feasibility of combined neuroprotection in patients with AIS convincingly are substantiated by leading Ukrainian neurologists. The aim is to evaluate the economic feasibility of combined regimens of neuroprotection compared with the traditional. METHODS: Analysis of the results of comparative clinical trial of three neuroprotective regimens therapy of patients with moderate and severe AIS: traditional - citicoline (1 regimen), traditional - citicoline + acetocarin (2 regimens), regimens of supplemental neuroprotective (i.e., heparin, acetylsalicylic acid, mannitol) (6). M. Vincuľo, O. A. Pustova, V.O. Mokchnach et al., 2008) was carried out. Cost-effectiveness analysis was used. Using a decision tree comparing the economic burden of the three regimens for one year was carried out. RESULTS: The number of patients recovered completely after three months were used as efficacy. The efficacy for 1, 2 and 3 regimens were respectively 29.6%, 38.9% and 23.3%. Direct costs of the treatment regimens were €1,015, €1,186, €617 for 1, 2 and 3 regimens, respectively. Incremental cost-effectiveness ratio (ICER) for 1 and 2 regimens were respectively €6,317, €3,647. The economic burden per one patient for one year were: €7,006, €6,551, and €6,690 for 1, 2 and 3 regimens, respectively. CONCLUSIONS: The use of regimen 1 and regimen 2 provides greater efficacy and needs greater cost. With the forecast for one year and taking into account the indirect costs the neuroprotective regimen with combination of two drugs (regimen 2) has economic advantages.

PCV28 2-YEAR INCIDENCE OF STROKE AND HEMORRHAGES HOSPITALIZATIONS AND COSTS WITHIN ATRIAL FIBRILLATION PATIENTS IN FRANCE Corte E1, Chauze G2, Kachaner I3, Gaudin A4, Vainchot A5, Durand-Zaleski I6, Transversal International BVBA, Diegem, Belgium, 1Clinique de l’Est, Paris, France, 2Hôpital Henri Mondor, Créteil, France OBJECTIVES: The prevalence of atrial fibrillation (AF) in France approaches one million. The major complication associated with AF is stroke. Current anti-coagulant options for stroke prevention increase the risk of hemorrhages. Objectives were to estimate the 2-year cumulative incidence and costs of hospitalizations for strokes and hemorrhages in adults hospitalized for AF and eligible for stroke prevention. METHODS: Data for patients with an AF-related hospitalization in 2008 were extracted from the French Hospital National Database (PMSI). Risk scores (i.e.CHADS2; range:0–6) were calculated from 2006–2008 data. Patient eligible for stroke prevention were selected for the follow-up analysis. Strokes and hemorrhages hospitalizations were identified according to ICD-10 codes. Strokes severity was based on rehabilitation length and death. Cumulative incidence was calculated by the number of new hospitalizations during the 2-year period divided by the number of patients. Mean hospital costs were evaluated in 2011 National Reference Price for each for acute and rehabilitation care. RESULTS: A total of 64,582 AF patients were identified. Mean age was 75.0(±11.0) years old and mean CHADS2 was 1.90(±0.99). 2-year cumulative incidences of any strokes and hemorrhages were 3.21% (ischemic/60%; hemorrhagic/24%; unspecified/16%) and 5.31% (gastro-intestinal/26%; intracranial/5%; others/69%), respectively. Mean costs of ischemic and hemorrhagic strokes were €4,848 and €6,173 (mild); €10,909 and €14,298 (moderate); €29,065 and €32,552 (severe); and €4,099, €14,049, €25,024, €100,946 for the surgical and non-surgical groups, and €7006, €6511, and €6930 for 1, 2 and 3 regimens, respectively. The number of patients suffering hemorrhages in 2008 were extracted from the French Hospital National Database (PMSI). Risk scores were used between the surgical and non-surgical groups and depending on type of surgery. RESULTS: The overall cost per patient was €22,152. In the non-surgical group (n=15,769), patients were hospitalized on average 3.1 times over 12 months with an average length of stay of 7.7 days. Among those patients, 24% were admitted to a rehabilitation facility (on average 1.5 times) with an average length of stay of 27.9 days. The average total cost per patient was €12,177, varying between €9,957 to €13,538, without and with heart failure respectively. Detailed analysis showed showed 2 to 3 times higher costs in the 9th and 10th percentiles. By subgroup, the average cost of the 10th percentile was €50,268 for the surgical group and €36,503 for the non-surgical group. CONCLUSIONS: The total observed cost in this population was €283 million over 12 months. Significant differences were observed in cost and resource used between the surgical and non-surgical groups and depending on type of surgery. The overall incidence of heart failure and mortality were calculated for each subgroup. This is the first study reporting hospital costs associated to MR in France.

