**OBJECTIVES:** Modern medicine provides continuous improvement of diagnosis, treatment and prevention methods in accordance with the requirements of best medical practice. The system of medical care standardization with regard of the evidence-based medicine is focused on developing medical and technological documents that assist a doctor to act effectively in specific clinical situations, avoiding inefficient and false interventions. In view of this, the Ministry of Health of Ukraine has approved the methodology for development of medical and technological documents on the basis of evidence. **METHODS:** Evidence of clinical effectiveness is the main criterion in choosing the treatment methods combating tuberculosis. **RESULTS:** Ukraine has recently introduced the methodology of developing unified clinical protocols of medical care based on adapted clinical guidelines, which in turn are the result of adaptation of the best international practice. In particular, within the project of combating TB the adapted clinical guidelines was developed based on the documents of NICE and WHO. In developing the protocol there identified found differences in the tuberculosis treatment in Ukraine compared to the best practice, which resulted in amendments to the corresponding regulations in health care. **CONCLUSIONS:** Practical recommendations derived from the evidence-based medicine allowed the change of approaches to diagnosis and treatment of tuberculosis in Ukrainian regulations. 3-time examination by sputum smear and culture microscopy is replaced by 2-time, the duration of the basic course of chemotherapy is reduced from 8 to 6 months and its intensity is reduced from 5-component to 4-component treatment for the treatment of new and recurrent cases of tuberculosis with sensitive mycobacteria. In order to integrate these changes into clinical practice local protocols and critical pathways for management of tuberculosis are developing in all health care facilities taking into account peculiarities of the region and available resources of the hospitals.

## RESPIRATORY-RELATED DISORDERS – Clinical Outcomes Studies

### PRS1

### CHARACTERISTICS OF PATIENTS WITH CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD) RECEIVING INHALED CORTICOSTEROID/LONG-ACTING β2–SS2-AGONIST (ICS/LABA) FIXED COMBINATION PRODUCTS IN ENGLISH PRIMARY CARE

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**OBJECTIVES:** ICS/LABA fixed combinations are used in patients with COPD with a history of repeated exacerbations i.e. worsening of disease including infections and who have significant symptoms despite regular bronchodilator therapy. This study describes the characteristics of COPD patients initiating ICS/LABA in English primary care. **METHODS:** Patients with first prescription (index date) of fluticasone/salmeterol (FP/SM) or budesonide/formoterol (BUD/FM) between 01.01.2005-31.10.2011 and a prior COPD record were selected from CPRD primary care records linked to Hospital Episode Statistics. Baseline characteristics prior to first ICS/LABA prescription were described as proportions, means and rates (95%CI). Prior exacerbations were defined as: antibiotic or oral corticosteroid prescriptions or COPD hospitalisation; multiple events within 14 days were treated as one event. **RESULTS:** 26,875 patients age≥40 at index were included with 75.9% initiating FP/SM and 24.1% BUD/FM; mean age 70.3(70.1-70.4) and 69.0(68.8-69.3) years, respectively. In both cohorts 54% were male, approximately 36% current smokers, and 56% past smokers. Pneumonia within 1-year prior to index was slightly higher in FP/SM patients (1.9%(1.9-1.9)) compared to 1.4%(1.4-1.4) in BUD/FM), as was prior mean annual COPD hospitalisation rate (0.17(95%CI:0.16-0.17); 0.11(95%CI:0.10-0.12)). Amongst FP/SM patients 12.7%(95%CI:12.6-12.9) had COPD hospitalisations 1-year prior with 9.2%(95%CI:8.9-9.4) amongst BUD/FM. 37.2%(95%CI:36.7-37.7) of FP/SM patients received tiotropium 1-year prior with 35.4%(95%CI:34.5-36.2) amongst BUD/FM. The majority of patients had received short-acting ß2-agonist; FP/SM patients: 89.8%(95%CI:88.6-91.1), BUD/FM patients: 84.8%(95%CI :82.7-86.8). Proportions receiving inhaled-corticosteroids within 1-year prior was 50.9%(95%CI:50.3-51.6) and 48.0(95%CI:46.8-49.2) for FP/SM and BUD/FM, respectively, oral-steroids figures were 42.2%(95%CI:41.7-42.8) and 39.8%(95%CI:38.8-40.8), respectively, and mean annual exacerbation rate was 2.15(95%CI :2.12-2.18) and 2.02(95%CI:1.96-2.07), respectively, with 75.3%(95%CI:74.2-76.3) and 73.9%(95%CI:72.1-75.7), respectively, having exacerbations. **CONCLUSIONS:** Both groups had similar burden of COPD disease prior to starting fixed combination. The crude prevalences for some baseline characteristics were slightly higher in FP/SM vs. BUD/FM highlighting the need for rigorous propensity score matching in any comparative outcomes research.

