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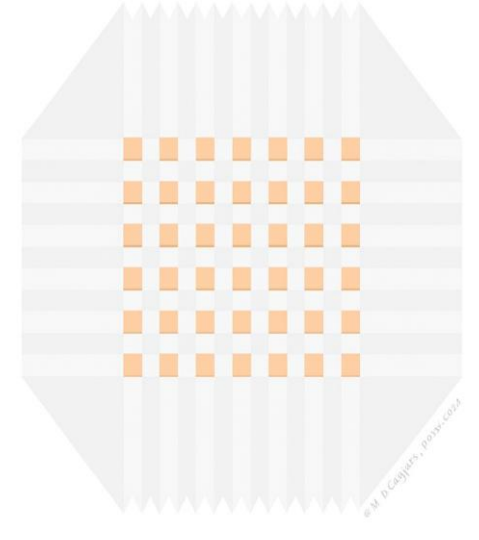
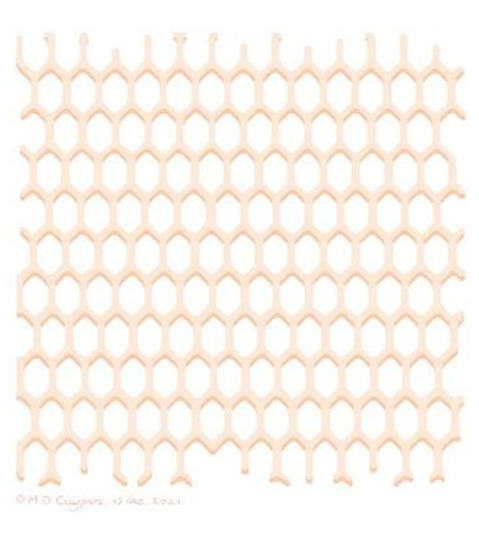
3. Burn Center, Ghent University Hospital, Belgium

INTRODUCTION

Background

In patients with deep and/or full-thickness (burn) wounds, autologous skin grafting surgery is necessary when the entire dermis (=both reticular and papillary layers) is affected.

Meek micrografting and Mesh skin are two widely utilized skin expansion techniques applied in autologous skin transplantation.

Meek micrografting	Mesh grafting
	
Expansion up to 1:9 → Limited donor site(s) needed	Expansion up to 1:4
TBSA > 20%	TBSA < 20%
Lower average amount of operations	Lower average operating time
Lower average bacterial load → Lower infection rate	

