# Studies on the interaction of extracellular vesicles with proteins of the complement system

# Mihály Józsi, Edit Búzás

The project initiated a new collaboration regarding the interaction of the complement system with extracellular vesicles (EVs). Both purified IgM and IgG were found to bind to EVs. Using flow cytometry and label-free optical biosensors, we detected significant EV binding of normal human serum-derived IgG. CD59 and CD46 complement regulatory proteins (expressed by the EV-releasing U937 cells) were not detected on EVs. Only minimal factor H binding to EVs from serum was observed. In contrast, we found significant EV binding of purified factor H. Both microvesicles and apoptotic bodies inhibited zymosan-induced complement activation showing an additive effect with factor H.