DOI: 10.66069/ojspub.27450734

Research Progress on Gastric Cancer Prevention and Treatment Guided by the Traditional Chinese Medicine Concept of "Treating Disease Before Its Onset"

Xingyan Ma, Renting Li*, Qianqian Zhang, Hui Qiang, Weicheng Zhao

Shaanxi University of Chinese Medicine, Xianyang 712046, Shaanxi, China
**Correspondence Author*

Abstract: ***Gastric cancer is one of the most common malignant tumors in clinical practice and is characterized by high incidence and high case-fatality rates. Advanced-stage disease is a major contributor to the rising mortality rate and poses a substantial threat to human health. Although conventional medical treatments have continued to advance, comprehensive gastric cancer management remains challenging. The TCM concept of zhì wèi bìng, commonly translated as "preventive treatment" or "treating disease before its onset"—was first proposed in the classic TCM text Huangdi Neijing (The Yellow Emperor's Inner Canon). As a distinctive theoretical principle of traditional Chinese medicine (TCM), it continues to provide important guidance for clinical practice and offers valuable insights into modern medical practice, particularly the development of strategies for gastric cancer prevention and treatment. This review summarizes the current application of the TCM concept of zhì wèi bìng in gastric cancer prevention and treatment. The findings indicate that this concept has shown promising benefits in preventing the initial development of gastric cancer, managing disease progression, improving quality of life in patients with advanced gastric cancer, and reducing the risk of recurrence and metastasis.***

Keywords: Gastric cancer, Zhì wèi bìng, Traditional Chinese medicine and herbal medicine, Traditional Chinese medicine, Gastric cancer prevention and treatment**.**

1. Introduction

According to authoritative statistics released by the National Cancer Center in 2026, approximately 5.1506 million new cases of malignant tumors and 2.5822 million cancer-related deaths were reported in China in 2024. These figures highlight the severe challenge posed by cancer to public health in China and underscore the urgency and importance of cancer prevention and control [1]. Gastric cancer ranks among the leading cancers in terms of both incidence and mortality in China [2]. The numbers of new gastric cancer cases and deaths are expected to continue increasing, imposing an increasingly substantial socioeconomic burden [3]. These trends highlight the urgent need for epidemiological research, innovation in early diagnostic technologies, and optimization of preventive interventions for gastric cancer, with the ultimate goals of reducing the public health burden of cancer and substantially improving population health and well-being. Gastric cancer represents a major public health challenge because of its high incidence, high metastatic potential, and high case-fatality rate [4]. Although early gastric cancer is associated with a relatively favorable prognosis [5], most patients are diagnosed at an advanced stage and have poor outcomes [6]. Therefore, strengthening early detection and intervention is essential for improving overall prognosis. Integrating the traditional Chinese medicine (TCM) concept of zhì wèi bìng ("preventive treatment" or "treating disease before its onset") into an integrated strategy encompassing gastric cancer prevention, early diagnosis, comprehensive treatment, and rehabilitation management may reduce incidence, delay disease progression, prevent recurrence, and improve patients' quality of life. As a distinctive contribution of TCM theory, the concept of zhì wèi bìng continues to exert a profound influence. Accordingly, the current status of gastric cancer prevention and treatment under the guidance of this concept is discussed below.

2. Origins of the Concept of Zhì Wèi Bìng

The Huangdi Neijing states: "Therefore, the sage does not treat disease after it has developed; rather, the sage treats disease before it arises. The sage does not wait until disorder has occurred to restore order, but establishes order before disorder develops... This is like digging a well only after becoming thirsty. Would that not be too late?" The Nanjing, "Difficulty 77"," further explains: "What is meant by treating disease before its onset? When disease of the liver is observed... this is called treating disease before its onset." The Jingui Yaolue (Essential Prescriptions from the Golden Cabinet) records: "The five zang organs are interconnected, and pathological transmission follows an orderly sequence. When one of the five zang organs becomes diseased, the disease is transmitted to the organ that it controls." Ye Tianshi, a physician of the Qing dynasty, stated in the Wenre Lun (Treatise on Warm-Heat Diseases): "First secure the areas that have not yet been affected by pathogenic factors." These statements demonstrate that physicians throughout history have attached great importance to the early prevention and early treatment of disease. Through clinical practice, they accumulated extensive experience and wisdom in implementing the concept of zhì wèi bìng and developed many effective methods and strategies, including health preservation, emotional regulation, and traditional exercises.

