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Cornuside alleviates experimental autoimmune encephalomyelitis by inhibiting Th17 cell infiltration into the central nervous system

Key words: **Cornuside; Experimental autoimmune encephalomyelitis; Multiple sclerosis; Th17 cell; Treg cell; Inflammation**

Research Summary

The purpose of this study was to clarify the therapeutic effect of cornuside on experimental autoimmune encephalomyelitis (EAE) and its influence on Th17 cell and Treg cell infiltration into the central nervous system, and the main contents include the following aspects:

- **Effect of cornuside on the symptoms of neurological deficit in EAE rats.**
- **Effect of cornuside on the histopathology of spinal cord of EAE rats.**
- **Effect of cornuside on the infiltration of Th17 and Treg cells into EAE spinal cord.**
- **Effect of cornuside on the number of Th17 and Treg cells in EAE rat blood, and on the serum levels of IL-17A and IL-10.**
- **Effect of cornuside on serum TGF-β, IL-6, IL-23, and IL-2 levels in EAE rats.**

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Innovation points

- **Cornuside can alleviate symptoms of neurological deficit in EAE rats.**

- **Cornuside can reduce the inflammation infiltration and demyelination in the spinal cord of EAE rats.**

- **Cornuside can inhibit the infiltration of Th17 cells into the spinal cord of EAE rats.**

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Figure 4

Innovation points

A series of comprehensive figures were generated to show the therapeutic effect of cornuside on EAE rats and mechanism involved

Figure 1 | Cornuside alleviated the symptoms of neurological deficit in EAE rats.

Figure 2 | Cornuside reduced inflammation and demyelination in the spinal cord of EAE rats.

Figure 3 | Effect of cornuside on the number of Th17 and Treg cells in the spinal cord of EAE rats.

Figure 4 | Effect of cornuside on number of Th17 and Treg cells in EAE rat blood, as well as on levels of IL-17A and IL-10 in EAE rat serum.

Figure 5 | Effect of cornuside on levels of TGF-β, IL-6, IL-23, and IL-2 in the serum of EAE rats.

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