

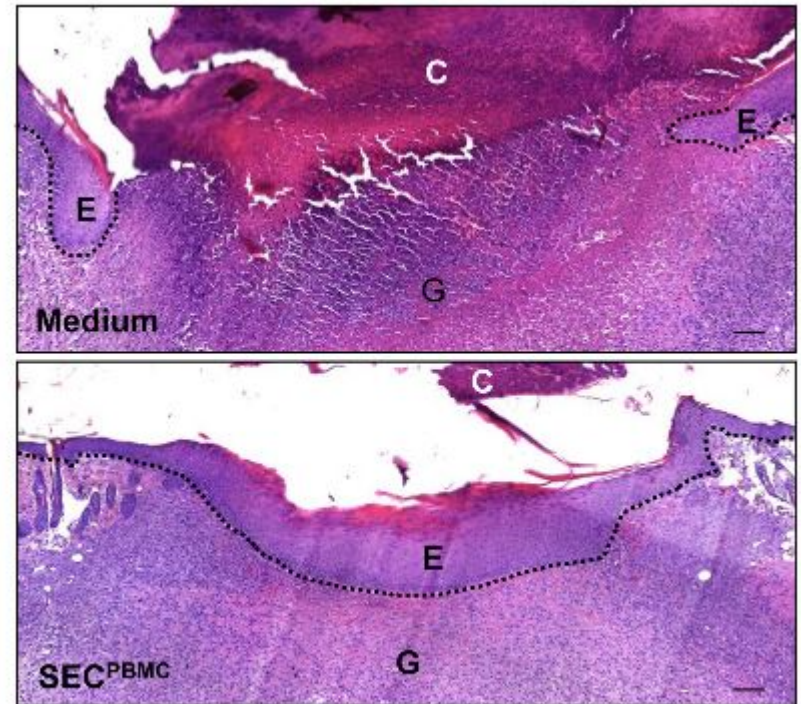
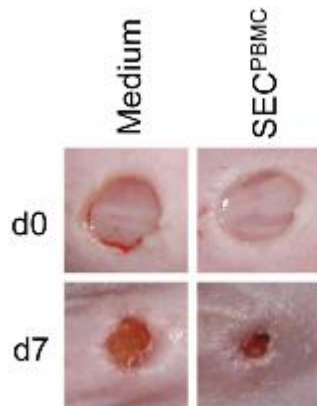
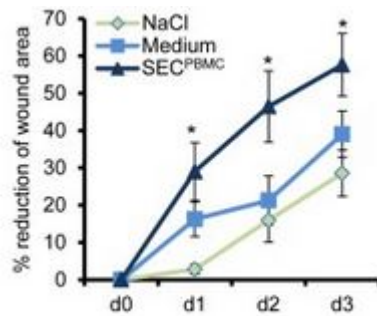
The role of apoptotic and necroptotic PBMC secretome in angiogenesis and wound healing

19.01.2019

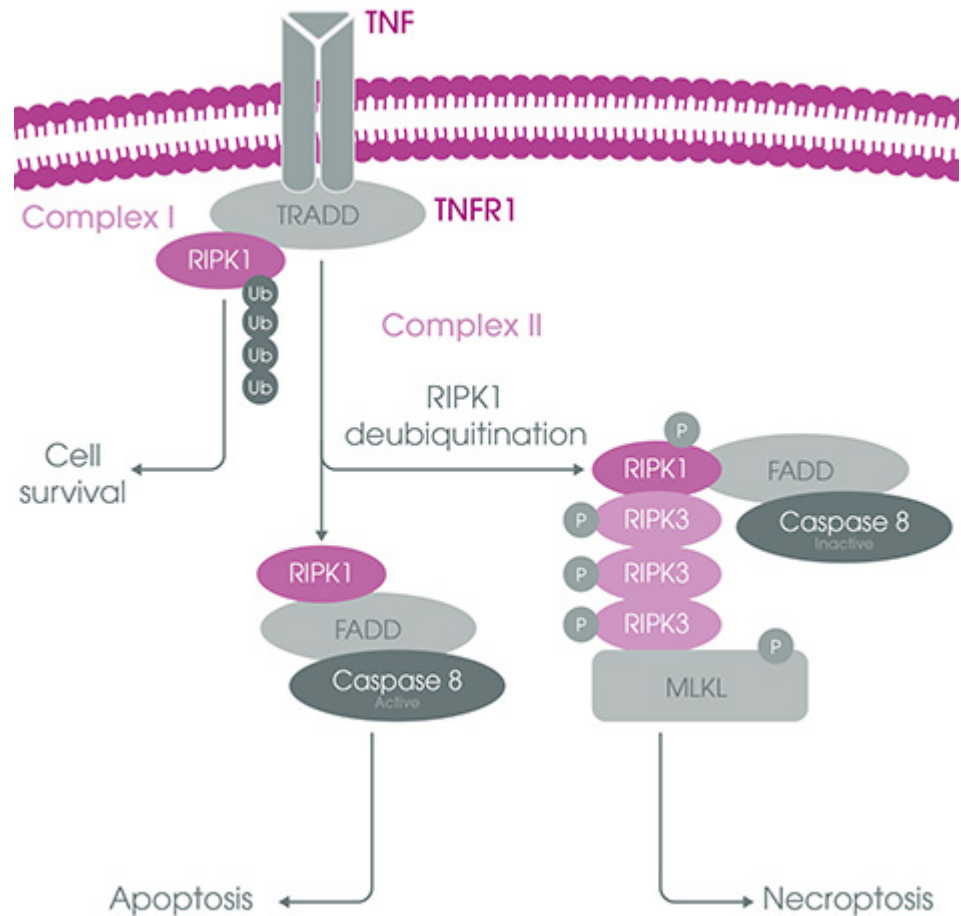
Secretome of Peripheral Blood Mononuclear Cells Enhances Wound Healing