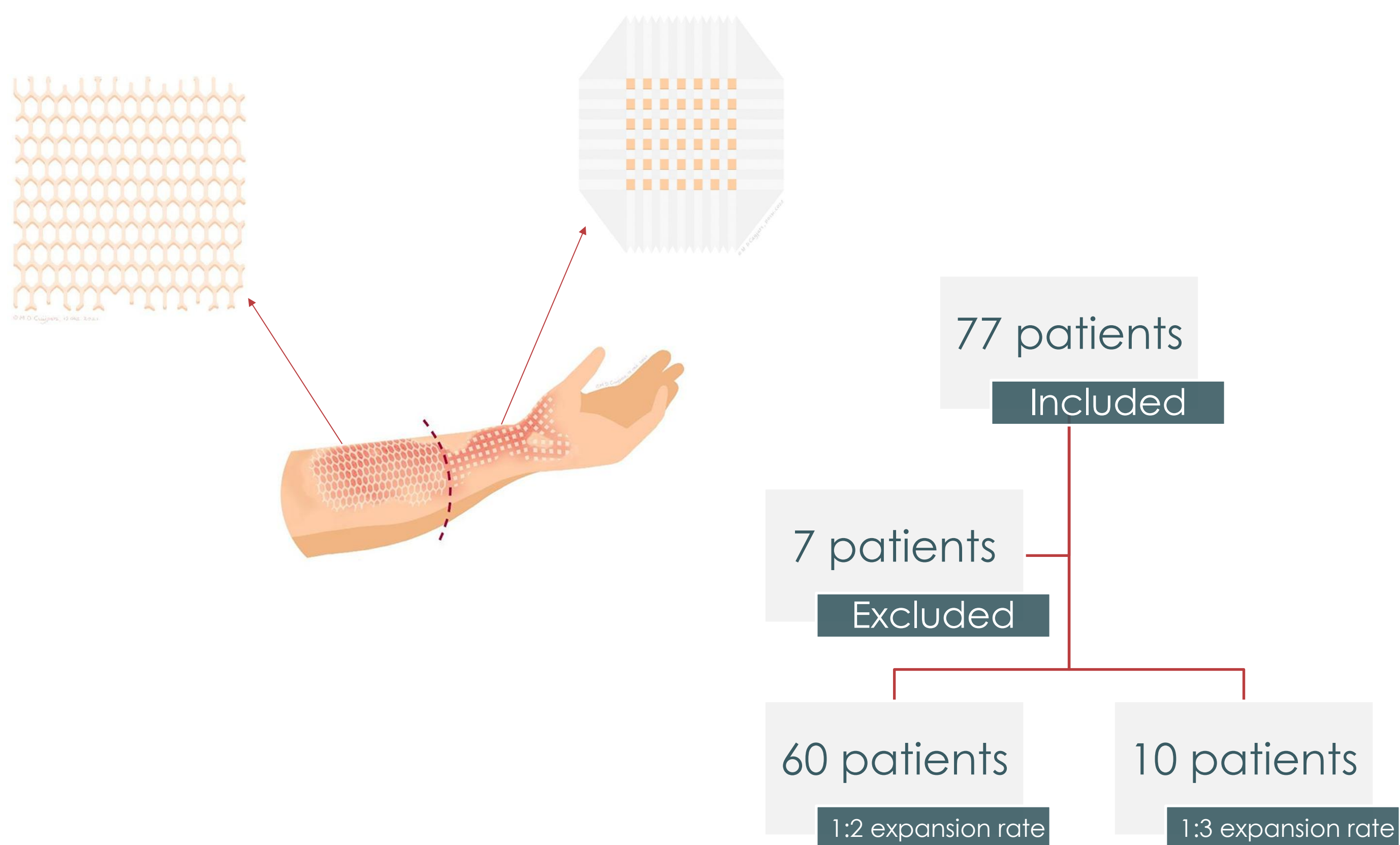
Hypothesis

Meek micrografting could serve as a cost-effective alternative treatment to Mesh grafting for (burn)wounds covering less than 20% of the TBSA.