PCV31 COST OF CARDIOVASCULAR DISEASES IN SERBIA Rakic D1, Tasic L1, Kos M2, Olovidzic M3, Tadic I2, 1University of Belgrade – Faculty of Pharmacy, Belgrade, Serbia and Montenegro, 2Faculty of Pharmacy, University of Ljubljana, Ljubljana, Slovenia, 3Faculty of Pharmacy, University of Novi Sad, Novi Sad, Serbia. OBJECTIVES: Cardiovascular diseases (CVDs) impose a burden to society in terms of mortality, morbidity and economic losses. The aim of this study was to estimate costs of CVDs in Serbia from the perspective of the society. METHODS: For the purpose of the study CVDs were defined as the International Classification of Disease 10 revision, as the following diagnosis: hypertension, coronary heart disease, cerebrovascular disease, heart failure and cerebrovascular disease. The prevalence, top-down method was used to quantify the annual cardiovascular costs. Productivity losses were estimated using the Human Capital method. Cost data were collected from Serbian Health Insurance Fund and National Public Health Institute "Batut". A discount rate of 5% was used to convert all future lifetime earnings into the present value. RESULTS: The total direct costs of CVD in 2009 were €400 million. The majority of total costs (€ 134.3 million) were for medication (29.94%), hospital days (28.97%) and hospital inpatient care - surgical and diagnostic interventions (17.35%). Indirect costs (mortality and morbidity) accounted for 22.15% of total costs. The results showed that more than half a million working days were lost due to incapacity resulting from CVDs. The results were robust to a change in: -20% of volume or the unit price of all direct and indirect cost and to discount rate 2% and 10%. CONCLUSIONS: The total CVD in 2009 represented approximately 1.8% of the Serbian gross domestic product. The results of study should be valuable to health policy makers to bridge the gap between invested resources and needs, in order to improve cardiovascular disease outcomes.

PCV32 THE COST OF DIABETES COMPLICATIONS IN BELGIUM Lamotte M1, Chevalier F2, 1MEFRMS, Vilvoorde, Belgium, 2Faculty of Medicine, University of Loma Linda, California, USA. OBJECTIVES: To identify the risk of cardiovascular disease is higher in patients with diabetes but what with the cost of this complication? The aim of this study was to compare the cost of cardiovascular events in patients with and without diabetes in Belgium. METHODS: Cost of cardiovascular events among hospitalized patients were estimated using the National Hospital Information System (PMSI). Cardiovascular events included myocardial infarction (MI), cardio-ICD-410, angina (ICD-9-413) and heart failure (ICD-9-428). Cerebrovascular disease (CVD) was defined as stroke (APR-DRG-045,046) and Transient Ischemic Attack (TIA, DRG-047). Diabetes was defined with the ICD-9 codes 249 and 250. Cost comparisons were made using a Wilcoxon non-parametrical test.
RESULTS: An MI in a diabetic patient was 35% more expensive compared to a non-diabetic ($7,485 vs $5,449; p = 0.001). In angina and heart failure the difference was less pronounced and the cost was respectively 22% and 13% higher (angina: €2,570 vs. €2,101; p = 0.01, heart failure: €8,776 vs €7,757; p = 0.001). Stroke was 8% more expensive and TIA 17% more expensive (stroke: €9,508 vs. €8,804; TIA: €4,802 vs. €4,109; both p < 0.001). Reason for this higher cost is the longer length of stay when compared to non-diaetic patients (MI: 7.0 days; diabetic: 7.8 days; p = 0.001). Patients with diabetes did not only have a higher risk of cardiovascular events, in case they have an event this event is significantly more expensive.

PCV33 ECONOMIC BURDEN OF CARDIOVASCULAR DISEASES IN RUSSIAN FEDERATION Kontsevaya A, Khaltina A National Research Center for Preventive Medicine, Moscow, Russia

OBJECTIVES: To study the economic burden of cardiovascular diseases (CVD) in Russian Federation in 2006-2009. METHODS: The economic burden was calculated by the cost of illness method. The calculations included direct costs of health care system and indirect costs, associated with premature death in working age and disability. We used official statistics of health care resources utilization, associated with CVD (hospital days, outpatients visits, emergency visits), the results of pharmacoepidemiological surveys of CVD, mortality and disability statistics in Russia in 2006-2009. RESULTS: The total economic burden of CVD increased from 20.6 billions of euro in 2006 till 26.6 billion of euro in 2009 what was equal to 3.1-2.8% of GDP of Russian Federation. The increasing of the burden was mainly caused by the price increasing and in some degree by the increasing of PCI in CHD patients in recent years. Direct cost increased 21.3% per patient, indirect cost of CVD (9.7 billion of euro), indirect costs – 7.8% (2.9 billions of euro) in 2009. Indirect costs mainly consisted of the GDP losses because of premature death of working age men. CHD represented 37.8%, cerebrovascular diseases 17.1% and hypertension -10.8% of overall CVD costs. In-hospital care represented 47.5% of direct costs, out-patient visits – 21.8%, medication – 20.7%, PCI – 4.1% and emergency care 4.1% of direct costs in 2009, respectively. CHD represented 45.3% of direct cost, because of large duration of hospitalization and PCI costs. CONCLUSIONS: CVD is a big public health challenge in Russia. The results of economic burden assessment should help policy makers to make policy impact and prioritize expenditures.