3. Application of Zhì Wèi Bìng in the Prevention and Treatment of Gastric Cancer

3.1 Preventing Disease Before Its Onset—Eliminating

Potential Illness Before It Develops and Treating Disease Before It Arises

Preventing disease before its onset involves adopting proactive preventive measures before disease develops, interrupting its pathogenic progression, and protecting health. In the context of gastric cancer, intervention should begin during the stage of gastric precancerous diseases, gastric precancerous lesions, or even earlier. At these stages, the pathological changes are relatively mild and may still be reversible, thereby reducing the difficulty of treatment and alleviating patients' suffering. This approach helps protect patients' health.

Modern cancer-control strategies generally include three levels of prevention. Primary prevention, or etiological prevention, aims to prevent tumor development by enabling healthy populations to avoid exposure to risk factors. This approach is consistent with the TCM concept of zhì wèi bìng. Current estimates indicate that more than 50% of cancer cases and cancer-related deaths are attributable to potentially modifiable risk factors. A substantial proportion of these cases could therefore be avoided through the implementation of scientifically sound and appropriate prevention strategies [7]. This finding is highly consistent with the TCM concept of zhì wèi bìng.

3.1.1 Developing Healthy Lifestyle Habits

Suwen, "Shanggu Tianzhen Lun" ("The Great Treatise on Heavenly Truth in High Antiquity") states: "In ancient times, people who understood the principles of life followed the patterns of yin and yang... They lived out the full span of their natural lifespan and reached the age of one hundred before departing." It also states: "Avoid pathogenic influences and harmful winds in a timely manner... Keep the spirit inwardly guarded; how could illness arise?" These teachings emphasize timely avoidance of pathogenic factors, including external pathogenic influences and harmful winds, as well as maintaining inner calm, eliminating distracting thoughts, preserving the smooth flow of qi, and preventing the leakage of vital essence. Together, these practices promote healthy daily routines and may prevent disease.

Studies have shown that appropriate physical exercise can reduce the risk of gastric cancer [8]. Incorporating TCM exercises, such as Baduanjin and Tai Chi, together with traditional health-preservation practices based on the 24 solar terms, may offer clinical potential and value as preventive interventions in gastric cancer prevention strategies.

Epidemiological investigations, nutritional analyses, and studies of carcinogens have identified a series of factors closely associated with an increased risk of gastric cancer. These include smoking and alcohol consumption [9], irregular eating patterns, rapid eating, consumption of very hot foods, intake of hard foods, frequent consumption of smoked or pickled foods, preference for spicy foods, a high-salt diet, and microbial contamination caused by improper food storage, including pathogenic bacteria in leftover food [10]. Other risk factors include high consumption of processed meat [11], depression [12], and exposure to secondhand smoke [13].

In contrast, protective dietary patterns associated with a lower risk of gastric cancer include frequent consumption of fresh fruits and vegetables; intake of dairy products containing probiotics and prebiotics; consumption of beans and bean products; regular intake of plant foods from the onion and garlic family, which may have anticancer potential [9]; drinking 1,000–1,500 mL of clean water daily [14]; drinking lightly brewed tea; and avoiding overnight food.

3.1.2 Active Treatment of Gastric Precancerous Diseases and Precancerous Lesions

Gastric precancerous diseases refer to gastric disorders associated with a clearly increased risk of malignant transformation. These include chronic atrophic gastritis, gastric ulcer, gastric polyps, the remnant stomach, and giant hypertrophic gastric folds [15]. Precancerous lesions of gastric cancer (PLGC) mainly include intestinal metaplasia and moderate-to-severe dysplasia. Most patients with PLGC have no obvious symptoms. Some may experience mild symptoms such as upper abdominal pain and postprandial abdominal distension. In TCM clinical practice, these manifestations are often classified as weipi ("gastric glomus") or weitong ("gastric pain").

According to TCM theory, PLGC is located in the stomach and is closely associated with the spleen and liver. Regulation of the spleen and stomach in the middle jiao is therefore considered central to treatment. Li Dongyuan, a representative of the school of spleen and stomach theory, stated in Treatise on the Transmission and Transformation of Deficiency and Excess in the Spleen and Stomach: "Once the qi of the spleen and stomach is damaged, the primordial qi can no longer be adequately replenished, and this is the origin of various diseases." He emphasized that the stomach is the foundation of primordial qi. Damage to the stomach may lead directly to insufficiency of primordial qi, thereby disrupting the balance of yin and yang, the abundance of jing, qi, and shen, and the circulation of nutrient qi and blood. This creates conditions conducive to the development of various diseases.