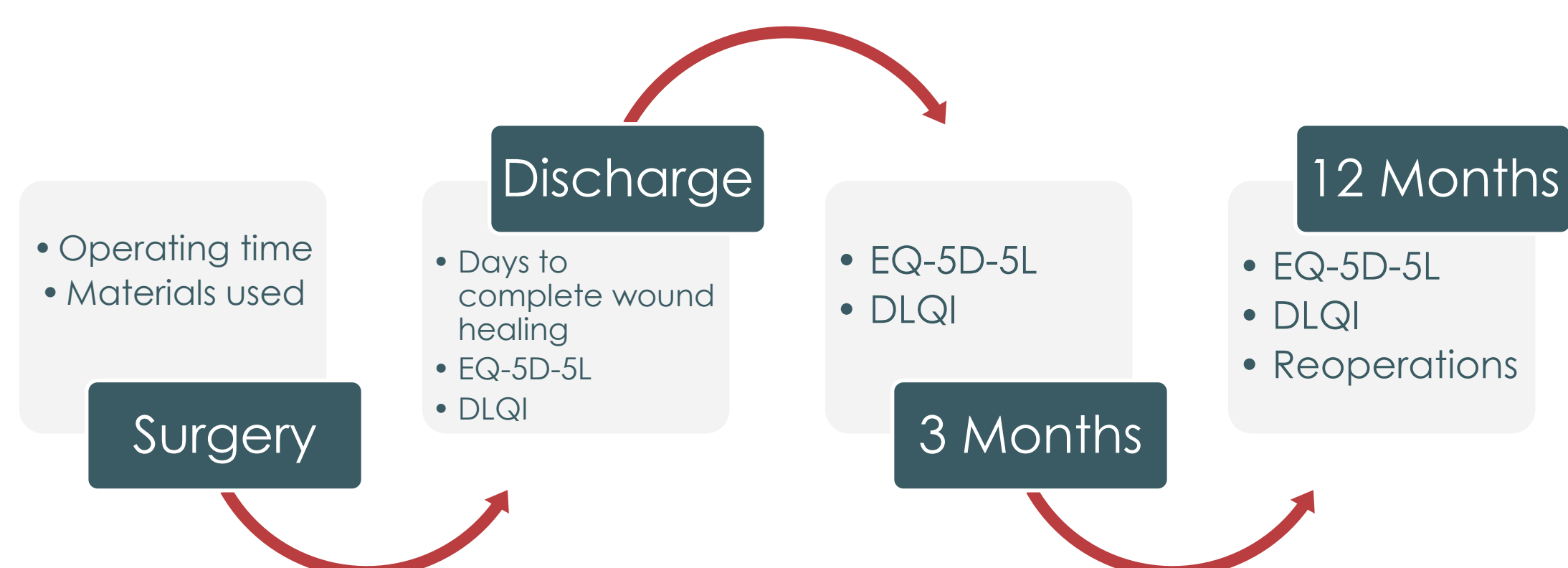
METHODS

Study design

Multicenter intra-patient randomized controlled trial at Red Cross Hospital Beverwijk (the Netherlands) & Ghent University Hospital (Belgium)



