13 April 2021

The Honorable Suzan DelBene
Vice Chair of Congressional Caucus on Diabetes
U.S. House of Representatives
Washington, DC 20515

Dear Representative DelBene:

As stakeholders in supporting new technologies that enhance health and quality of life for patients suffering from kidney disease, vascular disease, heart disease, and vascular trauma, we are asking for your kind support of the attached report language (*see "Addendum"*) in the FY 2022 Defense Appropriations legislation.

Scientists have been trying for decades to develop better ways to repair or replace blood vessels damaged by disease or trauma, and to create safer vascular access for hemodialysis patients, without inducing clotting or infection. This issue is highly important both to our warfighters who may incur battlefield trauma, as well as to our US civilians and veterans who live with kidney, vascular or heart diseases that require safe vascular access or replacement.

With the support of the U.S. Congress, the Department of Defense and the National Institute of Health, new technology has been developed to produce safer, more reliable synthetic replacement blood vessels (known as "vascular grafts") that can address this pressing need. With this innovation, a synthetic blood vessel can be engineered to look, feel, and function much like a human blood vessel, particularly in its capacity to bio-integrate with and be accepted by the body. It can have an extended shelf life and not need refrigeration—the first-ever bio-integrating vessel with such capabilities. And most importantly, it is expected to offer longer term viability and reduced risk of infection, relative to existing synthetic blood vessels.

This technology has the potential to greatly improve the health and longevity of patients with kidney failure, and save soldiers' lives on the battlefield by revascularizing limbs that have suffered traumatic injury. Vascular grafts are also routinely used in surgeries to bypass failing peripheral and coronary arteries. But currently-available grafts have had only limited success in these situations, due to their tendency to clot or become infected. Meanwhile, demand for a safer, more reliable synthetic blood vessel continues to grow, due to increasing rates of kidney, vascular and heart disease, and general aging of the population.

We request your kind support of the attached language that we believe could be of great benefit to the American people. Thank you.

Respectfully,

American Association of Kidney Patients

The Kidney Research Institute

The Center for Dialysis Innovation

Keiretsu Forum Northwest

Addendum

We believe this technology can best be advanced via continued support from the Department of Defense Combat Readiness Medical Research Program. As such, we are requesting the following report language for the Defense Appropriation Bill for this Program:

"The Committee continues to expect the Assistant Secretary of Defense Heath Affairs to fund research and development of rapidly deployable acute and chronic wound care therapy engineered to address vascular repair of traumatic injury in order to restore circulation as quickly as possible to prevent amputation risk and severe infections. The Committee further recommends that research should address the "golden hour" for servicemembers with life threatening injuries by supporting research which yields infection-resistant and thrombosis-resistant vascular graft technologies that reliably ensure favorable outcomes, require less-frequent intervention, are more cost-effective, and have extended shelf life with little to no refrigeration requirement, allowing wider pre-deployment."