Supplementary Material 3.1  Video depicting the ultrasound-guided injection procedure. Representative video of the ultrasound guidance process and the use of MicroMarker contrast agent to confirm injection in real-time. The needle and left ventricular (LV) wall are labelled at the beginning of the video. Subsequently, the different phases of the injection are indicated below the sonogram. The titles are displayed during the entirety of their respective phases as a representation of time duration. In the advancement phase, the needle is driven into the mid-anterior/septal wall of the heart, and its depth is adjusted. In the injection phase, the bolus is slowly injected into the target, as indicated by the blue arrow. It appears bright on the sonogram through the use of microbubble contrast agent. Note the expansion in the heart wall as the bolus is injected. Importantly, the ventricle remains dark throughout this process, indicating no leakage into the bloodstream is present. In the retraction phase, the needle is retracted from the thorax of the mouse. The bolus remains within the myocardium after needle retraction, confirming successful injection. The view is then adjusted to gauge dispersion of the injectate. The injection depicted in this video corresponds to Figure 3.10a. Tissue depth from the transducer is indicated to the right of the sonogram.