Michael Mildner^{1,9}, Stefan Hacker^{2,3,9}, Thomas Haider^{3,4}, Maria Gschwandtner¹, Gregor Werba⁵, Caterina Barresi¹, Matthias Zimmermann^{3,4}, Bahar Golabi^{3,4}, Erwin Tschachler^{1,6}, Hendrik Jan Ankersmit^{3,4*}

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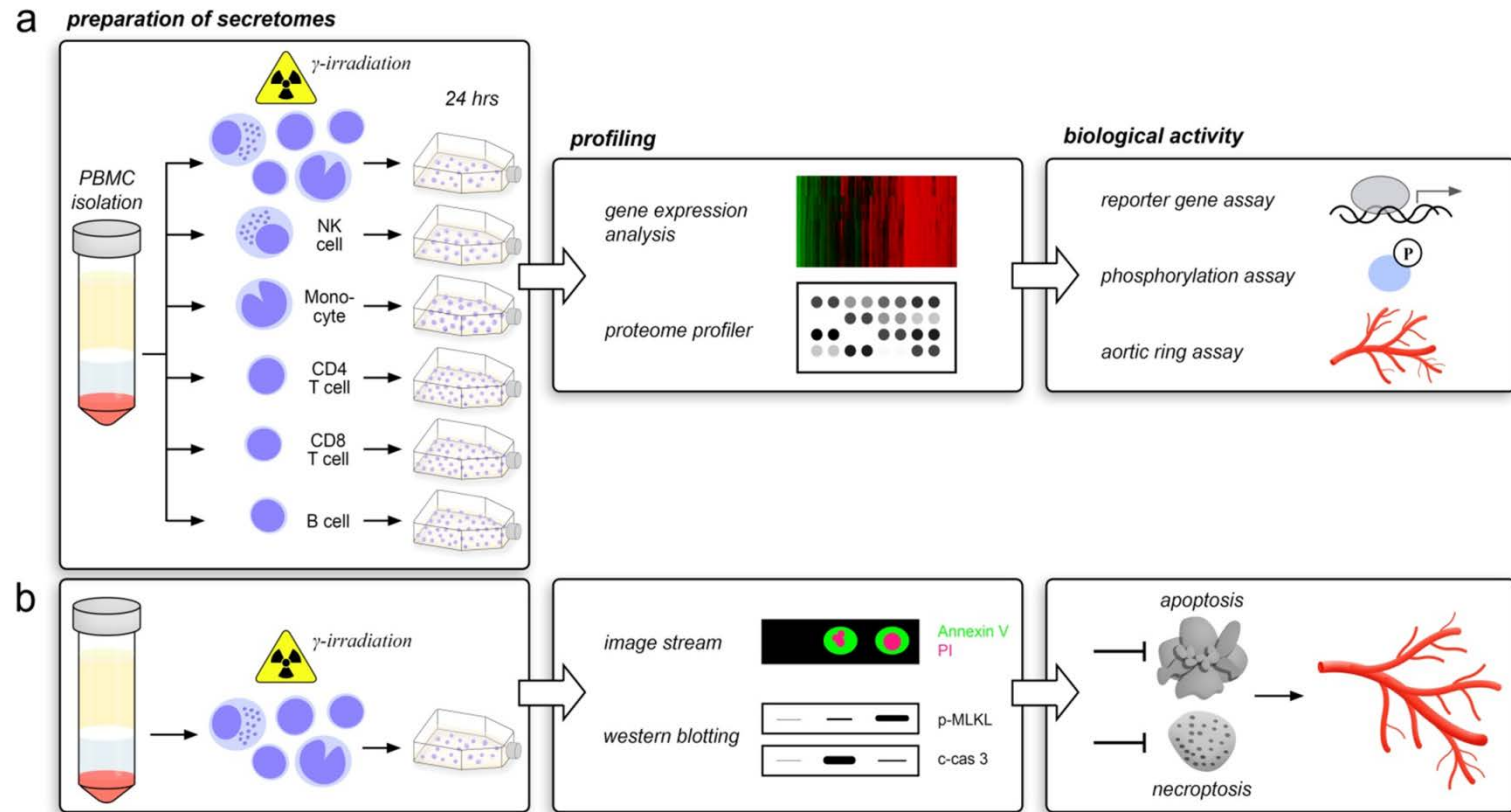


γ -irradiation activates the Necroptosis pathway



Experimental design

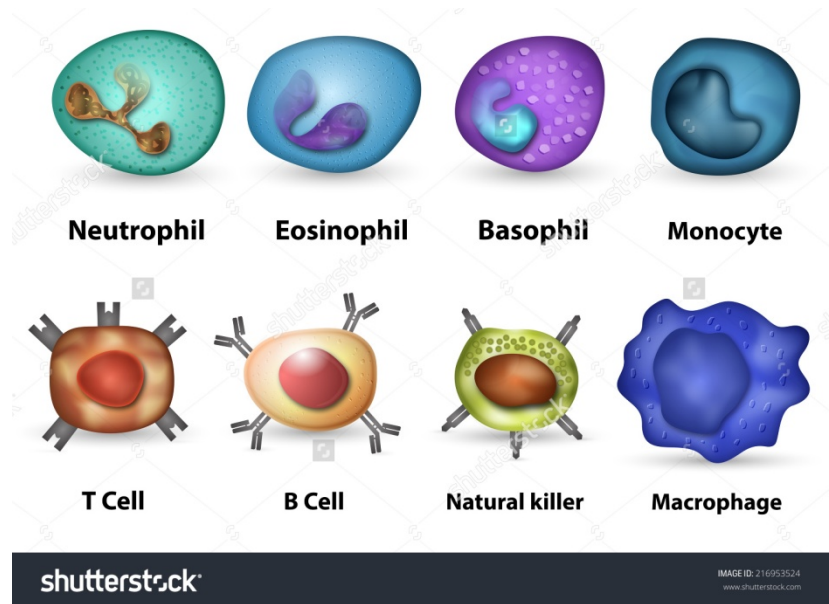
Figure 1



Positive selection of PBMC subsets

Peripheral blood mononuclear
cells

- CD 14 Monocytes
- CD 4 T-Helper cells
- CD 8 Cytotoxic T-cells
- CD 56 Natural killer cells
- CD 19 B-cells



