PCV12  PHARMACOECONOMIC GROUNDING OF USING POLYPILL AMLODIPINE WITH ATORVASTATIN VERSUS MONODRUGS IN PATIENTS WITH HYPERTENSION AND DYSLIPIDEMIA IN UKRAINE

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OBJECTIVES: One main factor of the low efficiency of cardiovascular diseases (CVD) treatment in Ukraine is the low adherence of patients. Modern trends improving the quality of treatment and increase patients compliance is use of polypills (PP). The aim: pharmacoeconomic assessment the feasibility of PP amlodipine and atorvastatin versus monodrugs in patients with hypertension and dyslipidemia (DYS) from the Ukrainian perspectives point of view.

METHODS: The results of clinical studies AVALON (Granger C. B., McMurray J. J., Yusuf S. et al., 2003) were used. Cost minimization analysis of three regimens of patients treatment with hypertension and DYS during 6 weeks: FP amlodipine 5 mg + atorvastatin 10 mg; amlodipine 5 mg, atorvastatin 10 mg. RESULTS: The results of the clinical research AVALON found, that the use of FP amlodipine-atorvastatin provides significant clinical benefit: the largest number of patients reached goal of 0.9 mmol/L of low-density lipoprotein cholesterol (LDL-C) (45.5%), versus amlodipine (8.3%), atorvastatin (28.6%), placebo (3.5%). The scheme using amlodipine is the most expensive (cost for course of treatment (CCT) = 1840/196), the regimen of atorvastatin 10 mg (CCT € 10.46) and the FP amlodipine-atorvastatin (CCT € 17.72) are less costly. This FP is more cost effective versus amlodipine monotherapy (CER = € 38.95 versus € 244.34 per patient with target levels of BP and LDL-C). Results of comparative atorvastatin monotherapy (CER = € 36.57 per patient with target levels of BP and LDL-C). The cost of an additional unit of effectiveness (CER) showed that the use of FP amlodipine-atorvastatin instead amlodipine provides for the treatment of each 100 patients additional 28.3 days of life with -3.8 mm Hg BP. The system data provided diagnostic insight on morbid event, activity and rest patterns, were collected via the PROSPECT system. RESULTS: Of the 190 patients, 21 patients had incomplete data. In the remaining 169 patients (89%), mean medication adherence was 88%, and mean BP decrease was -7.6 mm Hg. Conclusion: The system data provided diagnostic insight into morbid event, activity and rest patterns, were collected via the PROSPECT system. Thus, Proteus can identify specific individual needs for progressing through the recommended treatment pathway and for advancing toward treatment goals.

PCV14  LIFETIME CLINICAL EVENTS AVOIDED AND RESOURCE UTILIZATION WITH APIXABAN COMPARED TO LOW-MOLECULAR-WEIGHT HEPARIN FOLLOWED BY A VITAMIN K ANTAGONIST FOR THE TREATMENT AND PREVENTION OF VENOUS THROMBOEMBOLISM

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OBJECTIVES: One aim of this study was to compare apixaban (APX) to low-molecular-weight heparin (LMWH) followed by a vitamin K antagonist (VKA) for treatment and prevention of recurrent venous thromboembolism (VTE). The AMPLIFY-EXT trial compared APX to VKA for treatment and randomized patients to APX or VKA for prevention of VTE with apixaban (5 mg bid for 6 months, 2.5 mg bid) versus LMWH/VKA. Clinical endpoints were taken from AMPLIFY, AMPLIFY-EXT, and indirect treatment comparison. Length of stay for hospitalizations was taken from AMPLIFY for recurrent VTE (median 5 days for apixaban, 6 days for LMWH/VKA) and major bleeds (median 5 days for apixaban, 7 days for LMWH/VKA). Sixty percent of patients with recurrent VTE and all patients with major bleeding were assumed to be hospitalized. Outcomes evaluated were events and hospital bed days avoided, number needed to treat to avoid a recurrent VTE, number needed to treat to harm with an additional bleed, and life years gained. RESULTS: In a cohort of 1,000 patients, lifetime treatment with apixaban versus LMWH/VKA resulted in 6 fewer recurrent VTE events, 191 fewer major bleeds, 717 fewer clinically relevant non-major bleeds, and 1,730 hospital bed days avoided. On average, a patient treated with apixaban gained about 3 months of life expectancy due to avoidance of VTE events and major bleeds. These results translated to one recurrent VTE event avoided for each 157 patients treated and one major bleed avoided for each 5 patients treated with apixaban versus warfarin. CONCLUSIONS: Apixaban for treatment and prevention of VTE appears to be a superior alternative to LMWH/VKA, leading to fewer recurrent VTEs, bleeding events, and hospital bed days resulting in a projected increase in life expectancy.