Data collection and variables of interest



RESULTS

EQ-5D-5L

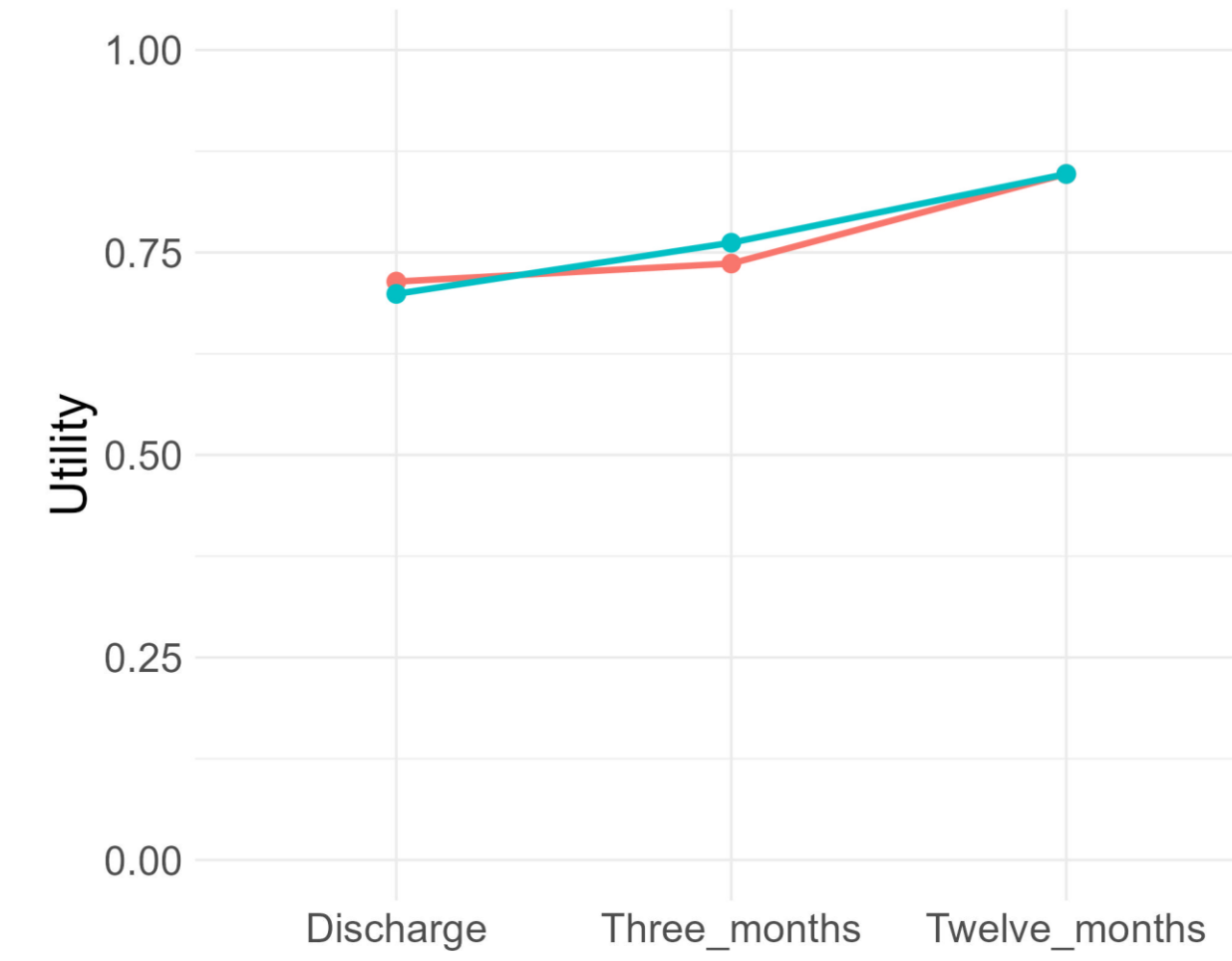
No significant difference in QALYs

