

Supplementary Figure Legend

Supplementary Figure 1. ASCL-PLC treatment promotes tissue repair at tenotomy sites in rats.

To create our model, we performed tenotomy of the rat left Achilles tendon and then injected either ASCL-PLCs (1.0×10^7 cells) or control PBS (50 μ l each) into incision sites. Sham-operated rats received only a skin incision without any treatment. One, two or four weeks later, Achilles tendon enthesis regions were harvested, stained with HE and observed under a microscope. N=3 each, 1 week after operation; N=6 each, 2 and 4 weeks after operation. Scale bar=100 μ m. Higher magnification images of regions boxed in lower magnification images (at left) are shown in corresponding images at right.

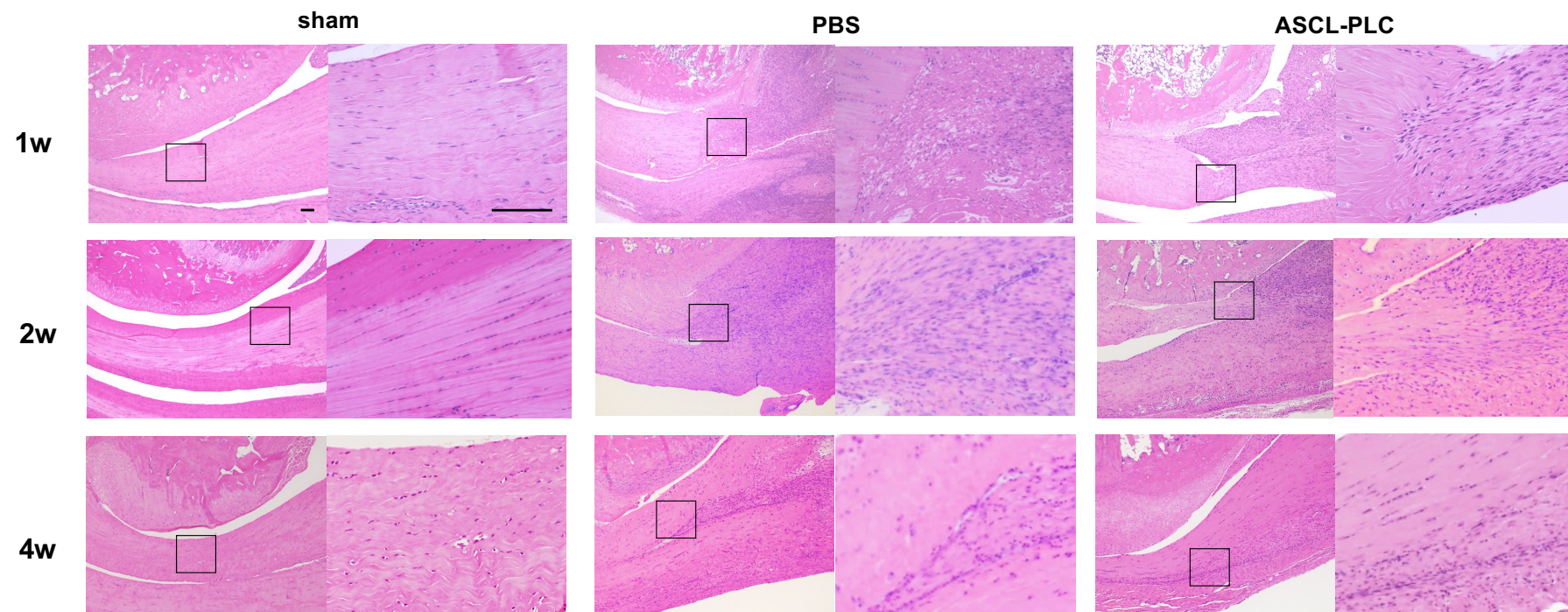
Supplementary Figure 2. ASCL-PLC treatment shortens the repair period at tenotomy sites in rats.

