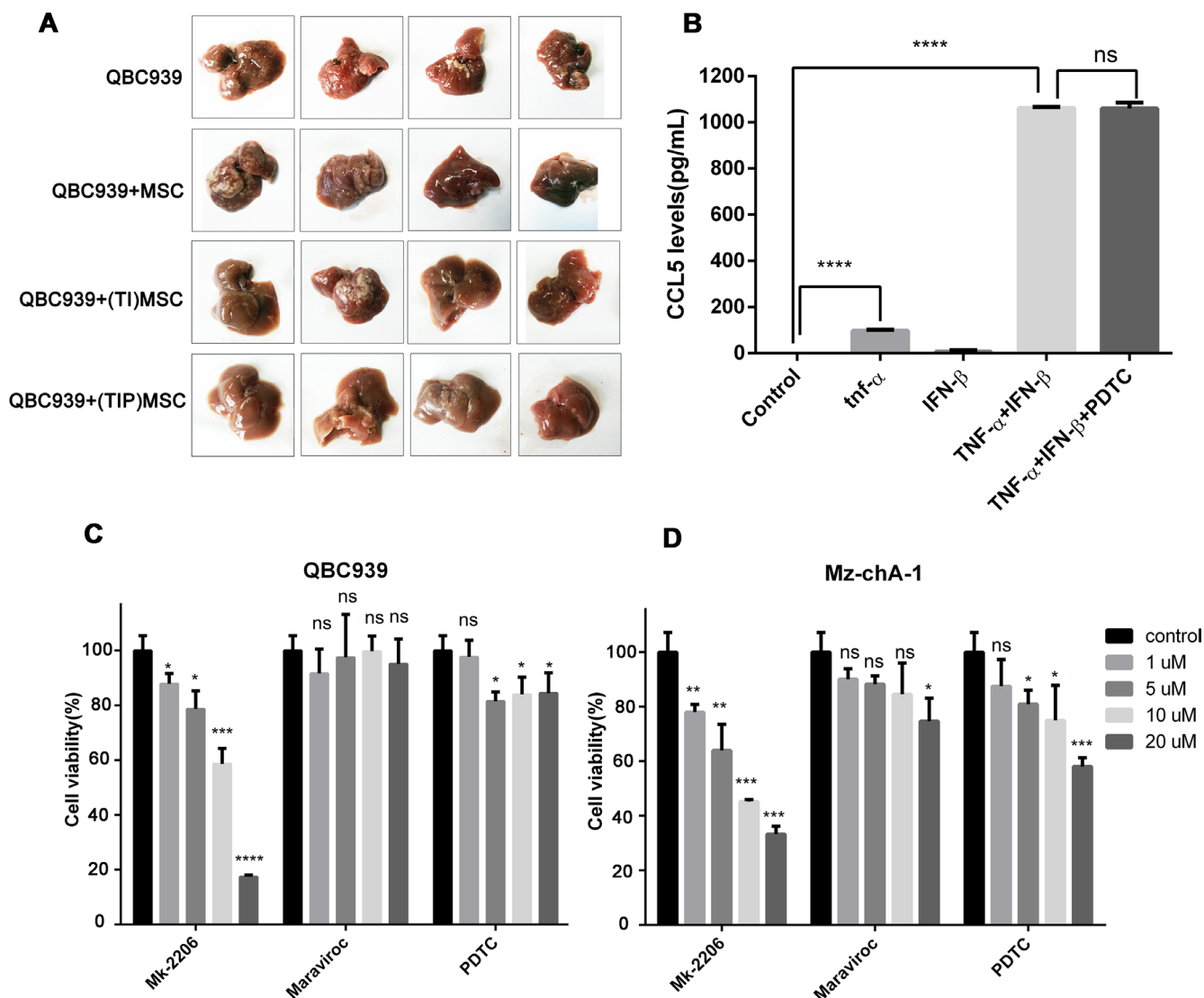


# Mesenchymal stem cells in inflammatory microenvironment potently promote metastatic growth of cholangiocarcinoma *via* activating Akt/NF-κB signaling by paracrine CCL5

## SUPPLEMENTARY MATERIALS



**Supplementary Figure 1:** (A) Picture showing metastasized tumor nodules in liver tissue. (B) PDTC can not inhibit the expression of CCL5 which induced by TNF- $\alpha$  and IFN- $\gamma$ . (C–D) Effects of MK-2206, Maraviroc and PDTC on cell viability of QBC939 (C) and Mz-chA-1 (D). Data are presented as means  $\pm$  SD. \* $P < 0.05$ , \*\* $P < 0.01$ , \*\*\* $P < 0.001$ , \*\*\*\* $P < 0.0001$ ; two-tailed Student's  $t$  test.

**Supplementary Table 1: Real-time RT-PCR primers**

<b>Gene</b>	<b>Forward primer(5'-3')</b>	<b>Reverse primer(5'-3')</b>
<i>IL-6</i>	GGCACTGGCAGAAAACAACC	GCAAGTCTCCTCATTGAATCC
<i>TNF-<math>\alpha</math></i>	GGCGTGGAGCTGAGAGATAAC	GGTGTGGGTGAGGAGCACAT
<i>CCL5</i>	TACCATGAAGGTCTCCGC	GACAAAGACGACTGCTGG
<i>TGF-<math>\beta</math></i>	CCCACAACGAAATCTATGAC	CCAGGAATTGTTGCTGTATT
<i>Periostin</i>	TGTTGCCCTGGTTATATGAG	ACTCGGTGCAAAGTAAGTGA
<i>IDO</i>	GCCCTTCAAGTGTTTCACCAA	CCAGCCAGACAAATATATGCGA
<i>CCR5</i>	GTATCTGGCATAGTATTCTGT	ATCTCTGGTCTGAAGGTT
<i>E-cadherin</i>	TGCCCAGAAAATGAAAAAGG	GTGTATGTGGCAATGCGTTC
<i>Vimentin</i>	GAGAACTTTGCCGTTGAAGC	GCTTCCTGTAGGTGGCAATC
<i>Snail</i>	CTGGGTGCCCTCAAGATGCA	CCGGACATGGCCTTGTAGCA
<i>Slug</i>	TACCGCTGCTCCATTCCACG	CATGGGGTCTGAAAGCTTGG
<i>ZEB1</i>	TGCACTGAGTGTGAAAAAGC	TGGTGATGCTGAAAGAGACG
<i>ZEB2</i>	CGGTATTGCCAACCCTCTGGA	TTGTTGTGCCAGGGGTGTTCC
<i>GAPDH</i>	TGCACCACCAACTGCTTAGC	GGCATGGACTGTGGTCATGAG