### PRS2

### THE EFFICIENCY OF PREOPERATIVE PHYSIOTHERAPY IN PATIENTS WITH CHRONIC OBSTRUCTIVE PULMONARY DISEASE UNDERGOING OPEN HEART SURGERY

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**OBJECTIVES:** Chronic Obstructive Pulmonary Disease (COPD) associated with heart disease is common; this fact leads to increase the number of postoperative complications. The aim of this study was to evaluate the benefits of preoperative physiotherapy (PT) among patients with COPD. **METHODS:** Thirty-seven patients with COPD were included in the study those who underwent open heart surgery. Group1 (n=17) participated in pre- and postoperative PT while Group2 (n=20) received only postoperative PT. Inclusion criteria: open heart surgery and patients diagnosed with COPD or have $FEV_1$<80%. Spirometric measurements (vital capacity=VC, forced expiratory volume=$FEV_1$, maximum expiratory pressure=PEF) performed preoperatively and on the 3rd and 7thpostoperative days. Operative data, duration of mechanical ventilation, average stay of intensive care unit, incidence of atelectasis were also assessed. IBM SPSS Statistics 20 software was used for statistical analysis; t-test and Pearson-correlation was applied (p<0.05). **RESULTS:** VC, $FEV_1$, PEF showed significantly decrease in Group1 (21.29±13.40%; 19.71±17.96%; 4.18±20.09%) compared to Group2 (34.70±17.54%; 32.85±11.95%; 24.65±21.65%), ($p_1$=0.013, $p_2$=0.011, $p_3$=0.002). Compared to the preoperatively measured, the fail of the three measured respiratory functional values on the 7th postoperative day was significantly smaller in Group1 than Group2 (VC, $FEV_1$, PEF; Group1: 14.18±12.61%; 12.82±14.31%; -6.29±18.46%; Group2: 25.60±16.11%; 23.05±14.93%; 13.70±19.28%; $p_1$=0.043, $p_2$=0.046, $p_3$=0.004). There was no difference between groups in duration of mechanical ventilation and average stay of intensive care unit. Incidence of atelectasis was 10% in Group1, while 0% in Group2. Pre- and postoperative respiratory functional values did not correlate significantly with extubation time (p>0.05). **CONCLUSIONS:** The applying of preoperative PT to cardiac surgical patients with COPD is effective since the examined respiratory functional values reduced less and increased better in the postoperative period at the preoperatively treated group.

