the only eHealth component were excluded. Two authors independently screened the studies and extracted the data. Analysis strategies. Pre-specified inclusion/exclusion were employed to identify randomized controlled trials (RCTs) evaluating apixaban, dabigatran, rivaroxaban, and edoxaban versus standard care. Eligible adult patients had objectively confirmed deep vein thrombosis (DVT), pulmonary embolism (PE) or both. A fixed-effect Bayesian NMA was conducted for relevant outcomes in terms of reduction in VTE or VTE-related death, apixaban had a significantly lower risk of 'VTE or PE or both' compared with rivaroxaban (21%, 0.79 [0.44, 1.40]; 18%, 0.82 [0.50, 1.34]; 25%, 0.75 [0.47, 1.26]), rivaroxaban (7%, 0.93 [0.59, 1.45]) and edoxaban (↓5%, 0.69 [0.51, 0.94]). The relative risk of 'VTE or related death' was lower with apixaban compared with both dabigatran (22%, 0.75 [0.51, 0.95]), rivaroxaban (17%, 0.60 [0.38, 1.03]) and edoxaban (16%, 0.69 [0.69, 1.01]). Apixaban was associated with the most favorable safety profile, showing a statistically significant reduction in the risk of 'major or clinically relevant non-major (CRNM) bleed' compared with rivaroxaban (15%, 0.73 [0.61, 0.86]), dabigatran (32%, 0.59 [0.36, 0.89]) and edoxaban (16%, 0.69 [0.51, 0.94]). The relative risks of all-cause mortality for apixaban versus dabigatran, rivaroxaban and edoxaban were comparable (21%, 0.79 [0.60, 0.93]; 16%, 0.80 [0.50, 1.34]; 25%, 0.75 [0.47, 1.21], respectively). CONCLUSIONS: While the NOACs have similar efficacy in terms of reduction in VTE or VTE-related death, apixaban had a significantly better safety profile versus NOACs. Terms of reduction in 'major or CRNM bleed' for initial/long term treatment of VTE.

PCV15
EFFECTIVENESS AND SAFETY OF AMLODIPINE AND BISOPROLOL IN HYPERTENSION TREATMENT: A SYSTEMATIC REVIEW
Enni EA1, Regresto MP2, Pepe CF3, Fernandez RA4, Haas L4, Junquiera PT1
1Mercy Hospital, São Paulo, Brazil; 2NeuroEd/Pediatria, NeuBT/Med/Inform - Grupo Resulta, São Paulo, Brazil; 3Grupo Resulta, São Paulo, Brazil
OBJECTIVES: The complexity of therapy and pill burden has a direct impact on treatment compliance. Compliance is improved when agents are low cost, fixed dose, free of side effects rather than separate pills. This could be of particular value in elderly patients with multiple morbidities requiring polypharmacy. This systematic review aims to evaluate efficacy and safety of the once-daily fixed-dose combination (bisoprolol/amlopidine) on SAIH. METHODS: Electronic searches included MEDLINE, LILACS, EMBASE, CRD, among others until June 2014. Search terms included “Amlopidine”, “Bisoprolol” and “Hypertension” via MEDSH controlled vocabulary. Where included studies with information on patients using the combination for hypertension treatment. Two reviewers performed the search. RESULTS: From 704 articles found, 3 evaluated feasibility. Mean reduction of 19.7% in DBP, from 103.6±6.9 mmHg at baseline to 83.4±6.2 mmHg (p=0.0003). SBP decreased from 20.4% to 21.8% and DBP decreased19.7% to 21.2%. SBP/DBP goal (<140/90 mmHg) was reached or exceeded from 82.5 to 89.0% of patients by the end of 8 weeks. HR presented reductions from 10.4% to 21.6% to the end of 8 weeks (from 73±11 [0.6 mmH] to 68 ± 8.13 mmH]. Pedal edema was observed in 7% to 8%. Excellent/good tolerability was reported by 90.6% to 94% of patients. Combination therapy is likely to cause fewer AEs with lower doses. Benefits of fixed-dose include reduced pill burden, improved BP control, compliance and cost savings. Persistence rate of 54.3% compared to 14.9% and a compliance rate of 76.9% versus 54.4% were observed. Patients with HR ≥79 bpm had an 89% greater risk of mortality than those with HR ≤79 bpm. CONCLUSIONS: In summary, bisoprolol plus amlopidine in a fixed-dose combination showed significant benefits, with a similar safety profile when compared with amlopidine and bisoprolol in monotherapy, potentially leading to an increase in SAH treatment compliance.