1:2 expansion > 1:3 expansion

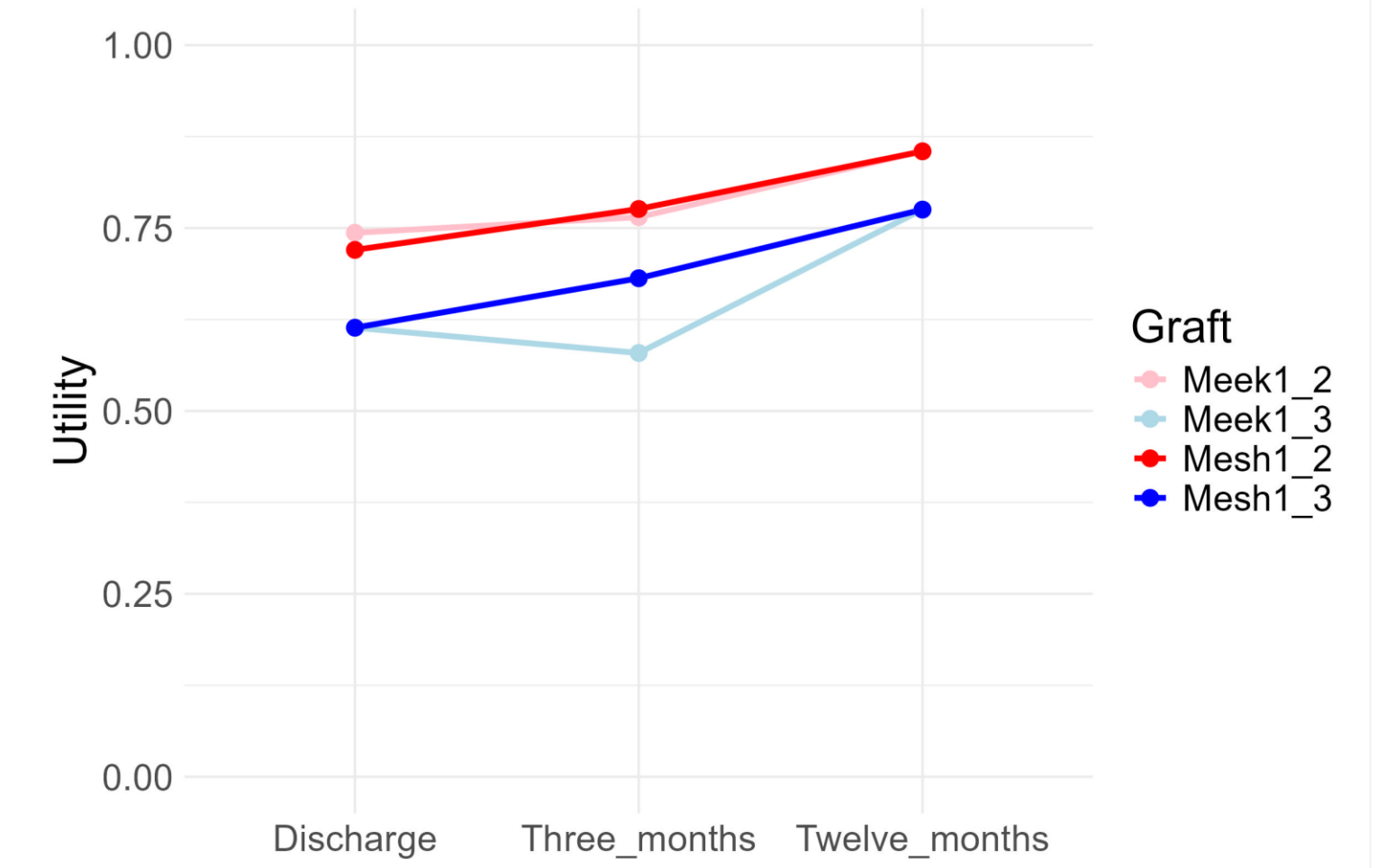
MEEK = MESH for 1:2 expansion

MEEK < MESH for 1:3 expansion