Li Dongyuan further noted that when disorders of the spleen and stomach persist without resolution, pathogenic factors may take the opportunity to penetrate the channels and collaterals. This process can aggravate the disease and induce complex pathological changes, including qi stagnation, blood stasis, phlegm accumulation, and dampness obstruction [16,17]. Most scholars consider the pathogenesis of PLGC to involve deficiency of the root with excess manifestations. Treatment should therefore address both the root and the branch while taking deficiency and excess into account. In clinical practice, early and active treatment of gastric precancerous diseases and lesions should follow these principles to delay disease progression as much as possible.

In addition to herbal medicine, external TCM therapies — including acupuncture, moxibustion, acupoint application, and acupoint injection—also play important roles in the clinical management of PLGC. These external therapies complement oral medication and together constitute a comprehensive treatment strategy. Specifically, such combined interventions may strengthen the body's zheng qi (vital qi), promote homeostatic stability, regulate the

physiological functions of the spleen and stomach, restore their normal transportation and transformation functions, and enhance the body's natural resistance to disease. These approaches broaden the therapeutic options for gastric precancerous diseases, improve overall treatment outcomes, and provide patients with more comprehensive and effective choices [18].

3.2 Preventing Disease Progression After Onset—First Securing Areas Not Yet Affected by Pathogenic Factors

Ye Tianshi proposed the therapeutic principle of "first securing the areas that have not yet been affected by pathogenic factors" in the Wenre Lun. He wrote: "When macules appear but the fever does not resolve, the stomach fluids have been depleted... Therefore, even when using sweet and cold medicines, one should add salty and cold medicines, with the priority of securing the areas not yet affected by pathogenic factors." This principle indicates that, after disease has developed, clinicians should predict its likely progression according to its pathogenesis and intervene proactively to prevent pathological transmission.

Because "the area of greatest deficiency is where pathogenic factors are most likely to remain," it is necessary to secure areas not yet affected and actively eliminate the conditions that facilitate tumor metastasis. Western medicine has made substantial progress in gastric cancer treatment. Surgery, radiotherapy, chemotherapy, immunotherapy, and molecular targeted therapy have become increasingly sophisticated, providing patients with diverse therapeutic options. However, treatment-related complications may cause not only physical suffering but also psychological frustration, which may even lead some patients to discontinue treatment. In comparison, TCM has demonstrated distinctive advantages in alleviating complications associated with conventional gastric cancer treatment, improving daily functioning and quality of life, and prolonging survival. It has therefore become an important component of comprehensive gastric cancer management.

3.2.1 Improving Prognosis and Preventing and Treating Postoperative Complications

Surgery remains a central treatment strategy for gastric cancer and can substantially improve the prognosis of patients with early-stage disease. However, intraoperative anesthesia and surgical wounds may cause gastrointestinal dysfunction, surgical-site infection, postoperative cognitive impairment, and other complications. These complications increase patients' physical and psychological burdens, prolong hospitalization, raise medical costs, and impose additional financial pressure. They may also increase the risk of other complications and pose potential threats to patients' lives [19].

From a TCM perspective, surgery often consumes qi, damages blood, and injures the zang-fu organs. Patients are physically weakened after surgery, and the imbalance between yin and yang may increase the risk of postoperative tumor recurrence and metastasis [20]. Studies have shown that TCM treatment can promote postoperative recovery of gastrointestinal function and effectively reduce the incidence of complications [21].

Gastroparesis is a common postoperative functional gastrointestinal disorder characterized by impaired gastrointestinal motility, marked delay in gastric emptying, and reduced peristalsis. Its incidence ranges from 0.4% to 5%. The condition may persist for a prolonged period and often predisposes patients to other complications, whereas conventional treatments may act slowly and are associated with a high rate of recurrence. Zou Liyan [22] treated gastroparesis using a combined regimen of Xuanfu Daizhe Decoction and acupuncture. The results demonstrated significant clinical efficacy.

