

# Low/intermediate dose ionising radiation induces an anti-inflammatory phenotype of activated peritoneal macrophages of BALB/c mice

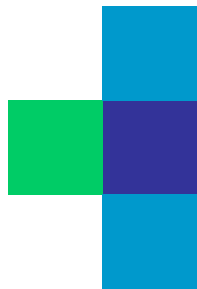
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Workshop**

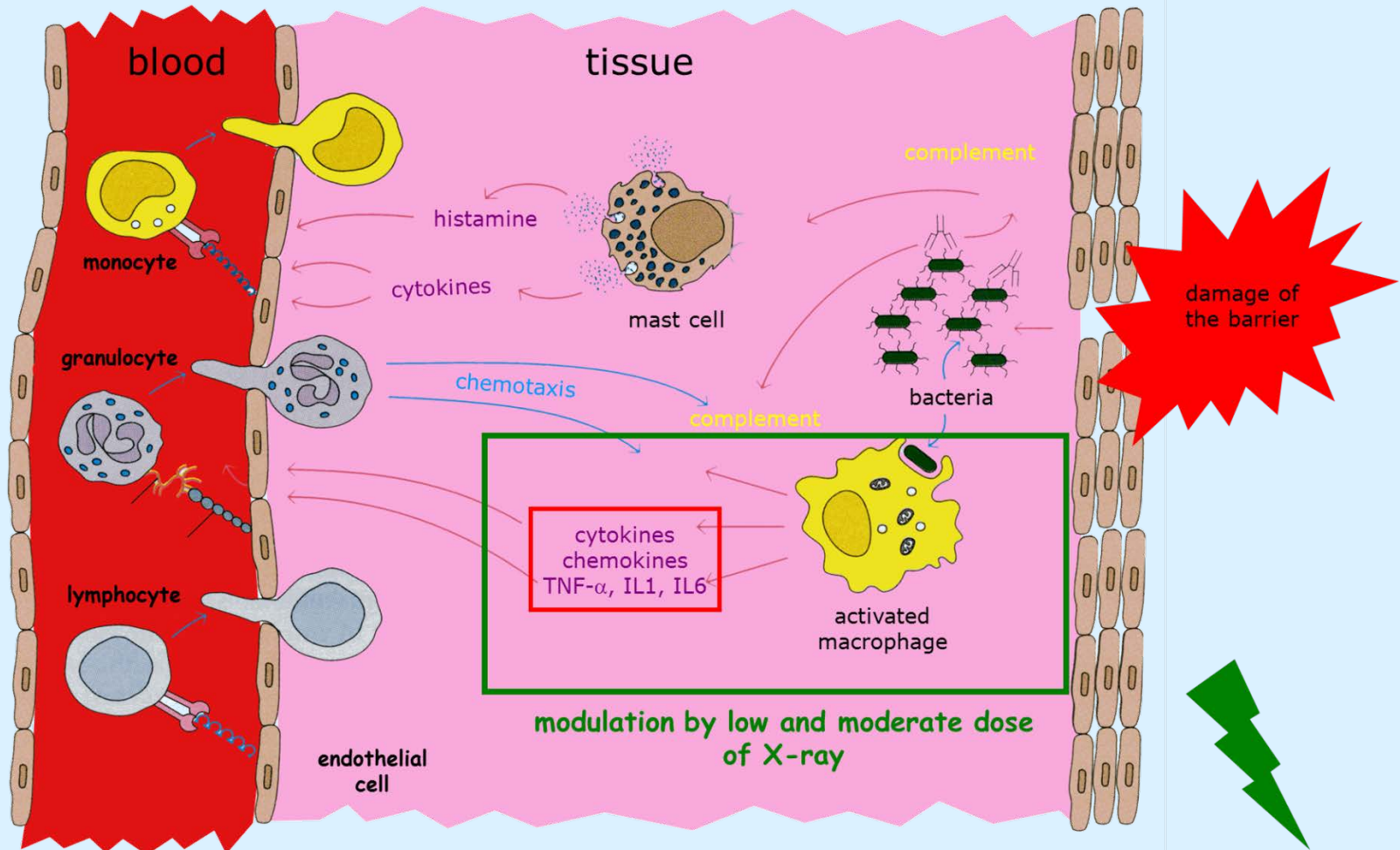


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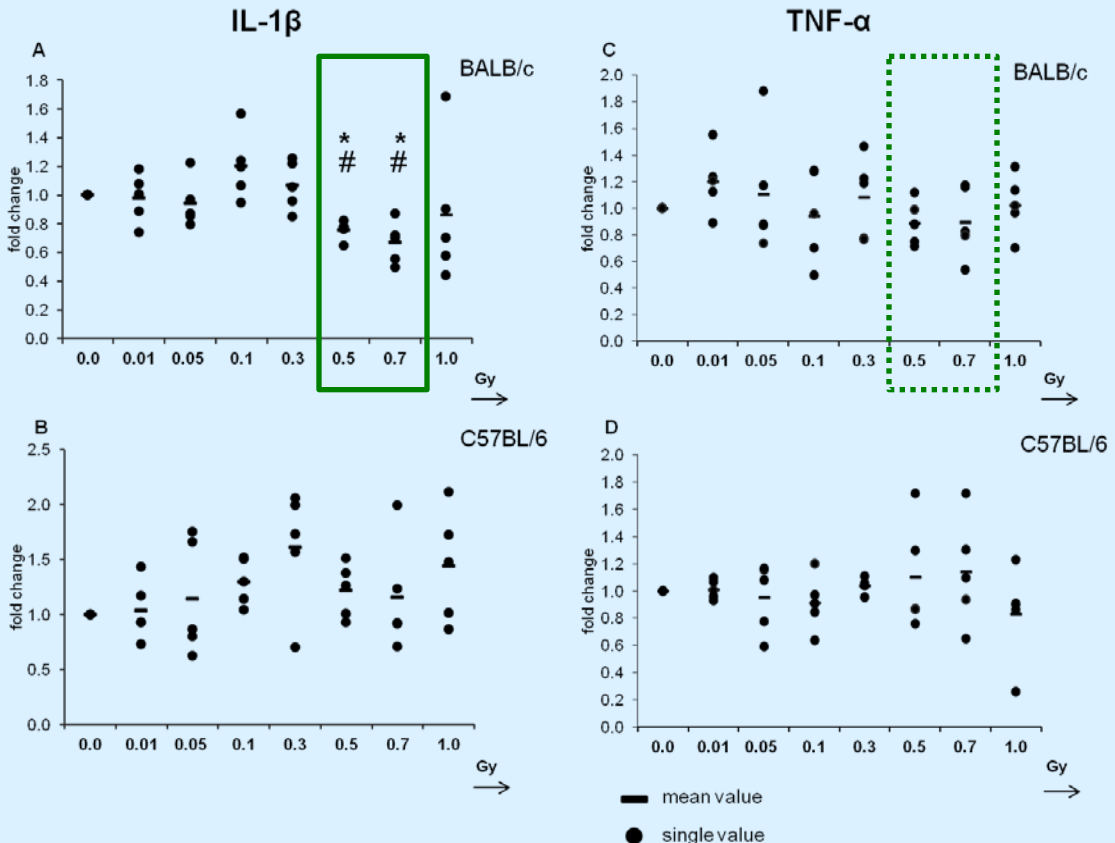
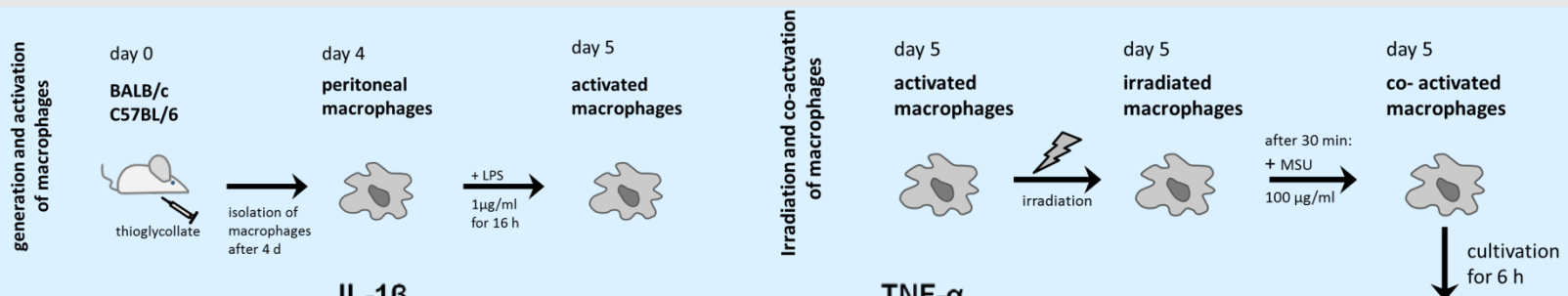
**Helsinki, 13.09.2012**



