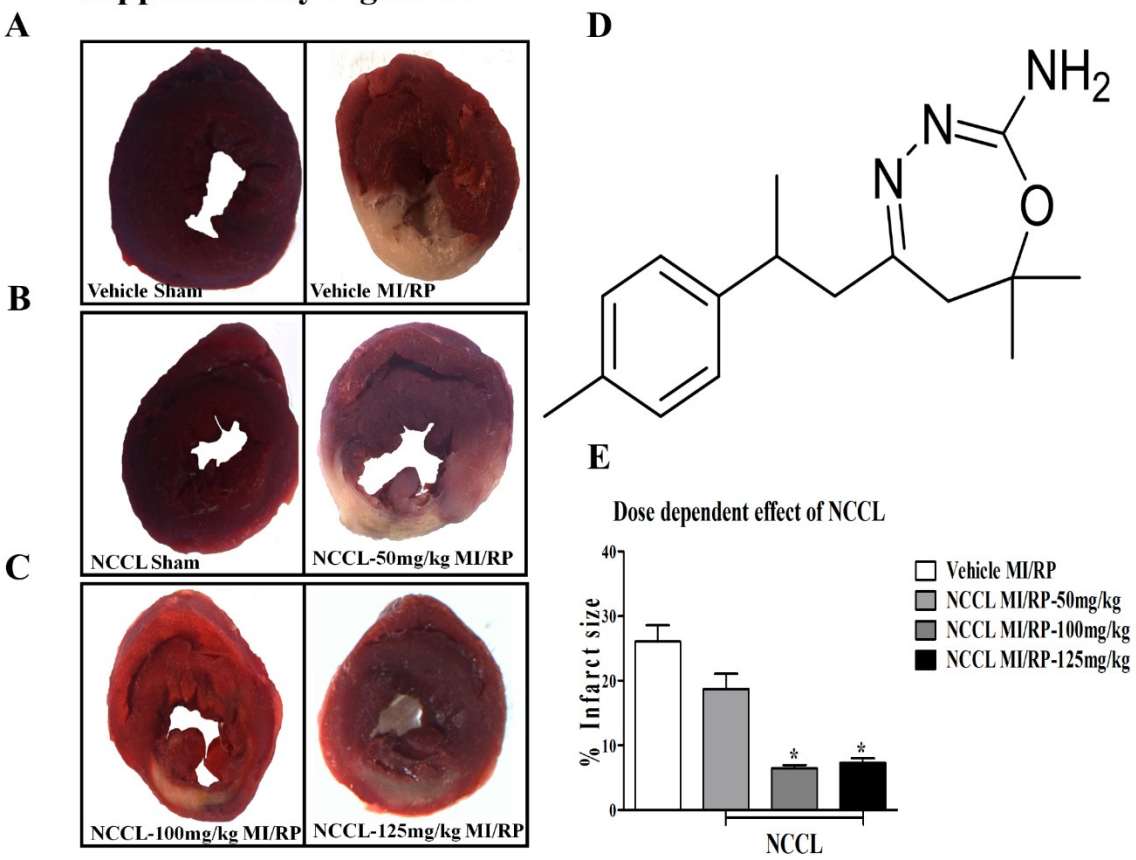
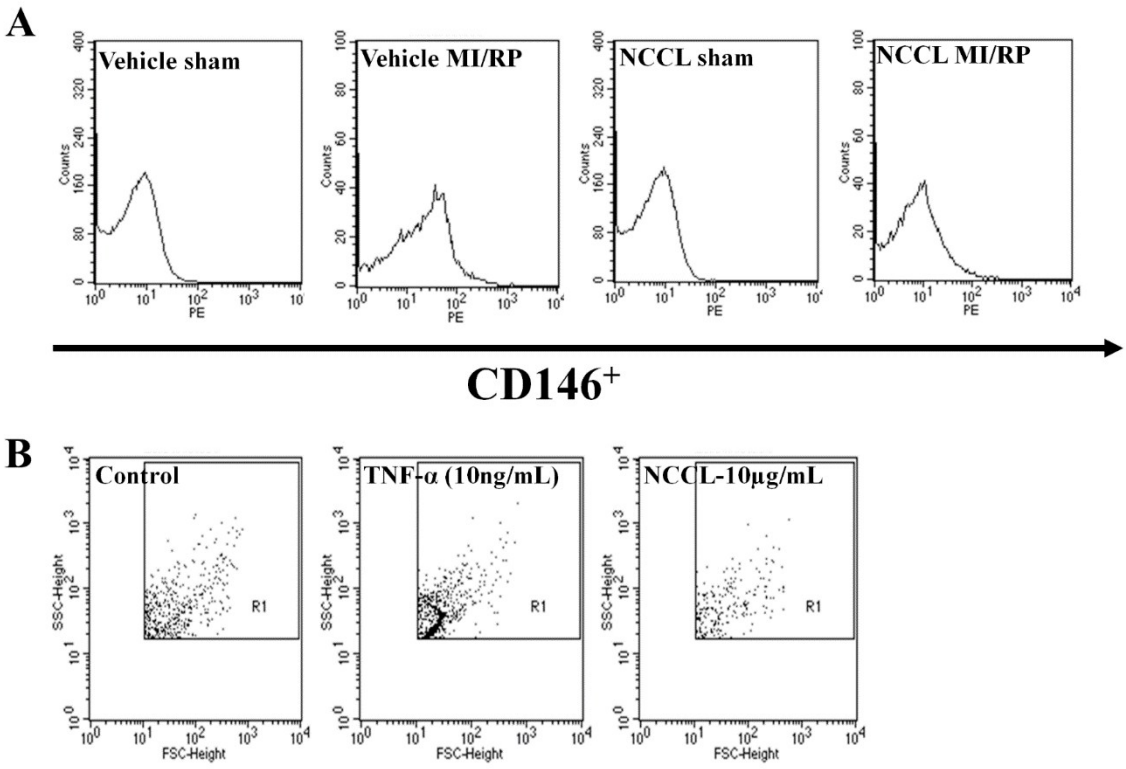
Supplementary Figure S1



