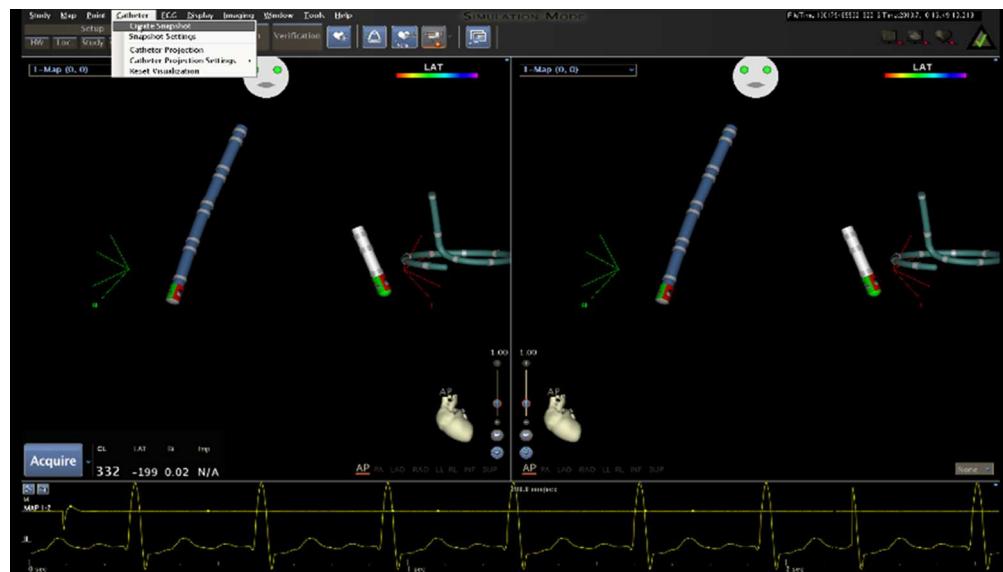




Supp Figure 1
205x125mm (150 x 146 DPI)



Supp Figure 2
230x137mm (142 x 133 DPI)



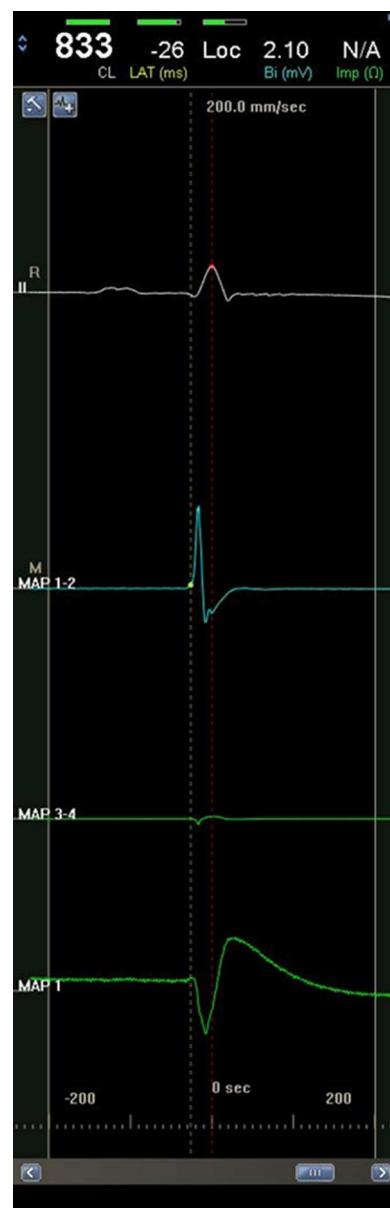
Supp Figure 4
254x149mm (128 x 122 DPI)



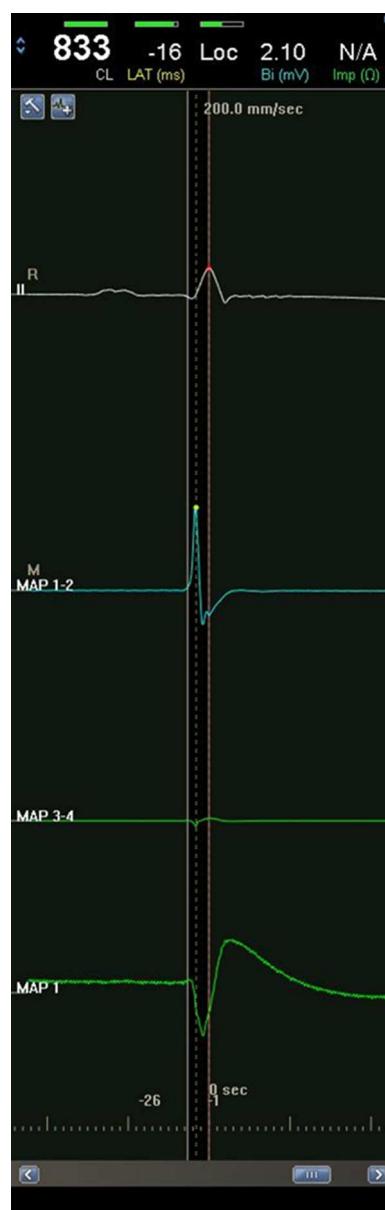
Supp Figure 5
254x153mm (128 x 120 DPI)



