

## 王珏



職 稱： 助理教授、博士生導師

學院/部門： 醫學部-中醫藥學院

電郵地址： wangjue@must.edu.mo

電 話： (853)8897-3012

傳 真： (853)2882-5123

辦 公 室： E201-C

郵寄地址： 澳門氹仔偉龍馬路

### 教研領域：

本科課程：人體解剖學、組織胚胎學、解剖及生理學、西醫內科學、西醫診斷學、病理學、醫學影像學、急救醫學。

研究生課程：醫學遺傳學、專業英語。

研究方向：中西醫結合內科學，腫瘤耐藥機制及中西藥物協同效應研究，循證醫學研究。

### 研究生指導：

(FC) 中醫學、中藥學、中西醫結合博士/碩士學位課程

(SP) 藥學博士/碩士學位課程

(FMD) 公共衛生學碩士學位課程

教育背景：

2017-2021 澳門科技大學 中西醫結合博士學位

2014-2017 澳門科技大學 中西醫結合臨床醫學碩士學位

2009-2014 蘭州大學 臨床醫學學士學位

工作經驗：

2024.07-至今 澳門科技大學中醫藥學院助理教授

2022.09-2024.06 澳門科技大學中醫藥學院講師

學術成果：

期刊文章(\*corresponding author(s), #contribution equally)

1. Xu C<sup>#</sup>, Jiang ZB<sup>#</sup>, Shao L<sup>#</sup>, Zhao ZM<sup>#</sup>, Fan XX, Sui X, Yu LL, Wang XR, Zhang RN, Wang WJ, Xie YJ, Zhang YZ, Nie XW, Xie C, Huang JM, Wang J, **Wang J**<sup>\*,#</sup>, Leung EL<sup>\*</sup>, Wu QB<sup>\*</sup>.  $\beta$ -Elemene enhances erlotinib sensitivity through induction of ferroptosis by upregulating lncRNA H19 in EGFR-mutant non-small cell lung cancer. *Pharmacological Research*. 2023 Mar 21;191:106739. doi: 10.1016/j.phrs.2023.106739. Epub ahead of print. PMID: 36948327.

2. **Wang J**, Li GC, Yu LL, Mo TT, Wu QB, Zhou Z. Aidi injection plus platinum-based chemotherapy for stage IIIB/IV non-small cell lung cancer: A meta-analysis of 42 RCTs following the PRISMA guidelines. *Journal of Ethnopharmacology*, 2018, 221:137.

3. **Wang J**, Xu C, Chen Y, Shao L, Li T, Fan X, Yu L, Zhang R, Chen B, Chen H, Sui X, Leung EL, Wu Q.  $\beta$ -elemene enhances the antitumor activity of erlotinib by inducing apoptosis through AMPK and MAPK pathways in TKI-resistant H1975 lung cancer cells. *Journal of Cancer*. 2021 Feb 22;12(8):2285-2294.

4. Huang X<sup>#</sup>, **Wang J**<sup>#</sup>, Lin W, et al. Kanglaite injection plus platinum-based chemotherapy for stage III/IV non-small cell lung cancer: A meta-analysis of 27 RCTs. *Phytomedicine*, 2020, 67: 153154.

