efficient and comfortable care of (burn) wounds and epitomize a dressing beyond the 'ideal'.

Declarations of interest

None.

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Sebastian P. Nischwitz[a,b,*]
Elisabeth Hofmann[a,b]
Lars-Peter Kamolz[a,b]

[a]*COREMED — Cooperative Centre for Regenerative Medicine, Joanneum Research Forschungsgesellschaft mbH, Graz, Austria*

[b]*Division of Plastic, Aesthetic and Reconstructive Surgery, Department of Surgery, Medical University of Graz, Graz, Austria*

* *Corresponding author at*: Joanneum Research Forschungsgesellschaft mbH, COREMED — Cooperative Centre for Regenerative Medicine, Neue Stiftingtalstrasse 2, 8010 Graz, Austria.
E-mail address: sebastian.nischwitz@joanneum.at (S. Nischwitz).

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Letter to the Editor

Response to the article: "The impact of skin allograft on inpatient outcomes in the treatment of major burns 20-50% total body surface area — A propensity score matched analysis using the nationwide inpatient sample" by Sheckter et al. (Burns, 45, 2019)

Dear Editor,

With interest I have read the article "The impact of skin allografton inpatient outcomes in the treatment of major burns 20-50% total body surface area — A propensity score matched analysis using the nationwide inpatient sample" by Sheckter et al. (Burns, 45, 2019). It is always good that "assumptions" are tested using a scientific approach and the results put the use of allografts in a new light.

A few comments need to be made, however:

- It should have been made clear that this research, and therefore its conclusion, is most likely solely about cryopreserved allografts, the type of allograft preferred in the United States. Glycerolized allografts are more commonly used in Europe and in some other countries around the world [1,2] (source: Euro Skin Bank, Beverwijk, the Netherlands). This type of allograft has different immunologic properties [3] and while it is unknow and unlikely that outcomes with glycerolized allografts would have been different, it should have been mentioned in the article.

- Cost and availability, mentioned by the authors as practical "problems" are different between the two preservation techniques. In fact, in the referenced article [4], which I published in 2011, I made a specific distinction between glycerolization and cryopreservation with regard to cost and availability, both in favor of the glycerolization technique, an observation that was also supported by an article by Janezic in burns [5]. Also worth mentioning is that most alternatives for allografts, particularly the different types of dermal matrices, are generally very expensive as well.
- Allografts play a role in the sandwich technique [6–8]. While I do realize that this was not the topic of the research, it perhaps should have been mentioned in the discussion part of the article.

I am not disputing the results of the research project and it is doubtful that an analysis of the use of glycerolized cadaver skin in the same indications would have shown different clinical outcomes, but a somewhat broader scope could have added value to the article.

Conflict of interest

The author declares "No conflict of interest".

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Michel H.E. Hermans
Hermans Consulting LLC, 10184 NW 52nd Terrace, Doral, FL 33178, United States

E-mail address: hci@hermans-hci.com (M. Hermans).

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Letter to the Editor

Reply: The impact of skin allograft on inpatient outcomes in the treatment of major burns 20–50% total body surface area — A propensity score matched analysis using the nationwide inpatient sample

Dear Editor,

We appreciate the letter by Hermans in response to the recent analysis of allograft in the acute treatment of major burns 20–50% total body surface area (TBSA) [1]. He raises many excellent points, which deserve further discussion.

In the current analysis [1], the potential ill effects of alloimmunization following the use of skin allograft were discussed. Though little research has investigated this question, clinical evidence suggests that engraftment of skin allograft may lead to the formation of alloantibodies [2]. While this certainly could impact burn survivors requiring future hematopoietic, solid organ, or vascularized composite allotransplantation, the long-term effects of such alloantibodies are unknown. Hermans suggests that the immunogenicity of glycerolized allograft is significantly less than cryopreserved allograft based on his investigations [3,4]. Furthermore, Hermans reminds us that glycerolized skin allograft is less expensive, given the lower cost of processing. In the US, the majority of skin allograft is cryopreserved, in contrast to Europe where most of the product is glycerolized [5]. The differences in clinical outcomes between these two products should be investigated if the combined clinical and economic profile of glycerolized products is better.

Hermans also discusses the *sandwich* technique [6] as another use of skin allograft that was not specifically discussed in the manuscript. While skin allograft is primarily utilized by most burn surgeons as an intermediate, temporary coverage option for freshly excised burn wounds, the sandwich technique uses skin allograft as a temporary coverage of widely meshed autograft. When widely meshed autografts (3:1 and greater) are used to close large wounds, the open interstices could potentially present opportunity for infection and insensible fluid losses. In the current analysis, the simultaneous use of allograft and autograft was not investigated. Furthermore the database utilized for this research does not specify whether the allograft was used as a *sandwich* on top of autograft or whether it was placed directly on the wound bed.

As our field advances and technology improves, it is important that we take the time to reevaluate our standards of care. The use of allograft in burns seems to have evolved. The product was initially used in cases whereby %TBSA of excised tissue was in excess of donor skin, thereby acting as a bridge until donor sites healed [7]. More recently, skin allograft is used in smaller burns, possibly to stage the procedure and to ensure a more "prepared" wound bed for skin grafting. However, there are no clear indications or guidelines regarding this technique. The use of allograft results in a prolonged hospital stay and higher overall treatment cost. Thus if the main indication for allograft placement is priming a wound bed or to ensure wound