Irradiation and Necroptosis

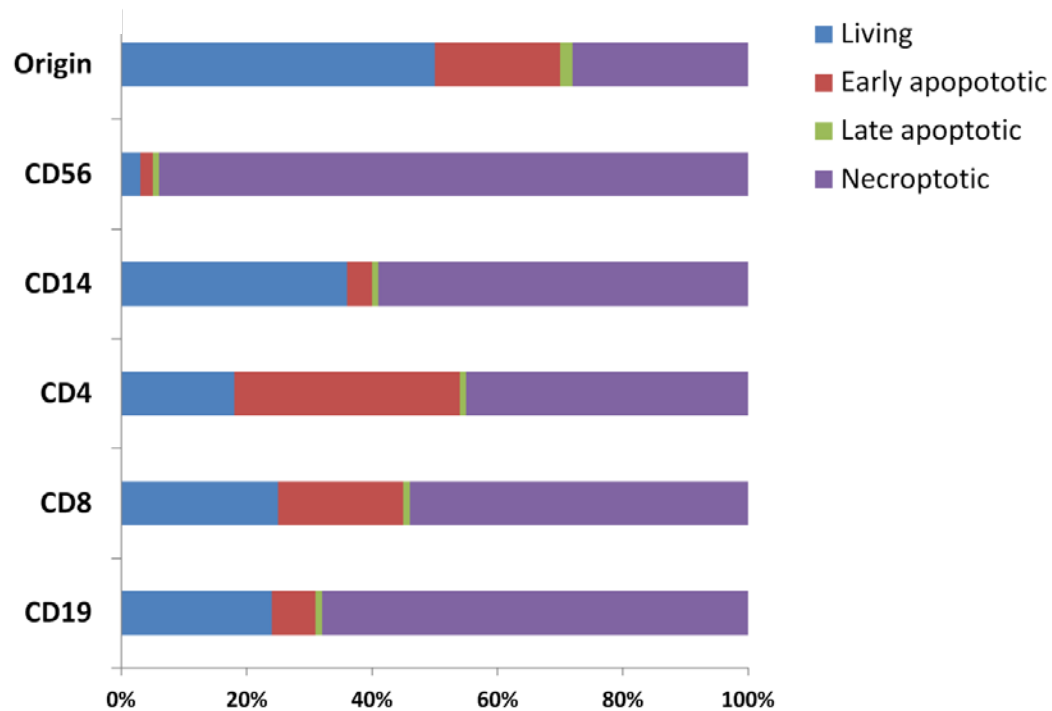
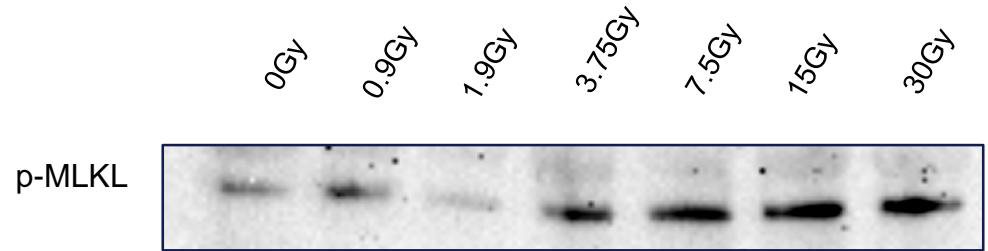
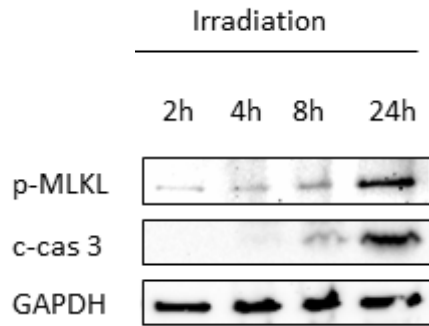


