoagulant therapy during their hospitalization and until 30 days after discharge. Among these patients who received prophylaxis, 2,137 (33.06%) received LMWH only, 693 (10.72%) received warfarin only, 2168 (33.54%) received UFH only, 12 (0.19%) received fondaparinux only, 291 (4.50%) received LMWH and warfarin, and 325 (5.03%) received UFH and warfarin. Among the 6 prophylaxis patterns, patients who received LMWH only were associated with lower VTE (0.39% vs. 1.98%, p=0.0001) and readmission rates (8.38% associated with lower VTE (0.39% vs. 1.98%, p=0.0001) and readmission rates (8.38% associated with lower VTE (0.39% vs. 1.98%, p=0.0001) and readmission rates (8.38% associated with lower VTE (0.39% vs. 1.98%, p=0.0001) and readmission rates (8.38% associated with lower VTE (0.39% vs. 1.98%, p=0.0001) and readmission rates (8.38% associated with lower VTE (0.39% vs. 1.98%, p=0.0001) and readmission rates (8.38% associated with lower VTE (0.39% vs. 1.98%, p=0.0001) and readmission rates (8.38% associated with lower VTE (0.39% vs. 1.98% as

vs. 13.68%, p=0.0049) than those with LMWH and warfarin combination therapy. In addition, the LMWH only group of patients had lower rates of major and minor bleeding than the UFH and warfarin combination therapy group. CONCLUSIONS: Despite existing guidelines, few medically ill patients receive anticoagulant prophylaxis. Appropriate anticoagulant prophylaxis results in lower VTE event rates in hospitalized medically ill patients.

### THROMBOPROPHYLAXIS USE AND VENOUS THROMBOEMBOLISM, MAJOR AND MINOR BLEEDING EVENT ANALYSIS IN HOSPITALIZED MEDICALLY ILL **PATIENTS**

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OBJECTIVES: To assess the real-world rate of appropriate prophylaxis use for incidences of venous thromboembolism (VTE), and major and minor bleeding in hospitalized medically ill patients. METHODS: A retrospective study (January 01, 2005 to December 31, 2007) was conducted using a health insurance claims database. Eligible patients were selected if they were continuously enrolled in their health plan for at least 180 days prior to and 30 days following the index hospital discharge date, for which they were hospitalized with a medically ill diagnosis. Prophylaxis use was defined as receiving low molecular weight heparin (LMWH) only, warfarin only, unfractionated heparin (UFH) only, fondaparinux only, LMWH and warfarin, or UFH and warfarin, from the index hospitalization admission date to 30 days after index hospital discharge, and before VTE events. Risk-adjusted VTE and major and minor bleeding events among patients with different thromboprophylaxis patterns were compared. RESULTS: In patients who were identified as medically ill (n=12,947), 6,949 (53.67%) received anticoagulant therapy during their hospitalization and until 30 days after discharge. Among those patients who received prophylaxis, 2,295 (33.03%) received LMWH only, 752 (10.82%) received warfarin only, 2,313 (33.29%) received UFH only, 12 (0.17%) received fondaparinux only, 309 (4.45%) received LMWH and warfarin, and 353 (5.08%) received UFH and warfarin. Compared with patients who received LMWH only, patients who received the combination therapy of LMWH and warfarin had significantly more VTE events (1.14% vs. 0.32%, p=0.0099) and higher readmission rates (6.11% vs. 3.05%, p=0.0093), while patients who received the combination therapy of UFH and warfarin had significantly higher minor bleeding (11.70% vs. 6.06%, p=0.0002) and readmission rates (7.49% vs. 3.05%, p=0.0001). **CONCLUSIONS:** Appropriate anticoagulant prophylaxis use results in lower VTE event rates as well as lower major and minor bleeding rates in hospitalized medically ill patients. More effort is required to improve the use of appropriate thromboprophylaxis.

### COMPARATIVE EFFICACY OF MAINTENANCE OF SINUS RHYTHM VERSUS RATE CONTROL STRATEGIES IN THE TREATMENT OF ATRIAL FIBRILLATION -SYSTEMATIC REVIEW AND META-ANALYSES

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OBJECTIVES: The aim of this study was to assess whether restoration and maintenance of sinus rhythm is associated with clinically meaningful improvement in patients with atrial fibrillation (AF) or atrial flutter (AFI). METHODS: Assessment was based on randomized controlled trials (RCTs) identified by means of systematic review, carried out according to the Cochrane Collaboration guidelines. Studies met the inclusion criteria if they directly compared two treatment strategies, i.e. maintenance of sinus rhythm (MSR) including first generation antiarrhythmic drugs (FGAAD; mainly amiodarone, sotalol, dizopiramide, propafenone, dofetilide, flecainide) vs. rate control (RC) including pharmacologic agents (calcium channel blockers, beta blockers, cardiac glycosides), with regard to clinically meaningful endpoints. The most important medical databases (EMBASE, MEDLINE and CEN-TRAL) were searched until January 2011. Two reviewers independently selected trials, assessed their quality and extracted data. RESULTS: Eight RCTs directly comparing MSR vs RC were identified and included. Meta-analysis of those studies showed that significantly more patients assigned to MSR were in sinus rhythm at the end of study as compared to RC strategy (RB = 4.49 [2.49; 8.09]; NNT13-37months = 2 [2-4]). However, it did not lead to any benefit regarding clinically meaningful endpoints. Comparison between both treatment strategies revealed no statistically significant difference with respect to risk of overall mortality (RR = 1.06[0.96; 1.17]), cardiovascular mortality (RR = 1.01 [0.88; 1.16]), stroke (RR = 1.02 [0.82; 1.26]), systemic embolism (RR = 0.78 [0.35; 1.71]), heart failure (RR = 0.94 [0.80; 1.09]) or bleeding (RR = 1.10 [0.65; 1.84]). CONCLUSIONS: In this analysis, restoration and maintenance of sinus rhythm achieved with FGAAD was not associated with clinically meaningful improvement in patients with AF or AFl. MSR strategy neither improved survival nor decreased morbidity as compared to RC. The reevaluation of current criteria of antiarrhythmic drug assessment should be considered.

# THROMBOEMBOLISMS WITH THROMBOPOIETIN RECEPTOR AGONISTS: SYSTEMATIC REVIEW AND META-ANALYSIS OF RANDOMIZED CONTROLLED

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