PCV15  THE EFFECTIVENESS OF CAROTID ARTERY STENTING COMPARED WITH ENDARTERECTOMY IN SYMPTOMATIC PATIENTS WITH CAROTID STENOSIS IN KOREA: MULTI-CENTER SETTING

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OBJECTIVES: Carotid endarterectomy (CEA) has been recommended as the gold standard for the management of carotid disease in many clinical guidelines. But, in Korea, clinical practice, carotid artery stenting (CAS) was conducted more than CEA (21.6%) based on the national claim-data. The purpose of this study was to compare the effectiveness with CEA and CAS in 677 patients with symptomatic carotid artery stenosis in Korea. METHODS: From January 1 2008 to December 31 2011, retrospective cohort study was conducted in 677 symptomatic carotid stent patients and those with 50% stenosis (CAS=346, CEA=331) in the Korean hospitals (Asan medical center, Samsung medical center, Severance hospital, Inha university hospital, etc). The cases of ICH do not non-rally reflect these latest findings and as such, current treatment practices may be lagging behind what the highest level of evidence suggests should be standard of care.

PCV16  REAL-TIME ASSESSMENT OF MEDICATION TAKING AND ACTIVITIES OF DAILY LIVING IN PATIENTS WITH UNCONTROLLED HYPTENSION

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OBJECTIVES: For patients with uncontrolled hypertension, differentiation of pharmacological resistance from inadequate or improper medication use is key to clinical management. Proteus Digital Health has developed a unique digital feedback system, which utilizes an Ingestible Sensor (IS) to determine medication-taking patterns. A wearable sensor in the form of an adhesive patch collects timing and taking of 15 ingestions, and physiological and behavioral metrics such as heart rate, sleep, and physical activity to provide insight into patient’s everyday-to-day lifestyle. This study evaluates the utility of the Proteus system in patients with uncontrolled hypertension. METHODS: Patients with a history of uncontrolled hypertension and 3 years of taking antihypertensives were recruited at 5 primary care centers in the United Kingdom. All patients were prescribed the Proteus system for 14 days. Patients co-ingested the IS along with their prescribed BP medications while simultaneously wearing the patch. BP was measured daily at 3 and 12 hours post-pill ingestion. Other indicators of adherence, activity and rest patterns, were collected via the Proteus system. RESULTS: Of the 190 patients, 21 patients had incomplete data. In the remaining 169 patients (89%), mean medication adherence was 88%, and mean BP decrease was -7.6 mm Hg. Conclusion: The system data provided diagnostic insight into morbid event, activity and rest patterns, were collected via the PROSPECT system. Thus, Proteus can identify specific individual needs for progressing through the recommended treatment pathway and for advancing toward treatment goals.

PCV17  USE OF COMPUTER SIMULATION TO GENERATE EVIDENCE TO AID HEALTH CARE DECISION MAKING: AN EXAMPLE USING THE ARCHIMEDES MODEL TO COMPARE ROSUVASTATIN TO ATORVASTATIN

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OBJECTIVES: The primary aim of the analysis was to illustrate the most robust evidence source for making patient health care decisions whenRCT data are lacking, however, complementary evidence sources may also be needed. As an example of this, three clinical trials comparing rosuvastatin with atorvastatin were simulated using the Archimedes model, an individual-based simulation of human pathophysiology and behaviours, treatment interventions and health care systems. METHODS: Comparison A assessed clinical outcomes in patients receiving rosuvastatin therapy for symptomatic carotid artery stenosis in South Korea. This study suggests that CEA can be considered the first-line therapy for symptomatic carotid artery stenosis in South Korea.