Figure 2

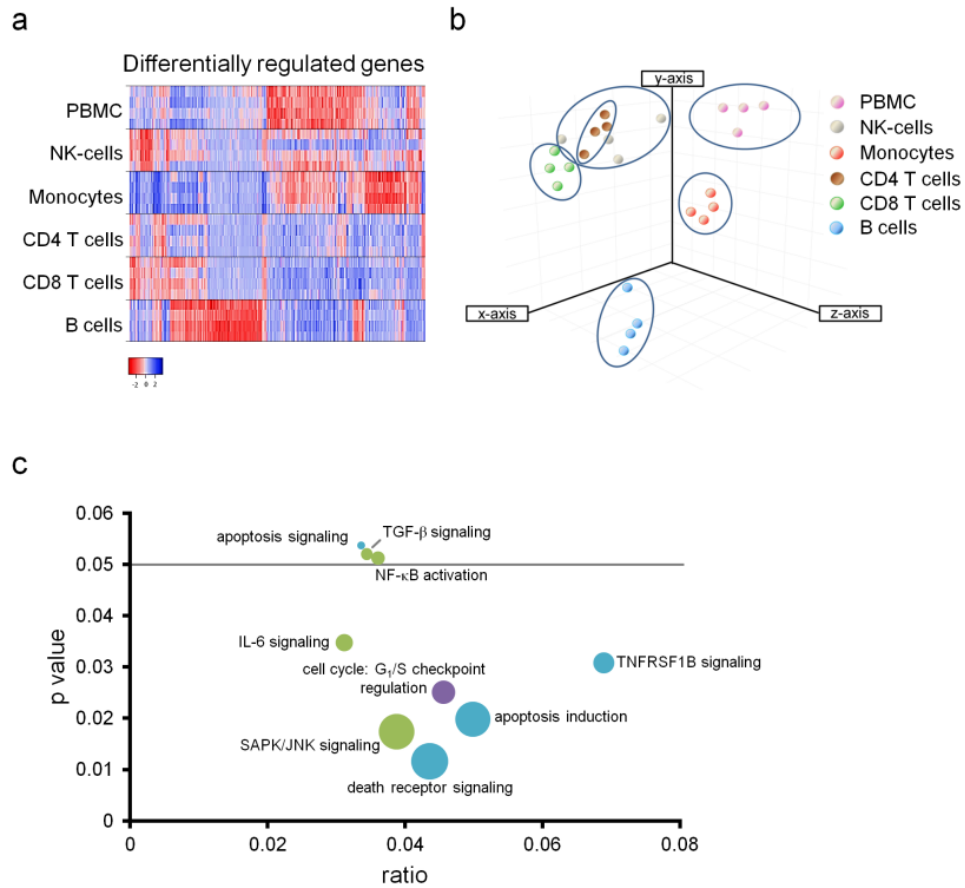


Figure 3

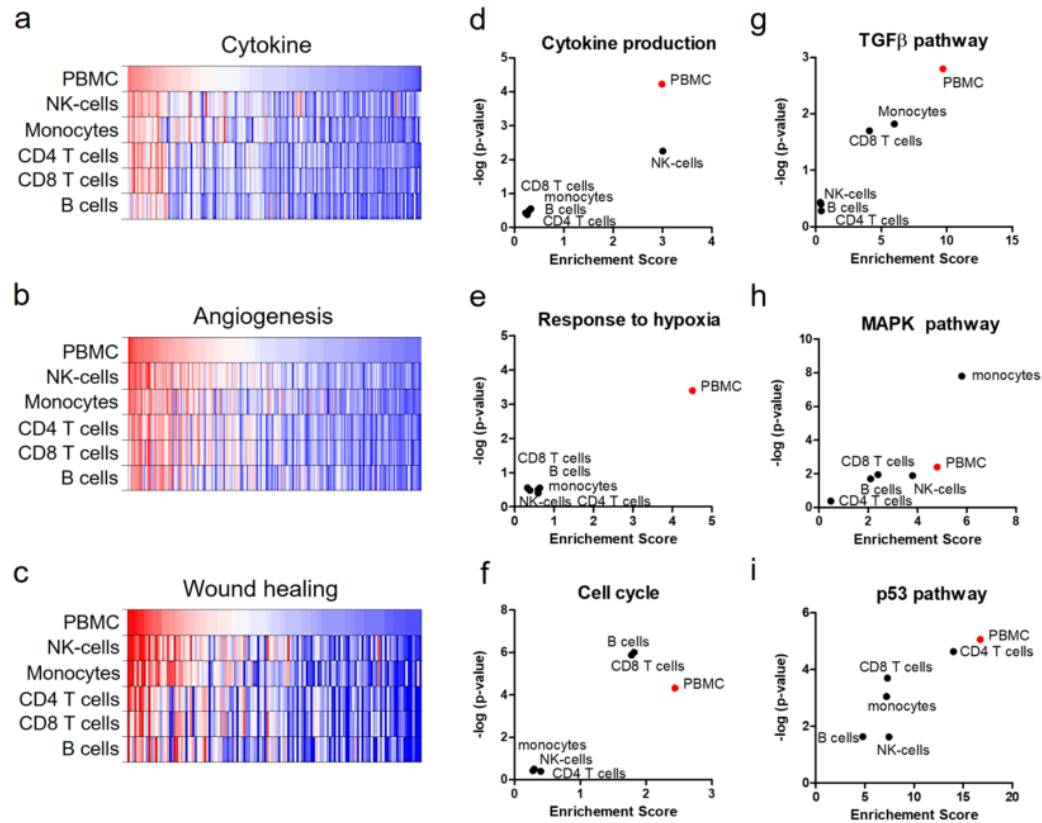


Figure 4

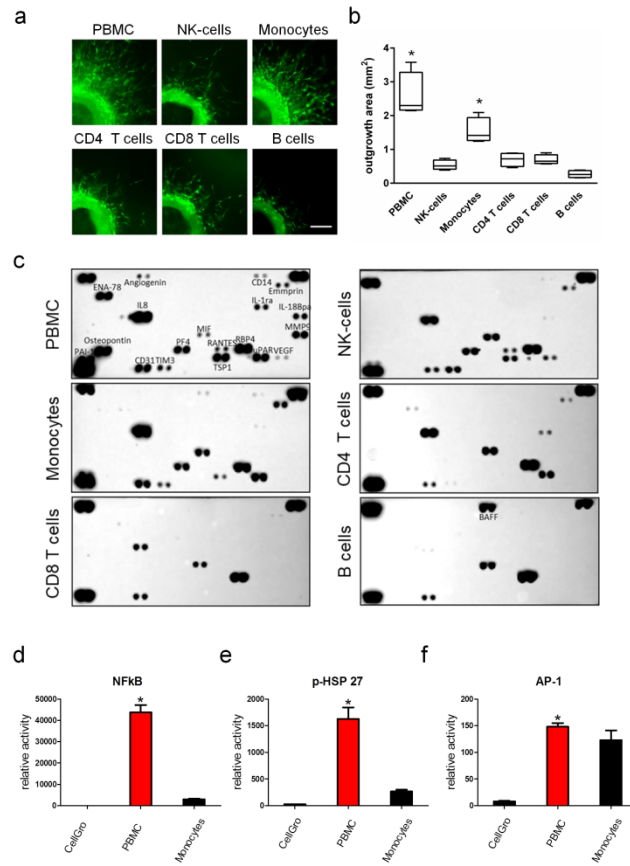


Figure 5

