

## Development of traditional complex formulas as therapeutic agents

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Traditional Chinese medicine (TCM), a traditional complex formula, has gradually been accepted with the accumulation of practices and experiences. Liu Wei Di Huang Wan (LWDH), Ma-Xing-Shi-Gan-Tang (MXSGT) and San-Huang-Xie-Xin-Tang (SHXXT) are three cases we would like to share in the concept of evidence-based developments on traditional complex formulas. On the basis of our observations, MXSGT would prevent lung fibrosis through the inhibitory effect on nitric oxide generation in bleomycin-induced lung-fibrosis rats. LWDH was proved to improve neurodegenerative disorders. The *in vitro* and *in vivo* evidences of enhanced antioxidant defence and decreased apoptotic death suggested its potential benefits for ameliorating Parkinson's disease. LWDH can also be regarded as a candidate for spinal motor neurons (SMN) deficiency-related diseases. Additionally, we also revealed that LWDH possessed the protection on diabetic muscle atrophy. Both of the LWDH and MXSGT HPLC fingerprints and their quality control parameters were established. However, different qualities and origins of the composed materials are always the most annoying concerns when using TCMs. We focused on comparing 10 commercial SHXXT products from eight TCM companies. Different chemical profiles were found and indicated that each product with the same name might be regarded as a sole medicine and need to be investigated individually. It is never too much to emphasize the importance of quality control in TCM development.

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### References

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