## **Support Information**

## Fibrin-enriched Cardiac Extracellular Matrix Hydrogel Promotes In Vitro Angiogenesis

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- Figure S1. Morphology and gelation kinetics of Fn hydrogel.
- Figure S2. Comparison of network formation in Fn vs. Fn-cECM hydrogels.
- Figure S3. The qualitative assessment of injectability of cECM and Fn-cECM hydrogels.



**Figure S1.** Morphology and gelation kinetics of Fn hydrogel. (A) Macroscopic view of Fn hydrogel with its SEM image. (B) Gelation kinetics of Fn hydrogel.





**Figure S2.** Comparison of HUVECs tube formation on Fn-cECM and Fibrin(Fn) hydrogels. (A,D) Vascular network formation and expression of (B,E) CD31 of HUVECs on Fn-cECM (A,B) and Fn (D, E) hydrogels. (C, F) Expression of vWF for HUVECs seeded on Fn-cECM (C) and Fn (F) hydrogels. Scale bar: 100 $\mu$ m.(G) Quantification of angiogenesis parameters using ImageJ software. n=7. \*p < 0.05, \*\*\*\*p < 0.0001



**Figure S3:** The qualitative assessment of injectability of cECM and Fn-cECM hydrogels. Injectability demonstrated as the ability to be pushed through a syringe. (A) cECM hydrogel colored in green (B) Fn-cECM hydrogel colored in purple pushed through BD syringe needles (1mL, 25G).