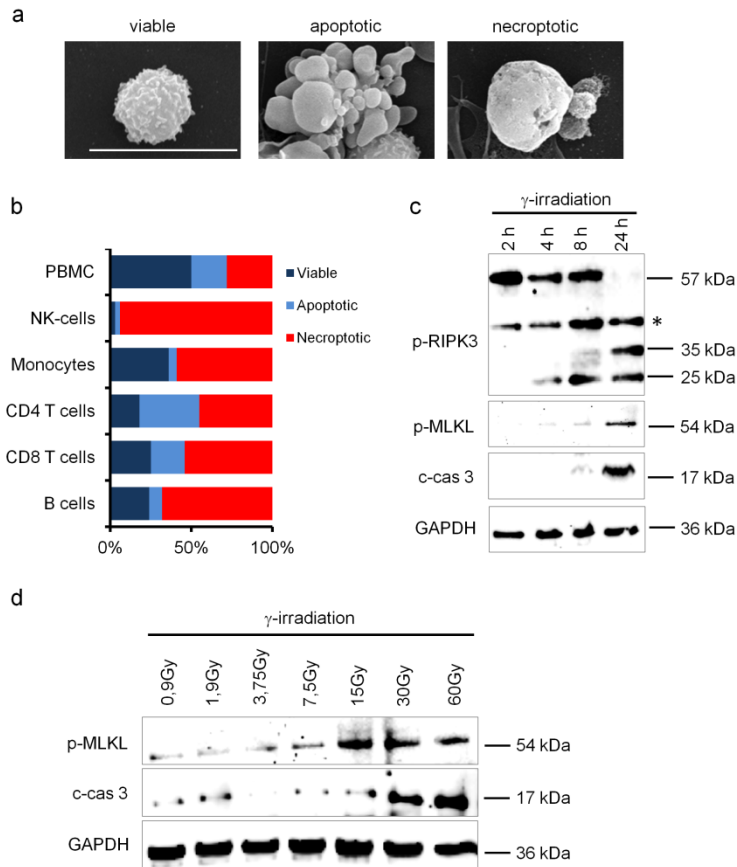


Figure 6

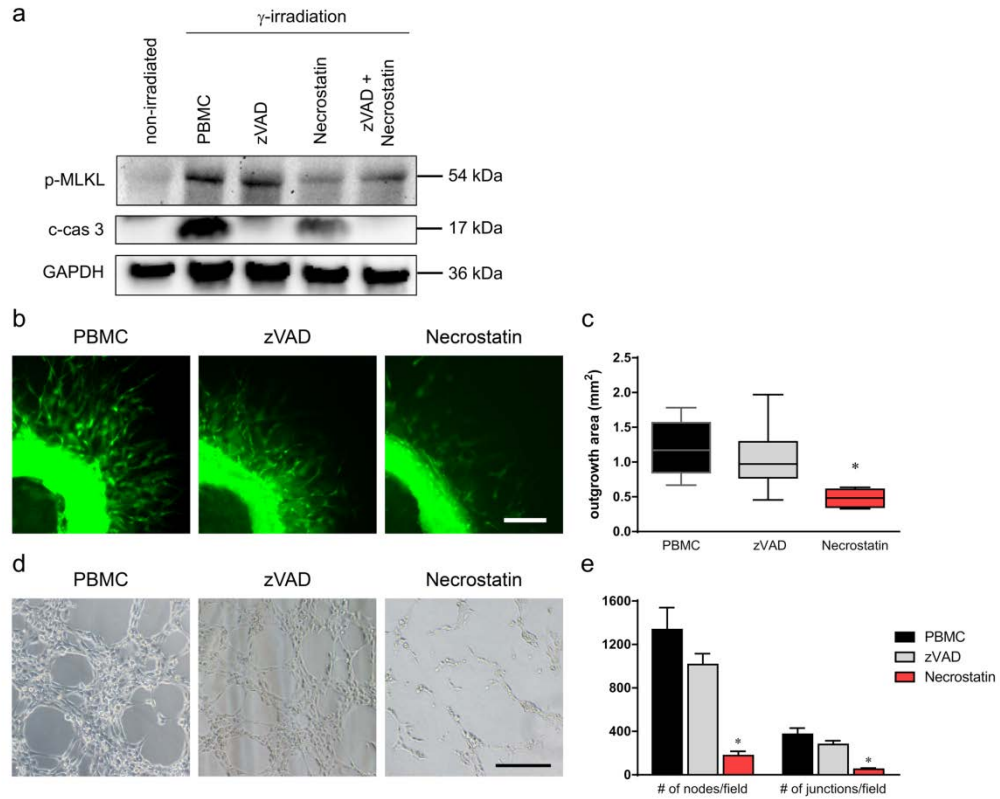
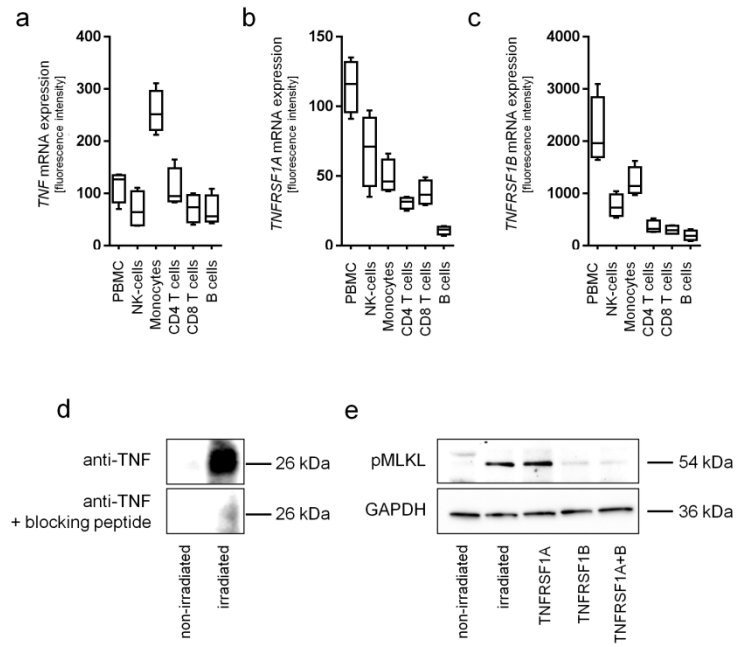
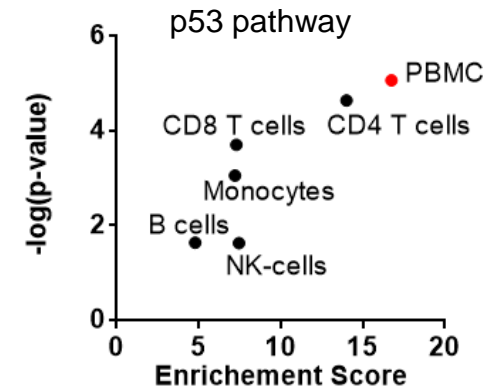
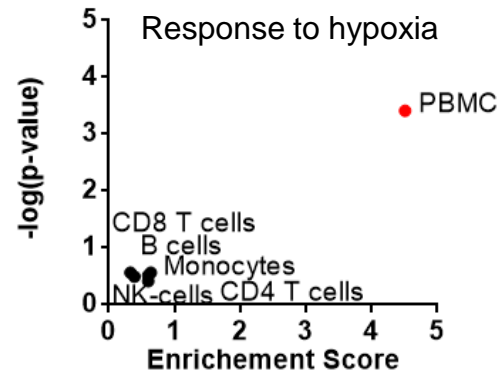
