

## Evidence summary

# Chinese medicine for Alzheimer's disease

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This summary of key findings from *Volume 8: Alzheimer's disease*<sup>1</sup> of the Evidence-based Clinical Chinese Medicine monograph series outlines:

- what Alzheimer's disease is
- current treatments
- findings from research into classical Chinese medicine literature and modern Chinese medicine clinical studies.

### What is Alzheimer's disease?

Alzheimer's disease is a chronic brain condition that gets worse over time.<sup>2</sup> It occurs when certain proteins build up in the brain, disrupting the way its neurons work. This may impair a person's language, memory, thinking and behaviour.<sup>2</sup> It mainly affects elderly people.<sup>2</sup>

### Current treatments

Current drug treatments for Alzheimer's disease are donepezil (the most common), galantamine, rivastigmine and memantine. These medicines slow Alzheimer's disease progression, but do not cure it.<sup>3</sup>

Chinese medicine treatment options for Alzheimer's disease include Chinese herbal medicine, acupuncture, and dietary and lifestyle advice. Chinese medicine practitioners base their treatments on the patient's symptoms, relevant clinical textbooks and guidelines, research and clinical experience.

### Classical Chinese medicine literature

The *Encyclopedia of Traditional Chinese Medicine (Zhong Hua Yi Dian)* is a large digital collection of over 1,000 Chinese medicine books. It includes 1,498 citations that describe Chinese herbal medicine treatment of a disorder consistent with Alzheimer's disease. Treatments mainly used multi-ingredient decoctions.

Acupuncture therapies appeared in 164 citations.

Chinese herbs and acupuncture points for Alzheimer's disease are similar in classical literature and modern clinical studies.

### Modern Chinese medicine clinical studies

#### Chinese herbal medicine

To write the *Alzheimer's disease* monograph, nine biomedical databases (five English-language and four Chinese-language) were searched in May 2014.<sup>1</sup> This search found 136 relevant studies of Chinese medicine for Alzheimer's disease. Most studies (110) were randomised controlled trials of Chinese herbal medicine. An additional search of the International Clinical Trials Registry Platform was conducted in April 2021, which identified three new registered randomised controlled trials of Chinese herbal medicine for Alzheimer's disease.

All 110 randomised controlled trials tested Chinese herbal medicine on memory, cognition and/or activities of daily living.

For memory and cognition, there were no differences between groups for Chinese herbal medicine compared to placebo, no treatment or donepezil. Chinese herbal medicines combined with donepezil showed greater improvement than donepezil alone.<sup>4</sup> The result was the same for activities of daily living.

Some people who participated in these trials reported gastrointestinal adverse events. There was no difference in adverse events between the Chinese herbal medicine and donepezil groups.

The three new registered randomised controlled trials of Chinese herbal medicine

for Alzheimer's disease from the 2021 search were all blinded. In two trials that compared Chinese herbal medicine with donepezil, both groups showed improved measures of cognition, with no differences between groups.<sup>5,6</sup> One of these trials found a greater improvement in activities of daily living in the Chinese herbal medicine group at follow up.<sup>5</sup> One trial of Chinese herbal medicine plus usual medicine for Alzheimer's disease compared to usual medicine alone found greater improvement in the Chinese herbal medicine group on one measure of cognition, but no differences on the other two measures.<sup>7</sup>

### Acupuncture and related therapies

The original search found 29 studies of acupuncture therapies for Alzheimer's disease, including 16 randomised controlled trials. People in acupuncture groups showed greater improvement in memory and cognition than people in the no treatment groups. There was no difference in memory and cognition between acupuncture and donepezil groups, but a greater improvement in the acupuncture plus donepezil compared to donepezil alone groups. However, these trials were not blinded.

No new relevant registered randomised controlled trials of acupuncture for Alzheimer's disease were identified in the 2021 search.

### Key messages

- Chinese medicine treatments have been used throughout history to treat Alzheimer's disease symptoms.
- Treatment approaches have evolved over time.
- Oral Chinese herbal medicines may improve cognitive symptoms and activities of daily living, especially when combined with conventional medicines for Alzheimer's disease.
- Acupuncture therapies may improve symptoms of Alzheimer's disease, but there have been only a few trials.
- Clinicians and patients should discuss the potential risks and benefits, so patients can make informed choices about their care.

### For more information

Find out more about Chinese medicine for Alzheimer's disease in the book *Evidence-based Clinical Chinese Medicine Volume 8: Alzheimer's disease*<sup>1</sup> from <https://doi.org/10.1142/10710>

Find out more about Chinese medicine research at the China–Australia International Centre for Chinese Medicine at [www.rmit.edu.au/research/centres-collaborations/multi-partner-collaborations/cairccm](http://www.rmit.edu.au/research/centres-collaborations/multi-partner-collaborations/cairccm)

### References

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3. National Institute for Health and Clinical Excellence (2011). NICE technology appraisal guidance 217 – Donepezil, galantamine, rivastigmine and memantine for the treatment of Alzheimer's disease (update). National Institute for Health and Clinical Excellence; London.
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### Disclaimer

This evidence summary is not intended as a guide for self-medication or medical advice – patients should seek professional advice from qualified Chinese medicine practitioners.