

Preeclampsia-asszociált extracelluláris vezikulák szabályozó hatása monocita sejtekre

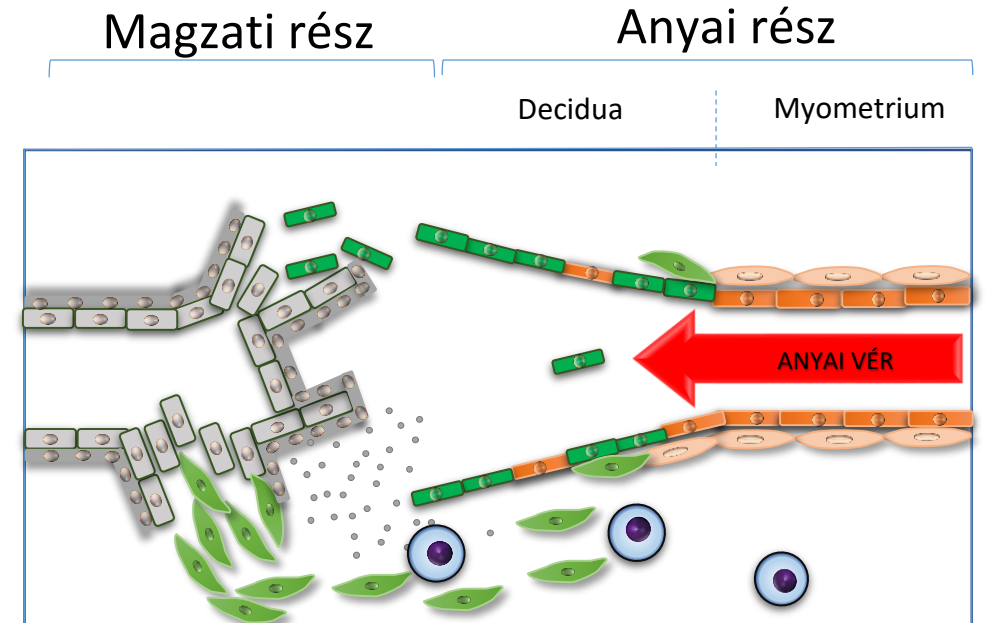
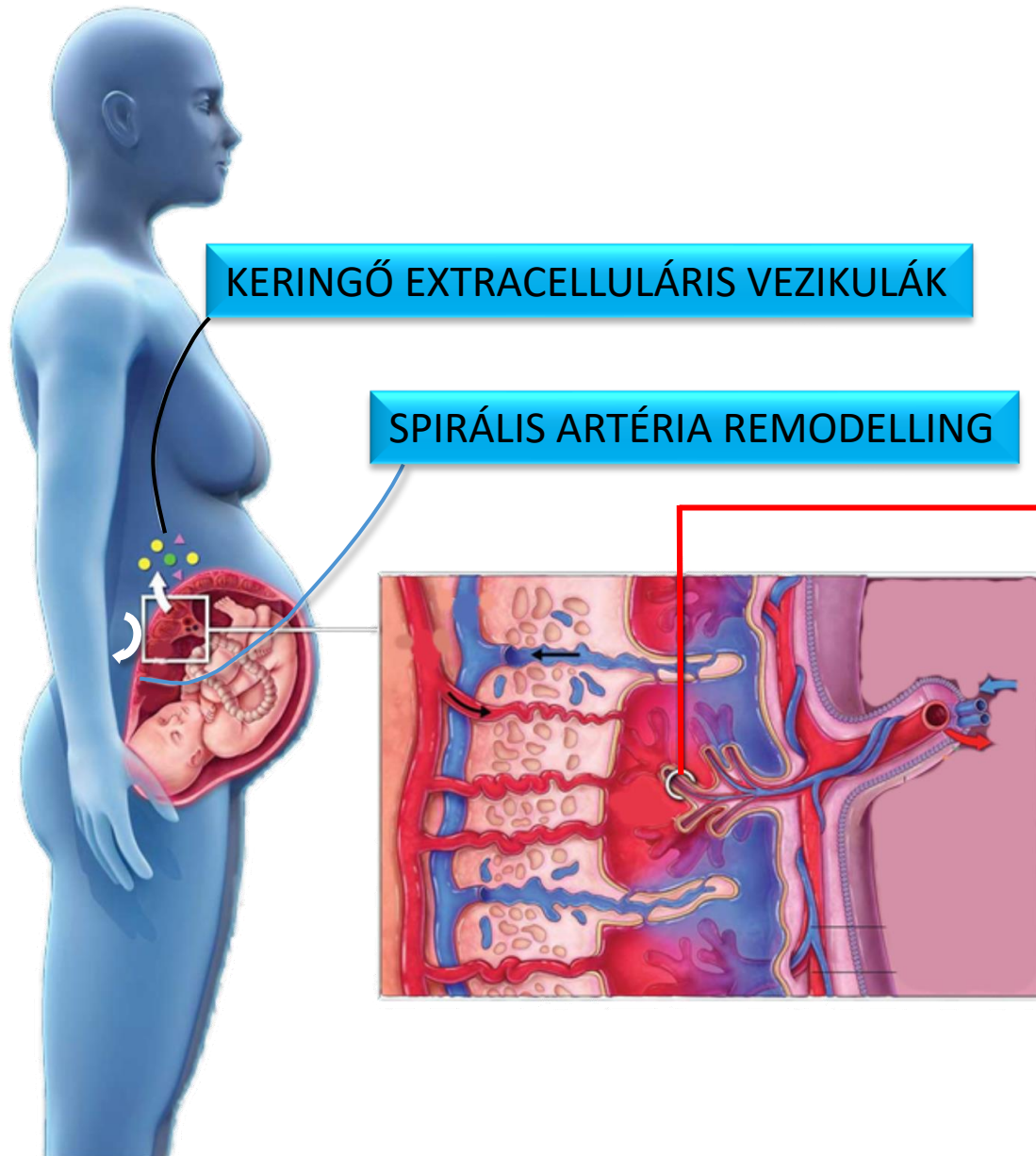
Kovács Árpád Ferenc¹, Láng Orsolya¹, Kőhidai László¹, Fekete Nóra¹, Rigó János², Buzás Edit¹, Pállinger Éva¹

¹Genetikai, Sejt- és Immunbiológiai Intézet, Semmelweis Egyetem ²1. sz. Szülészeti és Nőgyógyászati Klinika, Semmelweis Egyetem

2017. 02. 04



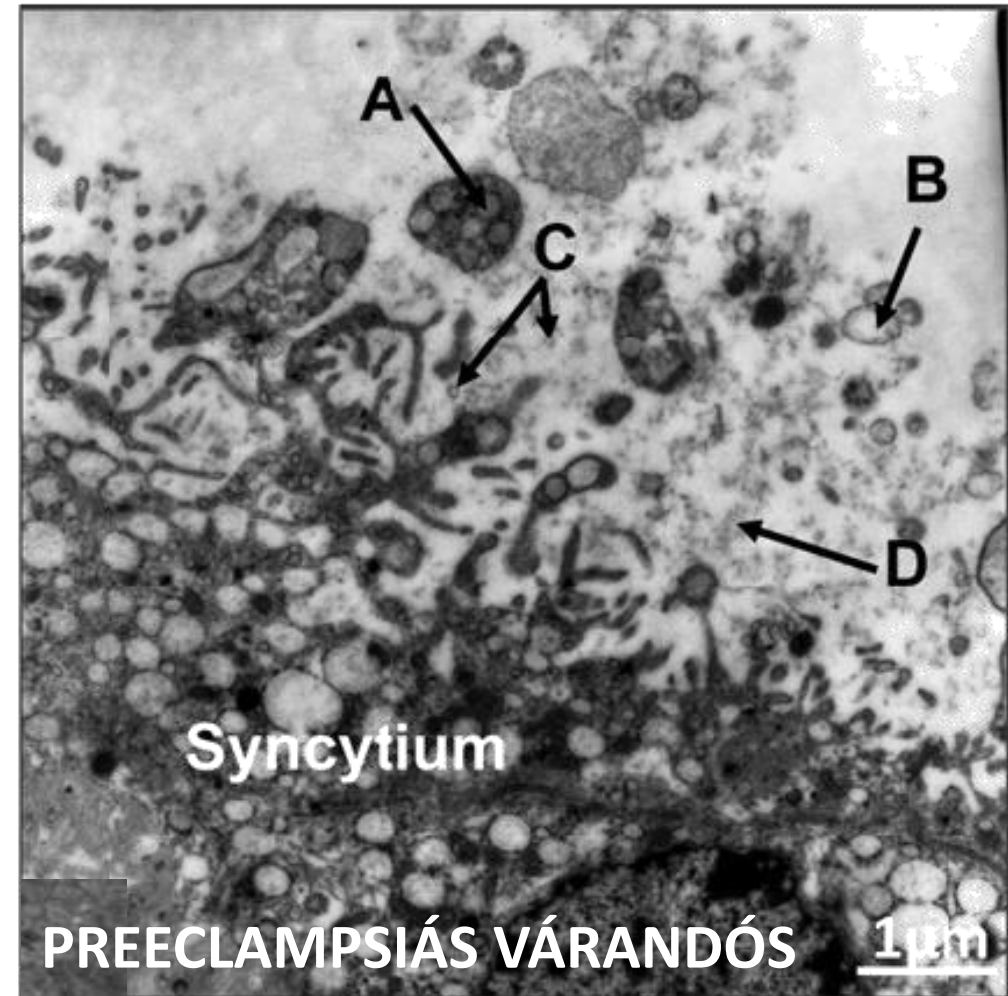
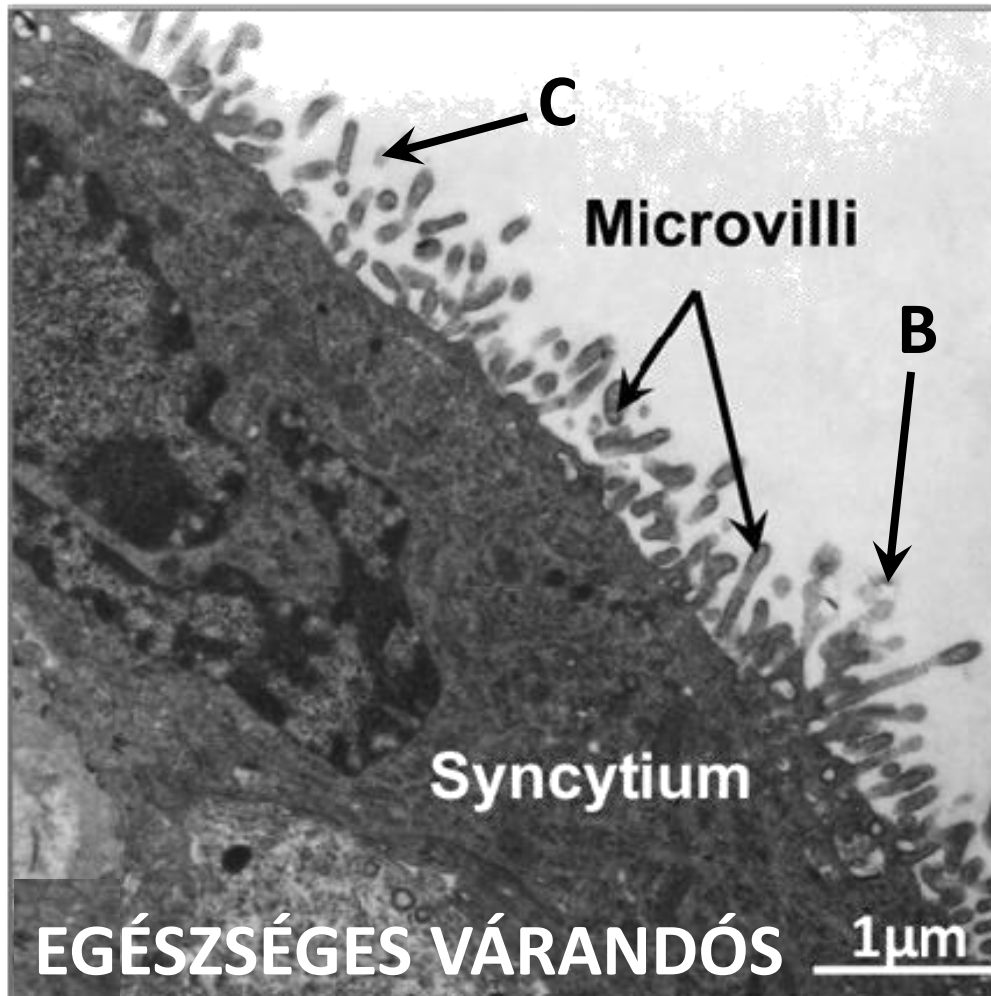
PREECLAMPSIA FELTÉTELEZETT PATOMECHANIZMUSA



