TECHNOLOGY OFFERING FOR:

VERIVAS DIALYSIS ACCESS CONDUIT ("VDAC")

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Key Words: Vascular access, dialysis access, vascular conduit

Background: Verivas Solutions Inc. is a recently formed incubator for innovative medical ideas and devices with a patent pending device, the "Verivas Dialysis Access Conduit" (VDAC). VDAC is a new alternative to conventional vascular access.

Despite being one of the most common medical procedures, hemodialysis access is troubled by the high frequency of associated problems including bleeding, clotting, infection, vessel stenosis (narrowing) and aneurysm formation (abnormal vessel enlargement). These complications are largely due to devices having a direct connection to the blood stream or residing (at least partially) within the lumen of the blood vessel being accessed. Additionally, there are many instances where patients are poor candidates for standard access procedures and require alternative procedures with lower rates of success. VDAC is likely to be especially helpful in these circumstances, allowing long term vascular access with low patient risks.

Technology: The Verivas Dialysis Access Conduit ("VDAC") is a new alternative to conventional vascular access that eliminates or significantly reduces risk factors associated with repeated procedures. VDAC is a stent reinforced tubular conduit with a self-sealing, removable valve at one end and a fibrous outer covering allowing tissue ingrowth of the indwelling portion of the conduit. VDAC can be placed (or removed) through a small incision without the need for general anesthesia. VDAC can be left in place over extended periods of time or removed as desired.

Instead of a direct connection to the blood stream or residing within a blood vessel, VDAC sits on the surface of a blood vessel but is external to the lumen. Therefore, it is not in continuity with the blood stream though still enables "temporary directed access" (TDA) to the blood vessel lumen for associated vascular procedures, the most common of which is hemodialysis. After use, the connection with the blood vessel lumen closes and heals over until next use.

Commercial Applications: Hemodialysis access is one of the most commonly performed invasive procedures performed (over 50 million dialysis access procedures yearly, worldwide). Additionally, VDAC has utility for plasmapheresis procedures, chemotherapy, and procedures when repeated vascular access is needed.

Advantages: VDAC resides external to the blood vessel being accessed; therefore, it is less prone to bleeding, clotting, systemic infection, vessel stenosis and obstruction. It is a safer alternative to current hemodialysis access grafts, catheters and other secondary vascular access procedures.

Stage of Development: Initiation of prototyping

Intellectual Property Information: International patent application pending, PCT/US22/19204

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