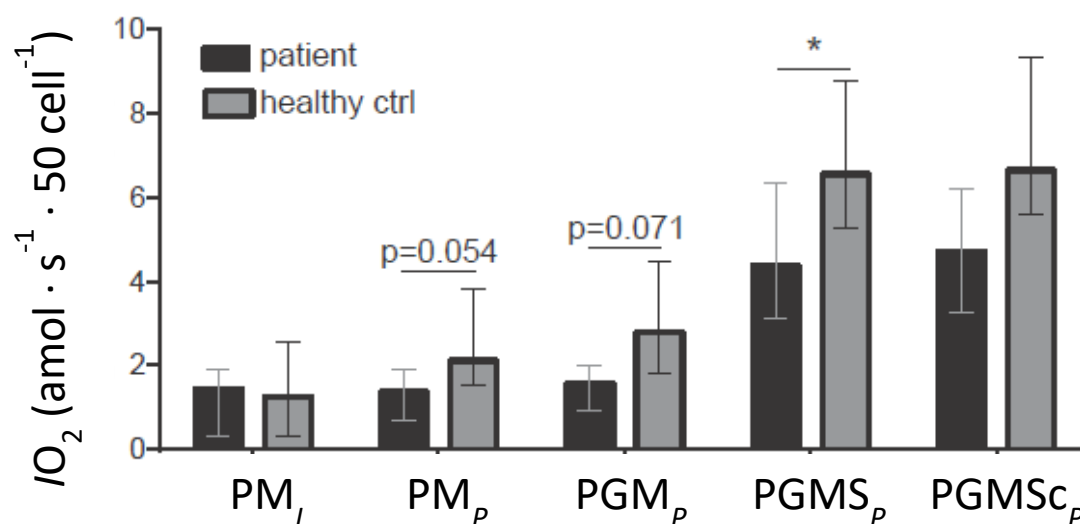


## Impaired mitochondrial activity explains platelet dysfunction in thrombocytopenic cancer patients undergoing chemotherapy

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### OXPHOS respiration decreased for the NADH- and succinate pathway control states in platelets from thrombocytopenic cancer patients undergoing chemotherapy



#### Figure 1. Mitochondrial respiration in platelets by high-resolution respirometry.

A simplified version of the SUIT-008 protocol was used to assess the mitochondrial function of permeabilized platelets using pyruvate and malate (LEAK, PM<sub>L</sub>), saturating concentrations of ADP (OXPHOS, PM<sub>P</sub>), glutamate (OXPHOS, PGM<sub>P</sub>), succinate (OXPHOS, PGMS<sub>P</sub>) and testing for the integrity of the mitochondrial outer membrane with cytochrome c (OXPHOS, PGMSc<sub>P</sub>). Medians with IQR are shown for samples obtained from patients (N=7) and controls (N=9).

### Platelets from patients undergoing chemotherapy shows a significant reduction of the mitochondrial membrane potential and the oxidative phosphorylation capacity

Reference: Baaten CCFMJ, Moenen FCJI, Henskens YMC, Swieringa F, Wetzels RJH, van Oerle R, Heijnen HFG, Ten Cate H, Holloway GP, Beckers EAM, Heemskerk JWM, van der Meijden PEJ (2018) Impaired mitochondrial activity explains platelet dysfunction in thrombocytopenic cancer patients undergoing chemotherapy. Haematologica