Utilities of Meek and Mesh



Utilities of Meek and Mesh subgroups



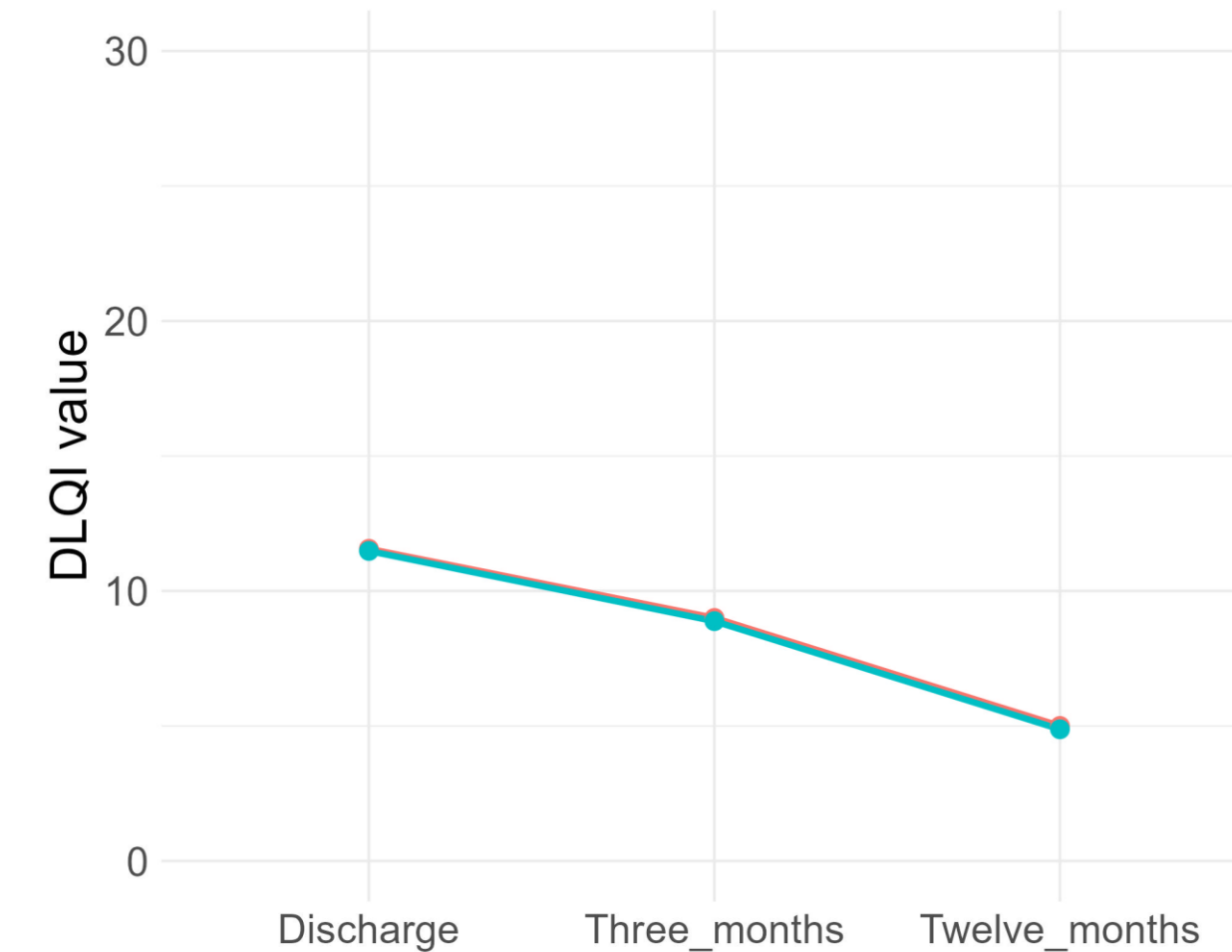
Dermatology Life Quality Index (DLQI)