Tenotomy was performed in the rat left Achilles tendon and then incision sites were injected either ASCL-PLCs (1.0×10^7 cells) or control PBS (50 μ l each). One, two or four weeks later, Achilles tendon enthesis regions were harvested, stained with Alcian blue (A), observed under a microscope, and the Bonar score was calculated (B). Data represent mean Bonar score at the indicated time point $\pm$ SD (N=3 each, 1 week after operation; N=6 each, 2 and 4 weeks after operation). Scale bar=100 μ m.

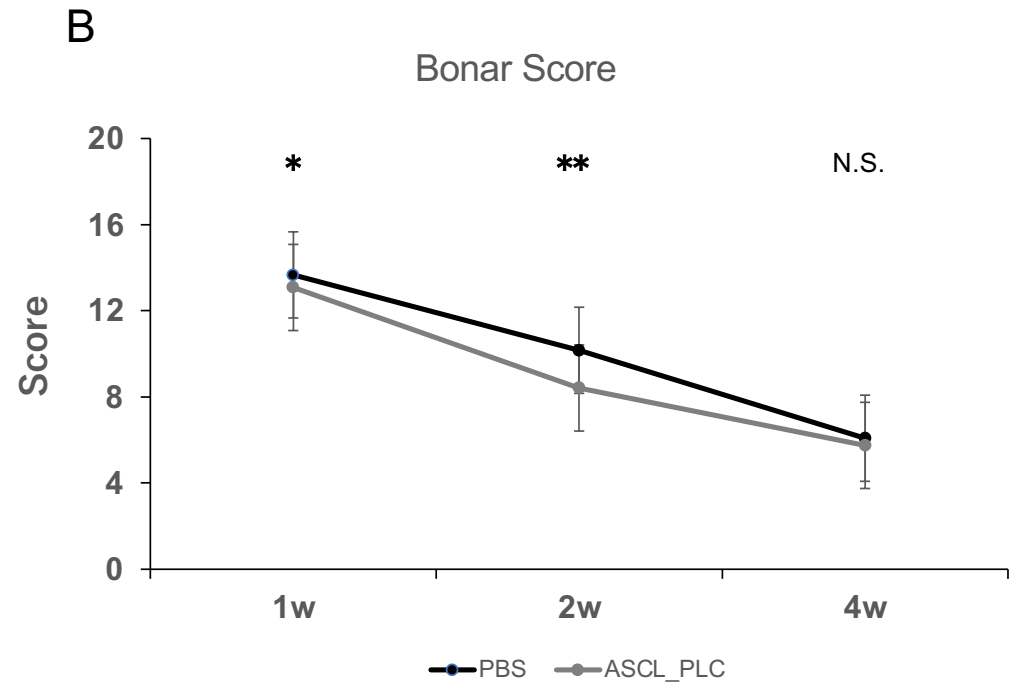
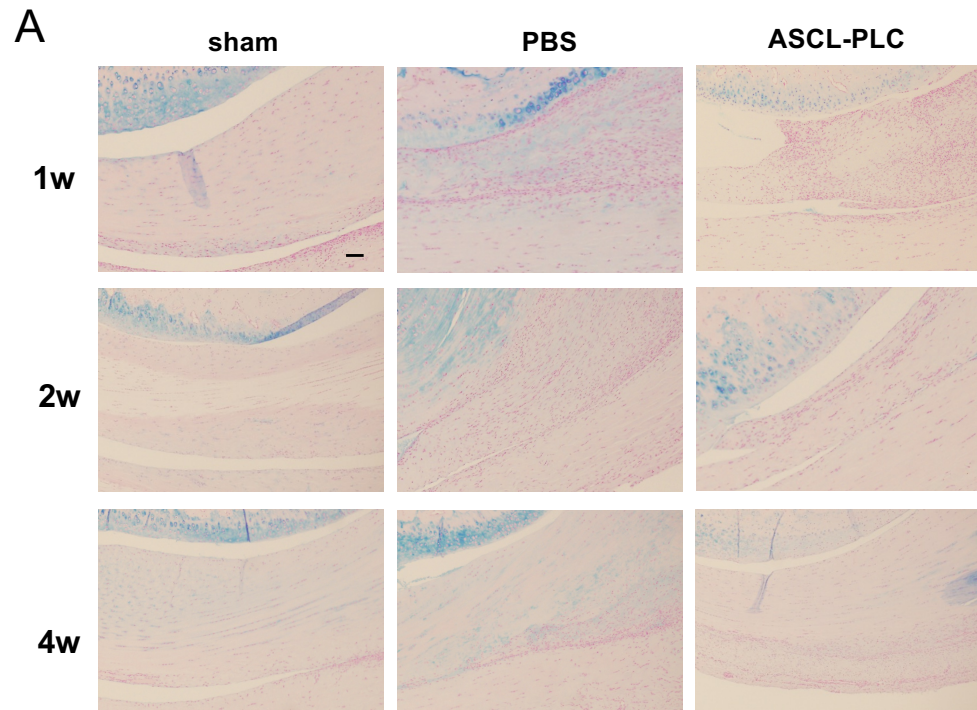
Supplementary Figure 3. Analysis of each Bonar score components in Achilles tendons.