5. Xu C<sup>#</sup>, **Wang J<sup>#</sup>**, Yu L, Sui X, Wu Q. Omicron subvariant BA.5 is highly contagious but containable: Successful experience from Macau. *Front Public Health*. 2023 Jan 10;10:1029171.
6. Dong H, Ge D, Qu B, Zhu P, Wu Q, Wang T\*, **Wang J\***, Li Z\*. Transarterial chemoembolization with or without multikinase inhibitors for patients with unresectable hepatocellular carcinoma: a systematic review and meta-analysis of randomized controlled trials. *Front Oncol*. 2023 Jun 8;13:1139025.
7. Luo X, Zhang Z, Zheng Z, Ye Q, **Wang J\***, Wu Q\*, Huang G\*. Art therapy as an adjuvant treatment for schizophrenia: A protocol for an updated systematic review and subgroup meta-analysis of randomized clinical trials following the PRISMA guidelines. *Medicine (Baltimore)*. 2022 Oct 7;101(40):e30935.
8. Wang XW, Liu ZT, Sui XB, Wu QB, **Wang J**, Xu C. Elemene injection as adjunctive treatment to platinum-based chemotherapy in patients with stage III/IV non-small cell lung cancer: A meta-analysis following the PRISMA guidelines. *Phytomedicine*, 2019, 59: 152787.
9. Chen K, Qu J, Chen H, **Wang J**, Hua H, Li J, Zhou L, Zhang W, Li Z. Investigating the medicinal potential, material basis and mechanism of Polygoni Orientalis Fructus based on multi-technology integrated network pharmacology. *Phytomedicine*. 2021 Jul 25;91:153685.
10. Li Z, Qu B, Zhou L, Chen H, **Wang J**, Zhang W, Chen C. A New Strategy to Investigate the Efficacy Markers Underlying the Medicinal Potentials of Orthosiphon stamineus Benth. *Frontiers in pharmacology*. 2021 Sep 24;12:748684.
11. Li Z, Qu B, Wu X, Chen H, **Wang J**, Zhou L, Wu X, Zhang W. Methodology improvement for network pharmacology to correct the deviation of deduced medicinal constituents and mechanism: Xian-Ling-Gu-Bao as an example. *Journal of Ethnopharmacology*. 2022 Jan 31:115058.
12. Wang T, Wang Y, **Wang J**, Chen H, Qu B, Li Z. Efficacy and Safety of Topical Therapy With Botanical Products for Melasma: A Systematic Review and Meta-Analysis of Randomized Controlled Trials. *Frontiers in medicine*. 2022 Jan 24;8:797890.
13. HW, Yao XJ, Li T, CWK Lam, Zhang H, **Wang J**, ... & Leung ELH. Compound Kushen injection combined with platinum-based chemotherapy for stage III/IV non-small cell lung cancer: A meta-analysis of 37 RCTs following the PRISMA guidelines. *Journal of Cancer*, 2020, 11(7): 1883.
14. Chen B, Zhang RN, Fan XX, **Wang J**, Xu C, An B, Wang Q, Wang J, Leung ELH, Sui XB, Wu QB. Clinical diagnostic value of long non-coding RNAs in Colorectal Cancer: A systematic review and meta-analysis. *Journal of Cancer*, 2020, 11(18): 5518.
15. Xu C, Yao X, Li T, Wang J, An B, **Wang J**, Sui X, Leung EL, Wu Q. Pretreatment neutrophil-to-lymphocyte ratio is a predictive biomarker for EGFR TKI-treated patients

with advanced EGFR-mutant Non-small cell lung cancer. *Transl Cancer Res.* 2020 Apr;9(4):2875-2883. doi: 10.21037/tcr.2020.02.28. PMID: 35117644; PMCID: PMC8797611.

16. Zhong ZH, Yi ZL, Zhao YD, **Wang J**, Jiang ZB, Xu C, Xie YJ, He QD, Tong ZY, Yao XJ, Leung EL, Coghi PS, Fan XX, Chen M. Pyronaridine induces apoptosis in Non-small cell lung cancer cells by upregulating DR5 expression and inhibiting EGFR. *Chemical Biology & Drug Design.* 2021 Jul 21. doi: 10.1111/cbdd.13926. Epub ahead of print.

17. Chen HW, Yao XJ, Liu Z, Li T, Xu C, **Wang J**, et al. Efficacy and safety of Shenqi Fuzheng injection combined with platinum-based chemotherapy for stage III/IV non-small cell lung cancer: A protocol for systematic review and meta-analysis of randomized controlled trials. *Medicine*, 2019, 98(39).

18. Wu QB, Chen HW, Yao XJ, Li T, Xu C, **Wang J**, ... & Leung ELH. Long-term aspirin use for cancer primary prevention: A protocol for updated systematic review and subgroup meta-analysis of randomized clinical trials. *Medicine*, 2019, 98(39).

19. Chen HW, Yao XJ, Li T, CWK Lam, Zhang H, **Wang J**, ... & Leung ELH. Compound Kushen injection combined with platinum-based chemotherapy for stage III/IV non-small cell lung cancer: A protocol for systematic review and meta-analysis of randomized controlled trials. *Medicine*, 2019, 98(52).