MEEK = MESH

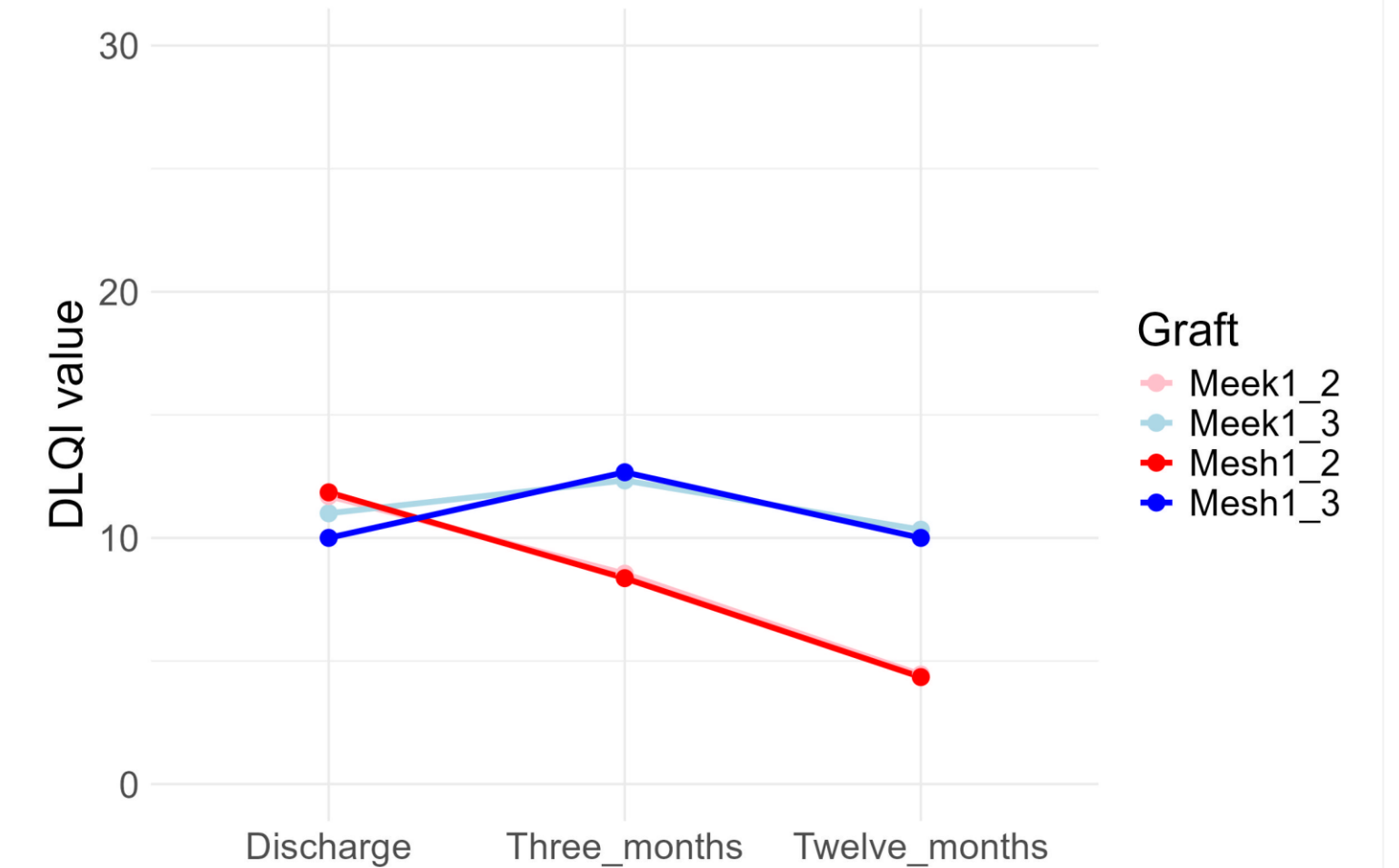
At hospital discharge, MESH 1:3 expansion had the lowest* value

