### ABSTRACTS

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SCIENTIFIC-RESEARCH INSTITUTE OF HEART SURGERY AND ORGANS TRANSPLANTATION OSH INTERREGIONAL UNITED CLINICAL HOSPITAL EUROASIAN ASSOCIATION OF CARDIOTHORACIC SURGEONS

#### A-1

The proportion of coronary heart disease in development of chronic heart failure by retrospective analysis of three-year registry of hospitalization cases in tertiary healthcare institutions<sup>\*</sup> of Kyrgyz Republic.

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#### Abstract

In this retrospective study, we analyzed epidemiological aspects and etiological structure of heart failure in tertiary cardiac hospitals of republic, namely National Center of Cardiology and SRI of Heart Surgery and Organs Transplantation in three-year follow-up from 2016 to 2018. Among all underlying disorders, the proportion of coronary heart disease predominated in heart failure conditions: 31.8% and 84.3% in I-II class and III-IV class groups classified according to New-York Heart Association, respectively.

**Keywords**: heart failure, chronic heart failure, coronary artery disease, arterial hypertension, underlying disease, prevalence, functional class, morbidity, hospitalization case, retrospective study

#### A-2

## The structure of cardiac surgery and interventions in heart failure management in the Kyrgyz Republic: A retrospective analysis.

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#### Abstract

In this study, we retrospectively analyzed the cardiac surgical and interventional care of patients with chronic heart failure hospitalized in Scientific-Research Institute of Heart Surgery and Organs Transplantation (SRIHSOT) and Osh Interregional United Clinical Hospital (OIUCH).

Key words: heart failure, cardiac surgical care, intervention, extent of operation, follow-up

#### A-3

### Survival analysis of renal patients underwent transplantation in Kyrgyz Republic and various countries by 10 years follow-up.

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#### Abstract

In our study we conducted survival analysis of 204 patients visited Scientific-Research Institute of Heart Surgery and Organs transplantation and who underwent renal transplantation in Kyrgyzstan and other Eurasian countries between 2005 and 2016 years (age range: 9-71 years, mean: 38.21 (12.74) years, median: 34.0 (0.89) years; gender: 142 male (69.6%)).

During follow-up period, mortality event was observed in 16 (7.84%) patients. Survival function probabilities of patients and rational risk factors of survival functions were evaluated by Kaplan-Meier and Cox regression analyses, respectively. According to Kaplan-Meier results survival probabilities calculated for 1<sup>st</sup> year: 0.96 (0.014), for 3<sup>rd</sup> year: 0.94 (0.018), for 5<sup>th</sup> year: 0.86 (0.04), for 7<sup>th</sup> year: 0.75 (0.10). Among age groups 28-39 age ranges prevailed by 11 patients. Nevertheless, that difference did not show statistical significance: p>0.322. The intensity of transplantation also analyzed according to years, which revealed increasing in numbers of operations by time. For instance, when in 2006 only two cases were registered in our center, but numbers of transplanted patients reached up to 48 in 2015. The association of mortality states and years of transplantation found significantly by Kaplan-Meier test (Breslow p<0.001). The survival analysis was compared according to countries and revealed significant results (Breslow p<0.05). From other factors influencing mortality, sex did not show strong impact on survival by Kaplan-Meier analysis, but significant association was found by Cox regression analysis.

**Keywords**: renal transplantation, survival function, cumulative survival, mortality, follow-up, Kaplan-Meier analysis, Cox regression analysis, event, censored value

#### A-4

#### The TACE's role in the management of primary liver cancer

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#### Abstract

**Objective:** Identify the most effective and safe method of transcatheter hepatic artery chemoembolization (TACE) in patients with primary liver cancer.

**Methods:** Overall, 139 patients, who underwent 558 TACE procedures were included in the study. Gender in the group of patients was distributed approximately equally and amounted to 72 men (52%) and 67 women (48%), the average age was 57.8 (9.9) years (range from 23 to 92 years). In most patients, the underlying disease for the development of hepatocellular carcinoma was cirrhosis of the liver in the outcome of hepatitis C or B. Characteristics of liver tumors were examined by magnetic resonance imaging or computed tomography and ultrasound. For verification of the diagnosis, a percutaneous liver biopsy was performed under ultrasound guidance, and the level of alpha-fetoprotein was also determined. All patients were considered unresectable due to cirrhosis and / or local spread of the tumor. Chemoembolization was performed by following scheme: one procedure in 2 months, not less than 3 procedures.

Doxorubicin was used for chemotherapy. As a carrier of chemotherapy, Lipiodol (Guerbet, France) or saturable Hepaspheres (Merit Medical, USA) were used. Each patient received from 3 to 13 procedures.

**Results:** Postembolization syndrome occurred in all cases, but was effectively treated. One patient died due to acute liver failure with the borderline stage of the disease according to the BCLC classification (EASL 2012) and the multinodular form of HCC. There were no serious complications in the treatment process. In two patients in the area of the puncture of the femoral artery, pseudoaneurysm was formed, which was eliminated by compression under ultrasound guidance. About 10% of patients developed subacute cholecystitis in the postoperative period and were associated with non-targeted chemoembolization in the cystic artery. In all patients, the symptoms of cholecystitis at the time of discharge were relieved conservatively.

Survival median – 19 months. Dynamics of tumors was assessed by RECIST criteria. In the group of patients with hepatocellular carcinoma after first 3 TACEs partial response and stabilization were observed in 83%, progression in 17%. In 18 cases (13%), histologically proved tumor necrosis after TACE was achieved, without progression during follow-up. Three patients after reducing of tumor size was resected, 32 patients continue treatment.

**Conclusion:** Transcatheter arterial chemoembolization in the treatment of hepatocellular carcinoma shows high efficacy, low mortality and the development of postoperative complications in patients with concomitant liver cirrhosis and locally advanced tumor lesion.

Key words: Chemoembolization of hepatic artery, hepatocellular carcinoma