- Extravillosus trophoblast
- Endovascularis trophoblast
- Syncytiotrophoblast sejtréteg
- Cytotrophoblast
- Endotél sejt
- Simaizomsejt
- Monocyta/ Macrophag
- Syncytiotrophoblast eredetű extracelluláris vezikulák

ANYA-MAGZAT FELSZÍN

C.W.G. Redman et al. / Placenta 33, Supplement A, Trophoblast Research, Vol. 26 (2012) S48–S54

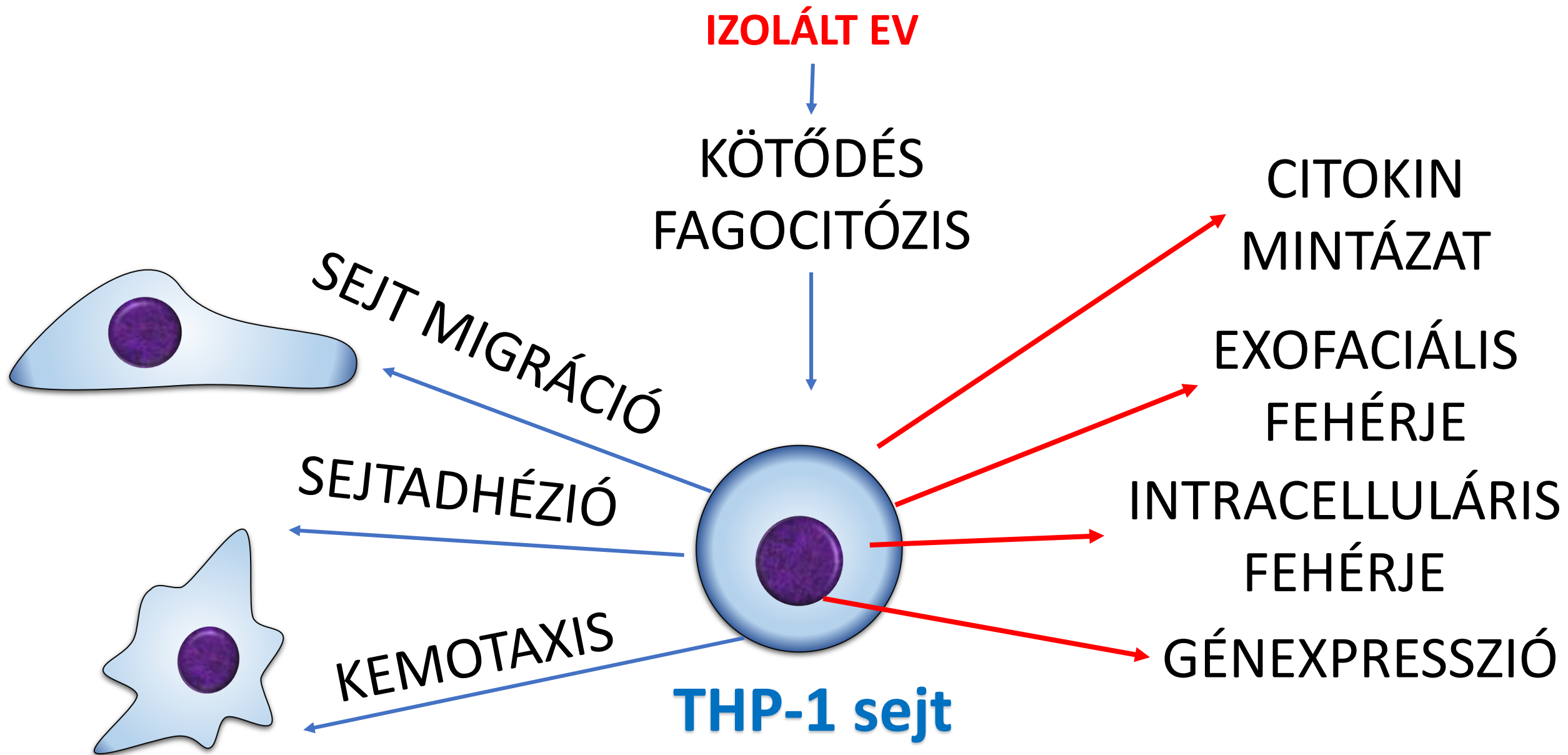


CÉLKITŰZÉS

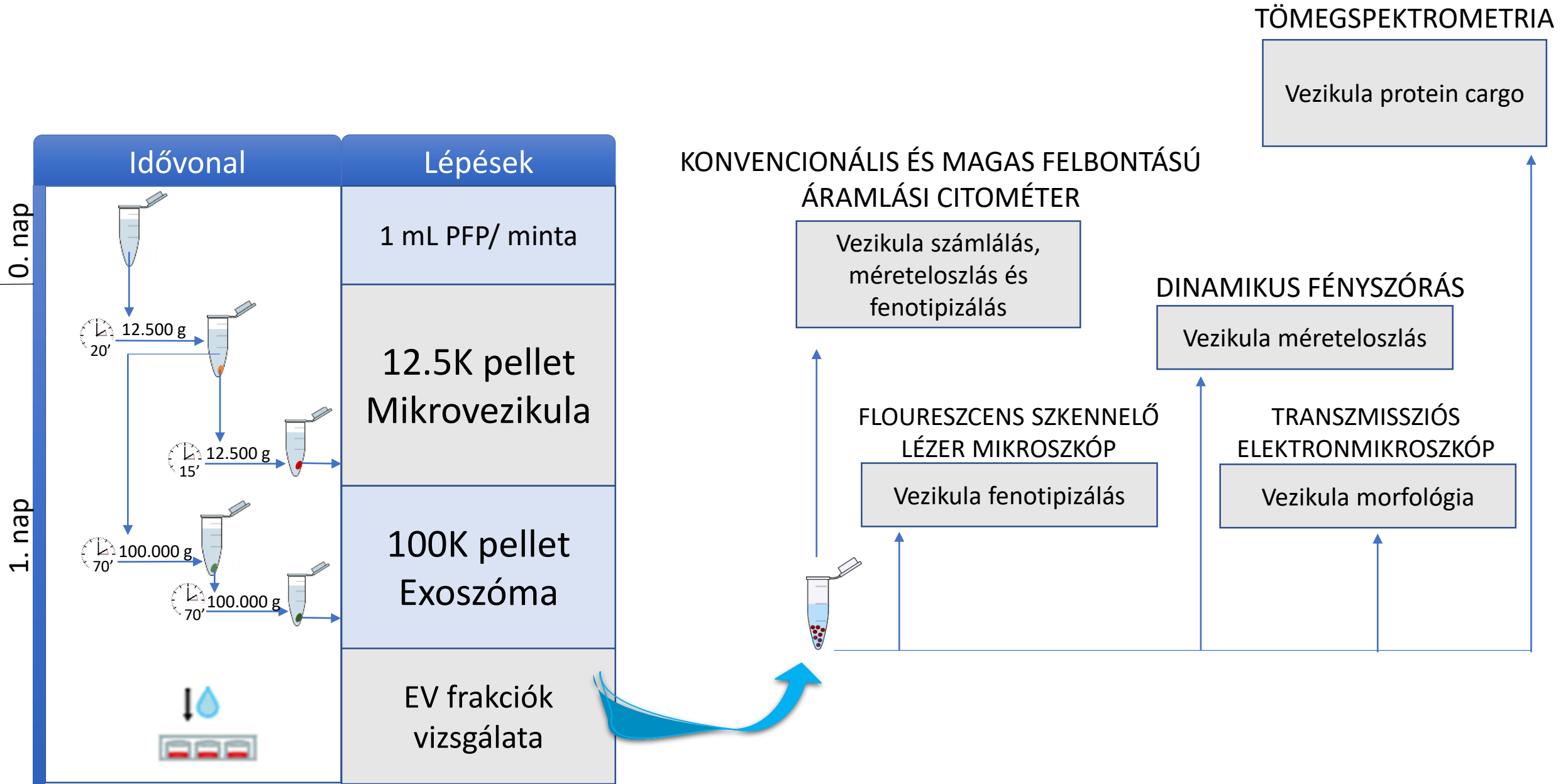
**Keringő preeclampsia asszociált
extracelluláris vezikulák monocita
sejtekre kifejtett hatásainak
jellemzése**



MÓDSZERTAN (1)



MÓDSZERTAN (2)



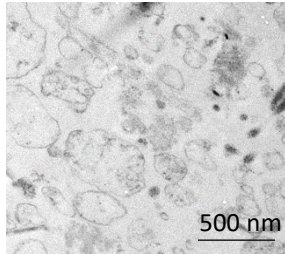


KERINGŐ EXTRACELLULÁRIS VEZIKULA MINTÁZAT (1)

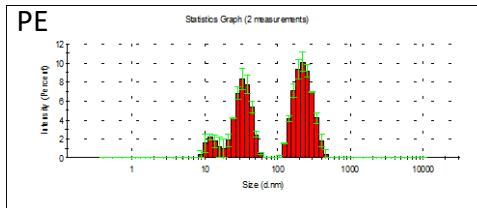
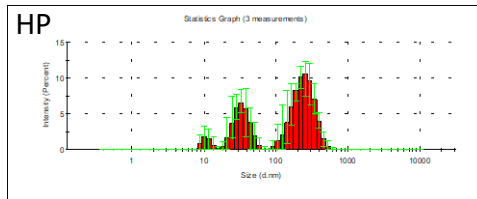
MIKROVEZIKULA 12.5K pellet

EXOSZÓMA 100K pellet

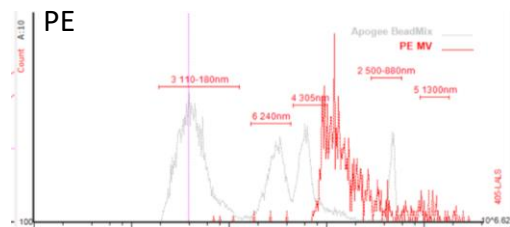
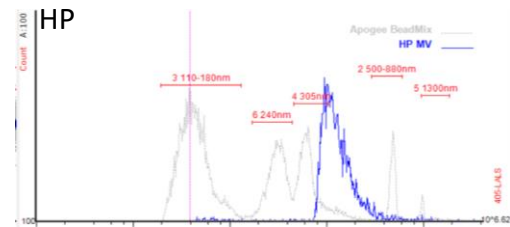
TEM