Caption:

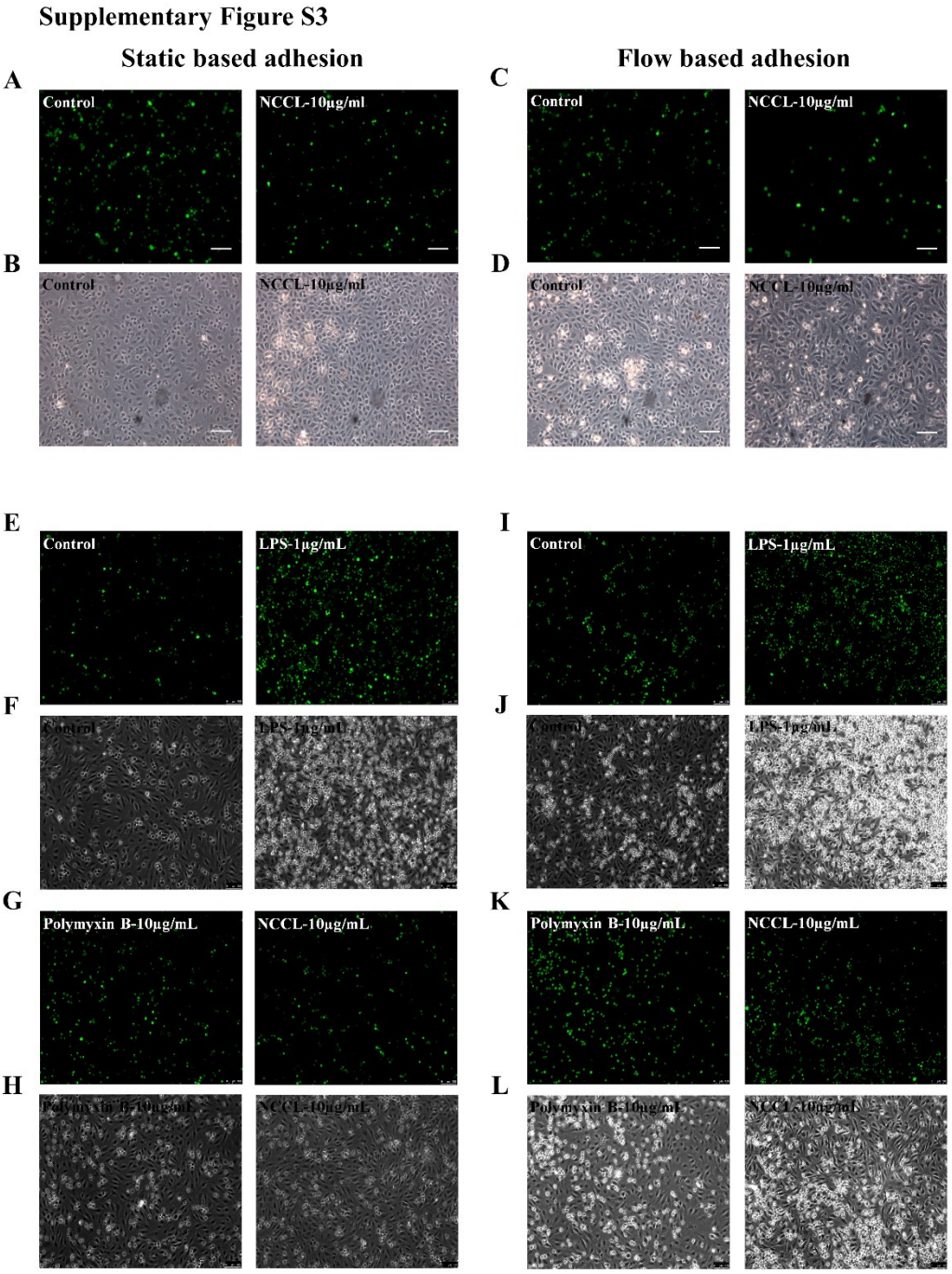
Supplementary Figure S1: Dose dependent effect of NCCL. TTC stained heart section A, Vehicle Sham and Vehicle MI/RP; **B,** NCCL Sham and NCCL-50mg/kg MI/RP**; C,** NCCL-100mg/kg and NCCL-125mg/kg. **D,** Marker compound-(I) 7,7-dimethyl-5-(2-p-tolylpropyl)-6,7-dihydro-1,3,4-oxadiazepin-2-amine. **E,** percent infarct size of TTC stained hearts.

