**Dendronan reduce the risk of colorectal cancer by modulating the host inflammatory response and gut microbiota composition**

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(**Oral Presentation，Presenter：Xiaojun Huang，\*Corresponding author**)

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Dendronan is an- O-acetyl glucomannan, derived from *Dendrobium officinale* herb. In our previous study, the immunomodulatory activity of Dendronan was confirmed in both *in vitro* and *in vivo*. It was also proved benefit in promoting bowel movement and defecation, increasing fecal moisture and short chain fatty acids, while decreasing colonic pH. This time, Dendronan was administrated to colitis-associated colorectal cancer (CAC) mice to study its gut immunity effect. Results found that Dendronan was active in against tumorigenesis of CAC mice, represented in decreased epithelial damage and suppressed mucosal ulceration. This result is possibly related to its function in preventing the inflammatory infiltration in the colon of CAC mice via the TLR4/MyD88/NF-ĸB pathway. And this anti-inflammatory activity of Dendronan is possibly related to its function in balancing the gut microenvironment, including the ability of decrease the inflammation-raleted bacteria while increase the anti-inflammatory metabolites.