Appendix S1

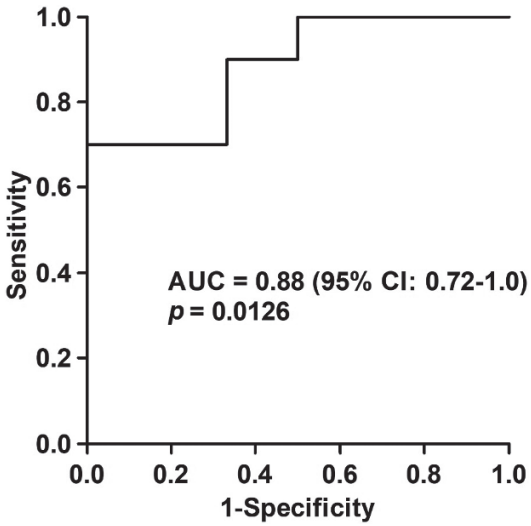
SUPPLEMENTARY RESULTS

The levels of matrix metalloproteinase (MMP)-9 in wound fluids increased significantly in venous leg ulcers that subsequently showed good healing of the transplanted autologous split-thickness skin graft vs venous leg ulcers with poor healing (**STable I**). The diagnostic value of the MMP-9 concentration when expressed to the protein content of the wound fluids was 0.88 (95% confidence interval 0.72–1.0, $p = 0.0126$) from the receiver-operating characteristic analysis (**SFig. 1**).

STable I. Relationships between preoperative biochemical wound fluid markers expressed per protein content, and split-thickness skin graft (STSG) healing outcome 12 weeks after transplantation of venous leg ulcers

	Split-thickness skin graft healing		
	Good ($n = 10$) Median (IQR)	Poor ($n = 7$) Median (IQR)	p-value[a]
LPS, pg/mg	56 (36–95)	330 (44–770)	0.313
TNF-α, pg/mg	45 (29–50)	56 (36–95)	0.368
HNE activity, pmol/mg	4.6 (0.28–9.1)	3.0 (1.0–4.2)	0.562
MPO activity, U/mg	0.80 (0.47–2.6)	0.84 (0.50–0.92)	0.635
MMP activity, pmol/mg	16 (13–120)	76 (35–120)	0.0727
MMP-2, ng/mg	4.8 (0–28)	6.7 (0.32–20)	0.713
MMP-9, ng/mg	3,700 (1,600–4,900)	1,200 (630–2,000)	0.0110
MMP-8, ng/mg	290 (160–490)	140 (100–230)	0.0559
TIMP-1, ng/mg	21 (16–31)	11 (9.9–37)	0.181

[a]Mann–Whitney *U* test.
IQR: interquartile range; LPS: lipopolysaccharide; MPO: myeloperoxidase; HNE: human neutrophil elastase; TIMP: tissue inhibitor of metalloproteinases; TNF: tumour necrosis factor.



SFig. 1. Receiver-operating characteristic (ROC) curve showing the sensitivity and specificity of diagnosing split-thickness skin graft (STSG) healing in relation to matrix metalloproteinase (MMP)-9 wound fluid concentration expressed to the protein content. AUC: area under the curve; CI: confidence interval.