3.2.2 Reducing Toxicity and Enhancing Efficacy: Preventing and Treating Adverse Reactions to Radiotherapy and Chemotherapy

In current clinical practice, many patients with gastric cancer are diagnosed at an intermediate or advanced stage and have already missed the optimal window for curative surgery. Radiotherapy, chemotherapy, and targeted therapy therefore become essential alternative or adjunctive treatments. Although these therapies may benefit patients, they can also cause various adverse reactions and complications, including myelosuppression, recurrent nausea and vomiting, marked alopecia, and impaired immune function [23]. These effects increase patients' physical and psychological burdens and may lead some patients to interrupt treatment.

TCM has distinctive advantages in reducing treatment-related adverse reactions and enhancing therapeutic efficacy while minimizing toxicity. Studies have shown that, when used as an adjunct to conventional chemotherapy, TCM can reduce toxicities, improve clinical efficacy, increase survival, and help prevent gastric cancer recurrence and metastasis [24].

Professor Li Renting proposed that "preserving stomach qi" can restore the balance between yin and yang, correct disturbances in the internal environment, and enhance patients' endogenous immunity. This approach may reduce toxicity and enhance the efficacy of conventional treatment [25]. For symptoms such as nausea and vomiting, epigastric fullness, fatigue, somnolence, low-grade fever, and weight loss, herbal medicine can nourish and protect the spleen and stomach. This treatment may be combined with indirect moxibustion at Zusanli (ST36), Shenque (CV8), and Guanyuan (CV4) [26] to restore vital qi and re-establish the balanced state in which "yin is at peace and yang is securely contained."

The principle that "when vital qi is nourished, accumulated masses resolve spontaneously" may also be combined with the concept of zhì wèi bìng to guide gastric cancer prevention and treatment. This principle originated from Zhang Yuansu of the Yishui school, who stated: "When vital qi is nourished, accumulation resolves spontaneously, just as a room filled with exemplary people... If genuine qi is strengthened and stomach qi becomes robust, accumulation will resolve on its own." The central idea is to nourish and strengthen stomach qi, reinforce the foundation acquired after birth, and ensure that vital qi is sufficient so that external pathogenic factors cannot exploit deficiency.

Although the two concepts are expressed differently, they share the same core principle: disease prevention through

regulation of the body and mind and enhancement of physical constitution. When applied together, the body's vital qi should be nourished and physical resistance strengthened before disease develops, thereby achieving prevention before onset. Once disease has developed, timely TCM interventions, including acupuncture, massage, and herbal medicine, can be used to regulate physiological functions and prevent further progression. TCM emphasizes the body as an integrated whole and advocates simultaneously supporting healthy qi and eliminating pathogenic factors, as well as nourishing healthy qi while resolving pathological accumulation. These strategies may effectively alleviate adverse reactions to surgery, radiotherapy, and chemotherapy, strengthen the constitution, and improve the quality of life of patients with gastric cancer.

3.3 Preventing Recurrence After Recovery—Preventing Gastric Cancer Recurrence and Metastasis

Studies have shown that highly concentrated, viscous, aggregated, and coagulated blood may promote the recurrence or metastasis of malignant tumors [27]. This finding is consistent with the pathological characteristics attributed in TCM to phlegm and blood stasis. During the early stage of recovery, patients' vital qi has not yet been fully restored, and the circulation of qi and blood remains impaired. Consequently, the syndrome of "phlegm and blood stasis binding together" may develop during rehabilitation. The formation of phlegm accumulation and blood stasis further obstructs the circulation of qi and blood, creating a vicious cycle that increases the risk of gastric cancer recurrence and makes the disease more difficult to treat.

TCM views gastric cancer recurrence through the principle that "where pathogenic factors gather, vital qi must be deficient." The Yizong Bidu states: "Accumulations form when vital qi is insufficient, after which pathogenic qi occupies the affected area." These teachings emphasize that tumor development is closely associated with deficiency of vital qi. When the body remains in a state of prolonged vital-qi deficiency, disorders such as consumptive disease may arise, leading to depletion of qi, blood, yin, and yang, as well as deterioration of zang-fu function [28].

Internal deficiency of vital qi is considered a major driving force underlying gastric cancer recurrence and metastasis. The deficiency of qi and blood that accompanies gastric cancer after surgery, radiotherapy, or chemotherapy is a key factor associated with a sharp increase in the risk of recurrence and metastasis. The Wenyi Lun (Treatise on Pestilence) states: "When disease arises spontaneously without an apparent cause, the latent pathogen has not been fully eliminated." By analogy, residual toxic factors may remain in patients after gastric cancer surgery, and these unresolved pathogenic factors may contribute to recurrence and metastasis. In the prognostic management of gastric cancer, TCM follows the principle of "regulating yin and yang, with balance as the goal." It emphasizes holistic regulation and harmonization of yin and yang to restore the state in which "yin is at peace and yang is securely contained."