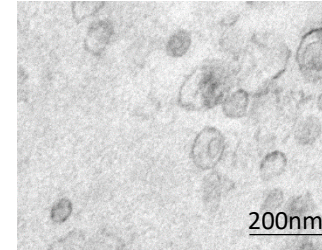
DLS



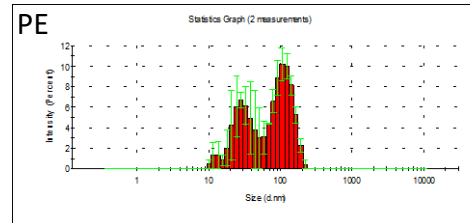
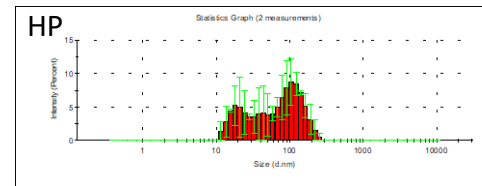
APOGEE



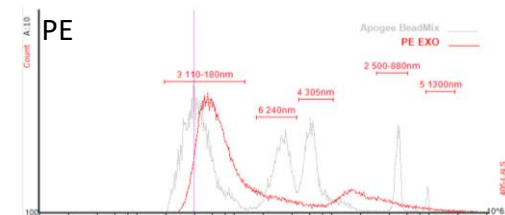
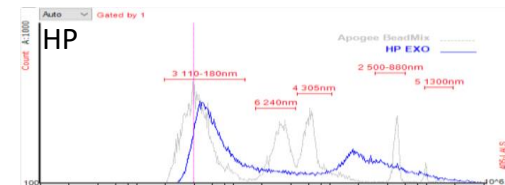
TEM



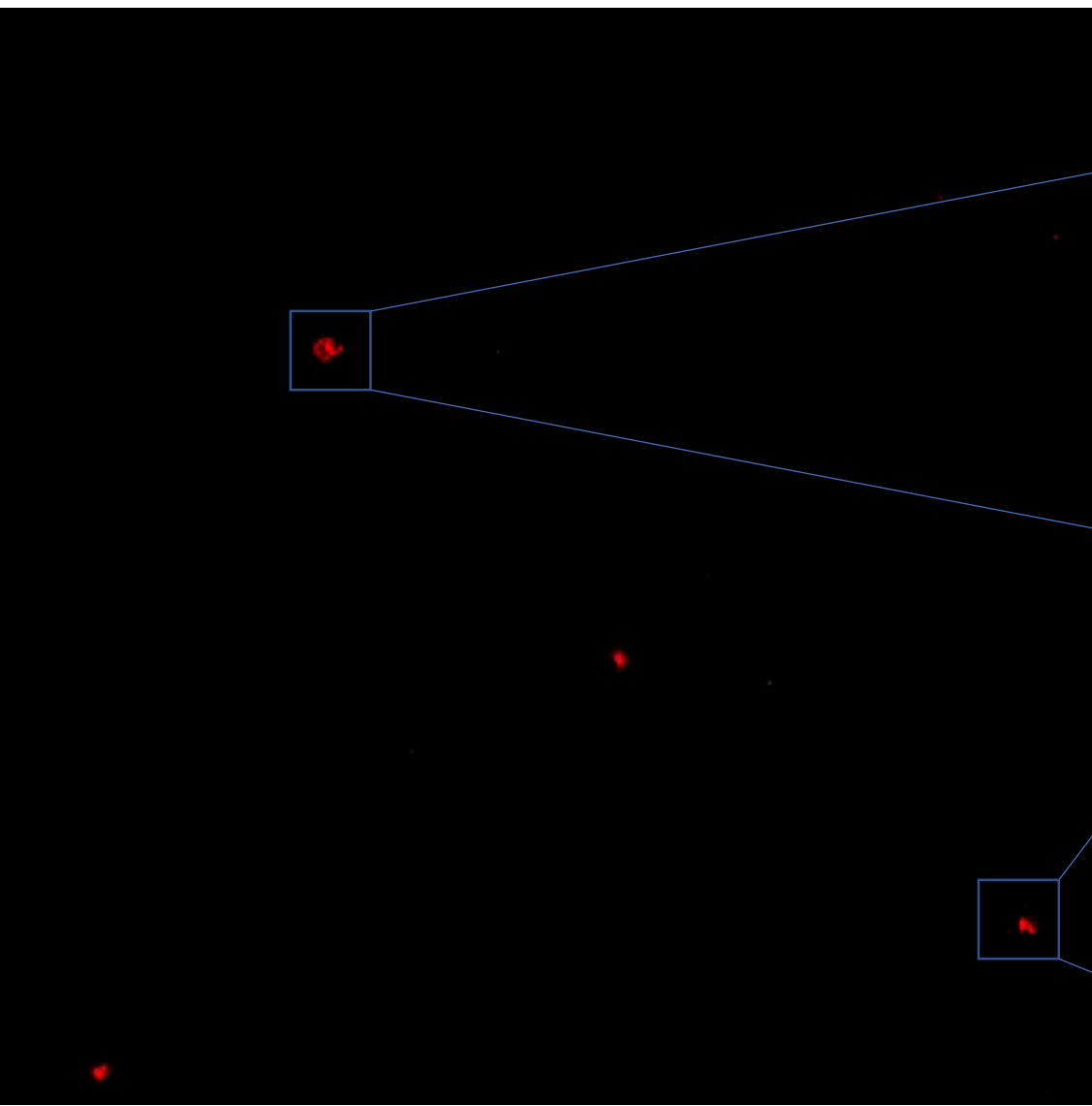
DLS



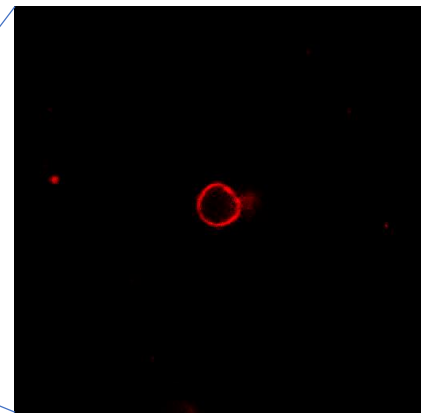
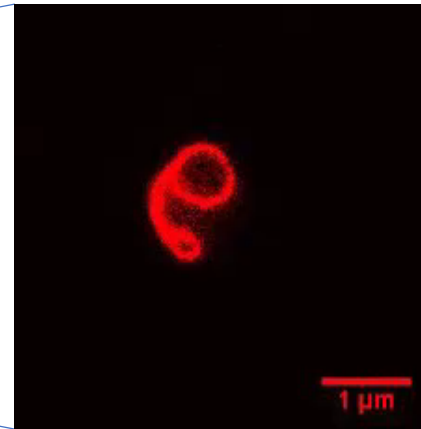
APOGEE



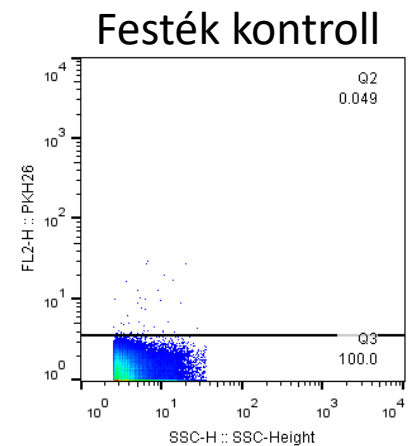
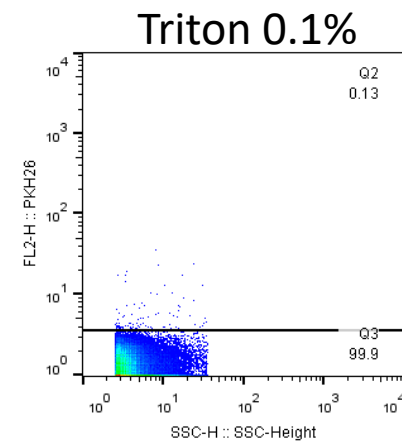
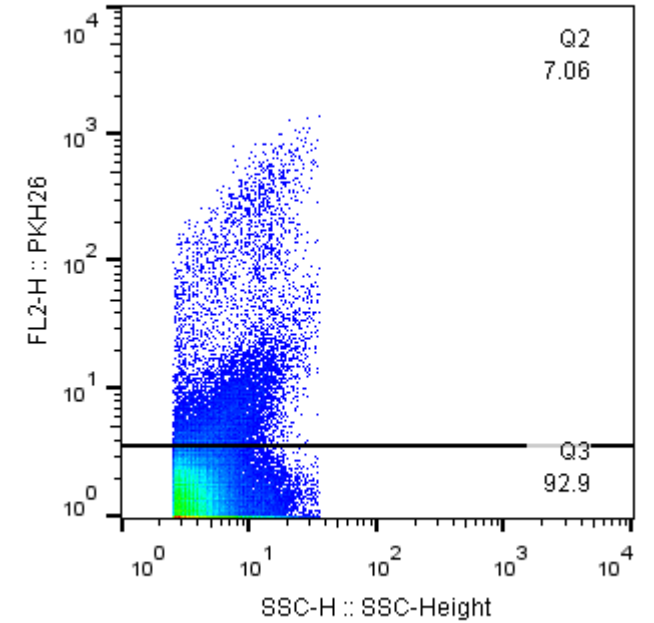
KERINGŐ EXTRACELLULÁRIS VEZIKULA MINTÁZAT (2)