Supplementary Figure S2



Caption

Supplementary Figure S2: Reduced EMP production *in vivo* and *in vitro* after NCCL treatment. A, Histogram of plasma EMPs of Vehicle sham, Vehicle MI/RP, NCCL sham and NCCL MI/RP. **B,** Dot plot of EMPs after TNFα and NCCL treatment.



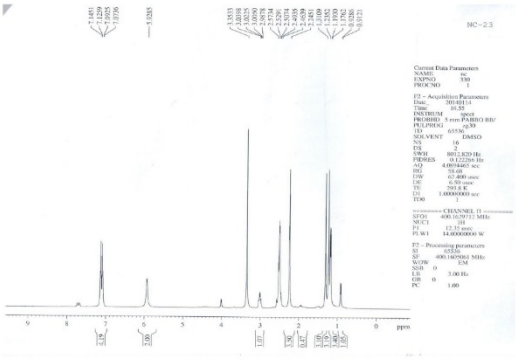
Caption

Supplementary Figure S3: Cellular interaction under static and flow based conditions. A, B, E - H, represent adhesion of THP-1 monocytes onto EA.hy926 cells under static condition. **C, D, I - L** represents adhesion of THP-1 monocytes onto EA.hy926 cells under flow based

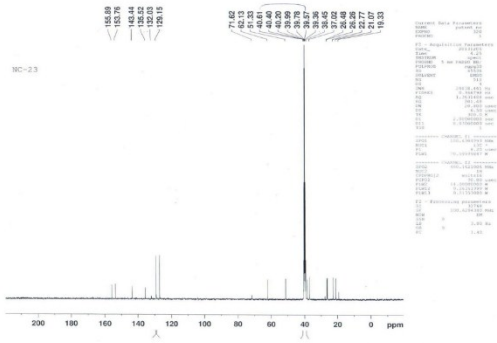
condition. Panel **A, C, E, G, I,** and **K,** represent the fluorescence image of THP-1 monocytes adhered onto EA.hy926 cells and Panel **B, D, F, H, J** and **L,** represents the phase contrast image.

Supplementary Figure S4

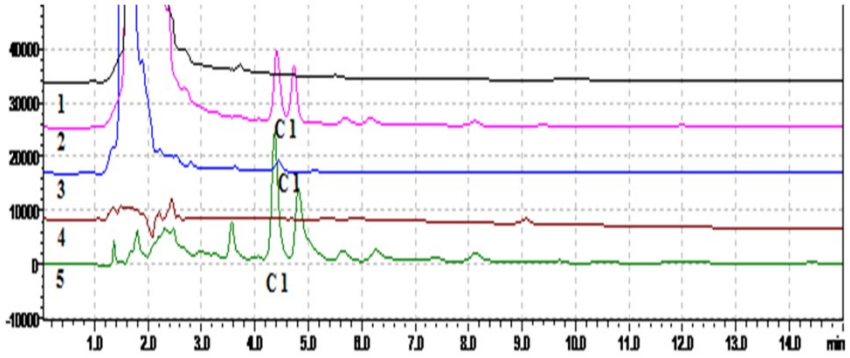
A **^{1}H NMR (400 MHz, DMSO-d6)**



B **^{13}C NMR (400 MHz, DMSO-d6)**



C **HPLC Chromatogram**



Caption

Supplementary Figure S4: NMR and HPLC chromatogram of NCCL. A, represent ^{1}H NMR (400 MHz, DMSO-d$_6$): δ 7.13(d, 2H, J= 7.68), δ 7.08(d, 2H, J= 7.56), δ 5.93 (S, 2H), δ 3.01 (dd, 1H, J=6.90), δ 2.5 (m, 4H), δ 2.24 (s, 3H) , δ 1.31 (s, 3H), δ 1.23(s, 3H), δ 1.18 (d, 3H, J=6.72). **B, represents ^{13}C NMR (400 MHz, DMSO-d$_6$):** 155.41, 153.28, 142.96, 135.04, 128.86, 126.69, 61.66, 50.85, 37.98, 36.55, 26.00, 25.78, 22.29, 20.59. **C, represents HPLC fingerprint of NCCL** achieved on a Lichrocart RP 18e (250 x 4.6mm, 5µ) column using mobile phase comprising acetonitrile: water (70:30); where C1 represents major marker compound (I); 1: Blank plasma, 2: Plasma spiked with 200 µg/mL NCCL, 3: Plasma at 6 hours after administration of NCCL, 4: Blank methanol, 5: NCCL (200 µg/mL).