4. Conclusion

With the continued advancement of research into gastric cancer prevention and treatment, TCM and herbal medicine have demonstrated distinctive value and advantages throughout the entire disease-management process. These applications include preventing gastric cancer, reducing toxicity and enhancing the efficacy of conventional treatments, improving quality of life, prolonging survival, and preventing recurrence and metastasis. They provide patients with diverse therapeutic options and may strengthen their confidence in treatment.

Nevertheless, the limitations and challenges of TCM must also be recognized. Different practitioners have varying understandings of gastric cancer and use different pattern-identification and treatment approaches. In current practice, pattern-based treatment relies heavily on the individual experience accumulated by clinicians over many years. A unified and systematic framework for pattern-identification criteria and treatment protocols is still lacking, which limits the application and dissemination of TCM in cancer prevention and treatment.

Because the pathogenesis of gastric cancer has not yet been fully elucidated, TCM also faces challenges in explaining its mechanisms and establishing corresponding diagnostic criteria and treatment strategies based on pattern identification. As oncology research continues to advance, particularly as investigations into the mechanisms underlying gastric cancer become increasingly refined, new scientific evidence may emerge to support the application of TCM in gastric cancer prevention and treatment.

Future clinical practice should focus on developing a systematic TCM framework for pattern identification and treatment. Such a framework may help clarify the mechanisms underlying the effects of TCM in gastric cancer prevention and treatment and promote its broader and more scientifically grounded application in oncology. Applying the TCM concept of zhì wèi bìng to gastric cancer prevention and treatment not only demonstrates the depth and distinctive strengths of TCM theory but also offers new perspectives and approaches for modern medical practice. This concept is of considerable importance for improving comprehensive gastric cancer management and patient outcomes and may provide patients with greater hope and more therapeutic possibilities.

References

[1] Han BF, Zheng RS, Zeng HM, et al. Age-specific analysis of cancer incidence and mortality in the Chinese population, 2024 [J]. China Cancer, 2026, 35(3): 163-171.

[2] Chen WQ, Zheng RS, Baade PD, et al. Cancer statistics in China, 2015 [J]. CA: A Cancer Journal for Clinicians, 2016, 66(2): 115-132.

[3] Long FN, Li J, Peng JP, et al. The burden and trend of gastric cancer and possible risk factors in five Asian countries from 1990 to 2019 [J]. Scientific Reports, 2022, 12(1): 5980.

[4] Chen XD, Pan HF, Cai TT, et al. Exploration of Professor Liu Youzhang's clinical academic thinking on precancerous lesions of gastric cancer [J]. China Journal

