## **Supplementary Material**

Supplemental Digital Content Fig. 1.

Four-quadrant plot analysis used to examine the trending ability for the  $\Delta CO_{ClearSight}$  compared with that for the  $\Delta CO_{TD}$  after artificial valve deployment. The shaded gray area is the exclusion zone that was set as the percentage change in cardiac output (CO) < 5%.  $\Delta CO_{ClearSight}$ : cardiac output change measured with ClearSight,  $\Delta CO_{TD}$ : cardiac output change measured with PAC thermodilution.

