

Supplement Table S1

Table S1. Participant comments and research observations after take-home testing.

Participant	Comments and Researcher Observations
1	<ul style="list-style-type: none"> Reported that he did not use the research prosthesis at times of exercise or sitting at his desk for work but did tasks such as grocery shopping and drumming practice Reported that the socket was comfortable Reported that a 1-ply sock was used during research prosthesis use where traditionally a 7-ply sock is used daily Reported that he fell off his bicycle during take-home testing, which he believed induced phantom pain and sharp nerve pain he had never had before Reported that he did not feel the insert in the research socket, nor was inconvenienced from suction suspension (because traditional was a 1-way valve, no EV, same foot)
2	<ul style="list-style-type: none"> Reported that he did not notice the insert in the research socket Researcher observed that upon returning to the lab, the distal end of the residual limb was dark purple, and dry skin indicated there was no distal end contact. Clinical evaluation, "clay ball test" confirmed this lack of distal end contact. This may have been exacerbated by adding a sock from 3 to 5 ply Reported that the extra weight of the prosthesis compared to his traditional increased the pistoning, and his desire to add sock ply
3	<ul style="list-style-type: none"> Participant felt that the edge of the insert caused redness, irritation and discomfort at distal tibia region Reported that the suction suspension was different than the traditional elevated vacuum and this caused numbness, tingling in the distal end of the residual limb after all day use Reported that the ESAR foot on the research prosthesis created a different alignment, foot flat height and push-off spring from the traditional direct laminated blade Reported that the research liner was thicker, stiffer and less sticky than the traditional liner, creating fit issues for the participant's wear schedule
4	<ul style="list-style-type: none"> Reported that he reduced the hours of prosthesis use due to the weight of the prosthesis Reported that not having the elevated vacuum like his regular prosthesis created more pistoning, and it did not feel as secure Reported that fit improved as he added (1 and 2 ply) socks