

Reply: The Preferential Use of Subcutaneous Arteries (SCIA-SB and SIEA) in Abdominal-based Autologous Breast Reconstruction With a Modified Flap Design

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Dear Sir/Madam,

We would like to thank our colleagues for commenting on our recently published work.¹ We are pleased to see that subcutaneous vessels crossing the inguinal ligament to reach the abdomen are receiving renewed attention. It is natural and appropriate for every author to bring their own perspective to the discussion. With the utmost respect for the authors, we will address the points they have raised.

It is true that our works were published almost simultaneously.^{1,2} However, it is not a priority for us to debate, as if in competition, who published first or within a matter of weeks. We take pride in our relatively substantial published case series of 18 consecutive flaps, which are well documented. Some of them have already been presented at conferences in 2023 and 2024, as disclosed in the footnotes of our article. At the time of preparing this response, our case series has expanded further, as we consistently utilize these subcutaneous vessels in all abdominal-based autologous breast reconstructions, rather than restricting their use to selected cases.

We would like to emphasize that neither we nor the authors have published anything entirely novel that warrants a claim to primacy. On this note, we strongly encourage revisiting the broader literature on the superficial inferior epigastric artery (SIEA), which is too often overlooked or not cited in discussions about the superficial circumflex iliac artery perforator (SCIP) flap. It would be presumptuous for anyone to claim they were the first to utilize previously unused vessels in breast reconstruction.³

The goal of our article was to leverage emerging technologies within the plastic surgeon's toolkit and to refine flap design to optimize the use of subcutaneous vessels originating from the femoral artery. To our knowledge, ours is the first case series reporting a 100% feasibility of harvesting an abdominal flap based on either the superficial circumflex iliac artery (SCIA) superficial branch or the SIEA, in which these vessels are clearly defined and

distinguished. Modification of flap design, guided by aesthetic surgical principles and imaging devices such as color-coded duplex sonography and indocyanine green angiography, was fundamental to achieving this goal.

Schweiger et al² suggest using the acronym superficial circumflex iliac superficial branch perforator (SCISP) to “simplify” and “maintain consistency.” However, we respectfully disagree that introducing the acronym SCISP in a field already saturated with acronyms contributes to simplification or consistency.

The so-called superficial branch of the SCIA is commonly referred to in the existing literature using more established acronyms such as SCIA⁴ or SCIA-SB.⁵ Some authors even prefer the term “medial perforator” instead of “superficial branch.”⁶ The acronym SCISP, which we have not encountered in other publications—though oversight is possible—adds unnecessary complexity to an already convoluted terminology landscape.

In their article,² the authors seem to overlook the complete lack of distinction between the SIEA and the superficial branch of the SCIA. Although word-count limitations in their article may have prevented a detailed discussion of the distinction between these 2 vessels, their comment would have been a great opportunity to clarify how the flap presented in their clinical images differs from a typical SIEA flap. Simply hand-drawing vessels and labeling them without providing supporting explanations is, in our opinion, insufficient.

In the work by Fernandez et al,⁷ to which the authors have referred us, there is no mention of a distinction between the SIEA and the superficial branch of the SCIA. The term SIEA is mentioned only once in the entire article. Furthermore, none of the references cited in the study by Fernandez et al article address the differentiation between the SIEA and the superficial branch; they exclusively focus on the SCIP, with no discussion of the SIEA whatsoever.

We find it disappointing that one could discuss autologous breast reconstruction based on the superficial branch (and present it as an innovation) without trying to define how it differs from the SIEA.