20. Zhai X, He Q, Chen M, Yu L, Tong C, Chen Y, **Wang J**, Fan X, Xie H, Liang Z, Sui X, Zeng L, Wu Q. Pinellia ternata-containing traditional Chinese medicine combined with 5-HT3RAs for chemotherapy-induced nausea and vomiting: A PRISMA-compliant systematic review and meta-analysis of 22 RCTs. *Phytomedicine.* 2023 Apr 14;115:154823.

21. Qiu L<sup>#</sup>, Chen Y<sup>#</sup>, **Wang J**<sup>#</sup>, Yu L, Wu Q, Mo H. Efficacy and safety of Simiao decoction in the treatment of cervical HPV infection: A systematic review and meta-analysis of randomized clinical trials. *Heliyon.* 2023 Nov 8;9(11):e21840.

22. Luo X, Zhang Z, Shi X, He C, **Wang J**<sup>\*</sup>, Wu Q<sup>\*</sup>, Huang G<sup>\*</sup>. Arts therapies for mental disorders in COVID-19 patients: a comprehensive review. *Front Public Health.* 2023 Dec 4;11:1289545.

23. Chi H, Su L, Yan Y, Gu X, Su K, Li H, Yu L, Liu J, **Wang J**<sup>\*</sup>, Wu Q<sup>\*</sup>, Yang G<sup>\*</sup>. Illuminating the immunological landscape: mitochondrial gene defects in pancreatic cancer through a multiomics lens. *Front Immunol.* 2024 Mar 6;15:1375143.

24. Luo D<sup>#</sup>, Fang M<sup>#</sup>, Shao L<sup>#</sup>, **Wang J**<sup>#</sup>, Liang Y, Chen M, Gui X, Yan J, Wang W, Yu L, Fan X, Wu Q. The EMT-Related Genes GALNT3 and OAS1 are Associated with Immune Cell Infiltration and Poor Prognosis in Lung Adenocarcinoma. *Front Biosci (Landmark Ed).* 2023 Oct 27;28(10):271.

25. Zhang A, Luo X, Lin R, He C, **Wang J**<sup>\*</sup>, Huang G<sup>\*</sup>. Group arts therapies for patients with schizophrenia: a protocol of systematic review and meta-analysis. *BMJ Open.* 2024 Jun 4;14(6):e082076. doi: 10.1136/bmjopen-2023-082076. PMID: 38834330.

