DIACTMOND is a multidisciplinary project. Scientific areas involved include Blood Rheology (Hemorheology), Fluid and Biofluid Mechanics and BioMicrofluidics, Digital Signal Processing (DSP), Information and Communication Technologies (ICT) and Clinical Medicine.

Project Partners are experts in the above-mentioned scientific areas. Collaborators from the Cyprus League Against Rheumatism (CYPLAR), ensure an effective representation of the patients and the social partners of interest in the project.

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Inflammation and coagulation
Acute or chronic systemic inflammation, and blood coagulation are associated with various major diseases, one of which is Rheumatoid Arthritis (RA).

Inflammation biomarkers and other measures are commonly used to monitor the disease activity.

The increased cardiovascular risk in RA is well established in the literature and therefore the possibility for estimating both inflammation and coagulation at the point of care, and the home, is of considerable significance.

Develop a disease monitoring system, which is of low cost, easily operated and e-health compatible for the simultaneous assessment of inflammation and coagulation, which will provide therapy monitoring at the point of care or in the home.

The DIACTMOND Project

- Bio-Rheology, Bio-Fluid Mechanics, Bio-Microfluidics, advanced Data Processing methods, and e-Health software systems will be utilised, to develop a prototype point of care system, for the monitoring of inflammation and coagulation in blood.

- A single finger-prick blood drop will be used for the quantification of inflammation and blood coagulation. The information will be transferred to the treating physician through the network for assessment. The outcome of the project will be a point of care solution for instantaneous estimation of blood inflammation-coagulation, which can be used as a DIsease ACTivity MONitoring Device.

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