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Fabric Sleeve for Percutaneous Transluminal Device Provides Embolic Protection

IP Status: Issued US Patent; **Application #:** 10/884,600

Percutaneous Transluminal Devices and Angioplasty and Atherectomy Risks

Using a porous sleeve as a filter placed over the balloon catheter on a percutaneous transluminal device protects from embolisms and reduces the risks associated with angioplasty, atherectomy and other similar procedures. Percutaneous transluminal devices can dislodge particles, such as calcium and plaque, during the procedure. These particles can block vessels, often causing severe complications including death. For procedures using these types of devices, there is a crucial need for a method of preventing these particles from blocking vessels without inhibiting the mobility of the guidewire and deployment device.

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Embolic Protection Device

Unlike other percutaneous transluminal devices that attach to the guidewire, this device uses a porous sleeve that is placed over the balloon catheter instead. The balloon expands the porous sleeve, which then functions as a filter. The expanded filter provides embolic protection from any particles that may be dislodged during the procedure. By eliminating the need to attach the filter to a guidewire, the wire can be guided easily to the target location and the filter deployed. This product can additionally be added to any manufacturer's angioplasty system, without adding much bulk or changing the required type of guidewire.

BENEFITS OF POROUS SLEEVE ON PERCUTANEOUS TRANSLUMINAL DEVICE FOR EMBOLIC PROTECTION:

- Improves mobility and placement accuracy during angioplasty and atherectomy procedures
- No need for a separate deployment mechanism
- Less bulk in the system
- Can use system's native guidewire for optimal maneuverability

Fulfillment Details Licensee will receive rights to practice the issued patent for the purposes of developing and manufacturing a commercial product.

Phase of Development Proof of Concept: A working prototype is available for testing.

Technology ID
z03040

Category
Life Sciences/Medical Devices

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