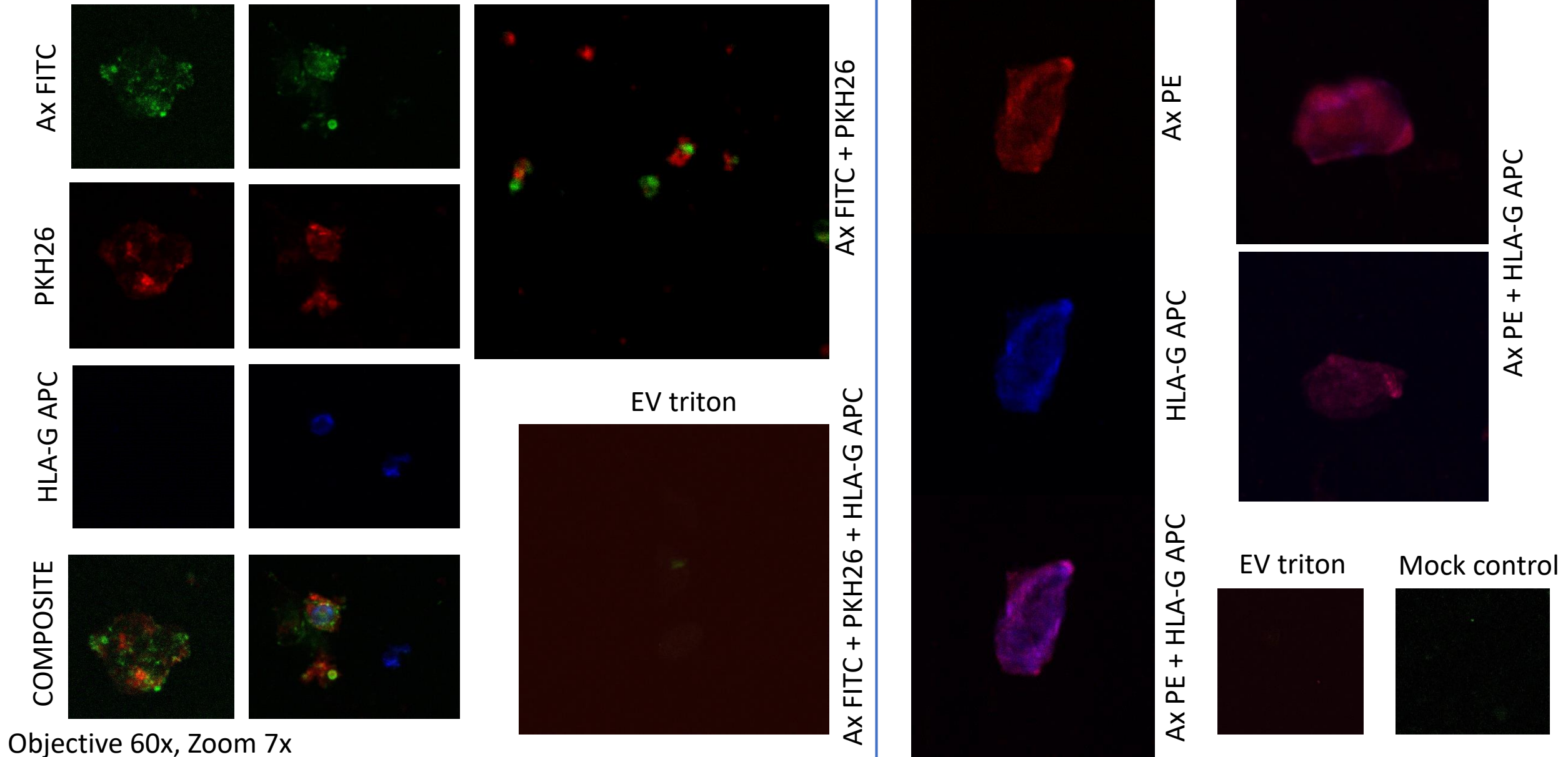
Objective 60x



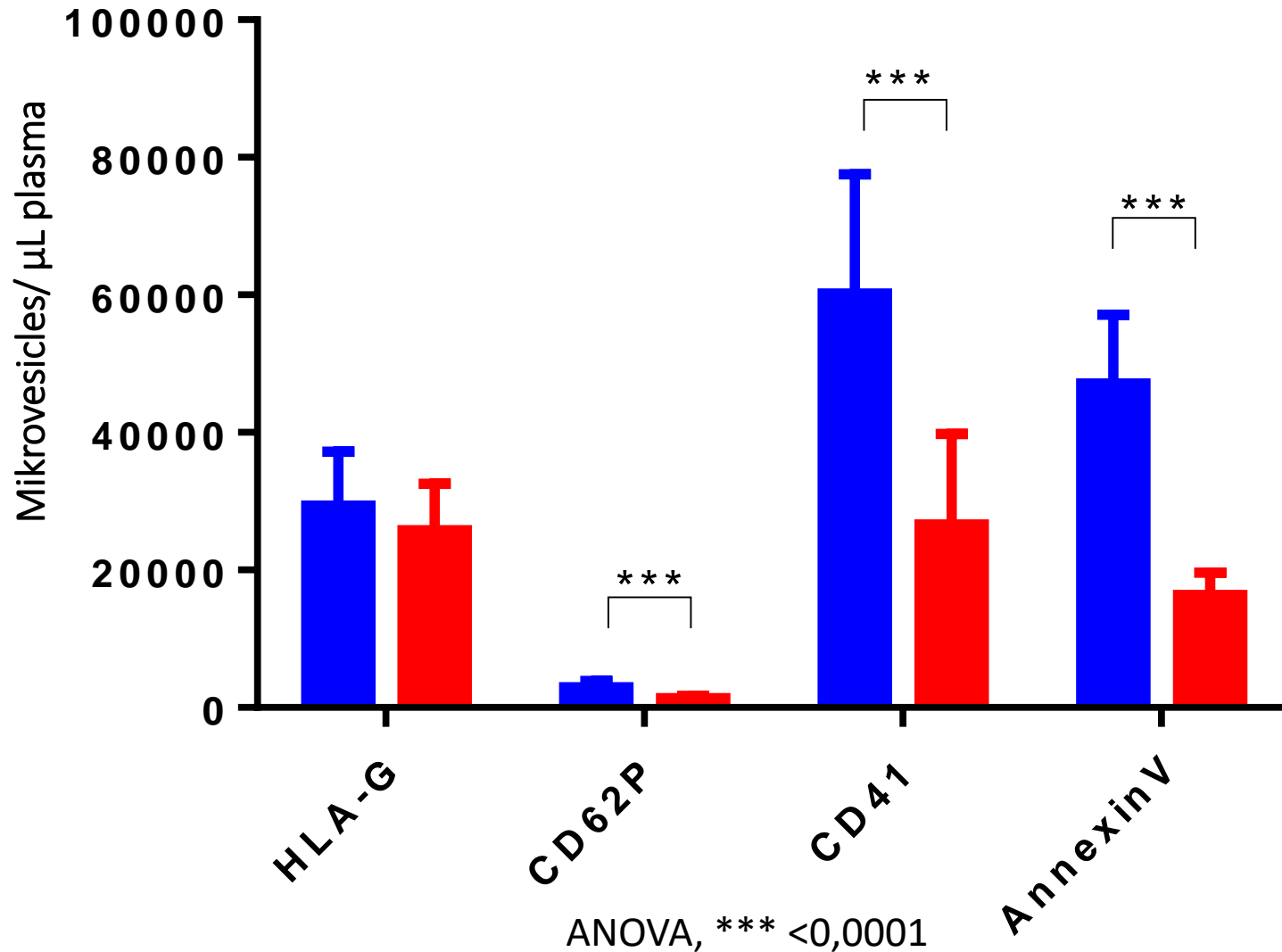
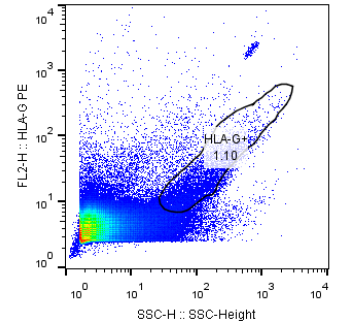
Objective 60x, Zoom 7x



KERINGŐ EXTRACELLULÁRIS VEZIKULA MINTÁZAT (3)

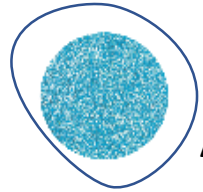


KERINGŐ EXTRACELLULÁRIS VEZIKULA MINTÁZAT (4)

