## Differences in Human Activity Profile Scores Across Clinical Characteristics

| Clinical Characteristic | MAS score Median (IQR) | P-value | AAS score Median (IQR) | P-value |
|-------------------------|------------------------|---------|------------------------|---------|
| Age < 65 years          | 51 (33–66)46 (22–51)   | 0.07    | 19 (0–660)0 (0–13)     | 0.11    |
| Age ≥ 65 years          | 51 (31–68)48 (30–61)   | 0.33    | 10 (0–442)0 (0–36)     | 0.49    |
| Males                   | 51 (31–68)48 (30–61)   | 0.33    | 10 (0–442)0 (0–36)     | 0.49    |
| Females                 | 48 (29–63)51 (39–68)   | 0.35    | 7 (0–3719)0 (0–56)     | 0.34    |
| White                   | 51 (30–66)47 (39–61)   | 0.90    | 12 (0–3919)0 (0–39)    | 0.52    |
| Non-White               | 48 (29–63)51 (39–68)   | 0.90    | 12 (0–3919)0 (0–39)    | 0.52    |
| Hispanic                | 47 (30–68)51 (34–62)   | 0.99    | 1 (0–5219)0 (0–37)     | 0.98    |
| Non-Hispanic            | 51 (34–66)47 (27–60)   | 0.33    | 10 (0–4510)0 (0–30)    | 0.41    |
| Vintage < 1 year        | 45 (29–61)57 (43–78)   | 0.02    | 0 (0–3224)1 (71)       | 0.01    |
| Vintage ≥ 1 year        | 42 (28–58)51 (33–66)   | 0.14    | 0 (0–32217)0 (44)      | 0.09    |
| AVF/AVGCVC              | 48 (31–61)48 (33–63)   | 0.87    | 2 (0–33112)0 (39)      | 0.53    |
| Diabetes                | 56 (30–70)48 (33–63)   | 0.53    | 22 (0–568)0 (35)       | 0.39    |
| No Diabetes             | 48 (31–63)51 (34–67)   | 0.78    | 9 (0–3711)0 (54)       | 0.79    |

significant association (defined as < median of observed values) (ref: MAS ≥ median): ORs [95% confidence intervals (95% CIs)]: 1.04 (1.01–1.09); P = 0.005 and 2.57 (0.96–6.86); P = 0.06, respectively. Similarly, older age (+Δ 1-year increments) and diabetes were each associated with higher likelihood of low AAS scores (defined as < 52) (ref: moderate-high AAS scores): ORs (95% CIs): 1.06 (1.02–1.11); P = 0.01 and 4.83 (14.6–16.0); P = 0.01, respectively.

**CONCLUSION:** In this substudy of the NIH THYROID-HD Trial, HAP scores in HD patients with high-normal and subclinical hypothyroid range TSH levels were lower than observed in prior historical dialysis cohorts that did not have underlying thyroid dysfunction. Additionally, older age and diabetes were each associated with worse HAP scores. Further research is needed to determine the impact of thyroid hormone replacement on improving physical activity and function in this population, particularly those of elder age and with underlying diabetes.

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**MO891 PREDICTORS OF MORTALITY OF COVID-19 IN HEMODIALYSIS PATIENTS**

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**BACKGROUND AND AIMS:** The COVID-19 pandemic has disproportionately affected patients with pre-existing comorbidities, particularly dialysis patients. These patients appear to be more susceptible to severe forms of the infection, due to underlying, coexisting pathologies and their immunocompromised status. The aim of this study was to determine predictors of mortality in this population.

**METHOD:** We conducted an observational, retrospective, cohort study collecting data from the electronic medical records of a single dialysis centre at Hygeia Hospital Tirana, Albania. Baseline patient characteristics, including demographic, clinical and laboratory data were recorded. The receiver operating characteristic (ROC) analysis was used to determine predictors of mortality, their respective sensitivity, specificity and cut-off values.

**RESULTS:** Of 170 haemodialysis patients, 52 were diagnosed with COVID-19. The prevalence of COVID-19 infection in haemodialysis patients in our study was 30.5%. The mean age was 61.5 ± 12.3 years and 65.4% were men. The mortality rate in our cohort was 19.2%. Mortality rates were higher in patients with Diabetic Nephropathy (P < 0.04) and Peripheral Vascular Disease (P < 0.01). High BMI (P < 0.024), high RDW (P < 0.03), elevated C-reactive protein (P < 0.018) and elevated serum ferritin (P < 0.021) levels, were found to be risk factors for severe COVID-19 disease. ROC analysis identified lymphopenia and eosinopenia as the strongest predictors of mortality. AUC for lymphopenia was 0.739. It showed a sensitivity of 80% and a specificity of 85.7%, at a cut-off value of 0.185%. AUC for eosinopenia was 0.814. At a cut-off value of 0.185%, it revealed a sensitivity and specificity of 72.7% and 75%, respectively.

