

GLOSSARY

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5 DAMPs Danger/damage-associated molecular patterns are molecules with certain functions
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7 during homeostasis that turn into an immunostimulatory or cytotoxic alarm signal
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9 once injury misplaces them out of their natural compartment, i.e. extracellular
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11 histones or Tamm-Horsfall protein leaking from injured tubules.
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14 Danger control Response programs such as clotting, inflammation, regeneration, and scarring that
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16 were positively selected by evolution because they limit potentially fatal dangers
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18 such as bleeding, infection, barrier dysfunction, and tissue instability, respectively.
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- 20 Inflammation Local or systemic expression of cytokines that activate endothelial cells. This implies
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22 vascular plasma leakage and recruitment of activated leukocytes to enforce killing of
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24 pathogens, if present. Collateral tissue injury is particularly obvious in the absence of
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26 pathogens, i.e. sterile inflammation. Systemic inflammation may present with fever
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28 or as shock.
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31 Adaptive immunity Antigen-induced and -specific Immune response based on antigen-
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33 presentation and antigen-specific B and T cells.
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36 Innate immunity Genetically determined, intrinsic mechanisms of host defence.
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- 38 Necrosis Mode of cell death characterized by the rupture of the plasma membrane.
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41 Necroinflammation An auto-amplification loop of cell necrosis and inflammation that is driven by
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43 DAMP-release of necrotic cells and inflammation-related regulated necrosis.
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46 PAMPs Pathogen-associated molecular patterns activate immune and parenchymal cells via
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48 specific pattern recognition receptors, i.e. bacterial endotoxin/LPS activating Toll-like
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50 receptor-4.
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53 Regulated necrosis Active forms of necrosis induced via specific signalling pathways. Such
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55 pathways can be activated from outside the cell (outside-in) via distinct surface
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57 receptors or from inside the cell during cell stress. Blocking these pathways prevents
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59 necrosis.
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