of Traditional Chinese Medicine and Pharmacy, 2017, 32(10): 4491-4493.
[5] Aida K, Yoshikazu H, Chihiro M, et al. Clinicopathological features of gastric cancer detected by endoscopy as part of annual health checkup [J]. Journal of Gastroenterology and Hepatology, 2008, 23(4): 632-637.
[6] Pérez-Mendoza A, Zárate-Guzmán Á, García GE, et al. Systematic alphanumeric-coded endoscopy versus chromoendoscopy for the detection of precancerous gastric lesions and early gastric cancer in subjects at average risk for gastric cancer [J]. Revista de Gastroenterología de México (English Edition), 2018, 83(2): 117-124.
[7] Islami F, Marlow CE, Thomson B, et al. Proportion and number of cancer cases and deaths attributable to potentially modifiable risk factors in the United States, 2019 [J]. CA: A Cancer Journal for Clinicians, 2024.
[8] Moore SC, Lee IM, Weiderpass E, et al. Association of leisure-time physical activity with risk of 26 types of cancer in 1.44 million adults [J]. JAMA Internal Medicine, 2016, 176(6): 816-825.
[9] Cheng SL, Zhang FB, Li B. A meta-analysis of influencing factors for gastric cancer in Chinese population [J]. Chinese Journal of Public Health, 2017, 33(12): 1775-1780.
[10] Zhou XB, Zhang J, Zhang CY. Meta-analysis of relationship between lifestyle and gastric cancer in Chinese population [J]. Chinese Journal of Clinical Rehabilitation, 2006, 10(48): 10-13.
[11] Kim RS, Kim K, Lee AS, et al. Effect of red, processed, and white meat consumption on the risk of gastric cancer: an overall and dose-response meta-analysis [J]. Nutrients, 2019, 11(4): 826.
[12] Pyo SL, In-Kyung S, Hwan JK, et al. The effect of emotional stress and depression on the prevalence of digestive diseases [J]. Journal of Neurogastroenterology and Motility, 2015, 21(2): 273-282.
[13] Hao RT. A case-control study on risk factors for gastric cancer in Sheyang County, Jiangsu Province [D]. Chinese Center for Disease Control and Prevention, 2019.
[14] Li X, Yang Y, Pu GS, et al. Correlation analysis between drinking water hygiene and habits and gastric cancer [J]. Journal of Evidence-Based Medicine, 2020, 20(5): 289-293.
[15] Fudan University Press. Modern Oncology, 3rd edition [J]. Fudan University Journal (Medical Sciences), 2011, 38(5): 412.
[16] Zhang L. Clinical and experimental study on treatment of precancerous lesions of chronic atrophic gastritis from qi deficiency and blood stasis [D]. Nanjing University of Chinese Medicine, 2012.
[17] Wang JH, Yu WY, Hui JP, et al. “Toxin and stasis intermingling” as the core pathogenesis of high-risk patterns in gastric precancerous lesions [J]. Liaoning Journal of Traditional Chinese Medicine, 2012, 39(10): 1958-1959.
[18] An XX, Wang ZG, Kang Y, et al. Research progress of traditional Chinese medicine in treatment of gastric precancerous lesions [J]. Clinical Journal of Chinese Medicine, 2022, 14(5): 145-148.
[19] Chen Z, Tu XY, He JY, et al. Treatment and rehabilitation of gastric emptying disorder after radical gastrectomy [J]. Chinese Journal of Medicine, 2022, 57(1): 14-17.
[20] Huang MW, Wu LC, Zhou F, et al. Advances in the mechanism of circulating tumor cells involved in tumor recurrence and metastasis [J]. Chinese Journal of Cancer Prevention and Treatment, 2018, 10(1): 51-55.
[21] Yu SS, Shen Y, Zhang Q, et al. Professor Yu Qingsheng’s experience in early postoperative Chinese medicine treatment for gastric cancer [J]. Clinical Journal of Traditional Chinese Medicine, 2017, 29(12): 2019-2021.
[22] Zou LY. Xuanfu Daizhe Decoction combined with acupuncture in treatment of gastroparesis syndrome after gastric cancer surgery: 31 cases [J]. Hunan Journal of Traditional Chinese Medicine, 2020, 36(4): 52-54.
[23] Zhou QQ, Zhang AQ, Qian X. Research status of traditional Chinese medicine in enhancing immune function in gastric cancer [J]. Journal of Shaanxi University of Chinese Medicine, 2016, 39(1): 126-129.
[24] Zhang JF, Liu YX, Xu YF, et al. Meta-analysis of therapeutic efficacy of traditional Chinese medicine combined with chemotherapy for postoperative gastric cancer [J]. Chinese Archives of Traditional Chinese Medicine, 2019, 37(8): 1819-1825.
[25] Bai MS, Wang XC, Sun J, et al. Attenuating toxicity and enhancing efficacy of Shenfu Injection combined with Tanreqing Injection in elderly advanced lung cancer patients with spleen deficiency and dampness-phlegm pattern during chemotherapy [J]. Chinese Journal of Experimental Traditional Medical Formulae, 2018, 24(14): 159-163.
[26] Cui XX, Li RT, Liu L, et al. Professor Li Renting’s approach to treating malignant tumors by protecting stomach qi and promoting fu-qi circulation [J]. Journal of Changchun University of Chinese Medicine, 2019, 35(4): 640-643.
[27] Liu JP, Yuan CJ, Cao JG, et al. Understanding tumor angiogenesis from the perspective of traditional Chinese medicine image thinking [J]. Chinese Journal of Basic Medicine in Traditional Chinese Medicine, 2019, 25(7): 937-938+943.
[28] Hou SL, Zhang FL. Analysis of treatment principles for consumptive diseases in Xu’s Commentary on Ye Tianshi’s Later Years’ Medical Cases [J]. China Journal of Traditional Chinese Medicine and Pharmacy, 2022, 37(4): 2348-2351.