

2021 年度天津市科学技术奖提名成果公示材料

Clinical application and basic innovation research on the pathogenesis and early intervention of colorectal cancer and precancerous lesions

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2.

1 (HFD)

2 HFD

3

4

1

HFD

5

2

HFD

HFD

3

HFD

MCP-1/CCR2

Wnt/ β -catenin

COMP

TAGLN

-5 2

1

4

2

HFD

HFD

3

HFD

Wnt/ β -catenin

COMP

TAGLN

-5 γ 2

β 1

4

1

Zhong W, Hou H, Liu T, Su S, Xi X, Liao Y, Xie R, Jin G, Liu X, Zhu L, Zhang H, Song X, Yang C, Sun T, Cao H, Wang B. Cartilage Oligomeric Matrix Protein promotes epithelial-mesenchymal transition by interacting with Transgelin in Colorectal Cancer. *Theranostics*. 2020,10(19):8790-8806.

2

Chen D, Jin D, Huang S, Wu J, Xu M, Liu T, Dong W, Liu X, Wang S, Zhong W, Liu Y, Jiang R, Piao M, Wang B, Cao H. *Clostridium butyricum*, a butyrate-producing probiotic, inhibits intestinal tumor development through modulating Wnt signaling and gut microbiota. *Cancer Lett*. 2020,469:456-467.

3

Zhou B, Zong S, Zhong W, Tian Y, Wang L, Zhang Q, Zhang R, Li L, Wang W, Zhao J, Chen X, Feng Y, Zhai B, Sun T, Liu Y. Interaction between laminin-5 α 2 and integrin α 1 promotes the tumor budding of colorectal cancer via the activation of Yes-associated proteins. *Oncogene*. 2020,39(7):1527-1542.

- 4 Liu T, Guo Z, Song X, Liu L, Dong W, Wang S, Xu M, Yang C, Wang B, Cao H. High-fat diet-induced dysbiosis mediates MCP-1/CCR2 axis-dependent M2 macrophage polarization and promotes intestinal adenoma-adenocarcinoma sequence. *J Cell Mol Med.* 2020,24(4):2648-2662.
- 5 Li L, Li X, Zhong W, Yang M, Xu M, Sun Y, Ma J, Liu T, Song X, Dong W, Liu X, Chen Y, Liu Y, Abla Z, Liu W, Wang B, Jiang K, Cao H. Gut microbiota from colorectal cancer patients enhances the progression of intestinal adenoma in *Apc^{min+}* mice. *EBioMedicine.* 2019,48:301-315.
- 6 Cao H, Xu M, Dong W, Deng B, Wang S, Zhang Y, Wang S, Luo S, Wang W, Qi Y, Gao J, Cao X, Yan F, Wang B. Secondary bile acid-induced dysbiosis promotes intestinal carcinogenesis. *Int J Cancer.* 2017 Jun 1;140(11):2545-2556.
- 7 Cao H, Chen X, Du S, Song W, Wang W, Xu M, Wang S, Piao M, Cao X, Wang B. Detection Rate, Distribution, Clinical and Pathological Features of Colorectal Serrated Polyps. *Chin Med J (Engl).* 2016,129(20):2427-2433.
- 8 Cao H, Song S, Zhang H, Zhang Y, Qu R, Yang B, Jing Y, Hu T, Yan F, Wang B. Chemopreventive effects of berberine on intestinal tumor development in *Apc^{min+}* mice. *BMC Gastroenterol.* 2013,13:163.

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ZL

201710089659.2

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ZL 201410013108.4

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ZL 201310053465.9

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ZL 201821665030.4

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ZL 201720084525.7

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ZL 201420017630.5