

in WinBUGS14. **RESULTS:** We identified 1430 references and found 10 studies on four randomized trials in 2963 patients. The devices included in our study were Amplatzer (AMP), STARFlex (STF), and HELEX (HLX). The odds ratios (ORs) for AMP versus HLX were 0.54 (0.05–5.38), AMP versus Medical 0.37 (0.07–1.35), AMP versus SLX 0.36 (0.05–1.87), HLX versus Medical 0.68 (0.05–7.78), HLX versus SLX 0.66 (0.07–6.00) and Medical versus SLX 0.99 (0.18–5.53). The probability to be best in preventing strokes was 66.7% for AMP, 25.8% for HLX, 4.5% for STF, and 2.9% for medical therapy. **CONCLUSIONS:** Patent foramen ovale closure with Amplatzer appears superior to medical therapy in preventing strokes in patients with cryptogenic embolism.

#### PMD17

##### COMPARISON OF T-PIECE RESUSCITATOR WITH OTHER FLOW – INFLATING BAGS FOR PROVIDING POSITIVE PRESSURE VENTILATION DURING NEONATAL RESUSCITATION: A SYSTEMATIC REVIEW

Dang S<sup>1</sup>, Kanukula R<sup>2</sup>, Likhari N<sup>2</sup>, Vsn M<sup>2</sup>, Dang A<sup>2</sup>

<sup>1</sup>University of Kentucky, Lexington, KY, USA, <sup>2</sup>MarksMan Healthcare Solutions LLP (HEOR and RWE Consulting), Navi Mumbai, India

**OBJECTIVES:** Effective positive pressure ventilation is indispensable for successful resuscitation in neonates who fail to establish spontaneous breathing. In this review we sought to compare the T-piece resuscitator (TPR) with other flow-inflating bags for providing positive pressure ventilation during neonatal resuscitation. **METHODS:** We searched Pubmed, EMBASE and Cochrane databases from the inception to June 2015 for randomized controlled trials with specific search terms. All studies published in English language which compared TPR with flow-inflating bags were eligible for inclusion. Our primary outcome was intubation rate and secondary outcomes were heart rate, oxygen saturations, APGAR scores at 5 minutes, number of days of mechanical ventilation, length of stay, and mortality rates. Two reviewers independently performed study selection, data extraction and quality assessment procedures. **RESULTS:** A total of five studies with 1607 neonates were included in this review. There were less intubation rates observed in the TPR group as compared to other groups (8% to 27% vs 6% to 34%; four trials). One study showed significant reduction in intubation rates in TPR group compared to self inflating bags (odds ratio 0.58; 95% CI, 0.4 to 0.8). The response to resuscitation as showed by APGAR scores at 5min. was higher with T-piece as compared to other groups. The oxygen saturations, mechanical ventilation days, length of hospital stay and mortality were observed lesser in TPR group compared to other groups. **CONCLUSIONS:** Our review found that neonatal resuscitation with TPR decreases the intubation rates, mechanical ventilation days, length of hospital stay and mortality. However, further more trials with large sample size are warranted.

#### PMD18

##### INNOVATIVE METHODS FOR EARLY DIAGNOSTIC OF CANCER

Sassiykova A<sup>1</sup>, Gurtskaya G<sup>1</sup>, Kulkhan T<sup>1</sup>, Senshin S<sup>2</sup>

<sup>1</sup>Republican Center for Health Development, Astana, Kazakhstan, <sup>2</sup>LLP "Radian", Almaty, Kazakhstan