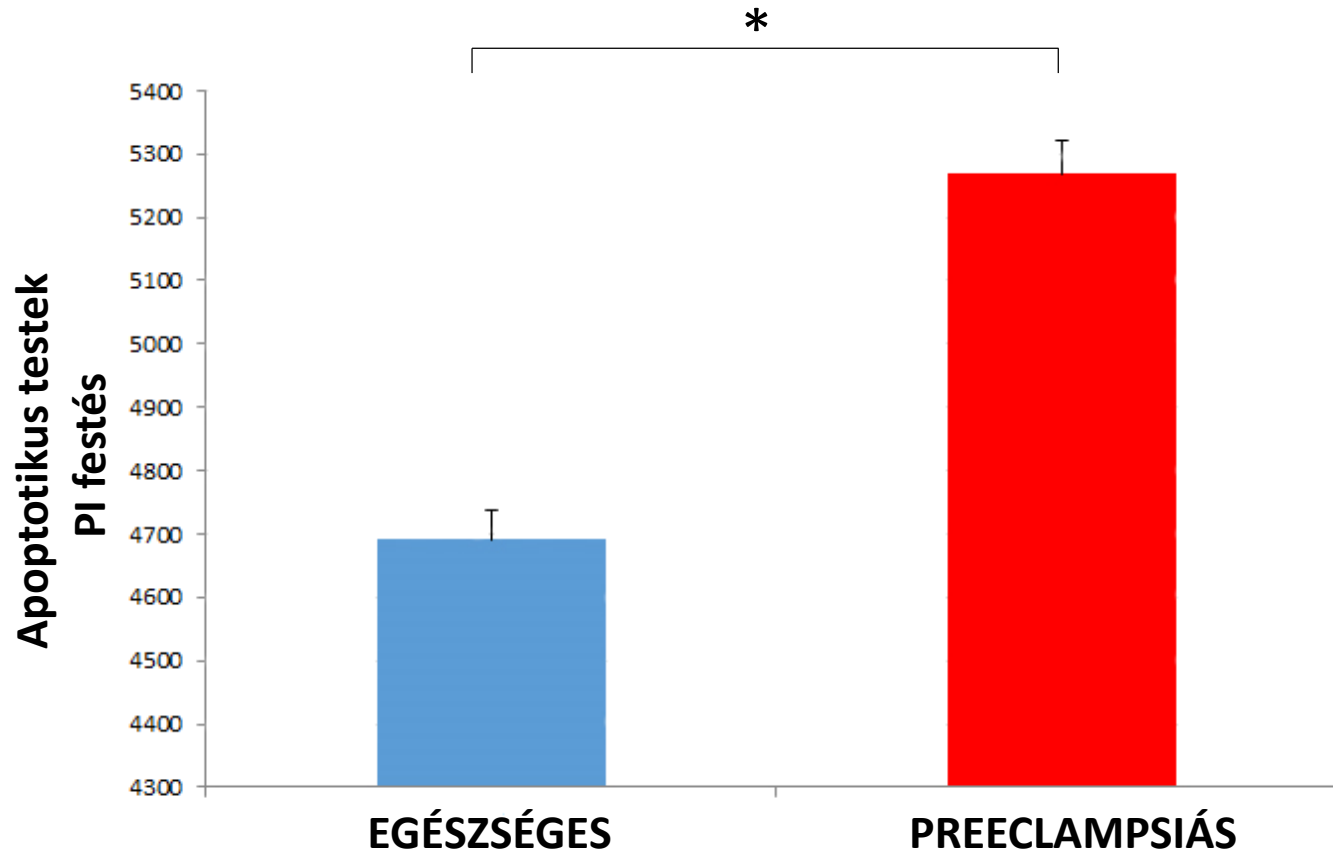


■ EGÉSZSÉGES
■ PREECLAMPSIÁS

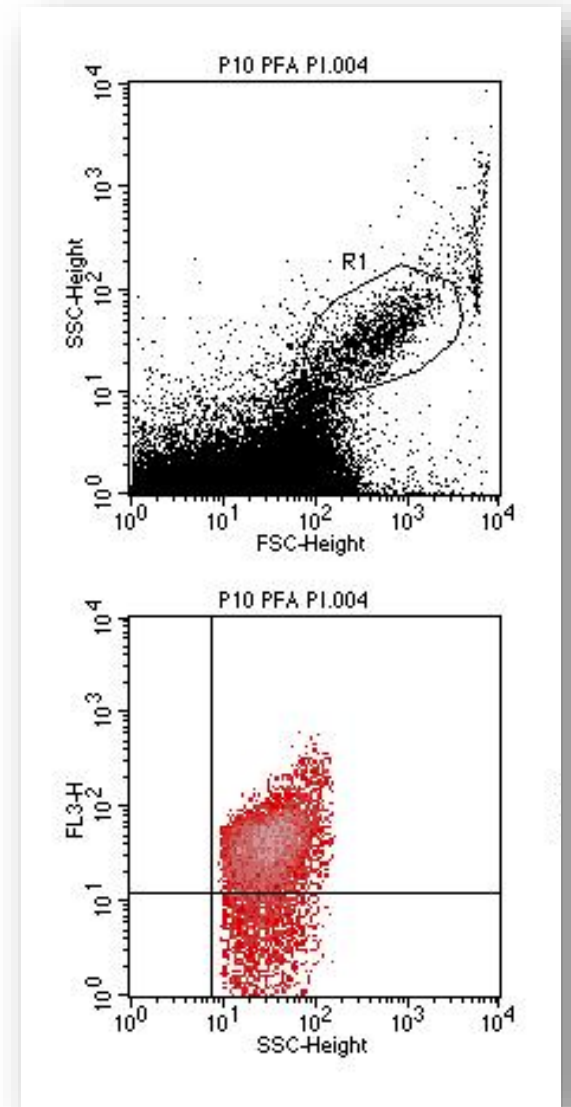
PREECLAMPSIA : MEGNÖVEKEDETT APOPTOTIKUS TEST MENNYISÉG



2.5K pellet
APOPTOTIKUS TESTEK

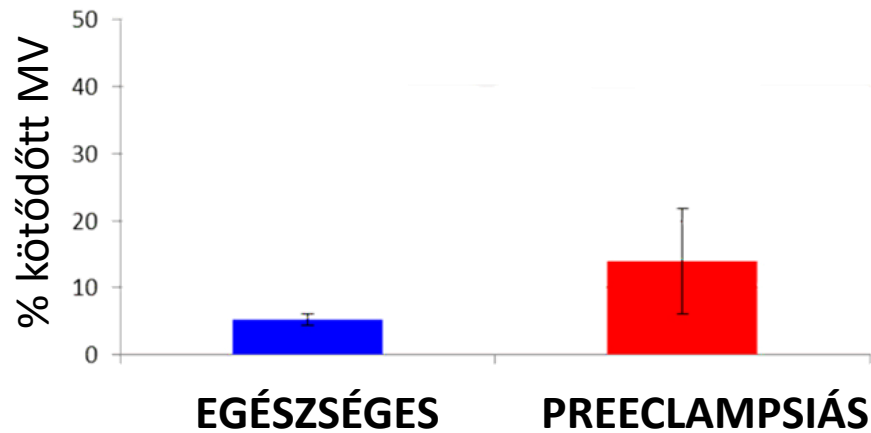


t-teszt; $p < 0,05$

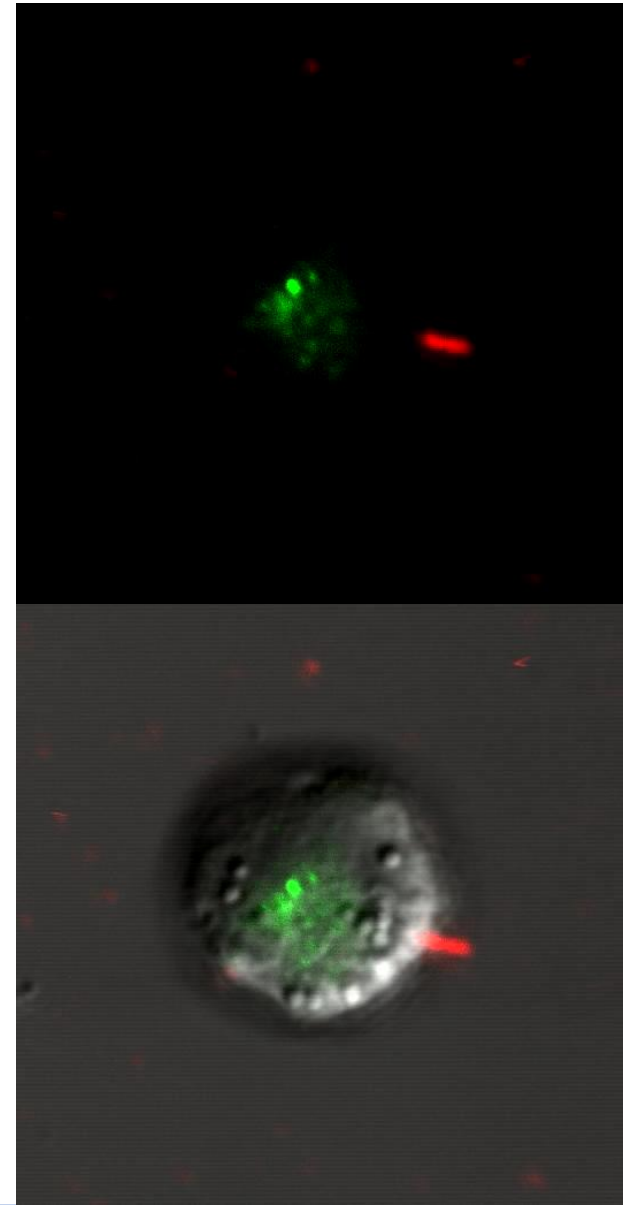
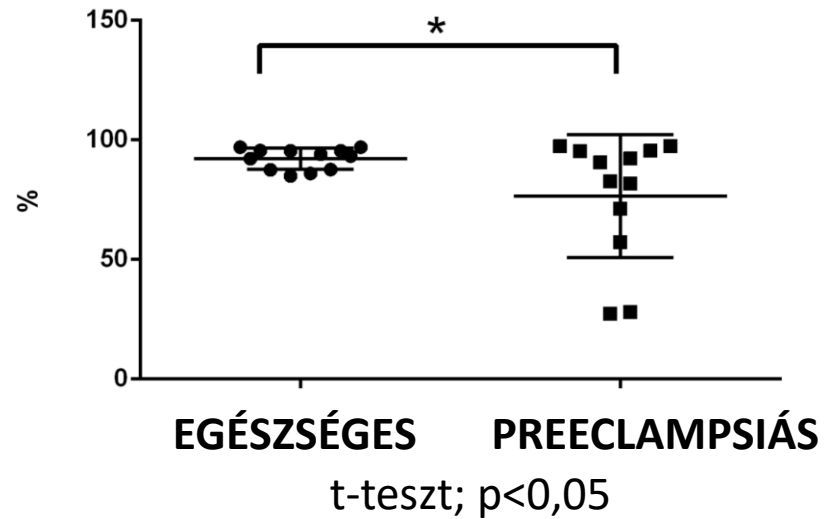


PREECLAMPSIA: CSÖKKENT MV FAGOCITÓZIS

MV kötődés THP-1 sejtekhez

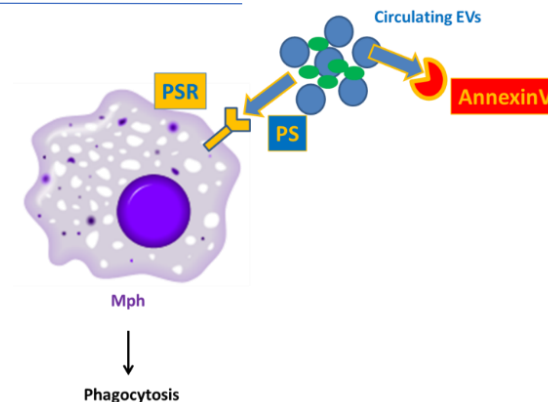


THP-1 sejtek által fagocitált MV

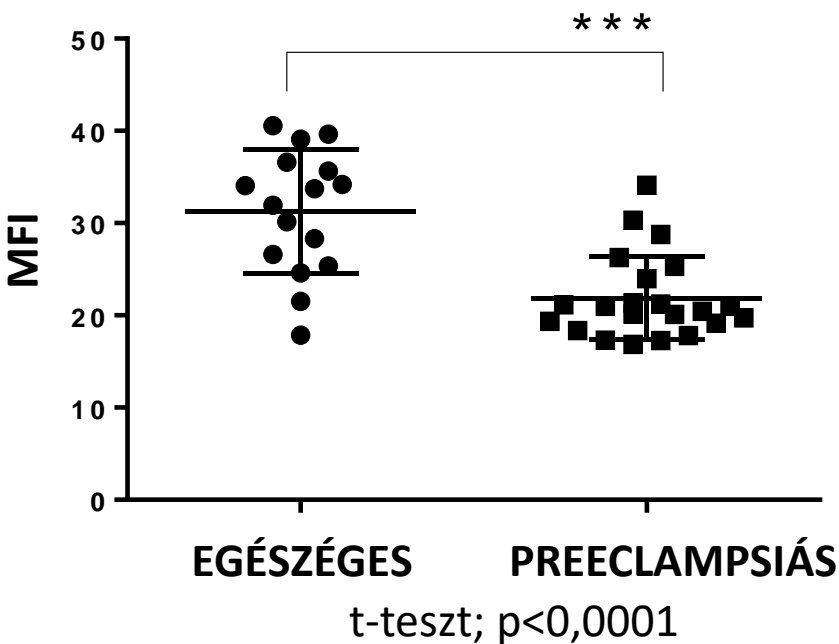


PRECLAMPSIA: ALACSONYABB PS EXPRESSZIÓ

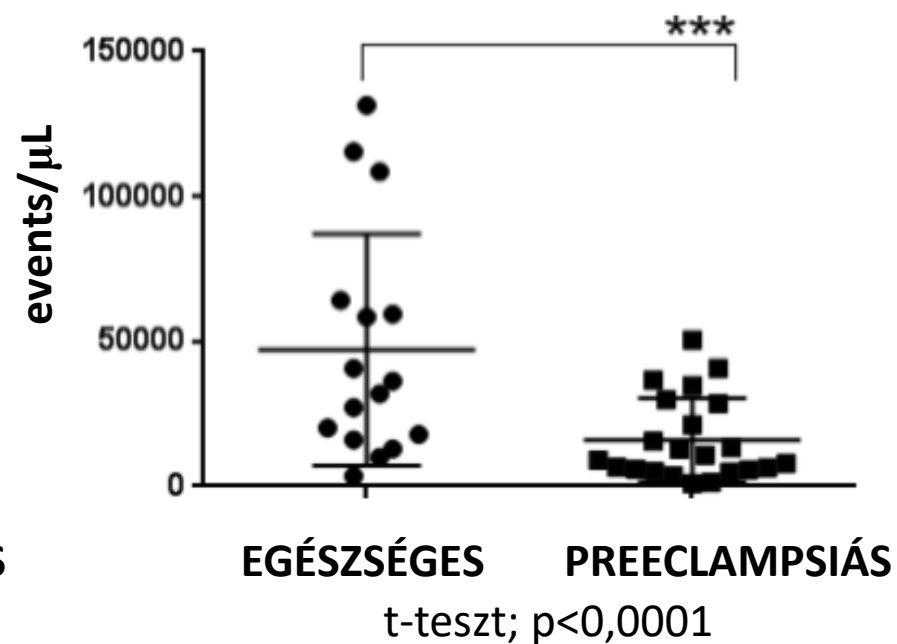
„Don't eat me!”