Tenotomy was performed in the rat left Achilles tendon and then incision sites were injected either ASCL-PLCs (1.0×10^7 cells) or control PBS (50 μ l each). One, two or four

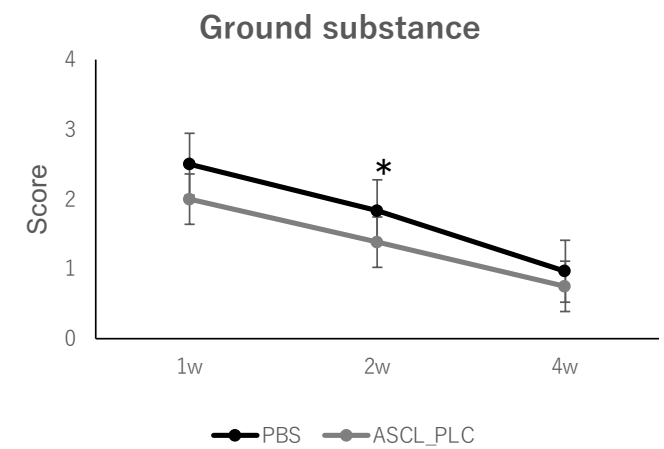
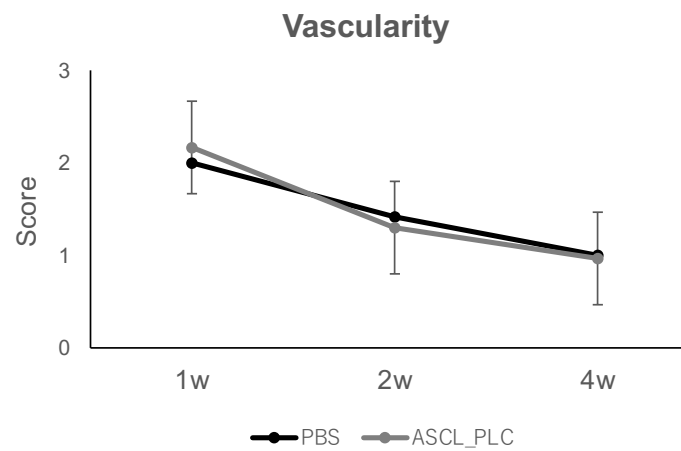
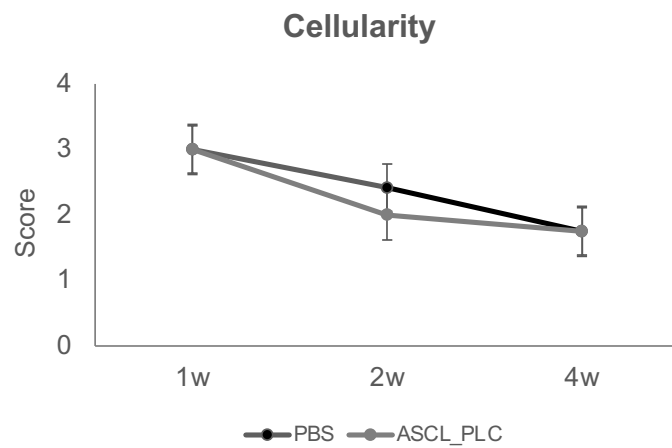
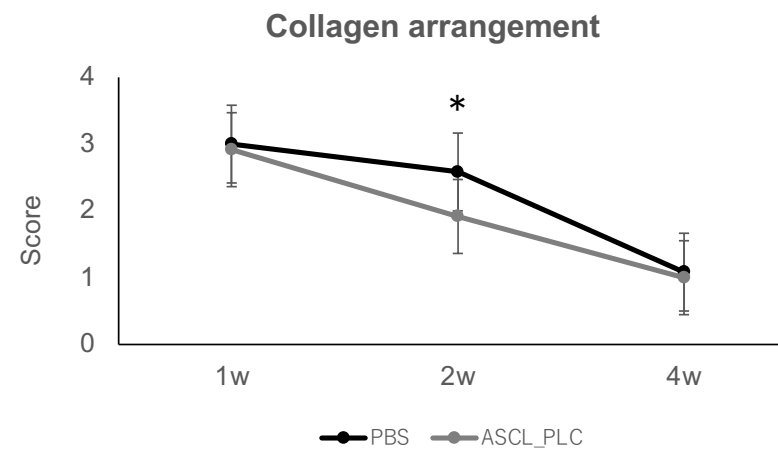
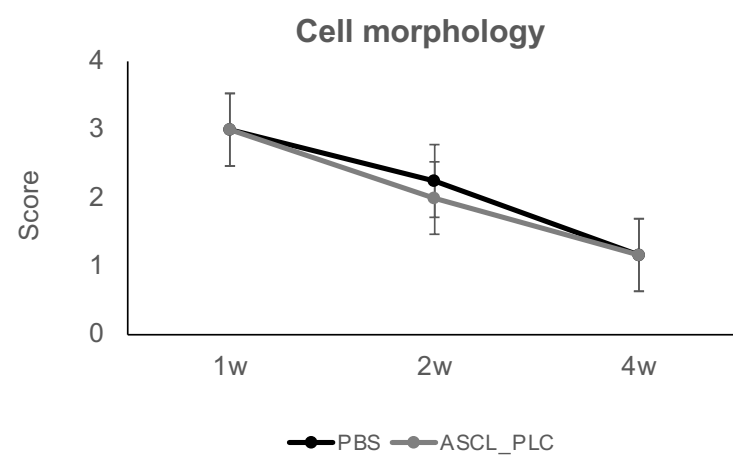
weeks later, Achilles tendon enthesis regions were harvested, stained with HE or Alcian blue. Bonar score components in rat Achilles tendons treated with ASCL-PLC or PBS are shown. The Bonar score is semi-quantitative assessment, which is calculated as the sum of five histological parameters- cell morphology (A), collagen arrangement (B), cellularity (C), vascularity (D), and ground substance (E)-evaluated via HE and Alcian blue staining. Each was scored on a scale 0 (normal) to 3 (severely abnormal). Significant differences were observed at 2 weeks in collagen arrangement and ground substance. (N=3 each, 1 week after operation; N=6 each, 2 and 4 weeks after operation).



Supplementary Figure 1



Supplementary Figure 2



Supplementary Figure 3