**OBJECTIVES:** In oncology, the factor in successful treatment of any type of cancer is early diagnostic. Electron paramagnetic resonance (EPR) is an innovative non-invasive method which is demonstrating the high information content in the diagnosis and monitoring of treatment of malignant neoplasms. The method of EPR based on measurement and interpretation of the resonant response of spin labels for diagnosis of structural and functional disorders of albumin. There is the project on approbation of innovative technology in cancer detection were performed in Kazakhstan. The purpose of project is the study of effectiveness of EPR technique for the early diagnosis of cancer and determining the applicability of the method in screening studies of population. **METHODS:** The study was double-blind, 150 serum samples were measured. Differences between samples taken from apparently healthy individuals and patients with confirmed malignancy were identified in the analysis of EPR spectra obtained using laboratory EPR-analyzer. **RESULTS:** In group A (cancer patients) in 68 cases was detected of active malignancy from 75 samples. In 7 cases the method detected lack of activity malignant proliferation. The sensitivity of the method in this group was 90.6%. In group B (healthy group) in 11 cases the method showed the likelihood of malignancy in patients, and there is no possible cancer in 64 cases from 75 samples. Thus, the specificity of the methodology in healthy group was 85.3%. Many of these false-positive cases are due to the presence of inflammation in the acute form, or accepting drugs in high concentrations. **CONCLUSIONS:** The EPR methodology demonstrates certain advantages over the currently used methods for early diagnosis of active malignant neoplasms and in the monitoring and control of cancer recurrence. EPR spectroscopy is not opposed to other methods of cancer diagnostics, but it can add significantly to efforts on the preclinical and early diagnostic.

#### PMD19

##### THE EFFECTIVENESS OF WIDE FIELD FLUORESCIN ANGIOGRAPHY : SYSTEMATIC REVIEWS

Kim SY

National Evidence-based Collaborating Agency, Seoul, South Korea

**OBJECTIVES:** The purpose of this assessment was to evaluate the effectiveness of Wide Field Fluorescein Angiography (WFFA), a technology targeting retinal disease patients that involves shooting a wide-angle 488nm laser to examine the retinal disease. **METHODS:** We searched 8 Korean databases and overseas databases Ovid-MEDLINE, Ovid-EMBASE and Cochrane Library, using a combination of search queries such as 'wide field' and 'ultra-wide' and related keywords. Total 260 studies were searched and 13 studies were included in the final assessment. Each of the stages from literature search and extraction of data were carried out independently by 2 researchers. We used tools of Scottish Intercollegiate Guidelines Networks (SIGN) for assessment of the quality of studies. **RESULTS:** The effectiveness of WFFA was assessed by means of the lesion detection rate, consistency, and impact on medical outcomes. The lesion detection rate of WFFA was reported in 12 studies. There were 3 studies, making a comparison with fluorescein angiography; the results showed

higher detection rate of the WFFA for vascular leakage, exudation, non-perfusion, neovascularization, and non-perfusion, neovascularization and ischemic lesions that were not detected by fluorescein angiography were detected. The inter-rater consistency was 0.75 for macular leakage and 0.43 for abnormality in the foveal and avascular areas in 1 study. The impact on the medical results was assessed based on 5 studies. The changes in the treatment strategy occurred at a rate of 16% in the case of the conventional fluorescein angiography and 48% in the case of WFFA in 1 study. The other study reported that when WFFA was implemented, photocoagulation was performed 3.8 times more compared to the conventional fluorescein angiography. **CONCLUSIONS:** WFFA is effective test as it can be used to detect the diseases around the retina, which were difficult to detect using the conventional method, and helps determine the treatment strategy for photocoagulation. (Grade of recommendation: C).