In our own work,¹ we have faced this nomenclature challenge directly. We have studied it thoroughly, and, in the absence of clear answers in the literature, we have made a concerted effort to differentiate these 2 entities based on the available literature.³

The belief that the SIEA follows a strictly medial path whereas the superficial branch of the SCIA follows a lateral one is a misconception that is widely spread in the

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Table 1. Some Relevant Studies Describe the Course and Angiosome of the SIEA as Lateral Rather Than Medial

Authors	Title	Journal (Year)
Taylor and Daniel	The anatomy of several free flap donor sites	<i>Plast Reconstr Surg</i> (1975)
Grotting	The free abdominoplasty flap for immediate breast reconstruction	<i>Ann Plast Surg</i> (1991)
Chevray	Breast reconstruction with superficial inferior epigastric artery flaps: a prospective comparison with TRAM and DIEP flaps	<i>Plast Reconstr Surg</i> (2004)
Holm et al	The versatility of the SIEA flap: a clinical assessment of the vascular territory of the superficial epigastric inferior artery	<i>J Plast Reconstr Aesthet Surg</i> (2007)
Aydin and Nasir	Free SCIA/SIEA skin flap: a dual blood supply approach to groin region	<i>Microsurgery</i> (2007)
Tregaskiss et al	The cutaneous arteries of the anterior abdominal wall: a three-dimensional study	<i>Plast Reconstr Surg</i> (2007)
Shaverien et al	Arterial and venous anatomies of the deep inferior epigastric perforator and superficial inferior epigastric artery flaps	<i>Plast Reconstr Surg</i> (2008)
Rozen et al	The variability of the superficial inferior epigastric artery (SIEA) and its angiosome: a clinical anatomical study	<i>Microsurgery</i> (2010)
Tremblay et al	Cutaneous vascularization of the femoral triangle in respect to groin incisions	<i>J Vasc Surg</i> (2016)

literature on the SCIP flap. In fact, most studies on the SIEA show that it follows a lateral course and perfusion pattern, and travels consistently lateral to the superficial inferior epigastric vein and the linea semilunaris.

Surgeons familiar with breast reconstruction using the SIEA flap (and its related literature) are well aware that the perfusion of the SIEA sometimes struggles to extend beyond the midline, given its predominantly lateral distribution in the abdomen.

We include a table reporting relevant studies on the SIEA (Table 1), which, regrettably, are almost never cited in SCIP-related publications. If so, they are cited without due consideration of their content.

In conclusion, we believe that for the sake of clarity and consistency, it is preferable to retain existing acronyms rather than introducing new ones for the same anatomical structures. Furthermore, we advocate for greater accuracy in anatomical descriptions.

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DISCLOSURE

The authors have no financial interest to declare in relation to the content of this article.

REFERENCES

1. Franchi A, Patanè L, Hummel CE, et al. The preferential use of subcutaneous arteries (SCIA-SB and SIEA) in abdominal-based autologous breast reconstruction with a modified flap design. *Plast Reconstr Surg Glob Open*. 2024;12:e6252.
2. Schwaiger K, Scharfetter S, Russe E, et al. Breast reconstruction using the superficial circumflex iliac artery superficial branch perforator (SCISP) flap [Published online October 15, 2024]. *Plast Reconstr Surg*. 2024.
3. Franchi A, Patanè L, Hummel CH, et al. Confusion regarding the anatomy of the superficial inferior epigastric artery and the superficial circumflex iliac artery superficial branch. *Plast Reconstr Surg Glob Open*. 2024;12:e5714.
4. Fuse Y, Yoshimatsu H, Karakawa R, et al. Novel classification of the branching patterns of the superficial branch and the deep branch of the superficial circumflex iliac artery and the superficial inferior epigastric artery on computed tomographic angiography. *J Reconstr Microsurg*. 2022;38:335–342.
5. Schiltz D, Lenhard J, Klein S, et al. Do-it-yourself preoperative high-resolution ultrasound-guided flap design of the superficial circumflex iliac artery perforator flap (SCIP). *J Clin Med*. 2021;10:2427.
6. Suh HSP, Jeong HH, Choi DH, et al. Study of the medial superficial perforator of the superficial circumflex iliac artery perforator flap using computed tomographic angiography and surgical anatomy in 142 patients. *Plast Reconstr Surg*. 2017;139:738–748.
7. Fernandez-Garrido M, Nunez-Villaveiran T, Zamora P, et al. The extended SCIP flap: an anatomical and clinical study of a new SCIP flap design. *J Plast Reconstr Aesthet Surg*. 2022;75:3217–3225.