At twelve months, no difference between MEEK and MESH was observed

DLQI values of Meek and Mesh

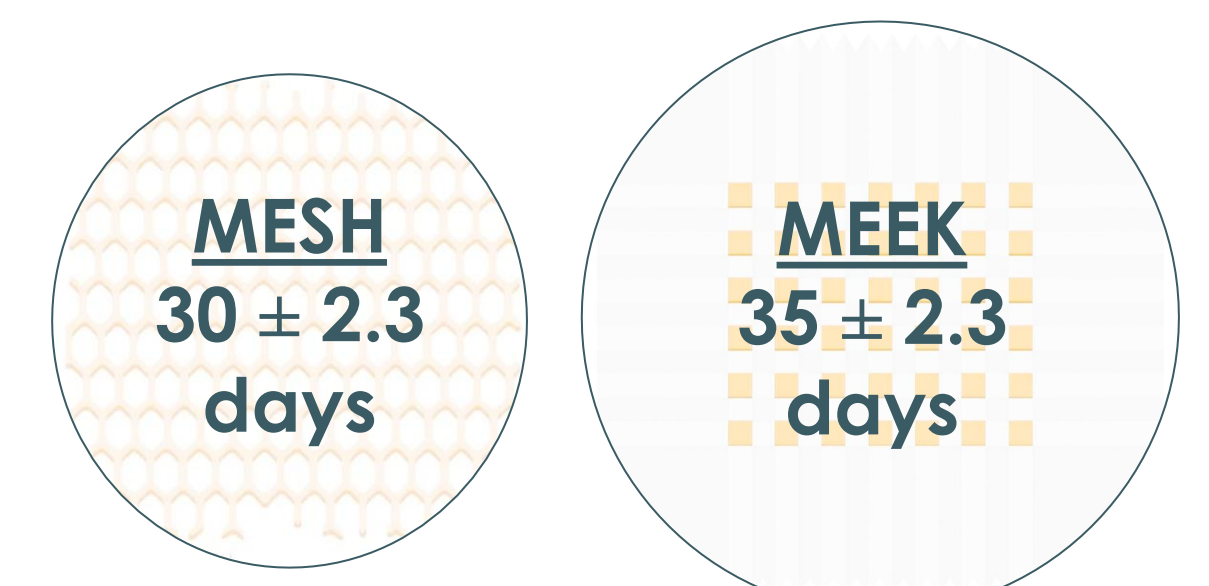


DLQI values of Meek and Mesh subgroups

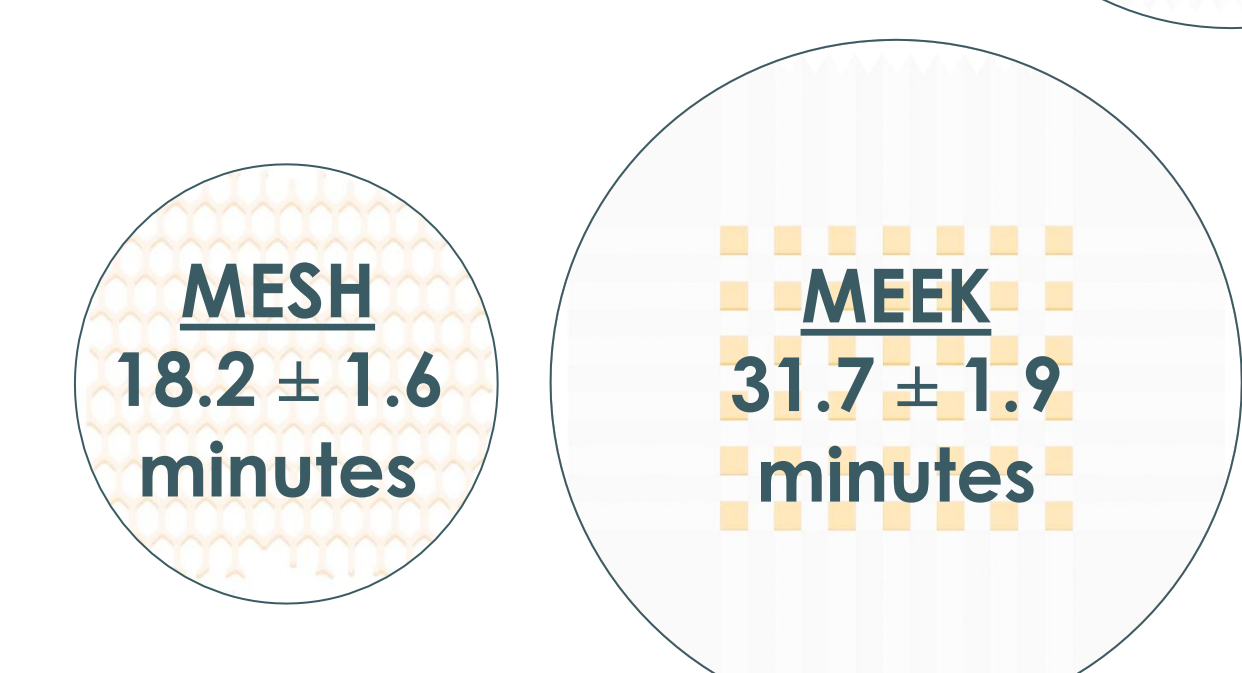


*A lower DLQI value indicates a higher life quality

Days to complete wound healing



Operating time



Reoperations

10 reoperations reported, of which:

- 6 on MEEK only
- 2 on both MEEK and MESH
- 2 unknown

CONCLUSION

No (significant) differences in health-related quality of life were found when comparing Meek vs. Mesh in patients with (burn)wounds covering less than 20% of the TBSA. Visually, it appears that a 1:3 mesh expansion may lead to faster recovery in the short term compared to 1:3 Meek micrografting, with no significant long-term differences between Mesh and Meek techniques. Several other variables (time to complete wound healing, operating time, reoperations) point towards Meek micrografting being more expensive.