# Typical inflammatory events in the tissue

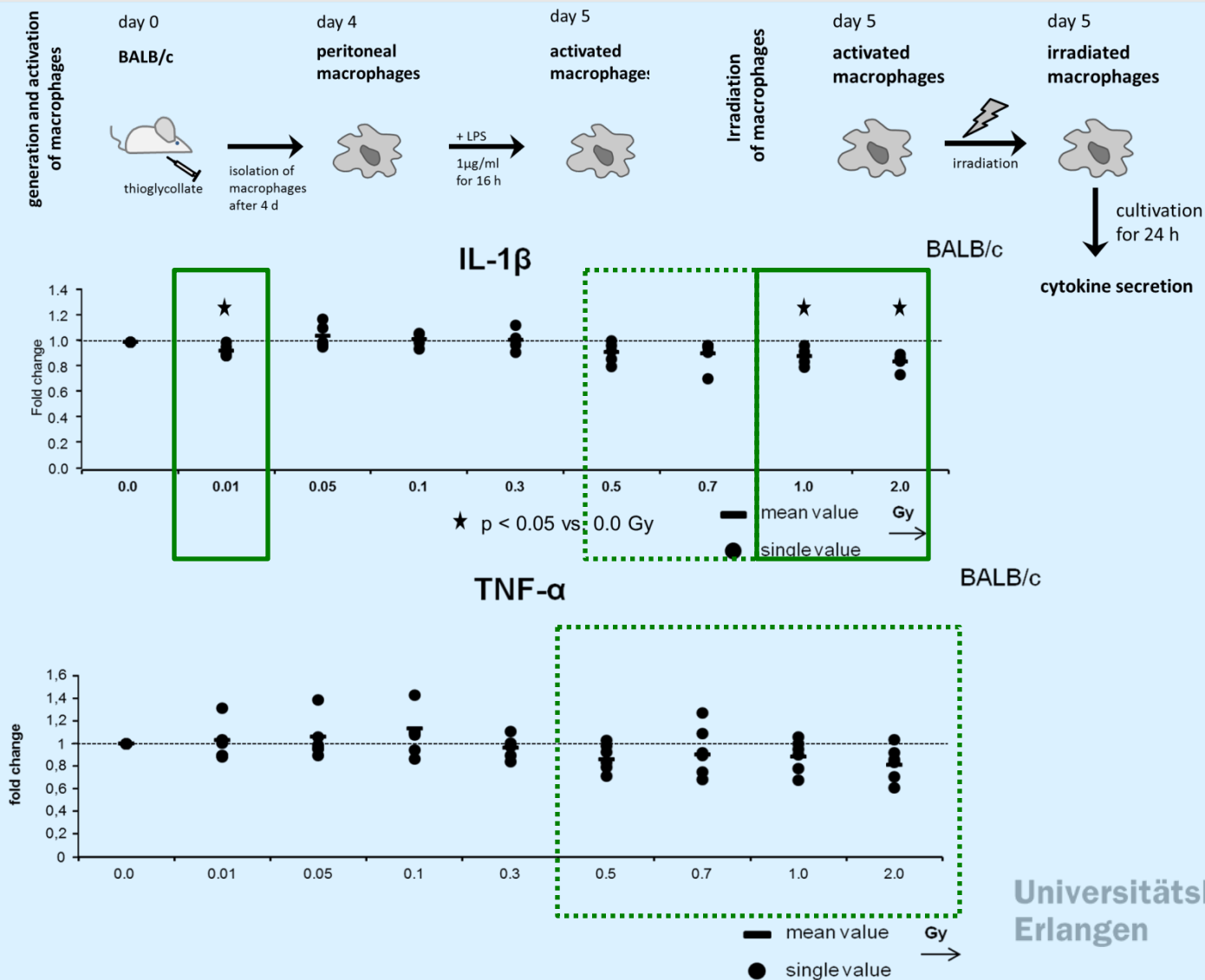


# LD-X-ray of 0.5 and 0.7 Gy significantly reduces the secretion of IL-1 $\beta$ of co-activated peritoneal macrophages in dependence of the genetic background determining the basal radiosensitivity



# p < 0.01 vs. 0.0 Gy  
\* p < 0.05 vs. 0.01 Gy

# LD-X-ray of 0.01 Gy and 0.5 – 2.0 Gy reduces secretion of IL-1 $\beta$ of only LPS pre-activated peritoneal macrophages obtained from radiosensitive BALB/c mice



# Conclusion

- LD-X-ray induces an anti-inflammatory phenotype of co-activated (LPS plus MSU) peritoneal macrophages in dependence of the genetic background
- IL-1 $\beta$  secretion is significantly and that of TNF $\alpha$  slightly reduced only in co-activated (LPS plus MSU) macrophages from more radiosensitive BALB/c mice
- LD-X-ray also slightly alters the inflammatory phenotype of only LPS-activated peritoneal macrophages from more radiosensitive BALB/c mice