26. Luo X, Zhang A, Li Y, Zhang Z, Ying F, Lin R, Yang Q, **Wang J\***, Huang G\*. Emergence of Artificial Intelligence Art Therapies (AIATs) in Mental Health Care: A Systematic Review. *Int J Ment Health Nurs*. 2024 Jul 17. doi: 10.1111/inm.13384. Epub ahead of print. PMID: 39020473.
27. Li Y, Luo X, Zhang A, Ying F, **Wang J\***, Huang G\*. The potential of arts therapies in Parkinson's disease rehabilitation: A comprehensive review. *Heliyon*. 2024 Aug 3;10(16):e35765. doi: 10.1016/j.heliyon.2024.e35765. PMID: 39229526; PMCID: PMC11369473.
28. Zhang A, Luo X, Li Y, Yan L, Lai X, Yang Q, Zhao Z, Huang G\*, Li Z\*, Wu Q\*, **Wang J\***. Epigenetic changes driven by environmental pollutants in lung carcinogenesis: a comprehensive review. *Front Public Health*. 2024 Oct 8;12:1420933. doi: 10.3389/fpubh.2024.1420933. PMID: 39440184; PMCID: PMC11493668.
29. Wang Y, Huang Y, Luo X, Lai X, Yu L, Zhao Z, Zhang A, Li H, Huang G\*, Li Y\*, **Wang J\***, Wu Q\*. Deciphering the role of miRNA-134 in the pathophysiology of depression: A comprehensive review. *Heliyon*. 2024 Oct 5;10(19):e39026. doi: 10.1016/j.heliyon.2024.e39026. PMID: 39435111; PMCID: PMC11492588.
30. Ho MI, Wu ZH, Chen YY, Leong WI, **Wang J**, Zhou H, Wu ZT, Mao YQ, Du JA, Zheng Y, Yu Y, Do Lago Comandante P, Yu LL, Wu QB. Influence of the continuing COVID-19 epidemic on sleep quality and psychological status of healthcare workers in private institutions. *World J Psychiatry*. 2024 Oct 19;14(10):1495-1505. doi: 10.5498/wjp.v14.i10.1495. PMID: 39474386; PMCID: PMC11514558.
31. Wen K, Sun D, Wang D, Li Y, **Wang J**, Wang B, Zhan M, Tan H, Su T, Lu L, Liang X, Lin J, Tang C, Lai X. Efficacy of acupuncture for pregnancy with early-onset ovarian hyperstimulation syndrome: study protocol for a randomised controlled clinical trial. *BMJ Open*. 2024 Nov 27;14(11):e090784. doi: 10.1136/bmjopen-2024-090784. PMID: 39608996.
32. Zhang A, Luo X, Ying F, **Wang J\***, Huang G\*. Collaborative arts therapies as a supportive intervention for autism spectrum disorders: Bibliometric analysis, insights, and directions. *Heliyon*. 2024 Dec 19;11(1):e41333. doi: 10.1016/j.heliyon.2024.e41333. PMID: 39958733; PMCID: PMC11825260.
33. Zhao L<sup>#</sup>, Guo R<sup>#</sup>, Zhao Z<sup>#</sup>, **Wang J<sup>#</sup>**, Lou Z, Bao J, Zheng W, Wang Q, Qiao L, Ye Y, Kwan HY, Zhou H, Wu Q, Xu K. Linking Hyperuricemia to Cancer: Emerging Evidence on Risk and Progression. *Curr Oncol Rep*. 2025 Apr 26. doi: 10.1007/s11912-025-01677-z. Epub ahead of print. PMID: 40285993.
34. Wang S<sup>#</sup>, Zhao Z<sup>#</sup>, Yu L<sup>#</sup>, **Wang J**, Ouyang Y, Zhou H, Shen W, Wu Q. Identification of Quercetin as a Natural MMP1 Inhibitor for Overcoming Cisplatin Resistance in Epithelial Ovarian Cancer. *J Cancer*. 2025 May 31;16(8):2578-2594. doi: 10.7150/jca.110517. PMID: 40535817; PMCID: PMC12171002.
35. An L, Huang Y, Wang Y, Shen S, Luo X, Liang X, Lu L, Tang C, Lin J, Su T, Zhan M, Wang D, **Wang J\***, Lai X\*, Li Y\*. Assessment of ovarian dysfunction induced by

environmental toxins: a systematic review. *Front Public Health*. 2025 Jul 30;13:1575418. doi: 10.3389/fpubh.2025.1575418. PMID: 40809751; PMCID: PMC12343636.

36. Guo S, Luo X, **Wang J\***, Huang G\*. Effect of sensory art therapies on root canal treatment anxiety and high dental anxiety in adults: A systematic review with meta-analysis. *PLoS One*. 2025 Sep 2;20(9):e0328917. doi: 10.1371/journal.pone.0328917. PMID: 40892734; PMCID: PMC12404381.

37. Liu MX, Cai YT, Yang Y, Zhao ZM, **Wang J**, Xu KY, Liu YX, Wu QB. Tumor Cell Membrane-Coated Oxygen-Evolving Carbon Nitride Nanozymes Combined with Curcumenol Delivery for Lung Cancer Therapy via 'Open-Source Throttling' Strategy. *Adv Healthc Mater*. 2025 Jul 30:e02510. doi: 10.1002/adhm.202502510. Epub ahead of print. PMID: 40739843.

38. Xu J, Lin R, Zhang A, Chen Q, Li D, Chen J, Song M, Chen S, Yang B, Li L, Xu H, Peng J, Tang Y, Yang W, Luo X\*, Zhou X\*, **Wang J\***, Huang G\*. AI-assisted drawing therapy for children with ADHD: A randomised controlled trial. *Complement Ther Med*. 2025 Nov;94:103262. doi: 10.1016/j.ctim.2025.103262. Epub 2025 Oct 13. PMID: 41093023.

