

compared to day 1, while NPSC migration at day 3 was increased over that at day 1 when transplanted in the HA-Lm gel (not significantly different, B). Sustained NPSC migration at day 3 to a distance of 0.23 – 0.345 mm away from NPSC injection site was significantly increased when transplanted in the HA-Lm gel compared to bolus (C). * $p < 0.05$ compared to bolus injection group of same time point.

Figure 6: Pre-incubation with AMD3100 significantly reduced NPSC migration, but not NPSC retention at 3 days. Representative images illustrate high NPSC retention (A) and reduction in NPSC migration at day 3 (B). Average NPSC retention in the HA-Lm gel is not significantly different with the addition of AMD3100 pre-incubation at 3 days ($p = 0.6377$, B). However, NPSC migration is significantly reduced when pre-incubated with AMD3100 compared to NPSCs transplanted within the HA-Lm gel without AMD3100 pre-incubation (D). * $p < 0.05$ compared to all other groups. Overview scale bar is 250 μm , inset scale bar is 100 μm .

Supplementary Figure 1: Examples illustrating the different criteria for counting labeled NPSC transplants. An example of a labeled cell (•) next to an unlabeled cell (°) based on the outlined criteria (A). An example of a labeled NPSC sharing a boundary with another NPSC, counting as only one labeled cell (arrowhead indicates boundary, B). An example of extracellular QTracker 655 that is not affiliated with an NPSC transplant (arrowheads, C). An example of a labeled, but multi-nucleated cell, indicating that it is apoptotic or an inflammatory cell type has phagocytosed extracellular QTracker 655 (white boundary, D). Scale bar is 10 μm .