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TITLE:

HIGHLY HYDROPHILIC MICROFLUIDIC DEVICE PROTOTYPING USING A NOVEL POLY(DIMETHYLSILOXANE)-BASED POLYMERIC MIX.

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Figure S1. Morphological studies using Scanning Electron Microscopy (SEM) imaging.

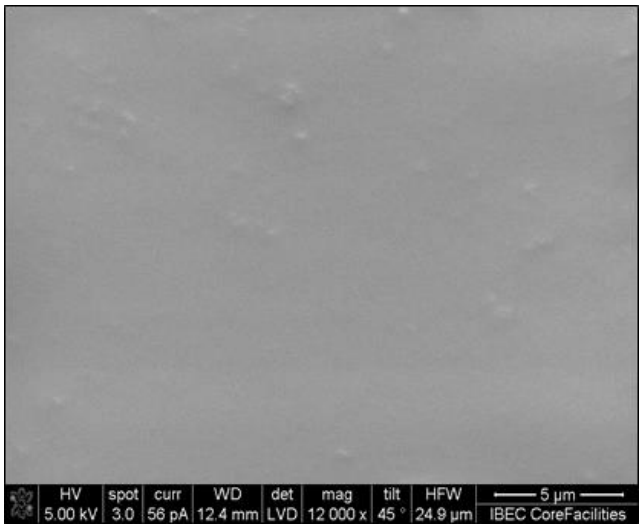

Figure S1. Morphological studies using Scanning Electron Microscopy (SEM) imaging. Morphological studies to characterize the mixing were done and homogeneity was confirmed using SEM imaging at a magnification of 12000X using a NOVA NanoSEM 230 high resolution scannning electron microscope (FEI Company).

Figure S2. Modification of wetting.

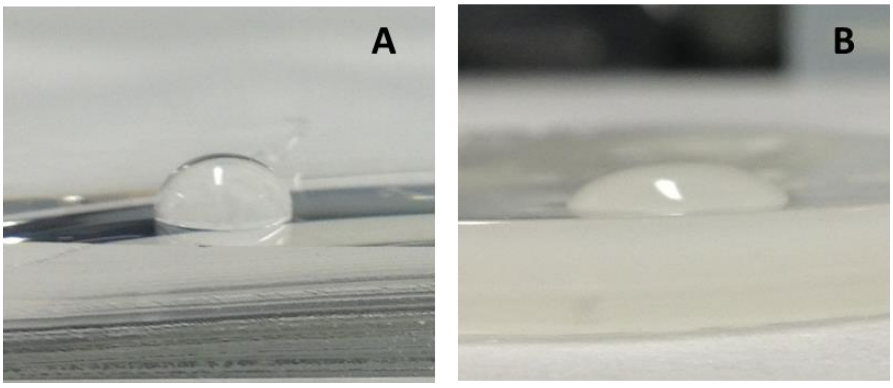

Figure S2. Modification of wetting. We demonstrate the ability to efficiently modify the water contact angle of the polymer surface. **Left Panel** (A) shows a water drop over a PDMS sample while the **Right Panel** (B) shows a water drop over the PDMS/HEMA polymer that presents a lower contact angle; therefore, differences in terms of this measure can be observed.

Supplementary Movie S1. Blood samples flowing through microfluidic devices.

Movie showing a blood sample flowing through microfluidic devices fabricated either with HEMA/PDMS-IPN or bare PDMS. Differences in blood motion behaviour inside the structures can be observed.