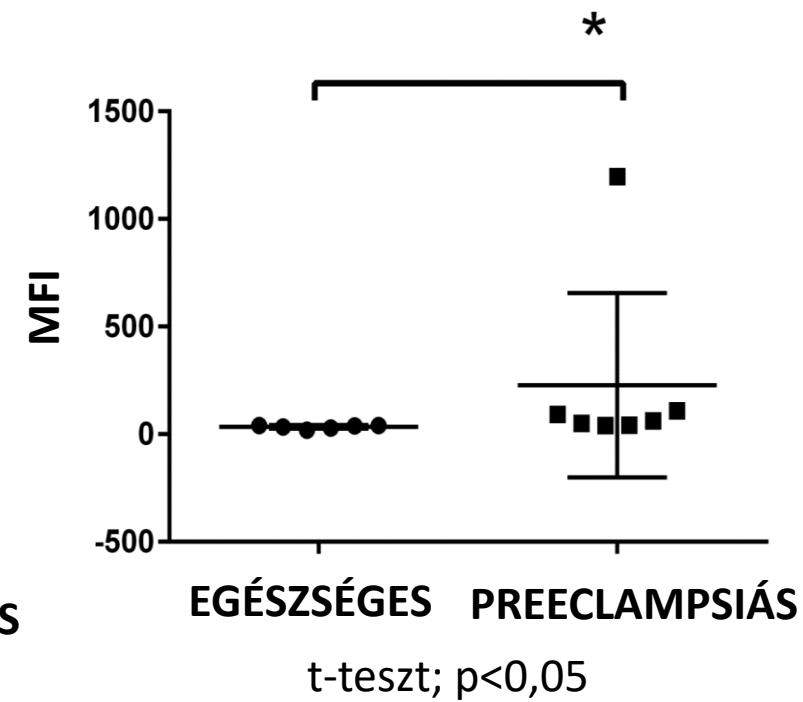
PS felszíni expresszió



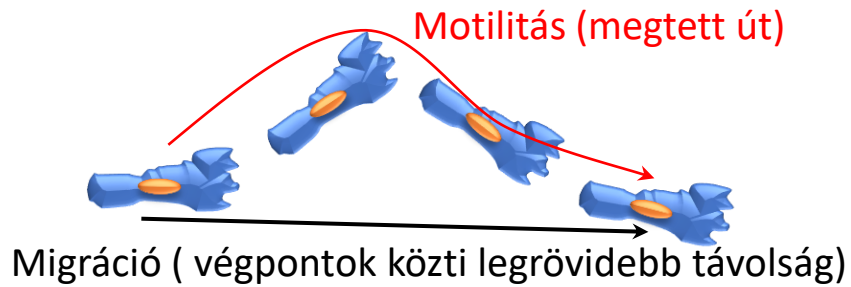
PS pozitív MV



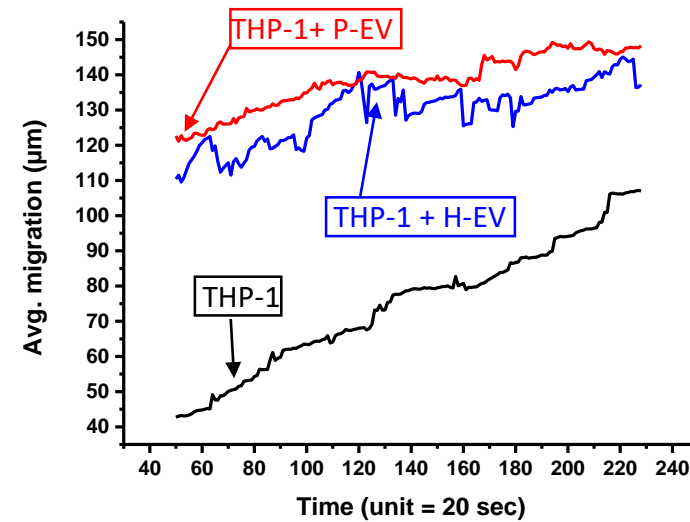
Exofaciális CD47 HLA-G+ MV



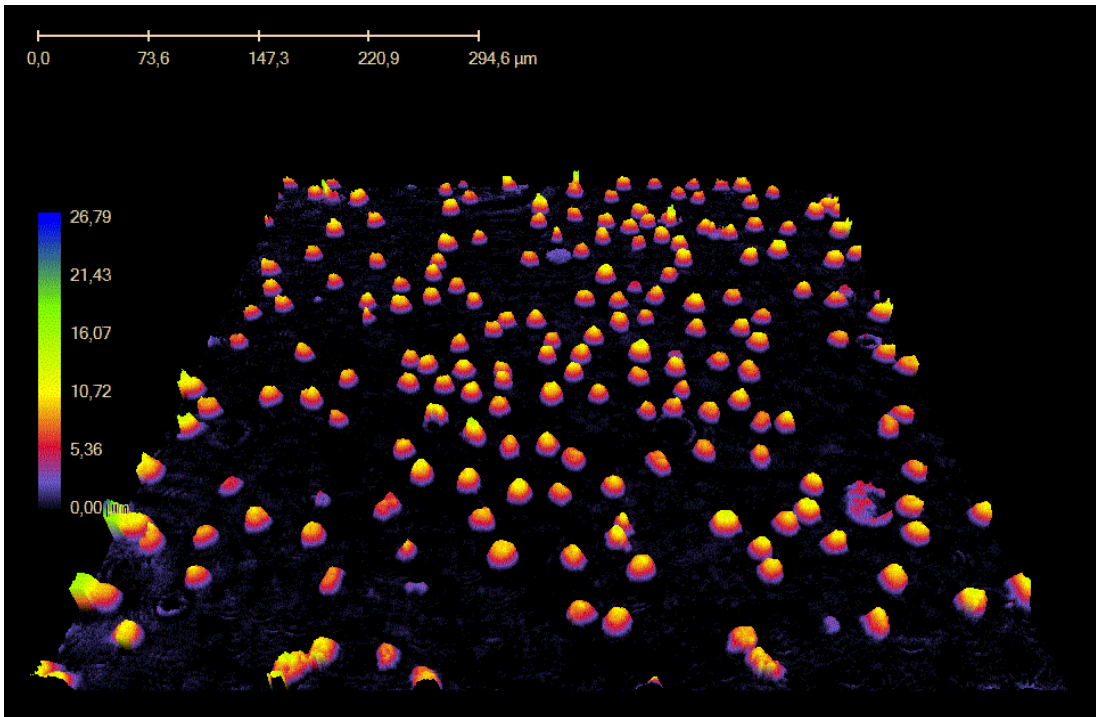
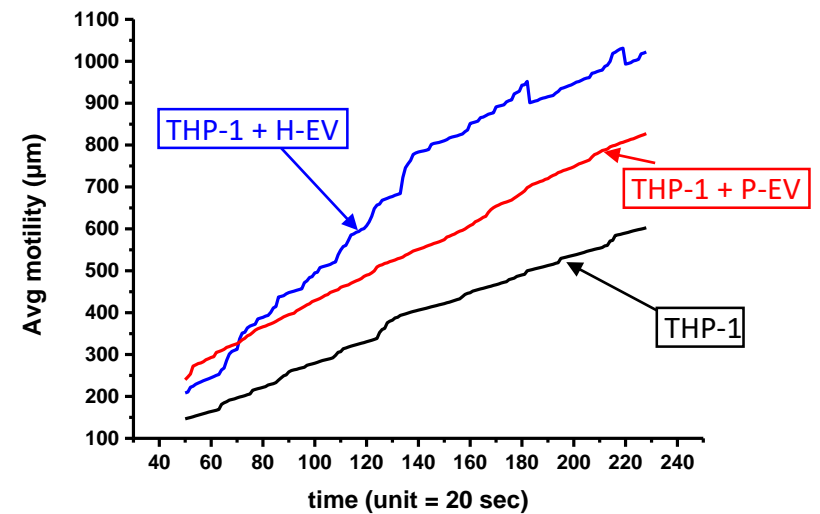
PREECLAMPSIA: CSÖKKENT MOTILITÁS