**CONCLUSION:** Our study revealed that risk factors for the development of severe COVID-19 infection were high BMI, high RDW, elevated levels of C-reactive protein...
(CRP) and serum ferritin. Lymphopenia and eosinopenia were determined as the most important predictors of mortality, in our cohort. Early recognition during the course of the infection, of a declining tendency of lymphocyte and eosinophil counts is paramount, in identifying high-risk patients for severe disease and poor outcomes among haemodialysis patients.

**RESULTS:**

We analyzed serological response to homologous (3 times mRNA-based vaccine) versus heterologous (adenoviral vectored plus mRNA vaccines) triple regimens in samples from patients on maintenance dialysis (NCT04378686). We measured IgG anti-S (spike) SARS-CoV-2 antibody levels using the IgG II Quant assay among haemodialysis patients.

**BACKGROUND AND AIMS:** Vaccination against COVID-19 is a promising strategy to reduce the risk for severe COVID-19. Patients on maintenance haemodialysis have a less robust immunoreponse than the general population. Triple vaccination might improve immunogenicity, and might benefit patients having a poor initial response.

**METHOD:** We analyzed serological response to homologous (3 times mRNA-based vaccine) versus heterologous (adenoviral vectored plus mRNA vaccines) triple vaccination regimens in samples from patients on maintenance dialysis (NCT04378686). We measured IgG anti-S (spike) SARS-CoV-2 antibody levels using the IgG II Quant assay (Abbott). Samples were collected between 6 and 12 weeks after both the second and the third vaccine dose.

**RESULTS:** A total of 302 patients received three vaccine doses. 94 patients received a heterologous regimen of the adenoviral vectored AZD1222 (2 doses) and the mRNA-based BNT162b2 (1 dose). The remaining 208 patients received a triple mRNA vaccine regimen of either BNT162b2 (1 dose). The remaining 208 patients received a triple mRNA vaccine regimen of either BNT162b2 (1 dose). The remaining 208 patients received a triple vaccine regimen of either BNT162b2 (1 dose).

**CONCLUSION:** Both heterologous and homologous triple vaccine regimens significantly augment the humoral response against SARS-CoV-2. The higher the ininitial response to the double prime-boost regimen, the lower the yield of a third vaccine dose. It seems prudent to prioritize vaccination of dialysis patients using mRNA-based vaccines when available.

**MO883**

**CARDIORENAL SYNDROME IN DIALYSIS: OUTCOMES AND PROGNOSIS IN COMPARISON WITH A CONTROL POPULATION**

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**BACKGROUND AND AIMS:** The interactions of both organs in Cardiorenal Syndrome (CRS) exacerbate the damage and determine a worse prognosis in these patients [1]. The aim of our study is to compare the development and prognosis of CRS patients compared with control patients.

**METHOD:** In a retrospective fashion, we assigned 60 patients with CRS who underwent dialysis, and we compared them with a control population of 60 patients without CRS in dialysis. We analyzed baseline characteristics of the patients and the dialysis parameters. Survival rates at 1 and 5 years were determined.

**RESULTS:** The baseline characteristics were similar between groups. The mean age was 72 ± 9 years in CRS and 68 ± 12 years in the control group. Men were more prevalent in both groups (55% versus 57%) and control (53%), Charlson’s Score was 8 ± 2 points in the CRS group and 7 ± 3 points in the control group. Diabetic nephropathy was the most frequent etiology of end-stage renal disease in CRS patients (37%), followed by nephroangiosclerosis (20%). In the control group, the most common etiologies were nephroangiosclerosis (32%), diabetic (22%) and interstitial nephropathy (11%).

CRS patients had more diabetes mellitus (55% versus 35%; P < 0.05), dyslipidemia (63% versus 38%; P < 0.05), ischemic cardiopathy (50% versus 31%; P < 0.05), atrial fibrillation (66% versus 21%; P < 0.05) and valvular heart disease (27% versus 6%; P = 0.05). There were no differences in hypertension (80% versus 76%; P = 0.58), ictus (31% versus 23%; P = 0.30) and peripheral arterial disease (40% versus 33%; P = 0.44) between groups. CRS patients had more hospitalizations due to heart failure before starting dialysis than the control group (52% versus 17%; P < 0.05).

Haemodialysis was the most common technique in both groups (CRS 98% and control 95%). The use of permanent tunneled catheters as definite vascular access was more common in CRS patients (60% versus 26%; P < 0.05). There were no differences in the duration of haemodialysis sessions (252 ± 18 versus 257 ± 23 min), neither in interdialytic weight gain (2.3 ± 0.7 versus 2.4 ± 0.9 Kg). CRS patients had worse ultrafiltration tolerance with a hypotension rate of 48% in CRS versus 10% in the control group (P < 0.05).

The median time in dialysis was inferior in the CRS group (24 [8–42] versus 61 [26–106] months; P < 0.05) compared with controls and the survival rates at 1 and 5 years were worse in the CRS group (71% versus 93%; P < 0.05) and (15% versus 50%; P < 0.05), respectively.