Supplementary Data Table 1: Polycaprolactone (PCL) nanofiber production. Results presented as mean diameter ± SD. n ≥ 31 fibers analyzed across a minimum of two scaffold batches.

PCL Concentration (% w/v)	**Needle Gauge**	**Flow Rate (µL/min)**	**Fiber Diameter (nm)**
7.5	18G	25 50 100	No fiber formation at all flow rates
10	18G	25 50 100	670 ± 515 1293 ± 1614 1450 ± 1310
20	18G	25 50 100	870 ± 600 1263 ± 1113 1733 ± 1445
30	18G	25 50 100	1623 ± 1498 1161 ± 1214 1953 ± 1731
40	18G	25 50 100	2374 ± 938 3647 ± 1386 2964 ±1682
50	18G	25 50 100	1822 ± 800 2392 ± 739 3833 ± 1324