PCV34 THE ECONOMIC COST OF ACUTE CORONARY SYNDROME IN TURKEY Cakir B1, Caliskan Z1, Ergun H2, Erol C2, Gumusel B1, Tokgozoglu L1, Dayioglu M3

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OBJECTIVES: Acute coronary syndrome (ACS) is a major complication of the atherosclerotic process that may lead to myocardial necrosis. It is a medical emergency and requires immediate hospital admission. The aim of the present study was to measure the cost of ACS in Turkey. As the number of ACS in the general population is aging, incidence of cardiovascular diseases tend to increase, yet knowledge on ACS-related health expenditures are inconclusive. METHODS: For this purpose, the 2008 data acquired from 28 hospitals of the Diagnosis-Related Group (DRG) based payment to diagnosis-related groups. Hospitals in Germany might be more cost-conscious in treating patients compared to the pre-reform period. This study was the most important cost driver for all outcomes and diabetes was an independent driver for MI and stroke. CONCLUSIONS: Patients with diabetes do not only have a higher risk of cardiovascular events, in case they have an event this event is significantly more expensive.

PCV36 INCREASING COSTS FOR GERMAN SOCIAL HEALTH INSURANCE (SHI) FUNDS BY ABANDONMENT OF PENTAMETHYLTETRAZINITRAT (PETN) FOR PATIENTS WITH CORONARY HEART DISEASE (CHD) - A COST ANALYSIS BASED ON SICK FUND DATA

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METHODS: A retrospective analysis was performed on data of 4 million patients of the SHI-patients from the years 2001 to 2011. Data were collected from 36 statutory health insurances. To assess costs based on PETN, a Markov model was created to calculate length of stay on a treatment principle, to calculate costs per treatment principle and to calculate the death rate due to different treatment strategies. For cost analysis, German SHI-patients were chosen. Drug costs were taken from official price lists of 2012. Future costs were discounted with a 5% discount rate. Sensitivity analyses were conducted. RESULTS: In this data a Markov model was created to calculate length of stay on a treatment principle, to calculate costs per treatment principle and to calculate the death rate due to different treatment strategies. CONCLUSIONS: CHD-patients with PETN is less costly for SHI. Abduction of PETN due to current fictive approval and higher drug costs – as published recently – will lead to prescription of other nitrates and as consequence, higher costs will accrue.

PCV37 VIP STUDY: INCREMENTAL COST DURING HOSPITALIZATION AFTER TOTAL KNEE AND HIP ARTHROPLASTY IN BRAZILIAN HEALTH CARE SERVICES Maimine S1, Nita MB2, Schinbinberg M3, Vasconcelos P3, Guerra RT4, Takemoto M4, Fujii RK5, Zanetti JG6, Loureiro-Valle AA7, Pressa JO8, Rached R9, Juarez Garcia A10, Donato BMK11, Rahal E12

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OBJECTIVES: To evaluate venous thromboembolism (VTE) rate and incremental costs during hospitalization for total knee (TKA) and hip arthroplasty (THA) in public and private health system. METHODS: Retrospective cohort study of patients undergoing elective TKA or THA in 2010. All review charts were from either one public or two private hospitals in Sao Paulo state, Brazil. Patients were 18 years old, and excluded from the study if antithrombotic drugs were used prior to surgery. Costs were estimated based on hospitalization resource utilization described in patients' chart. Costs are expressed in 2012 US$. RESULTS: From a total of 233 patients, 215 were included: 121 (56.3%) TKA and 94 (43.7%) THA. A total of 203 (94.4%) patients received VTE prophylaxis, being enoxaparin the first choice in 201 (99%). VTE was suspected in 7 (3.3%) cases during hospitalization (4 TKA/3 THA). VTE was confirmed in two cases from private hospitals: one deep vein thrombosis (DVT) and one DVT/pulmonary embolism. In the public setting (N=81), length of stay (LOS) and hospitalization average cost per patient was 4.9 (SD3.8) days and US$2,327.12, respectively, in non-VTE group (N=79) while 13 (SD9.0) days and US$31,121.01 in suspected VTE group (N=2). In the private setting (N=134), LOS and hospitalization average cost per patient were 5.1 (SD3.8) days and US$14,006.28, respectively, in non-VTE group (N=134), 15.7 (SD11.3) days and US$22,063.33 in suspected VTE group (N=3), and 22 (SD7.1) days and US$28,232.33 in confirmed VTE group (N=2). CONCLUSIONS: In our study, VTE rate was 0.9%, increasing four times the LOS and doubling hospitalization costs (US$14,265.05/patient) for the private service when comparing to patients without event. LOS of suspected patients was similar extended in both health services yet with higher hospitalization cost for the private setting.