Electronic Supplementary Material (ESI) for Lab on a Chip.

Dynamic Interplay of Flow and Collagen Stabilizes Primary Hepatocytes Culture in a Microfluidic Platform

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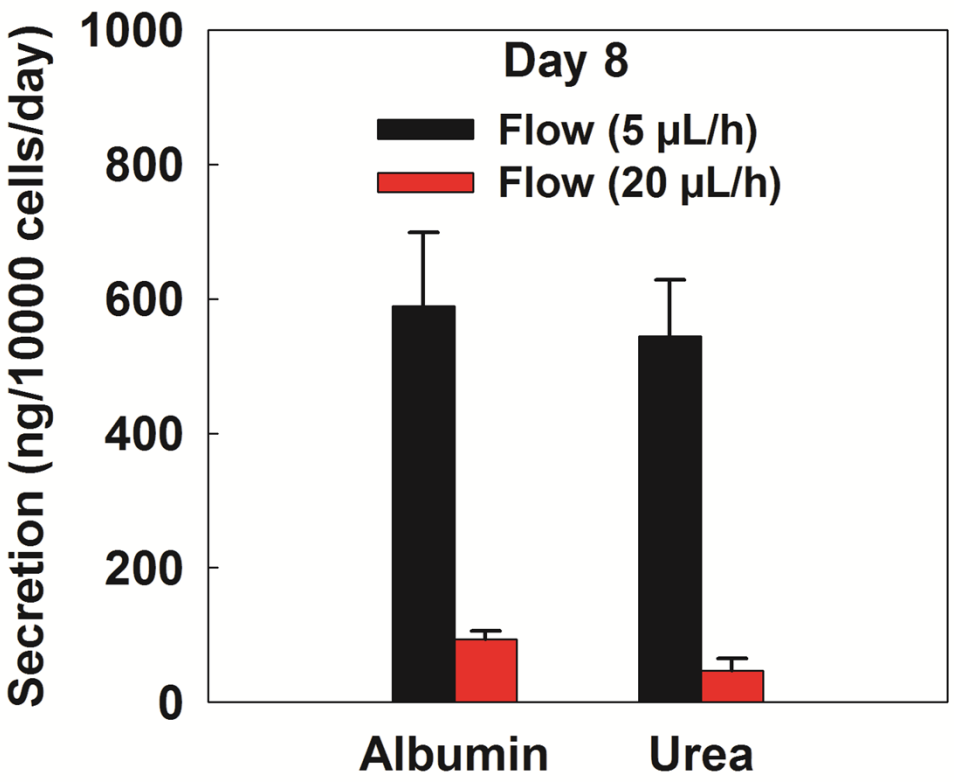

Figure S1: Albumin and urea secretion by hepatocytes on day 8 of culture. The media flow rate was maintained at 5 or 20 µl/hour.

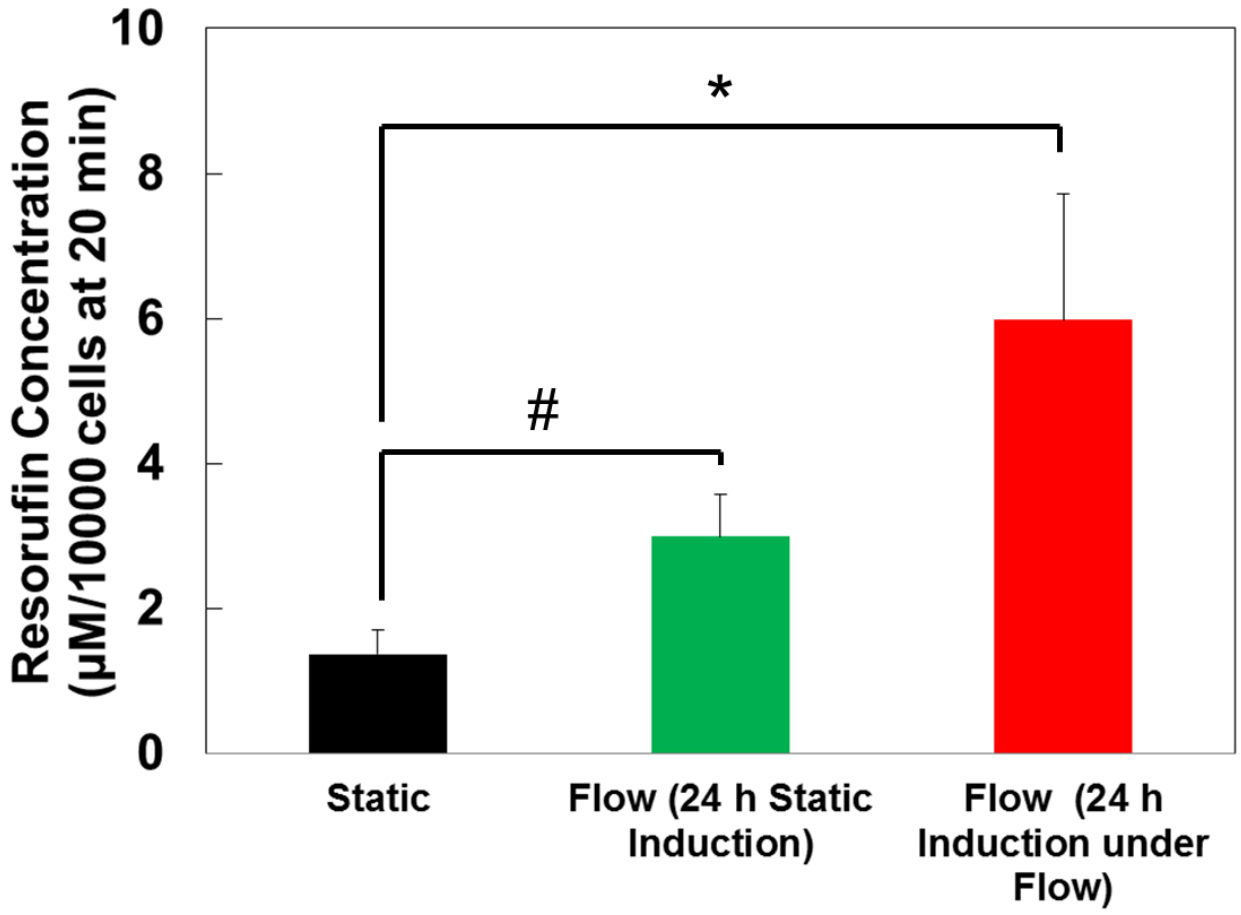

Figure S2: CYP1A1 activities assessed on Day 7 by induction of hepatocyte cultures with 3-methylcholanthrene (3-MC) in media show that static cultures exposed to 3-MC for 24 hours have significantly less CYP 1A1 activity compared to flow devices, induction either done by continuous perfusion of 3-MC for 24 hours such that the amount of 3-MC exposed to the cells were similar to the static devices, or by static induction with 2μM 3-MC for 24 hours. *p<0.01, #p<0.05.