39. Yang Q, **Wang J**, Du C, Lee HY, Wong LP. A video-based educational intervention to improve vaccine acceptance for Schistosomiasis japonicum: A pre-post study using the 5C model in rural China. *Hum Vaccin Immunother*. 2025 Dec;21(1):2585557. doi: 10.1080/21645515.2025.2585557. Epub 2025 Nov 11. PMID: 41215694; PMCID: PMC12607288.

40. Shen J<sup>#</sup>, Xu J<sup>#</sup>, Zheng Z<sup>#</sup>, **Wang J<sup>#</sup>**, Li L, Luo X, Huang G. The impact of mind-body therapies on the mental health of caregivers in palliative care settings: A systematic review. *Medicine (Baltimore)*. 2025 Oct 31;104(44):e45020. doi: 10.1097/MD.00000000000045020. PMID: 41261713; PMCID: PMC12582678.

41. Hu Q, Xu J, Peng Y, **Wang J\***, Huang G\*. The application of AI-based interventions in diabetes personalized management: a systematic review and meta-analysis. *Diabetol Metab Syndr*. 2026 Jan 16;18(1):57. doi: 10.1186/s13098-025-02079-8. PMID: 41546022; PMCID: PMC12892737.

#### 會議論文：

1. Cong Xu, Ze-Bo Jiang, Ruo-Nan Zhang, **Jue Wang**, Elaine Lai-Han Leung, Qi-Biao WU,  $\beta$ -elemene reverses erlotinib resistance through upregulation of LncRNA H19 in EGFR mutant lung cancer The 7th Annual Meeting of the Specialty Committee on Immunology of Traditional Chinese Medicine of the World Federation of Chinese Medicine Societies cum the Cross-Strait-Hong Kong-Macao Summit on Treatment and Research of Rheumatism and Nephropathy with Chinese Medicine (2020·Changsha China)
2. Ruo-Nan Zhang, Bi Chen, **Jue Wang**, Cong Xu, Elaine Lai-Han Leung, Xin-Bing Sui, Qi-Biao Wu, Curcumenol induces ferroptotic cell death in lung cancer cells. The 7th

Annual Meeting of the Specialty Committee on Immunology of Traditional Chinese Medicine of the World Federation of Chinese Medicine Societies cum the Cross-Strait Hong Kong-Macao Summit on Treatment and Research of Rheumatism and Nephropathy with Chinese Medicine (2020·Changsha China)

