



## **Accessible and Breathable Prosthetic Liner**

Life Sciences    Prosthetics    Prosthetic Liner    Research    Rehabilitation

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**University of Pittsburgh researchers have created an innovative prosthetic liner that enhances breathability and accessibility for amputees. It utilizes advanced materials and design to improve comfort and skin health.**

There is a critical need for prosthetic liners that can reduce the risk of skin issues and discomfort for amputees. Many existing liners are not breathable, leading to sweat accumulation and skin irritation. This novel prosthetic liner addresses these concerns with a breathable weave design, allowing for better air circulation and moisture wicking. Its adjustable design should also comply with the varying volume of residual limbs over time.

### **Indications**

Improving prosthetic comfort for daily wear

Preventing skin complications in amputee patients

Enhancing prosthetic fit

Accommodating long-term changes in residual limb size without the need for multiple liners

### **Advantages**

Increased breathability reduces the risk of skin irritation

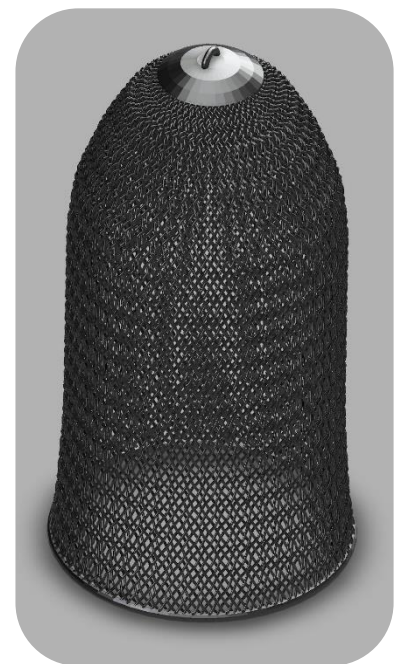
Moisture-wicking fabric prevents sweat accumulation

Dynamic adjustability to limb volume ensures a consistently secure fit

Eliminates the need for frequent resizing or replacement, offering long-term cost savings

### **Invention Readiness**

The prosthetic liner is currently at the prototype stage, with extensive user feedback indicating a strong market fit. Preliminary studies have demonstrated high probability of reduced incidence of skin complications compared to standard liners.



#### **Related Publications:**

[Does socket liner material affect clinical outcomes in lower limb prosthesis users?](#)

#### **Inventors**

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#### **IP Status:**

In progress



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