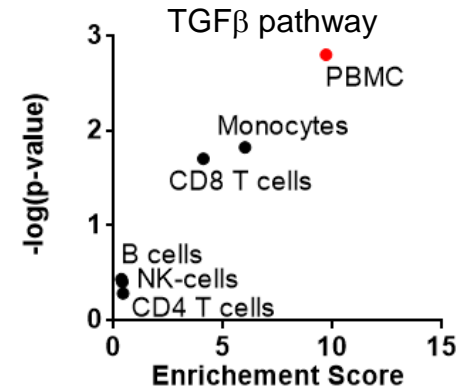
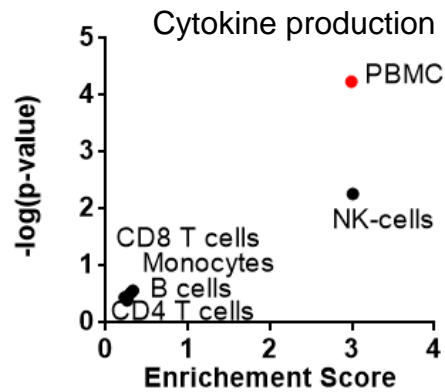
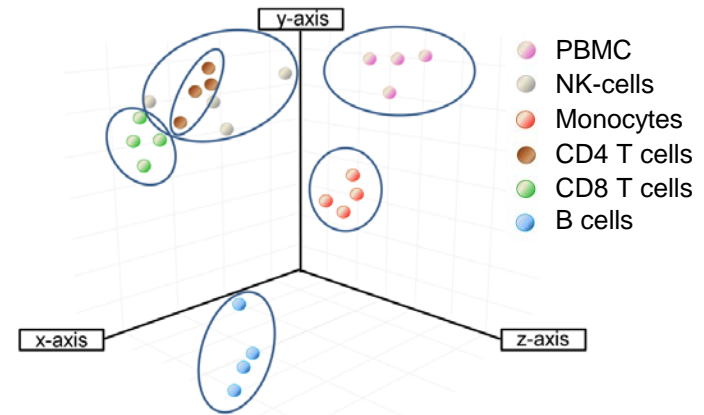
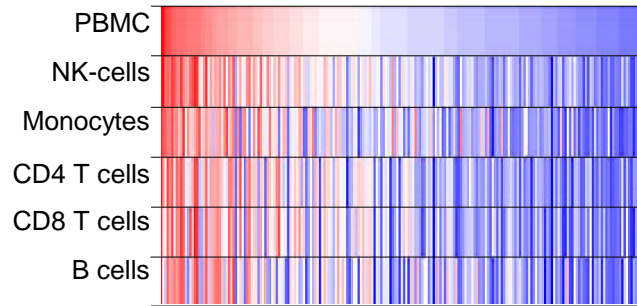