PCV17
EFFECTIVENESS AND COST-EFFECTIVENESS OF CATHETER-DIRECTED THROMBOLYSIS IN MASSIVE PULMONARY EMBOLISM
Kantarci CA1, Akaray T1, Akman Y1, Dursun T1, Karabulut M1, Aytug O1
1Kazlıçeşme Medical University for Continuing Education, Astana, Kazakhstan; 2Astana Medical University, Astana, Kazakhstan
OBJECTIVES: The massive pulmonary embolism (PE) is a life-threatening condition associated with a high incidence of fatalities comparable to that of acute myocardial infarction. A variety of treatment modalities have been used in patients with massive PE, which include systemic anticoagulation, catheter-directed thrombolysis (CDT) and etc. METHODS: A Markov model was constructed to determine the costs and benefits of CDT with urokinase and CDT with alteplase. The time horizon of the model was lifetime, and a monthly cycle length was adopted. A review of the literature on the decision rules was undertaken. A variety of studies were included to support the decision model. Direct medical costs were assessed from the payer perspective in the Kazakhstan and analyzed using sensitivity analyses. A Monte Carlo analysis was performed to calculate the probability of Death, major complications, hemorrhage, CDT was associated with a significant reduction of overall mortality. This reduction was not statistically significant after exclusion of studies including high risk PE. However, major hemorrhage and fatal or intracranial bleeding were significantly more frequent among patients receiving CDT. The multi-way sensitivity analysis showed that CDT was cost-effective only under specific scenarios. The expected costs per patient were $1,656 for CDT with urokinase and $1,487 for CDT with alteplase. Probabilistic sensitivity analysis showed that CDT with urokinase was more effective and less costly (dominant) in 23% of all simulations. CONCLUSIONS: The Markov model estimated that CDT is cost-effective in sub-group of patients at high risk of death from PE. The use of CDT with urokinase for the treatment of haemodynamically stable patients with PE was more cost-effective than CDT with alteplase in the Kazakhstan. The fact that when using alteplase there is a higher risk of hemorrhage than with urokinase is also preferences for the use of urokinase for CDT.

PCV18
MIPOMERSEN FOR TREATMENT OF HYPERCHOLESTEREMIA: EVIDENCE REVIEW AND META ANALYTIC EVALUATION OF RANDOMIZED CONTROLLED TRIALS
Banuka A, Gru G C
Eunoullys Research, Hyderabad, India, 1Eunoullys Research, Burgdorf, Germany
OBJECTIVES: The objective of this investigation was to assess the evidence base by retrieving randomized controlled trials (RCTs) for high-density lipoprotein (HDL) concentration and cholesterol for treatment of hypercholesteremia. METHODS: Studies published in English were collated from PubMed and Cochrane databases using validated search strategies. Pre-specified inclusion/exclusion were employed to identify randomized controlled trials. Exclusion criteria included Mipomersen study and other researchers independently screened the studies and extracted the data. Analysis of comparable outcomes was performed using random-effects model to calculate summary weighted mean difference (WMD) and 95% CI using statistical software STATA. RESULTS: Nine studies were finally included for data extraction. Overall effect size (WMD(95%CI)) were -0.42 (0.66, -0.18), -0.24 (0.37, -0.12), -48.18 (35.63, -55.80) (77.68, 34.24) and 0.16 (0.01, 0.33) for Apo B, VLDL, LDL, Non-HDL, and HDL respectively. Mipomersen was associated with a reduction in LDL-C concentrations from baseline at the primary efficacy time point. The mean percentage change from baseline in LDL-C concentration was significantly greater with Mipomersen than with placebo. For the secondary and tertiary outcome measures, percentage changes from baseline were significantly greater with Mipomersen than with placebo for apo B, total cholesterol, non-HDL-C. Mipomersen treatment also resulted in a significant percentage reduction when compared with the placebo group in the logprotein (a) concentration and LDL-C:HDL-C ratio. The most common adverse events were injection-site reactions, influenza-like symptoms, patients in Mipomersen group, increase in intrahepatic triglyceride content, increased ALT and AST alterations. CONCLUSIONS: The findings show that evidence supports Mipomersen being safe and effective intervention as an adjunctive drug for lowering LDL-C.

PCV19
THE USE OF LOW MOLECULAR WEIGHT HEPARIN AND PNEUMATIC COMPRESSION DEVICES FOR DEEP VEIN THROMBOSIS PROPHYLAXIS IN MAJOR TRAUMA PATIENTS: A COMPARATIVE EFFECTIVENESS ANALYSIS
Alahmane AE, Almalki ZS, Guo JJ
University of Cincinnati, Cincinnati, OH, USA
OBJECTIVES: Since the optimal Venous Thromboembolism (VTE) prophylaxis strategy for trauma patients is unknown, we performed this study to compare the effectiveness of the use of pharmacological thromboprophylaxis such as Low Molecular Weight Heparin (LMWH) to the non-pharmacological thromboprophylaxis such as pneumatic compression devices (PCDs) in the prevention of Deep Vein Thrombosis (DVT) among major trauma patients. METHODS: A simplified decision-analysis model was established. The outcome measures for this model were the expected utilities resulting for each of the comparison categories. Our model compares two strategies, LMWW and PCDs. Patients who received LMWH as prophylactic approach will then have the chance to either develop DVT or not develop DVT. As some patients develop DVT they have the four different chances, to die from DVT, survive DVT develop DVT or suffer from Heparin Induced Thrombocytopenia (HIT). The expected utility then calculated based on the terminal node utility and probability of each possible event. On the second strategy, PCDs patients patients rate of DVT, with a similar safety profile when compared with amlopidine and bisoprolol in monotherapy, potentially leading to an increase in SAH treatment compliance.