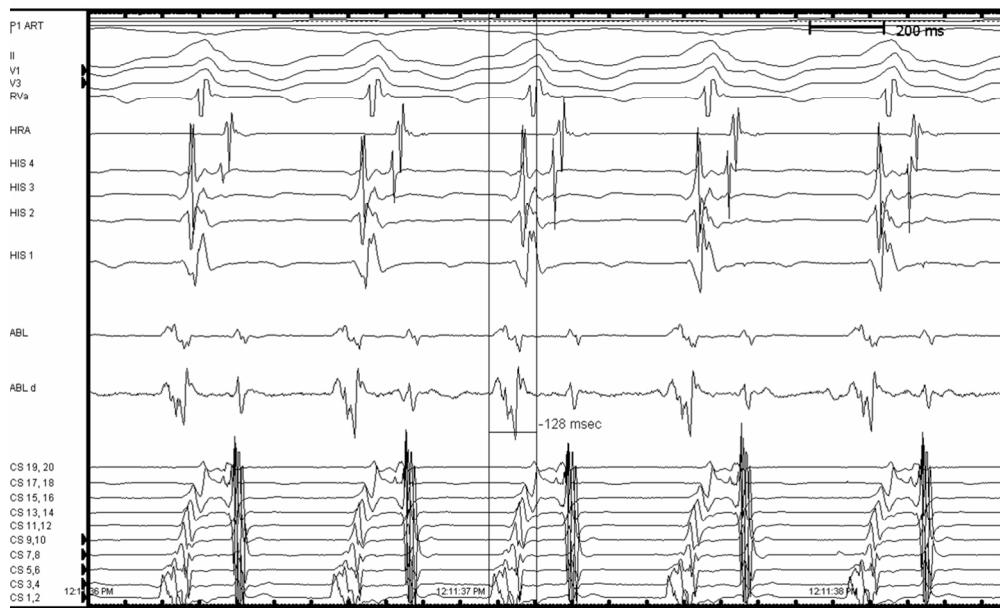
Supp Figure 6
254x154mm (128 x 118 DPI)



Supp Figure 7
57x177mm (150 x 150 DPI)



Supp Figure 8
61x190mm (147 x 147 DPI)



Supp Figure 9
253x151mm (122 x 129 DPI)

1
2
3
Table 1: Performance levels of the microaxial flow device and corresponding revolutions per minute of
4 the impeller. The flow rate is calculated for each performance level.
5
6
7
8

Performance level	Revolutions per minute	Calculated flow rate (L/min)
P0	0	0.0
P1	25,000	0.0 - 0.5
P2	35,000	0.4 - 1.0
P3	37,000	0.7 - 1.3
P4	40,000	0.9 - 1.5
P5	43,000	1.2 - 1.8
P6	45,000	1.4 - 2.0
P7	47,000	1.6 - 2.2
P8	50,000	1.9 - 2.5

Supplemental materials

Methodology for recording a location-only point using the impedance based mapping features of the magnet based mapping system (CARTO3).

1. Turning on Extended Features of the magnet based mapping system.

Go to Tools/Administration Tools/Enter password/Go to the Upgrade Tab/Check the Extended Features Box/Hit OK (Supplementary Figures 1 & 2).

2. Click on Map background to make the Main Map Viewer active. Press Shift+W to turn on “Hanging Electrodes”. Press Shift+W twice to display the electrodes and the catheter tip (Supplemental Figure 3).

3. To mark a point using the Hanging Electrodes, go to Catheter/Click Create Snapshot/enter a name for the snapshot (using the local activation time taken from the Prucka system or by using the calipers on the Annotation window of the magnet based mapping system), and click Save (Supplemental Figures 4 & 5).

4. To display a snapshot go to Catheter/Click Snapshot Settings/Check the box of the snapshot to be displayed (Supplemental Figure 6)

Measurement of local activation time in the Annotation Window of the magnet based mapping system.

1. Normal Annotation Window view, displaying -200 to 200 msec by default (Supplemental Figure 7).

2. Moving Window Calipers to find local activation time (Supplemental Figure 8).

3. Measurement of local activation time using the Prucka system (Supplemental Figure 9). The local activation time in milliseconds is determined by measuring time to maximal

surface QRS deflection from the local pre-potential. This value is entered as the name of the snapshot in the magnet based mapping system.

For Peer Review