

## The 3 main stages of a normal healing process

	Haemostasis/Inflammation	Granulation/Epithelialisation	Remodelling
<b>Starts within</b>	Immediate to a few minutes	Few hours to few days	About a week (reorganisation of extracellular matrix components)
<b>Length of duration</b>	Few hours 2/3 days	1 to 3 weeks	Few months to few years
<b>Key cells</b>	Platelets Neutrophils then macrophages +++	Fibroblasts +++ Keratinocytes	Macrophages Fibroblasts
<b>Effects</b>	<ul style="list-style-type: none"> <li>✍ Formation of a temporary extracellular matrix</li> <li>✍ Release and activation of mediators</li> <li>✍ Recruitment of inflammatory cells, fibroblasts and endothelial cells</li> </ul>	<p><b>Formation of granulation tissue :</b></p> <ul style="list-style-type: none"> <li>✍ Cellular proliferation: fibroblasts, endothelial cells</li> <li>✍ New ECM synthesis</li> <li>✍ Angiogenesis</li> </ul> <p><b>Re-epithelialisation</b></p> <ul style="list-style-type: none"> <li>✍ Transformation of fibroblasts into myofibroblasts</li> <li>✍ Migration of epithelial cells</li> <li>✍ Re-establishing epidermis barrier function through keratinocytes</li> </ul>	<ul style="list-style-type: none"> <li>✍ Progressive re-organisation of matrix due to myofibroblasts</li> <li>✍ Change in % of different collagen types: increase in collagen I, collagen III</li> <li>✍ Apoptosis of myofibroblasts</li> </ul> <p>Synthesis of a new and more solid extracellular matrix by fibroblasts</p>