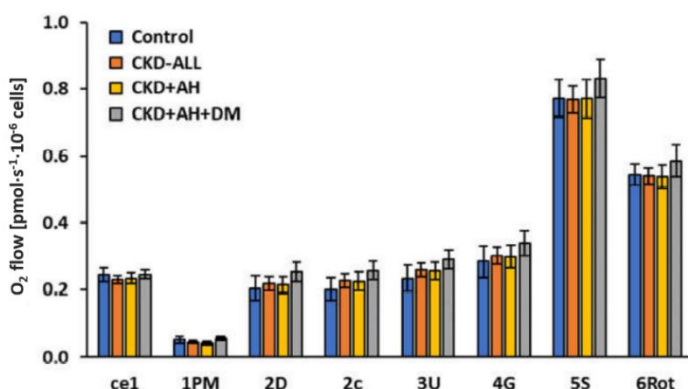


## Platelet Mitochondrial Respiration, Endogenous Coenzyme Q<sub>10</sub> and Oxidative Stress in Patients with Chronic Kidney Disease



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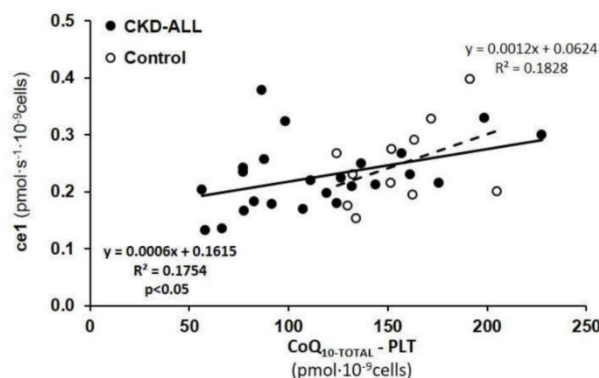
### Platelet mitochondrial function in control subjects and groups of CKD patients



**Figure 1.** The parameters of mitochondrial respiration in permeabilized human platelets. Bars show mean  $\pm$  SEM. x-axis represents steps in the SUIT RP1. Control—the group of healthy subjects ( $N = 12$ ); CKD-ALL—all patients with chronic kidney disease ( $N = 27$ ); CKD and arterial hypertension (CKD+AH)—the subgroup of CKD-ALL patients with arterial hypertension ( $N = 17$ ); and CKD+AH+diabetes mellitus (DM)—the subgroup of CKD-ALL patients with arterial hypertension and diabetes type 2 ( $N = 10$ )

### Correlation between CoQ<sub>10</sub>-TOTAL in platelets and the respiration of intact platelets in control subjects and CKD-ALL patients

**Figure 2.** Ce1—the rate of oxygen consumption in intact platelet; CoQ<sub>10</sub>-TOTAL—ubiquinol and ubiquinone. CKD-ALL all patients with chronic kidney disease ( $N = 27$ ); Control—the group of healthy subjects ( $N = 12$ ).  $p < 0.05$  statistically significant association between CoQ<sub>10</sub>-TOTAL in platelets and ce1 in CKD-ALL.



Mitochondrial respiration showed no significant differences between groups of CKD patients and control subjects. Oxygen consumption by intact platelets is positively correlated with the concentration of CoQ<sub>10</sub> in the platelets of CKD patients.

Reference: Gvozdjáková A, Sumbalová Z, Kucharská J, Komlósi M, Rausová Z, Vančová O, Számošová M, Mojto V (2020) Platelet mitochondrial respiration, endogenous coenzyme Q10 and oxidative stress in patients with chronic kidney disease. *Diagnostics (Basel)* 10:E176.

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