#### PMD20

##### COLONRECTAL CANCER EVALUATION OF ITALIAN SCREENING AND MORTALITY

Socievole G, Setola E, Garziera G

Johnson & Johnson Medical SpA, Rome, Italy

**OBJECTIVES:** Colorectal cancer (CRC) is one of the most frequently diagnosed cancers in Italy. According to the most recent estimates in Italy approximately 52,000 new cases are diagnosed and over 20,000 deaths occurred in 2014. A large number of patients are no longer surgically operable at the time of diagnosis and the generic symptomatology is often cause of a late diagnosis. The aim of this study was to determine the impact of colorectal screening programs implemented in Italy and by each Regional Healthcare Service in terms of mortality reduction and costs associated with the screening tests and surgery compared to drug therapy. **METHODS:** We identified the current colorectal screening programs adopted in each Italian region, mainly addressed to the age group 50-69 years. We compared incidence, mortality and prevalence data about CRC with target population's adherence to the programs, detection rate and cancer stage. We used early indicators of impact established by GISCoR for program evaluation of colorectal cancer screening. Then we defined and analyzed the costs associated with the screening programs and surgery and we compared them with costs of drug therapy. **RESULTS:** The spread of screening programs throughout Italy presents an upward trend with a significant increase in the North and Center of the country where regions show higher rates of adherence (>45%). With regard to the proportion of tumors in stage <II the more effective is the Piedmont region. Regions with a greater reduction in mortality are Marche, Liguria, Tuscany and Emilia Romagna. Cost of care varies according to the care pathway: initial phase, continuing phase or final phase. **CONCLUSIONS:** The study encourage the use of such analysis in a public health perspective, to increase understanding of patient outcomes and economic consequences of differences in policies related to cancer screening, treatment, and programs of care.

#### PMD21

##### RISK EQUATION FOR ALCOHOL RELATED CONSEQUENCES

Hoertel N<sup>1</sup>, Leleu H<sup>2</sup>, Blachier M<sup>2</sup>, Limosin F<sup>1</sup>

<sup>1</sup>Corentin-Celton Hospital / Paris Descartes University, Issy les Moulineaux, France, <sup>2</sup>PUBLIC HEALTH EXPERTISE, Paris, France

**OBJECTIVES:** A recent study showed that 28% of individuals in France are occasional heavy drinkers with short term social consequences that are underestimated. The objective of this study was to construct several risk scores to predict the probability of having drinking related social consequences. **METHODS:** Data from wave 1 and 2 of National Epidemiologic Survey on Alcohol, separated into a construction and validation samples, were used to predict the risk of dependence and alcohol-related depression, legal, relational and work issues in the next 3 years. Patients were included in the analysis if they declared drinking alcohol at least once in the last 12 months. Alcohol consumption was recoded in three variables corresponding to the AUDIT-C questions: drinking frequency in the last year, average drinks consumed when drinking and frequency of consuming five drinks or more. The probability of social consequences were modeled in the construction sample using logistic regression, with age, sex and alcohol consumption variables as predictors. Goodness of fit was assessed in the validation sample based on C-index and R<sup>2</sup>. **RESULTS:** Based on only five predictors, the risk equation demonstrated a good goodness-of-fit with a c-index of 0.87 for dependence, 0.81 for depression, 0.84 for legal issues, 0.82 for relational issues and 0.86 for work-related issues. Probability of event for a man between 30 and 39, drinking 2 to 4 times a week 3 or 4 glasses, never drinking more than 5 drinks at once had a risk of 13% for dependence, 6% for depression, 2% for legal issues, 4% for relational issues and 1% for work issues. **CONCLUSIONS:** Alcohol related social consequences are often underestimated by drinkers. The use of predictive tools based on a limited number of variables readily available in consultation can be used by GPs to encourage occasional and regular drinkers to stop or reduce their consumption.

#### PMD22

##### TO ACCESS INDEPENDENT RISK CAUSE OF SUDDEN CARDIAC DEATH IN HEMODIALYSIS PATIENTS

Kumar P<sup>1</sup>, Savant K<sup>1</sup>, Attur RP<sup>2</sup>

<sup>1</sup>Dept of Pharmacy practice, Manipal College of Pharmaceutical Sciences, Manipal University, Manipal India, Manipal, India, <sup>2</sup>Department of Nephrology, Kasturba Medical College, Manipal University, Manipal, India

**OBJECTIVES:** To examine the demographic, clinical characteristics and independent risk cause of sudden cardiac death in HD patients. **METHODS:** We analyzed the data of 410 hemodialysis patients, who were undergoing hemodialysis in a tertiary care teaching hospital and were followed for a median of 3 years. Baseline demographic data, comorbidities, biochemical parameters, ECG, and ECHO all these data was assessed from the patient files. The logistic regression was applied to obtain the adjusted odds ratio and 95% CI were calculated. In all tests, a probability of p < 0.05 was considered as statistically significant. **RESULTS:** During follow-up, SCD was observed in 65 HD patients and non-sudden death in 165. The patients