SUPPLEMENTARY MATERIALS

Table S1: LC Bead® elastic modulus

Bead Size (µm)	Elastic modulus ± SD (MPa)
40-90	0.32 ± 0.18
70-150	0.14 ± 0.03
100-300	0.11 ± 0.02
300-500	0.10 ± 0.01

Table S2: Suspension times of 70 – 150 µm RO Beads in various contrast agents (N=10).

Contrast Agent	Brand Name	Density (g/mL) (20°C / 37°C)	Viscosity (cP) (20°C / 37°C)	Suspension Time (min ± SD)
Iopamidol 300	Isovue 300	- / 1.330	4.7 / 8.8	1.04 ± 0.14
Iomeprol 300	Iomeron 300		4.5 / 8.1	0.9 ± 0.06
Iomeprol 400	Iomeron 400		27.5/ 12.6	50.4 ± 4.58
Iodixanol 320	Visipaque 320	1.369 / 1.356	26.8 / 11.8	8.97 ± 1.32
Iodixanol 270	Visipaque 270	1.314/1.303	12.7/6.3	2.88 ± 0.12
Iohexol 350	Omnipaque 350	- / 1.406	23.3 / 10.4	3.7 ±0.32

Table S3: Suspension times of various size of RO beads in iodixanol 320 (N=10).

Bead Size (µm)	Iodixanol Suspension Times (min ± SD)
40-90	31.16 ± 2.08
70-150	8.97 ± 1.32
100-300	9.01 ± 0.91
300-500	0.61 ± 0.02

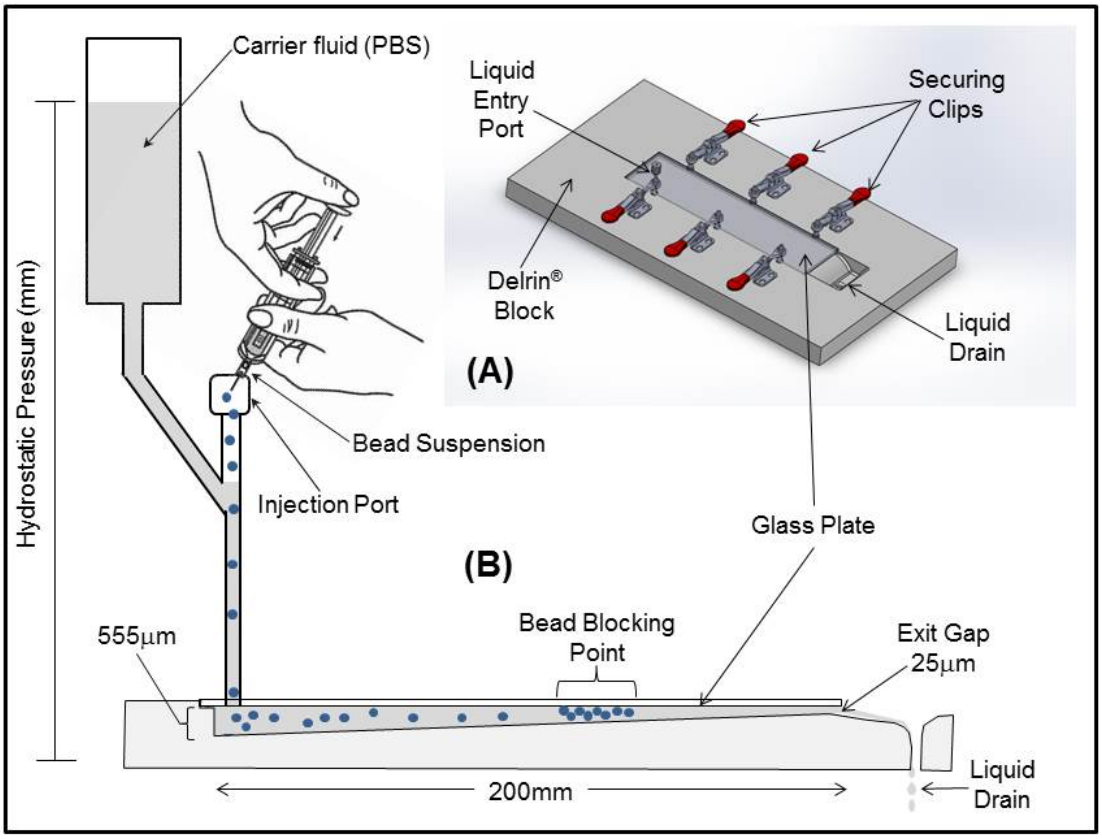

Figure S1: Penetration plate schematic. A) A glass plate was mounted over a gradient machined into a sheet of Delrin. B) Fluid flows from the carrier reservoir to narrow end of the gradient. Beads are trapped according to their size and mechanical properties.