

November, 23, 2020



Report of a Member of the Thesis Council on the Thesis by REMEZOV Andrey Vladimirovich on "Staged Surgical Treatment of Purulent Necrotic Complications of Diabetic Foot Syndrome".

Submitted with conformity for the degree of Candidate of Medical Sciences

Dear Colleagues,

I have had the pleasure of reading Dr. Remezov's thesis. It consists of an introduction and three chapters in addition to a conclusion and practical recommendations. I will review it in order.

Introduction:

The introduction is logically presented. Enthusiasm for it would be increased if the candidate would consider updating the citations. In fact, most of the citations are more than a decade out of date. This is particularly true for estimations of diabetes prevalence, which are more than twice what the candidate mentions. I would direct him to the International Diabetes Federation World Diabetes Atlas.¹ Additionally, the candidate might consider updating much of the estimates on the prevalence and significance of diabetic foot complications. A technical review may be found here.²

Chapter 1- Literature Review

The first sentence has a very minor issue: the Nobel is actually the "Nobel Prize in Physiology or Medicine", not "Nobel Peace Prize in Medicine".

The discussion of various classification systems is tantalizing—but I believe needs just a bit more development. Why select the Wagner system when it is, amongst all systems, the least predictive of poor outcome? Why have many surgeons considered adopting a "threatened limb





classification" that marries podiatric and vascular surgical components rather than just a wound classification system?

Chapter 2- Materials and Methods

The candidate might further clarify whether this study was randomized in nature and whether it was prospective or retrospective. Furthermore, why 100 subjects in the active and 75 in the control? Was there some power calculation that led to this?

The description of surgical decision making is particularly thoughtful and well done in this section.

Chapter 3- Clinical Study

Reporting patient groups based on Wagner grades is rather distracting—and potentially reduces the potential descriptive impact of these data. Essentially the candidate is creating a less specific version of the UT Wound Classification System by adding infection to wound depth (see Table 15). Furthermore, Table 16 is harder to decipher as well. Were there really no patients without osteomyelitis that didn't receive an angioplasty?

Scheme 3 is particularly helpful and descriptive.

The comparison of the active and standard therapies is compelling. It could be made even more compelling (and potentially publishable) if a comparison of both groups by WIFI score was made. That could be visually quite impressive.^{3–5}

Conclusion

This section is a particular strength of the thesis. It is laid out practically and points to very real change made by the candidate as a surgeon-scientist. The candidate might consider (again) specifying what types of "skill sets" would be ideal to carry out and to replicate the surgical





DAVID G. ARMSTRONG, DPM, MD, PhD Professor of Surgery Division of Vascular Surgery & Endovascular Therapy Director Southwestern Academic Limb Salvage Alliance (SALSA) Department of Surgery

service. The candidate might be directed toward Fitzgerald and coworkers, Wukich, et al and Miller and coworkers for inpatient guidelines.^{6–8}

In summary, the independently conducted research by Remezov is both novel and a worthy addition to the literature. It meets the requirements established by the University for awarding of the degree to which he has applied.

Respect David G. Armstrong, DPM, MD, PhD

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University of Southern California 1520 San Pablo Street, Suite 4300, Los Angeles, California 90033 – Tel: 323 865 1260 – www.diabeticfootonline.com





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