P263- EXPLORING THE POTENTIAL RELATION BETWEEN IMMUNE BIOMARKERS AND FRAILTY SYNDROME IN OLDER ADULTS - PRELIMINARY RESULTS FROM THE BIOFRAIL STUDY. Armanda Teixeira-Gomes[1,2], Solange Costa[1,2], Bruna Lage[1,2], Dietmar Fuchs[3], Vanessa Valdiglesias[1,4], Blanca Laffon[4], João Paulo Teixeira[1,2] *((1) EPIUnit – Instituto de Saúde Pública da Universidade do Porto, Porto, Portugal; (2) Environmental Health Department, National Institute of Health, Porto, Portugal; (3) Division of Biological Chemistry and Medical Biochemistry, Biocenter, Innsbruck Medical University, Innsbruck, Austria; (4) DICOMOSA Group, Area of Psychobiology, Department of Psychology, University of A Coruña, A Coruña, Spain)*

Background: Frailty is a multidimensional geriatric syndrome characterised by increased vulnerability and functional decline that may be reversed if addressed early. It has been identified to be the most common condition leading to disability, institutionalisation and death in older adults. Despite its known biological basis, no particular biological trait has been consistently associated with frailty syndrome so far. **Objectives:** On this basis, the main objective of the present work was to evaluate the possible association between immunological: biomarkers and the frailty status in a group of community dwellers. **Methods:** A group of older adults (>=65 years old) was engaged in this study. Frailty status was assessed via Fried's frailty model. The levels of several immune activation molecules – neopterin, tryptophan, kynurenine – were analysed. **Results:** The classification of the study population was 47.5% robust, 49.2% pre-frail and 3.3% frail. No significant differences were found between robust and pre-frail groups regarding serum concentrations of neopterin. Although, the kynurenine/tryptophan ratio was significantly higher in pre-frail individuals as compared with robust subjects. **Conclusion:** The preliminary data obtained suggest the activation of immunobiochemical pathways and are in agreement with previous studies that report alterations of the immune response in frail older adults. Nevertheless, further investigation is encouraged and required to consistently demonstrate these findings. In future studies physical activity, nutritional, psychological, sociological and clinical features should also be considered when evaluating changes in immune biomarkers and frailty. The work developed by Armanda Teixeira-Gomes and Solange Costa is supported by FCT under the grants SFRH/BD/121802/2016 and SFRH/BPD/100948/2014, respectively. Vanessa Valdiglesias was supported by Beatriz Galindo Research Fellowship BEAGAL18/00142.

P264- HEMOGLOBIN CONCENTRATION: A PATHWAY TO FRAILTY. Zara Steinmeyer, Laurent Balardy, Sandrine Sourdet *(Gérontopôle, Department of Internal Medicine and Geriatrics, Toulouse University Hospital, La Cité de la Santé, Hôpital La Grave, Toulouse, France)*

Background: Frailty and hemoglobin count, above what would be considered clinical anemia, are two common findings in older patients and lead to an increased risk of negative health outcomes. **Objectives:** Evaluate whether hemoglobin concentration is an independent predictor of frailty and investigate possibe causal pathways in particuliar the relationship between inflammation and nutrition with hemoglobin concentration. **Methods:** 1829 community-dwelling participants aged 65 years or older who visited the Toulouse frailty clinic between 2011 and 2016 were included in this analysis. Patients underwent a comprehensive geriatric assessment and had a blood sample. A series of multivariate logistic regression models were perfomed after minimizing potential influence from age, gender, kidney function, inflammation, cognition, nutritionnal status and certain socio-economic factors. **Results:** Hemoglobin count and frailty are significantly associated after minimizing potential influence from other covariates ($p<0.005$). An increase in one point of hemoglobin concentration is associated with a 14% risk decrease of being frail (OR=0.79, 95%IC=0.71-0.89). There were no evidences of significant impact of inflammation and nutritional status in the relationship between hemoglobin concentration and frailty status ($p>0.005$). **Conclusion:** Hemoglobin concentration is strongly associated with frailty in older adults. These results can have potentially important implications for prevention policies targeting frailty, by identifying potential patients with high risk of adverse outcomes and functional outcomes.

P265- THE ROLE OF MONOCYTE INFLAMMATORY ACTIVITY IN FRAILTY AND AGING - A LONGITUDINAL A STUDY OF ELDERLY MEDICAL PATIENTS AND AGE-MATCHED CONTROLS. Juliette Tavenier[1], Line Jee Hartmann Rasmussen[1], Jan Nehlin[1], Morten Baltzer Houlind[1], Aino Leegaard Andersen[1], Ove Andersen[1], Janne Petersen[1,2], Anne Langkilde[1] *((1) Clinical Research Centre, Copenhagen University Hospital Hvidovre, Hvidovre, Denmark; (2) Center for Clinical Research and Prevention, Copenhagen University hospital, Frederiksberg, Denmark and Section of Biostatistics, Department of Public Health, University of Copenhagen, Denmark)*

Background: Chronic inflammation is thought to be involved in the development of frailty. We hypothesized that increased monocyte inflammatory activity plays a role in chronic inflammation and thereby in frailty. **Objectives:** To study the potential role of chronic monocyte inflammatory activity in frailty. **Methods:** Two groups of elderly adults (>=65 years) were included: 52 patients with a recent admission to the emergency department (ED) and 52 age- and