H-EV VS P-EV HATÁS A SEJT MIGRÁCIÓRA

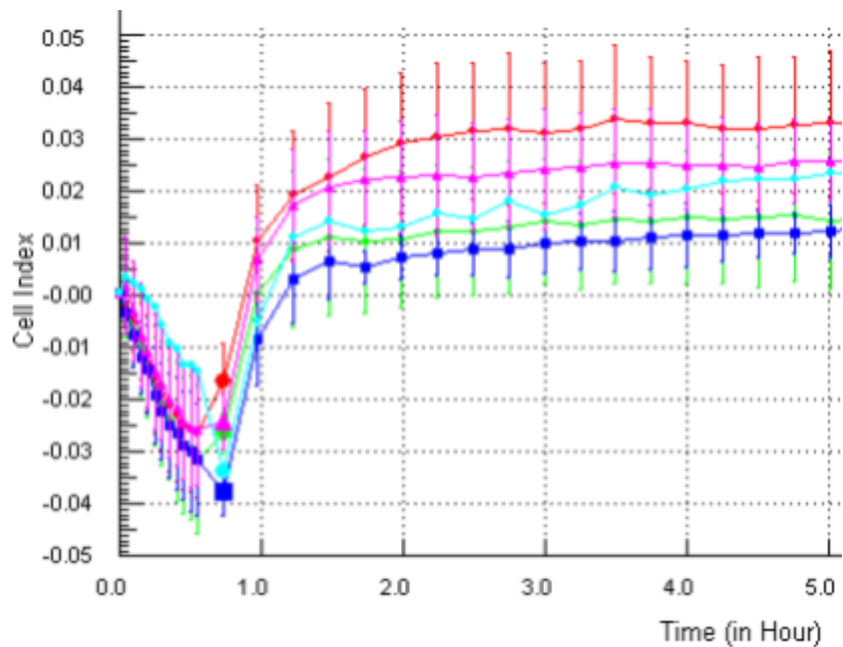


H-EV VS P-EV HATÁS A SEJT MOTILITÁSRA

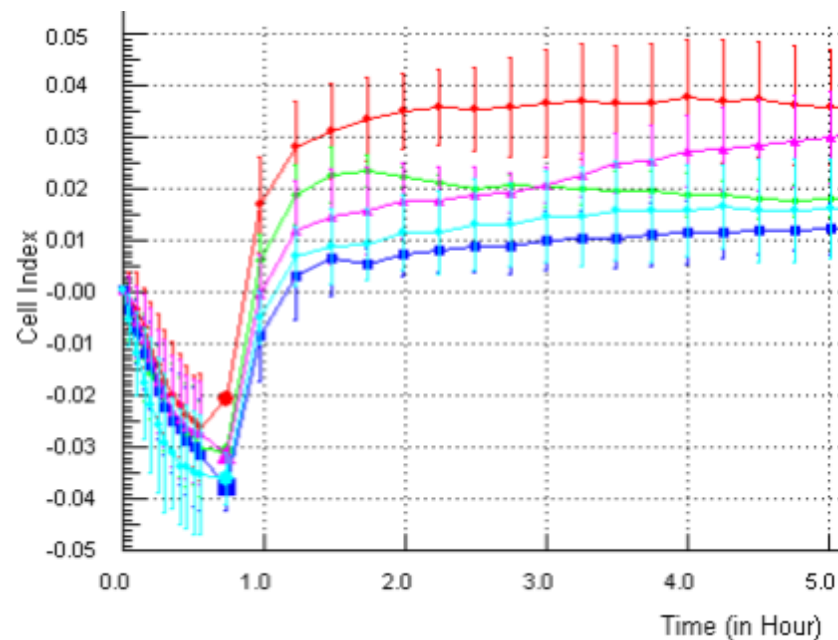


PREECLAMPSIA: MEGNÖVEKEDETT KORAI ADHÉZIÓ

EGÉSZSÉGES



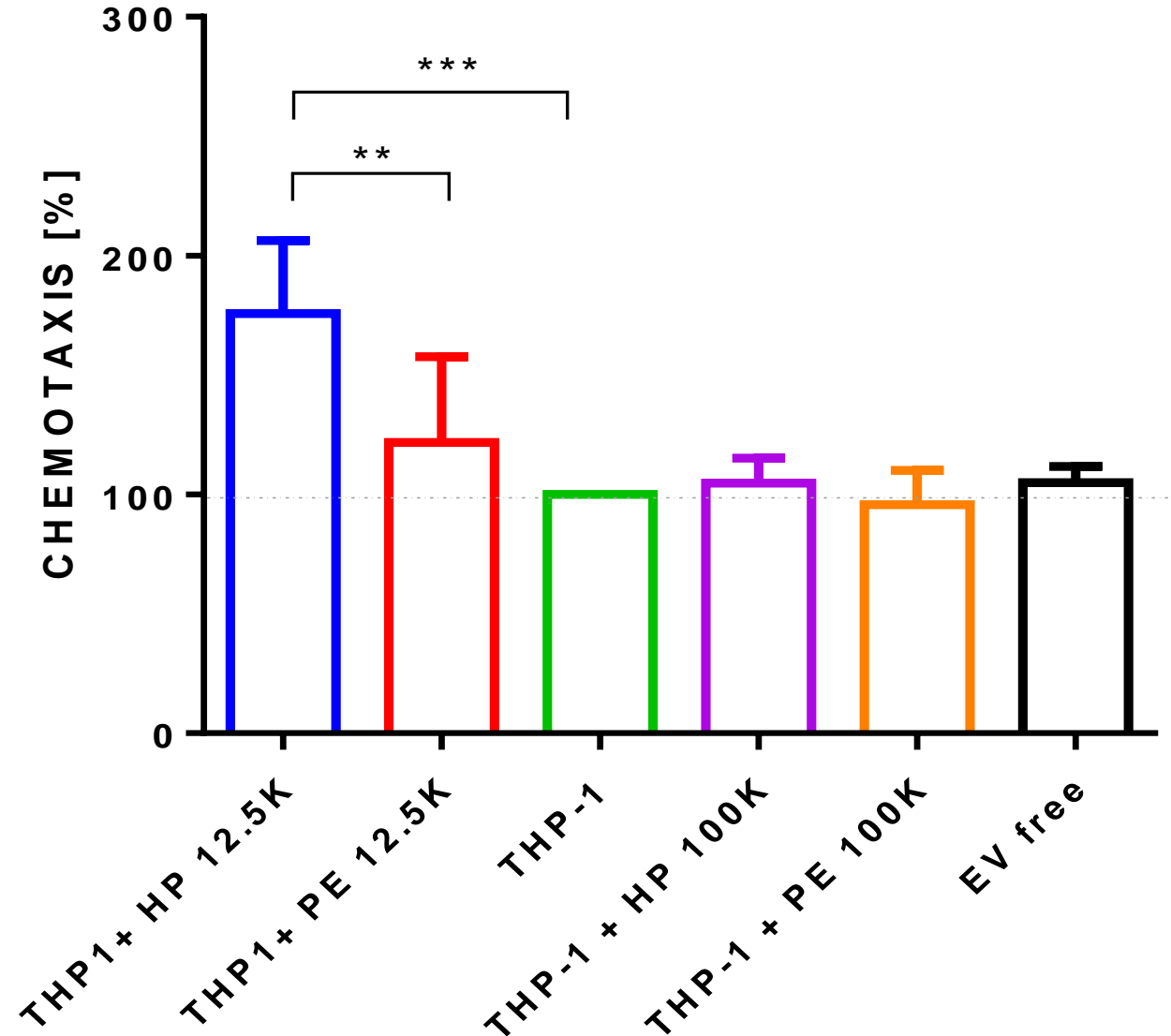
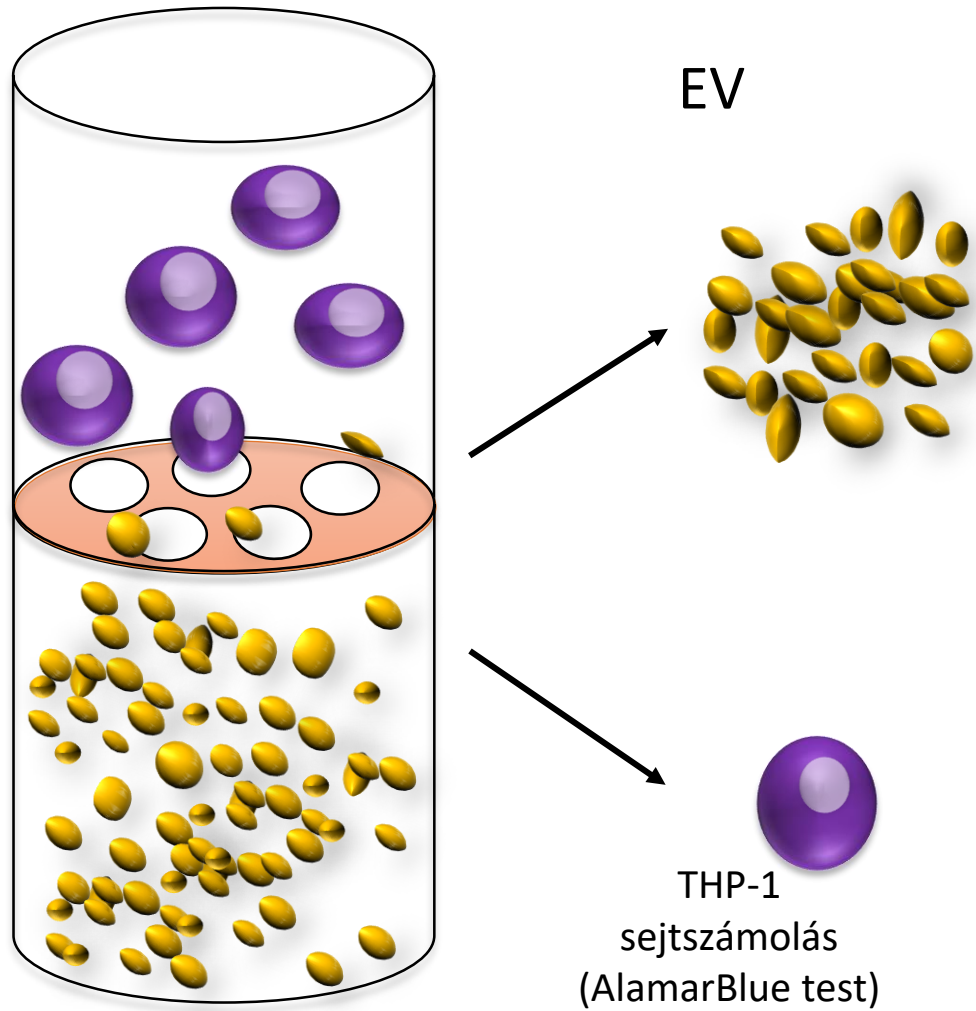
PREECLAMPSIÁS



	HP EV + THP-1	THP-1	PE EV +THP-1
CD44	29.7±1.9	124.2	46.3±3.4
INTEGRIN ALFA 2	17.5±4.8	19.93	9±0.9
INTEGRIN BETA 1	251.5±11.5	251.4±19.8	273.4±10.8