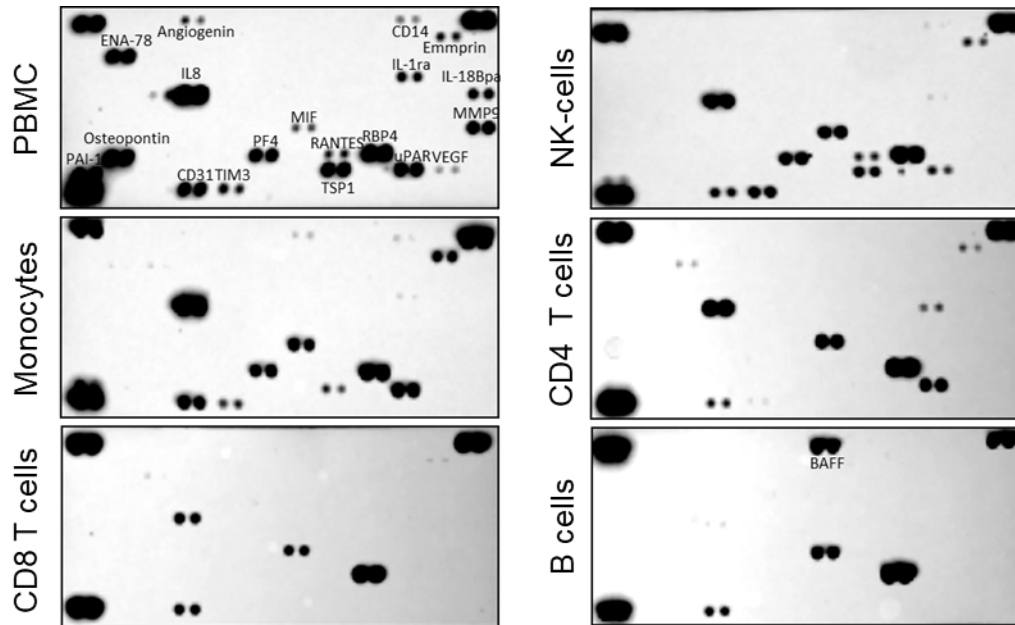
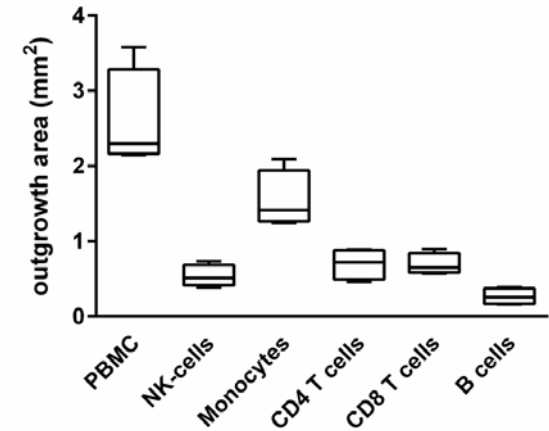
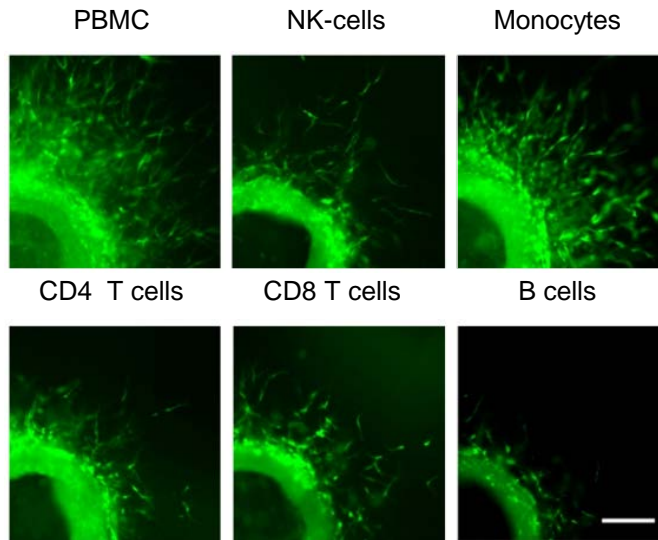
Figure 7

