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**Fig. S1.** Modularized perfusion plate with dimensions shown in auxiliary view and front view: (A) Illustration of modularized plate including media chamber, culture chamber, and collection chamber. (B) Image of modularized perfusion plate fabricated with acrylic via CNC machining. Each layer of acrylic is assembled with double-sided tape (thickness: 0.5mm). The image of the modularized perfusion plate is edited to enhance the visualization of the structure formed with transparent material.

**Fig. S2.** Morphology of the cells according to the position in the culture chamber. Shear stress applied to the cells lessened as the distance from the inlet increased.

## **Electronic Supporting Information (ESI)**

## Modularized dynamic cell culture platform for efficient production of extracellular vesicles and sequential analysis

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