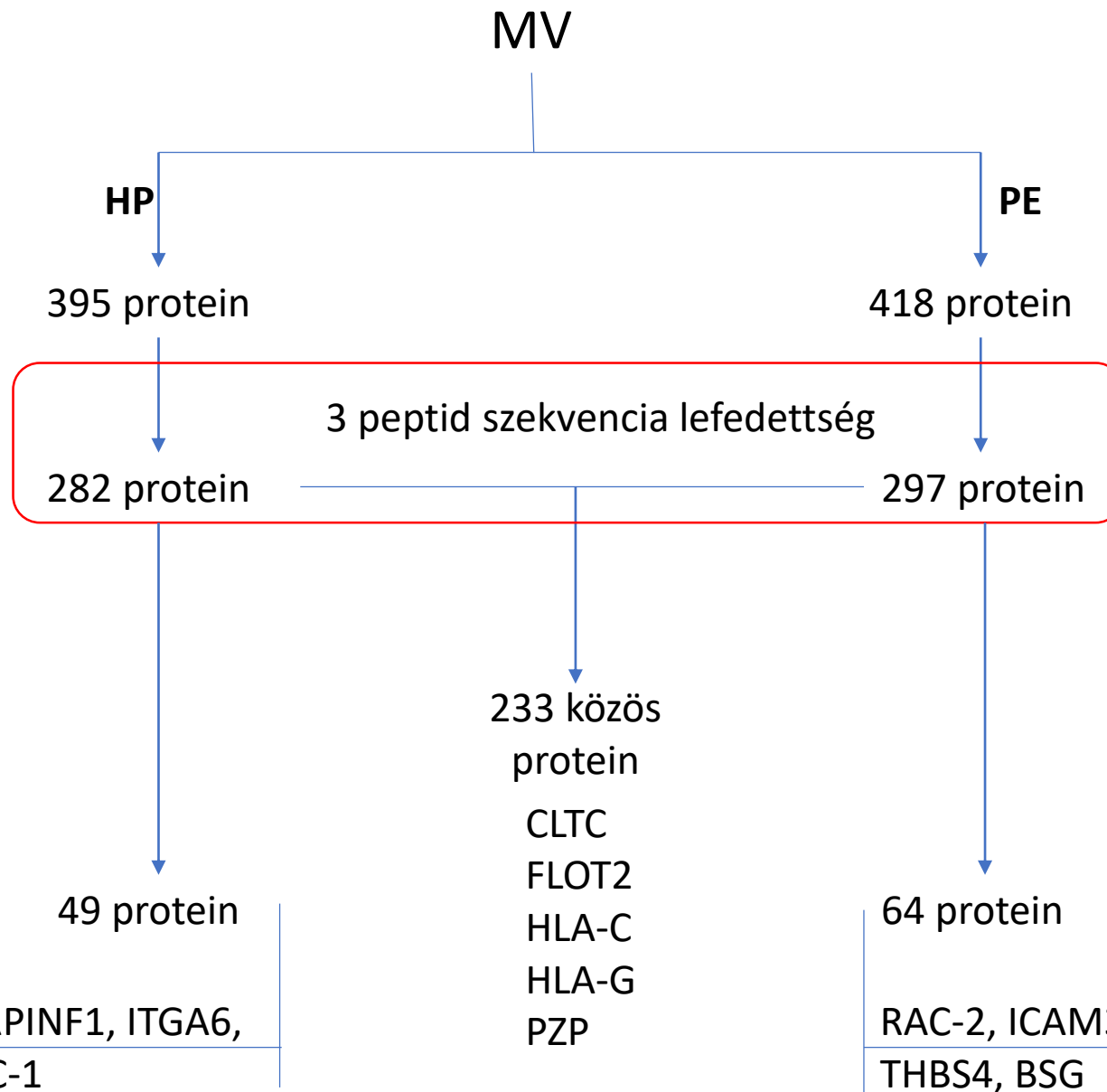
* MFI ÉRTÉK ± SEM

PREECLAMPSIA: CSÖKKENT KEMOTAXIS

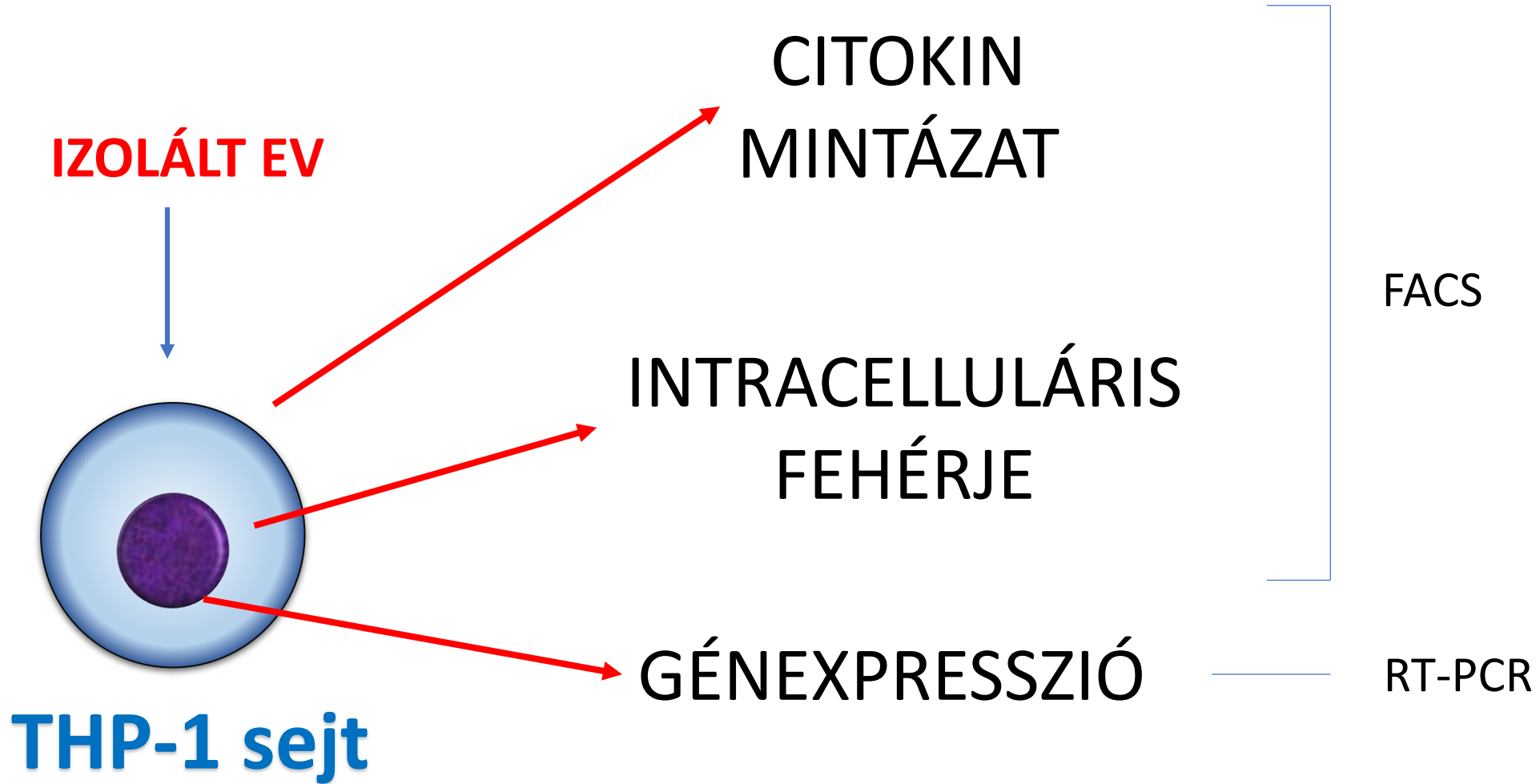


ANOVA, $p < 0,05$, Dunnett's test

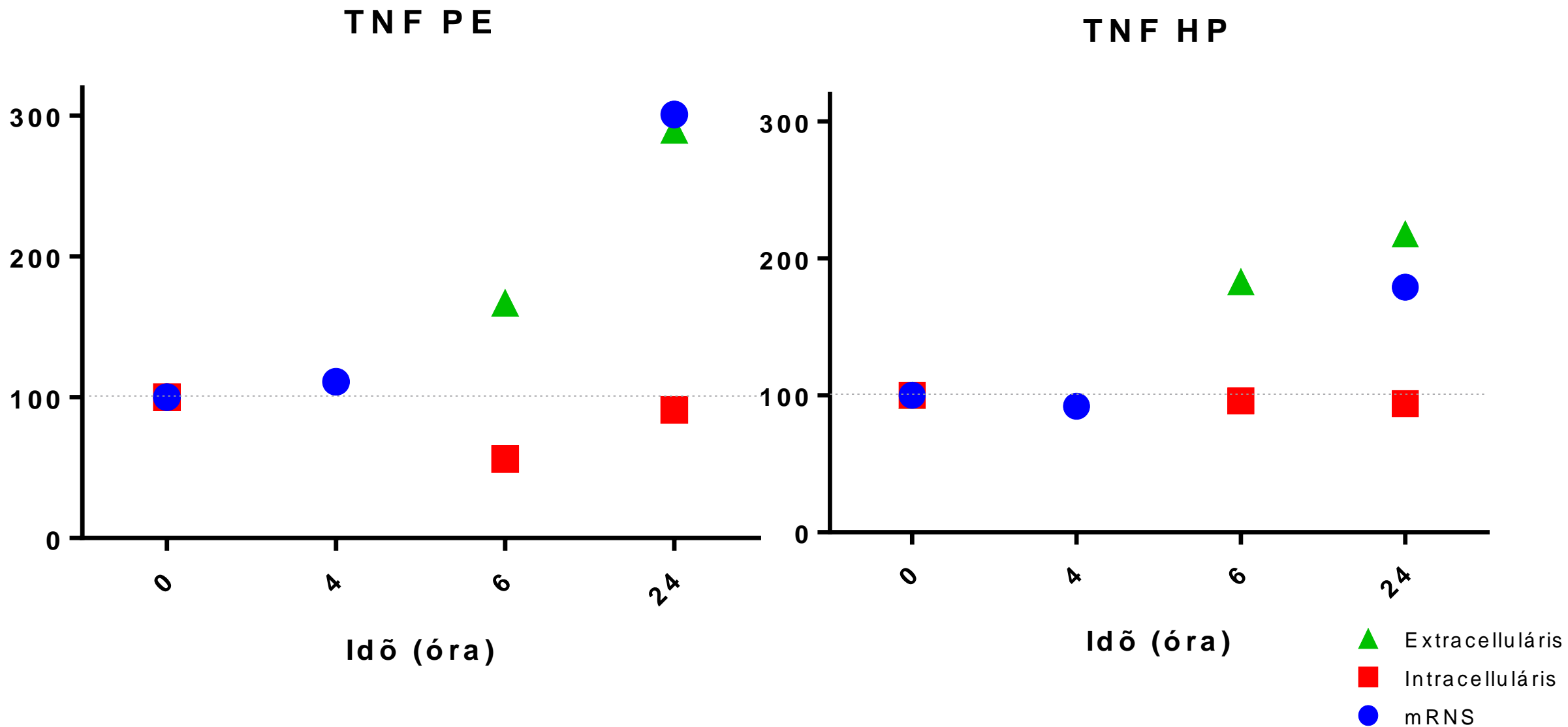
PREECLAMPSIA: MEGVÁLTOZOTT PROTEIN CARGO



EV INDUKÁLTA CITOKIN TERMELÉS



PREECLAMPSIA: GYULLADÁSOS CITOKIN MINTÁZAT

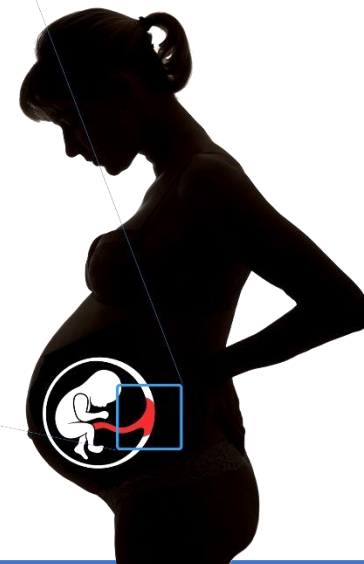
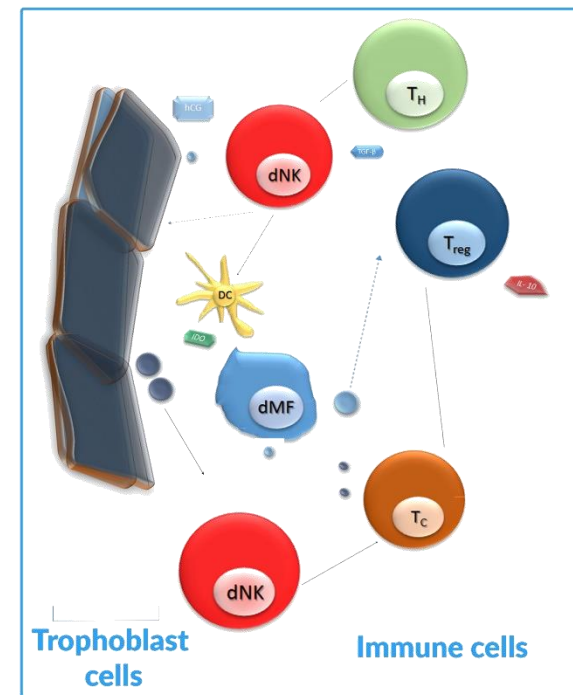


TAKE HOME MESSAGE

PREECLAMPSIA ASSZOCIÁLT EV MEGVÁLTOZTATJÁK A MONOCITA FUNKCIÓT

A keringő preeclampsia-asszociált EVk:

1. **Kevésbé fagocitáltak** a monocita sejtek által
2. **Csökkentik a motilitását** a monocita sejteknek
3. Monocita sejtek **gyorsabb adhézióját** váltják ki
4. Megváltoztatják a **sejtfelszíni fehérje mintázatot**
5. Hosszabb **gyulladásos citokin** választ indukálnak



KÖSZÖNETNYILVÁNÍTÁS



Pállinger Éva



Buzás Edit



Kőhidai László



Láng Orsolya



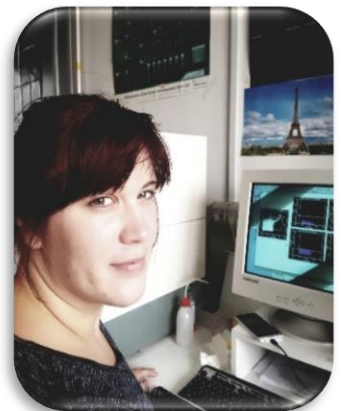
Krausz Máté



Turiák Lilla



Rigó János



Fekete Nóra



Szabó-Taylor Katalin



Wiener Zoltán



Sódar Barbara



Pálóczi Krisztina



Vukman Krisztina



Kittel Ágnes



Köszönöm a megtisztelő figyelmüket!

