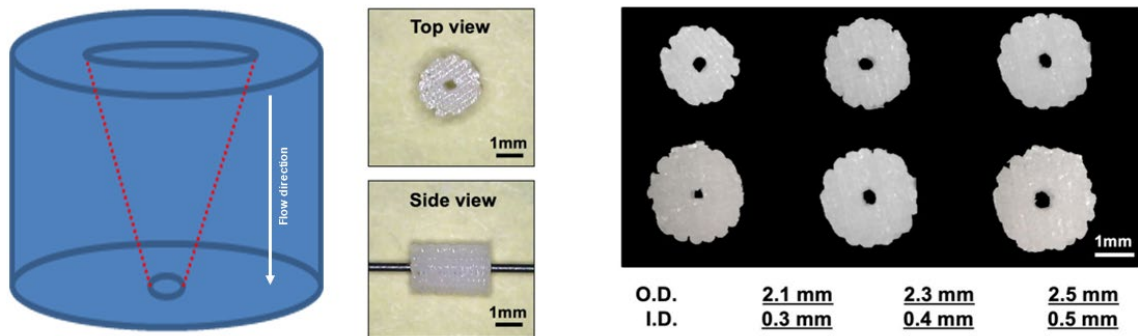


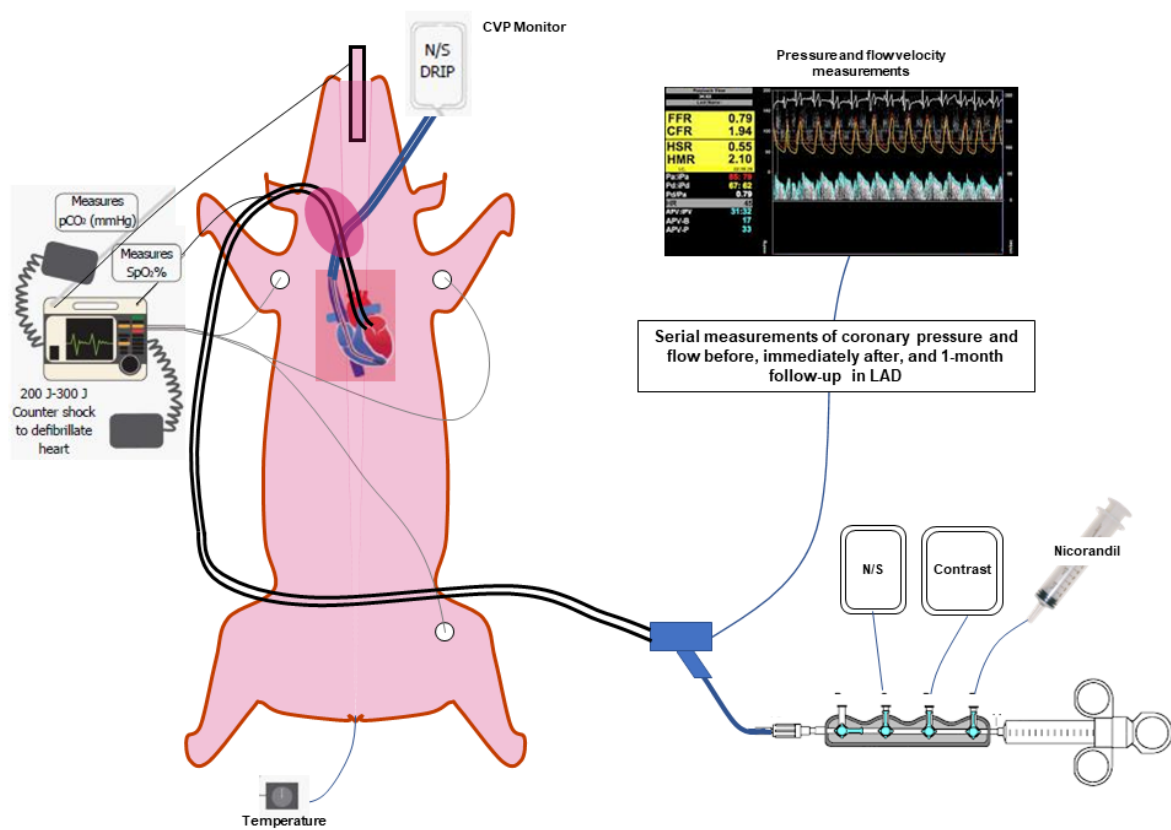
SUPPLEMENTARY DATA

Figure 1 of the supplementary data. Design of vascular occluder



Using a 3-dimensional bioprinting system (3DXPrinter, T&R Biofab, Republic of Korea) equipped with multiple extrusion-based printing heads, the molten polycaprolactone (PCL; MW 43,000, Polyscience Inc., Taiwan, China) was extruded through a metal needle onto a substrate in a layer-by-layer fashion to produce a pre-designed vascular occluder with varying reference vessel sizes (2.5 mm, 2.75 mm, and 3.0 mm). By controlling the inner hole of the vascular occluder, various stenosis severities were created. To facilitate coronary wiring, the inner hole was designed with an inverse funnel shape.

Figure 2 of the supplementary data. Preparation of experimental animal



Preparation of animals and devices for this experiment are schematically presented.

LAD, left anterior descending artery.