

The 3 main stages of a normal healing process

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