

Supplementary material

Zelias A, Khokhar AA, Proniewska K, et al. Percutaneous coronary intervention of a tortuous and complex circumflex lesion using the robotic CorPath GRX system. Kardiol Pol. 2021.

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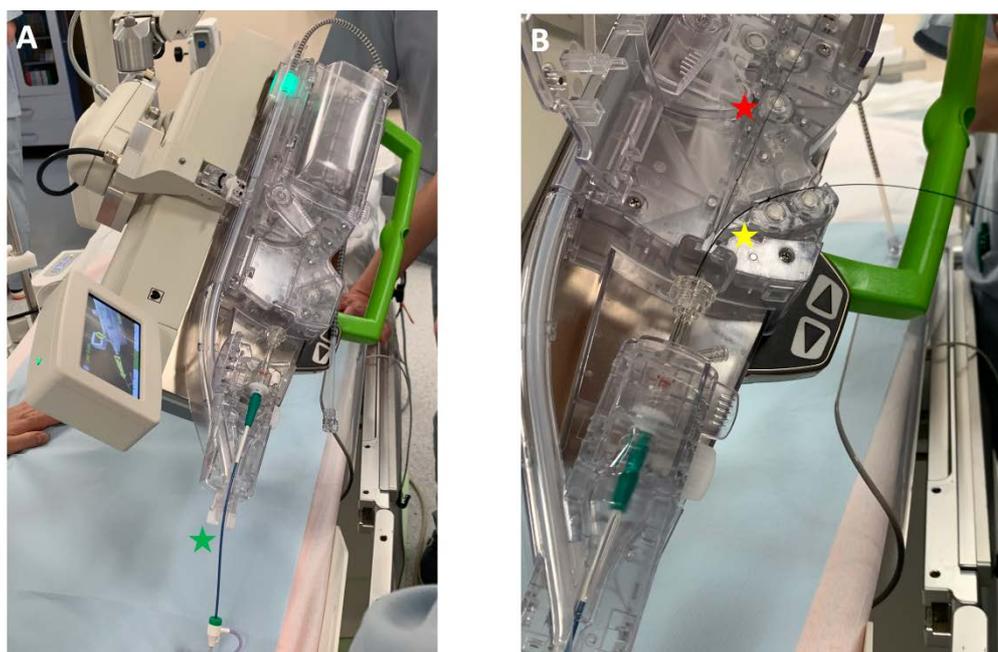


Figure S1. The CorPath GRX (Corindus Vascular systems) consists of two separate components: the robotic arm and device cassette shown here and the control console (*Figure S2*). Following coronary cannulation the guiding catheter is (**A**) connected to the robotic cassette (green star) and fixed in a stable position. The device cassette is then used to insert the required wires (red star) and devices (yellow star) which will be controlled by the operator on the separate console

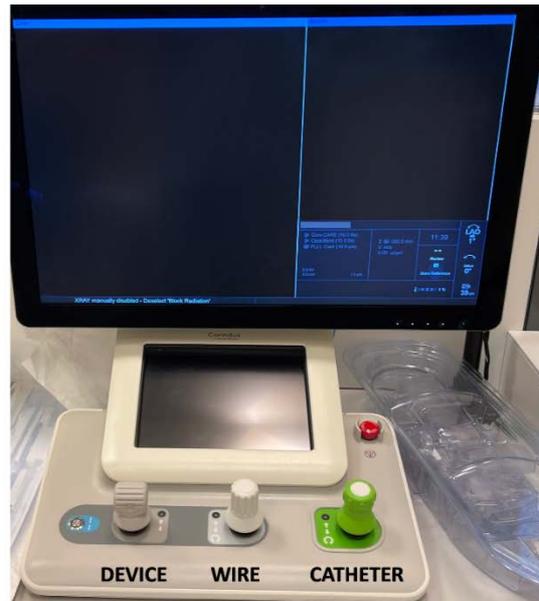


Figure S2. The console system for controlling movement of the guiding catheter (green joystick), coronary wire (middle joystick) and balloon or stent device (left joystick). Both the guiding catheter and wire joysticks enable forward and backward as well as rotational movements. In addition, the joysticks provide a haptic feedback to the operator. Any mono-rail device can be loaded onto the device arm and controlled by the left joystick, enabling robotic control of IVUS or OCT catheters for example



Figure S3. A. The primary operator completed the procedure sat outside the radiation zone without wearing any lead protection devices. From the control console they could independently manipulate the guiding catheter, wire and devices. **B.** On table support and manipulation of the device cassette and devices can be provided by additional operators or nurses. Exchange of devices can be performed without the need for additional fluoroscopy again minimizing radiation exposure