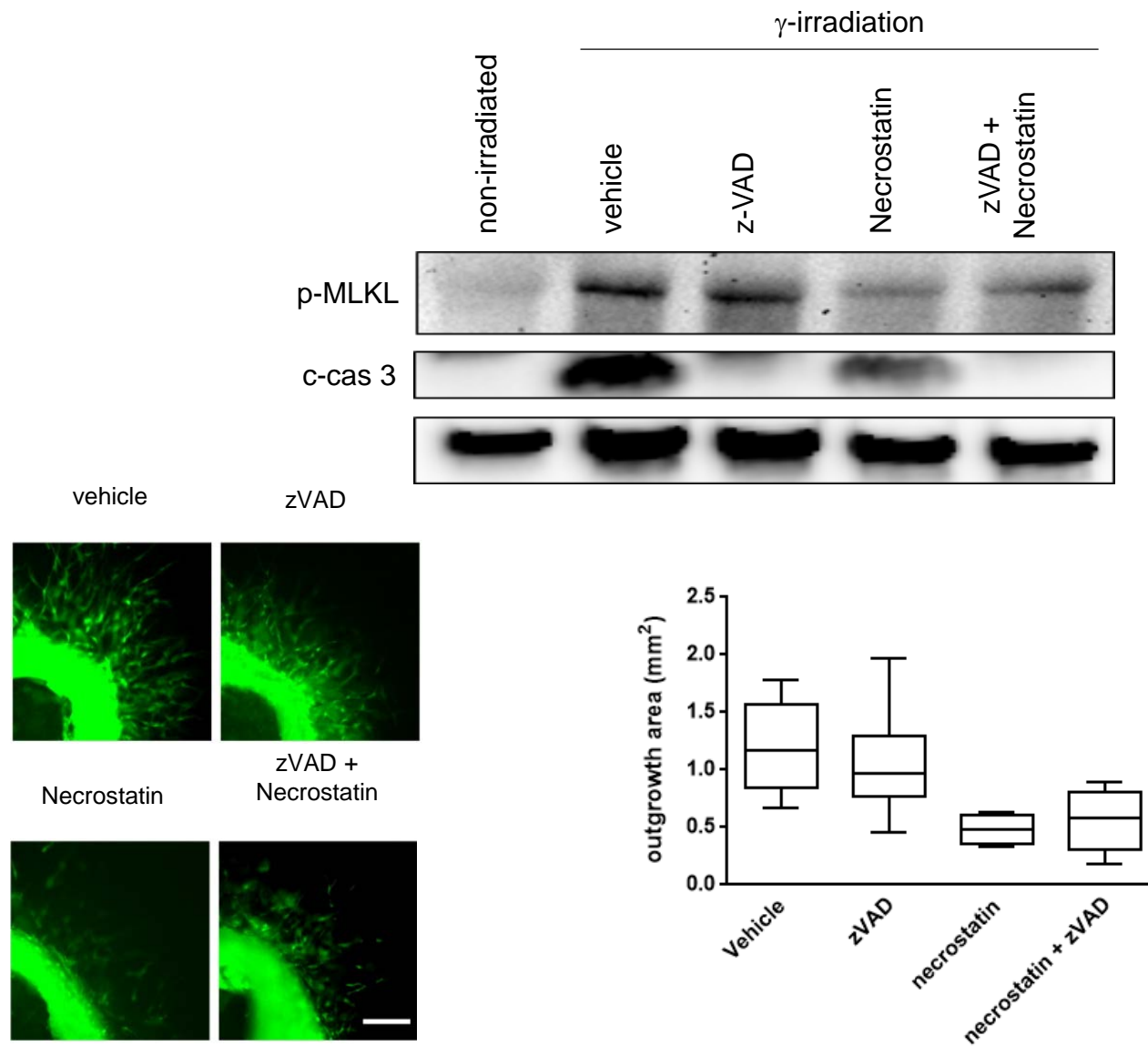


Angiogenic potential of apoptotic and necroptotic PBMC?

Angiogenesis

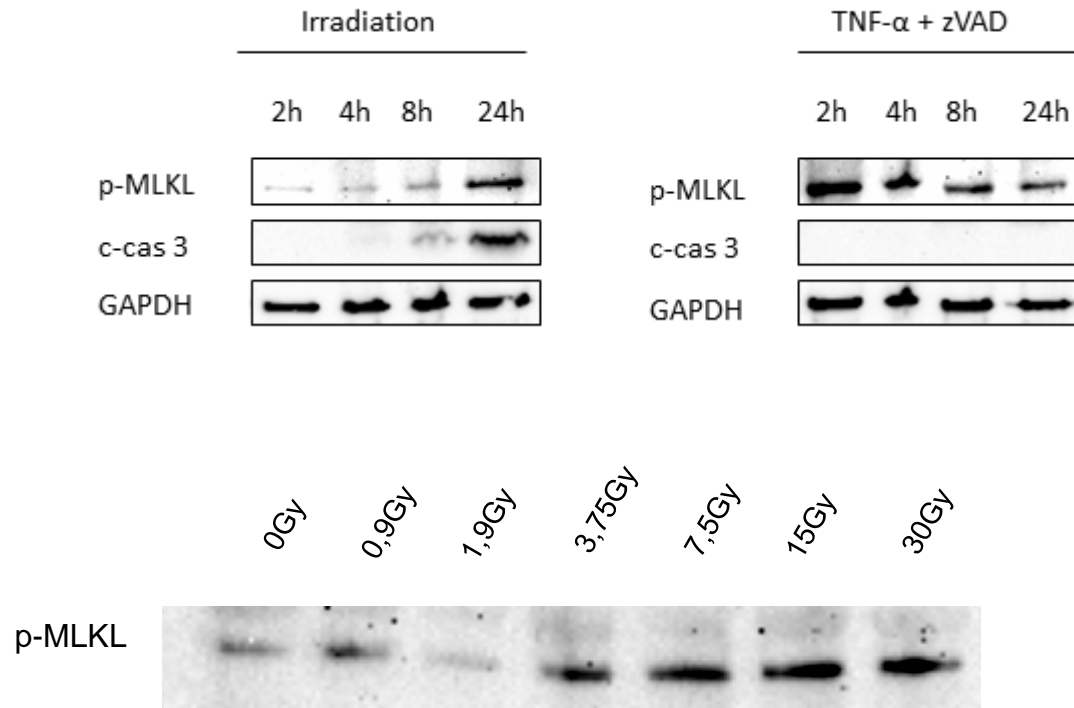






Thank you for your attention!

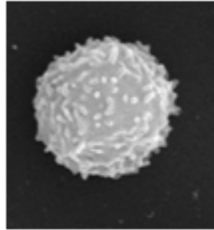
Time and dose-dependent effects



Scanning electron microscopy

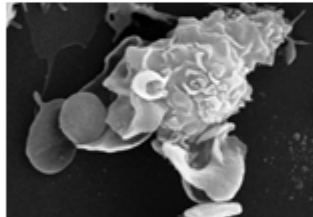
24 non-irr

living

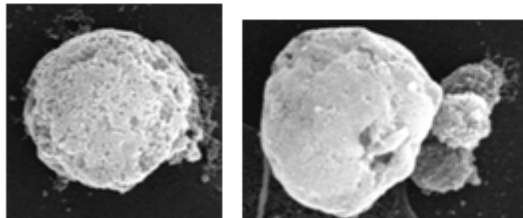


24 irr

apoptotic



necroptotic



Cell death