3. **Jue Wang**, Cong Xu, Xueli Cheng, Elaine Lai Han Leung, Qibiao Wu.  $\beta$ -elemene enhances antitumor activity and induces apoptosis on TKI-resistant H1975 lung cancer cells by regulating AMPK $\alpha$  and MAPK pathways. The 6th Annual Meeting of the Specialty Committee on Immunology of Traditional Chinese Medicine of the World Federation of Chinese Medicine Societies cum the Cross-Strait- Hong Kong-Macau Forum on Advanced Research in Treating Rheumatism with Chinese Medicine (2019·Tianjin China)
4. Cong Xu, **Jue Wang**, Xueli Cheng, Elaine Lai Han Leung, Qibiao Wu.  $\beta$ -elemene regulates oxidative stress to induce apoptosis and increase drug sensitivity of TKI-resistant NSCLC cells. The 6th Annual Meeting of the Specialty Committee on Immunology of Traditional Chinese Medicine of the World Federation of Chinese Medicine Societies cum the Cross-Strait- Hong Kong-Macau Forum on Advanced Research in Treating Rheumatism with Chinese Medicine (2019·Tianjin China)
5. Ruo-Nan Zhang Bi Chen, **Jue Wang**, Cong Xu, Elaine Lai Han Leung, Qibiao Wu.  $\beta$ elemene inhibits the metastasis of KDM6A-deficient bladder cancer cells by inhibiting the epithelial mesenchymal transition The 6th Annual Meeting of the Specialty Committee on Immunology of Traditional Chinese Medicine of the World Federation of Chinese Medicine Societies cum the Cross-Strait-Hong Kong-Macau Forum on Advanced Research in Treating Rheumatism with Chinese Medicine (2019·Tianjin China)
6. Bi Chen, Ruo Nan Zhang, **Jue Wang**, Cong Xu, Xinbing Sui, Elaine Lai Han Leung, Qibiao Wu, The role of traditional Chinese medicine in reducing the adverse reactions caused by cancer immunotherapy The 6th Annual Meeting of the Specialty Committee on Immunology of Traditional Chinese Medicine of the World Federation of Chinese Medicine Societies cum the Cross-Strait Hong Kong-Macau Forum on Advanced Research in Treating Rheumatism with Chinese Medicine(2019·Tianjin China)
7. Xuewei Wang, **Jue Wang**, Qibiao Wu. Elemene injection as adjunctive treatment to platinum-based chemotherapy for advanced non-small cell lung cancer a systematic review and meta-analysis. Proceedings of the 5th Annual Meeting of the Specialty Committee on Immunology of Traditional Chinese Medicine of the World Federation of Chinese Medicine Societies cum the Cross-Strait Forum on Advanced Research on Treatment of Rheumatism with Chinese Medicine (2018·Nanning China)
8. **Jue Wang** Elaine Laihan Leung\*, Qibiao Wu. A systematic review and meta-analysis of randomized controlled trials of Aidi injection in combination with chemotherapy for middle-advanced stage non-small cell lung cancer Proceedings of the 5th Annual Meeting of the Specialty Committee on Immunology of Traditional Chinese Medicine of the World Federation of Chinese Medicine Societies cum the Cross-Strait Forum on

Advanced Research on Treatment of Rheumatism with Chinese Medicine(2018·Nanning China)

9. Guanghui Huang, **Jue Wang**, Jifeng Shen. Application of neural rehabilitation assistive technologies in motor function recovery of stroke patients: a systematic review(2025·Taipei,Taiwan China)

研究項目：

2019-2021 中藥欖香烯治療非小細胞肺癌的靶標發現及逆轉酪氨酸激酶抑制劑耐藥的機制研究（澳門特別行政區科學技術發展基金）；已結題，參與

2019-2021 細胞自噬在非小細胞肺癌 TKIs 耐藥中的角色及欖香烯的干預作用與機制研究（澳門特別行政區科學技術發展基金）；已結題，參與

2023-2024 細胞焦亡在非小細胞肺癌 TKIs 耐藥中的角色及莪朮烯醇的干預作用與機制研究（澳門科技大學研究基金，普通研究項目）；已結題，主持。

2022-2024 大氣污染物與肺癌關係的循證醫學證據研究及其對肺癌預防的健康預警意義（粵港澳污染物暴露與健康聯合實驗室開放基金）；已結題，參與

2023 大氣污染物與肺癌的表觀遺傳學研究及其健康預警機制（粵港澳污染物暴露與健康聯合實驗室開放基金）；已結題，主持。

2022- 溫鬱金活性成分莪朮烯醇誘導肺癌細胞發生鐵死亡的分子機制及莪朮烯醇納米製劑研發（澳門特別行政區科學技術發展基金）；在研，參與

2024- 治療痰熱蘊肺證支擴的中藥複方“支擴寧”新藥研發與轉化（橫琴粵澳深度合作區深合中藥新藥技術創新中心基金項目）；在研，共同主持。

2024- 溫鬱金天然提取物莪朮烯醇治療 EGFR 突變型非小細胞肺癌的作用與分子機制研究及其靶向脂質體研發（澳門特別行政區科學技術發展基金）；在研，主持

學術機構及社會任職：

世界中醫藥學會聯合會內分泌專業委員會常務理事

世界中醫藥學會聯合會中醫藥免疫專業委員會理事

世界中醫藥學會聯合會血液病專業委員會理事

美國臨床腫瘤學會（American Society of Clinical Oncology）會員

日中醫學協會（The Japan China Medical Association）會員

澳門臨床腫瘤學會成員

澳門高等教育發展促進會會員

亞洲傳統醫學國際研究學會會員