### PRS3

### RESPIRATORY SYNCYTIAL VIRUS HOSPITALIZATIONS IN THE CANADIAN REGISTRY FOR SYNAGIS (CARESS)

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**OBJECTIVES:** Paediatric advisory committee guidelines recommend palivizumab prophylaxis for infants at high risk for respiratory syncytial virus (RSV) infection. The objective of this study is to compare the hospitalization rates for respiratory illness (RIH) and RSV-positive hospitalizations (RSVH) among infants who received palivizumab for various indications. **METHODS:** The Canadian Registry for Synagis (CARESS) is a prospective registry of infants who have received ≥1 dose of palivizumab per RSV season across Canada. Demographic data were collected in 32 Canadian national sites during the 2005-2012 RSV seasons. Respiratory illness related hospitalization events were recorded monthly. Standard risk indications that qualified for RSV prophylaxis were categorized as prematurity (≤35 completed weeks gestational age), chronic lung disease or bronchopulmonary dysplasia (CLD), hemodynamically significant congenital heart disease (CHD), and other serious underlying medical disorders (MD). A Cox proportional hazards analysis was conducted to examine differences in hospitalization rates between the indications. **RESULTS:** Of the 13,310 infants enrolled, 8751 were premature, 1048 had CLD, 1414 had CHD, and 2097 qualified with MDs. The overall RIH rate was 6.6% (n=875) with premature infants having a significantly lower rate than the other groups (4.4% vs. 12.2% [CLD], 10.3% [CHD], 10.3% [MD]; B=-0.770, df=1, p<0.0005). Details of hospitalizations did not differ between groups, except the number that were admitted to the Intensive Care Unit which was significantly different between groups ($\chi^2$=11.420, df=3, p=0.010). The overall RSVH rate was 1.55% but was also significantly lower for prematurity (prematurity, 1.36%; CLD, 1.64%; CHD, 2.05%; MD, 2.03%; p<0.0005), with no significant differences between the groups in terms of time to RSV hospitalization ($\chi^2$=1.833, df=3, p= 0.608). **CONCLUSIONS:** RIH and RSVH rates were dissimilar across the groups with premature infants being significantly lower compared to the others. However there were no identified group differences regarding time to first RSVH.

### PRS4

### THE EFFICACY OF THE EXTRA FRONT LOADING SMOKING CESSATION COUNSELLING SESSIONS ON THE ABSTINENCE RATE COMPARED WITH USUAL CARE USED IN QUIT SMOKING CLINIC IN PENANG, MALAYSIA

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**OBJECTIVES:** To assess the impact of the front loading phone calls counselling on the abstinence prevalence at 3 and 6 months after quit date among smokers in Penang, Malaysia. **METHODS:** The study was carried out at Quit Smoking Clinic of two major hospitals in the state of Penang, Malaysia. All the eligible tobacco users who attended the clinics between February 1 and October 31, 2012 were invited. Participants were randomly assigned to receive either the usual care (a combination of nicotine gum for the first 2 weeks and cognitive behaviour therapy); (control group), or the previous combination plus extra counselling sessions through phone calls during the first month of quit attempt (intervention group). **RESULTS:** Two hundred thirty-one subjects were recruited during the period under review. The mean age of starting smoking in the study population was 17.38 ± 3.9 years. The vast majority of our cohort (96.1%) was male. Participants smoked about 14 cigarettes per day on average (mean = 13.78 ± 7.0). At 3 months follow-up point, control group was less likely to quit smoking compared to intervention group but this did not reach statistical significance (OR = 0.669; 95% CI = 0.395-1.133, *P* = 0.86). However, at 6 months, the abstinence rate significantly differed between the standard care and combination of standard care and extra phone calls after verification with exhaled carbon monoxide (48.6% vs. 71.7%, respectively: < 0.001). The control group were significantly less likely to quit smoking (OR = 0.375; 95% CI = 0.217-0.645, P< 0.001). **CONCLUSIONS:** Smoking cessation intervention consisting of phone calls delivered counselling during the first month of quit attempt results in significantly higher abstinence rates compared with a standard care approach. Therefore, the front loading counselling is a promising treatment strategy that should be evaluated further.

### PRS5

### RESPIRATORY SYNCYTIAL VIRUS HOSPITALIZATION IN INFANTS WITH CONGENITAL AIRWAY ANOMALIES IN THE CANADIAN REGISTRY OF SYNAGIS® (CARESS) FOLLOWING PROPHYLAXIS (2005-2012)

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**OBJECTIVES:** Palivizumab is recommended for respiratory syncytial virus (RSV) prophylaxis. CARESS tracks palivizumab use and respiratory outcomes in high-risk infants, including those with congenital airway anomalies (CAA). Our objective was to compare hazards for hospitalization for respiratory illness (RIH) and RSV (RSVH) in CAA infants versus those prophylaxed for: 1) other medical disorders (MD) and 2) standard indications (SD). **METHODS:** Infants were prospectively recruited from 32 Canadian sites who received ≥1 dose of palivizumab during the 2005-2012 RSV sea-