

Yaning Yang

MD PhD

National Cancer Centre, panjiayuan south 17th, Beijing, China

✉ yaning_yang@outlook.com 🌐 <https://yangnuonuo.github.io>

Education

National Cancer Center, Peking Union Medical College, Tsinghua University

Beijing, China

PhD in Medical Oncology

Sep. 2021 – Jun. 2024 (expected)

- Thesis title: Clinical strategies for advanced non-small cell lung cancer with *EGFR/HER2* exon 20 insertions
- supervisor: Prof. Dr. Yan Wang

National Cancer Center, Peking Union Medical College, Tsinghua University

Beijing, China

MD in Medical Oncology

Sep. 2018 – Jun. 2021

- Thesis title: Clinical strategies for advanced non-small cell lung cancer with *rare mutation*
- supervisor: Prof. Dr. Yan Wang
- Final grade: 3.4/4

Tongji Medical College, Huazhong University of Science and Technology

Wuhan, China

Doctor of Medicine

Sep. 2013 – Jun. 2018

- Final grade: 3.4/4, 20/109

Research Interests

Rare mutations in advanced non-small cell lung cancer

- Designing protocol and conducting 2 perspective phase II clinical trials and several prospective studies

Predictive factors of immunotherapy in advanced non-small cell lung cancer patients

- Investigating the predictive roles of Aromatic hydrocarbon receptors and cytokines in advanced non-small cell lung cancer who received immunotherapy

Stipends & Awards

2022 First grade of PhD Award

China

2020 Second grade of MD Award

China

2018 Outstanding graduate Award

China

Research Output

Peer-Reviewed Publications

1. Yang Y, et al. Immunotherapy as a later-line option for HER2-altered advanced NSCLC: whether taxane is a favorable partner. *Future Oncology* (minor review) (2023)
2. Han SC#, Wang GZ#, Yang YN#, Fang WF#, Sun BB#, Zhang JD, Zhou HQ, Zhang L, Wang Y, Zhou GB. Nuclear AhR and membranous PD-L1 in predicting response of non-small cell lung cancer to PD-1 blockade. *Signal Transduct Target Ther*. doi: 10.1038/s41392-023-01416-5. (Co-first author) (2023)
3. Yang Y, Wang Y. Targeting exon 20 insertion mutations in lung cancer. *Curr Opin Oncol*. doi: 10.1097/CCO.0000000000000919. (2023)
4. Yang Y, Ai X, Xu H, Yang G, Yang L, Hao X, Yang K, Mi Y, Wang G, Zhang S, Lei S, Wang Y. Treatment patterns and outcomes of immunotherapy in extensive-stage small-cell lung cancer based on real-world practice. *Thorac Cancer*. doi: 10.1111/1759-7714.14684. Epub 2022 Oct 11. (2022)
5. Yang G#, Yang Y#, Hu J, Xu H, Zhang S, Wang Y. EGFR exon 20 insertion variants A763_Y764insFQEA and D770delinsGY confer favorable sensitivity to currently approved EGFR-specific tyrosine kinase inhibitors. *Front Pharmacol*. doi: 10.3389/fphar.2022.984503. (Co-first author) (2022)

6. Yang G#, **Yang Y#**, Liu R#, Li W, Xu H, Hao X, Li J, Zhang S, Xu F, Lei S, Wang Y. First-line immunotherapy or angiogenesis inhibitor combined with chemotherapy for advanced non-small cell lung cancer with EGFR exon 20 insertions: Real-world evidence from China. *Cancer Med.* doi: 10.1002/cam4.4852. (Co-first author) (2022)
7. Yang G#, **Yang Y#**, Liu R#, Li W, Xu H, Hao X, Li J, Xing P, Zhang S, Ai X, Xu F, Wang Y. First-line immunotherapy or angiogenesis inhibitor plus chemotherapy for HER2-altered NSCLC: a retrospective real-world POLISH study. *Ther Adv Med Oncol.* doi: 10.1177/17588359221082339 (Co-first author) (2022)
8. **Yang Y#**, Xu H#, Ma L#, Yang L, Yang G, Zhang S, Ai X, Zhang S, Wang Y. Possibility of brigatinib-based therapy, or chemotherapy plus anti-angiogenic treatment after resistance of osimertinib harboring EGFR T790M-cis-C797S mutations in lung adenocarcinoma patients. *Cancer Med.* doi: 10.1002/cam4.4336. (2021)
9. **Yang Y**, Yang L, Wang Y. Immunotherapy for Lung Cancer: Mechanisms of Resistance and Response Strategy. *Zhongguo Fei Ai Za Zhi.* doi: 10.3779/j.issn.1009-3419.2021.101.02. (In Chinese) (2021)
10. **Yang Y**, Wang Y. Present and Future of Efficacy Biomarkers in Immune Checkpoint Inhibitors of Small Cell Lung Cancer. *Zhongguo Fei Ai Za Zhi.* doi: 10.3779/j.issn.1009-3419.2020.101.42. (In Chinese) (2020)
11. **Yang Y**, Xu H, Yang G, Yang L, Li J, Wang Y. The value of blood biomarkers of progression and prognosis in ALK-positive patients with non-small cell lung cancer treated with crizotinib. *Asia Pac J Clin Oncol.* doi: 10.1111/ajco.13284. (2020)

Consortium Publications

1. Tobacco carcinogen induces tryptophan metabolism and immune suppression via induction of indoleamine 2,3-dioxygenase 1. *Signal Transduct Target Ther.* doi: 10.1038/s41392-022-01127-3. (2022)
2. Pyrotinib combined with apatinib for targeting metastatic non-small cell lung cancer with HER2 alterations: a prospective, open-label, single-arm phase 2 study (PATHER2). *BMC Med.* doi: 10.1186/s12916-022-02470-6. (2022)
3. Systematic analysis of IL-6 as a predictive biomarker and desensitizer of immunotherapy responses in patients with non-small cell lung cancer. *BMC Med.* doi: 10.1186/s12916-022-02356-7. (2022)

Conference Contributions

1. **Yang Y**, Liu C, Yang L, Yang G, Xu H, Hao X, Zhang S, Lei S, Wang Y. IL-6 triggers chemoimmunotherapy resistance by creating immunosuppressive tumor microenvironment in non-small cell lung cancer. ESMO Conference. **Poster.** (2023)
2. **Yang Y**, Yang G, Wang Y. Pyrotinib plus antiangiogenic agents for HER2-altered advanced non-small cell lung cancer: A retrospective real-world study. ASCO Conference. **Poster.** (2023)
3. Han S, **Yang Y**, Gui-Zhen Wang, Wenfeng Fang, Li Zhang, Yan Wang, Guang-Biao Zhou. The expression of aryl hydrocarbon receptor predicts responses to anti-PD-1 antibodies in non-small cell lung cancer. ASCO Conference. **Poster.** (2022)
4. **Yang Y**, Yang G, Xu H, Hao X, Zhang S, Ai X, Lei S, Wang Y. Taxanes plus immunotherapy might be a potential option for HER2-altered NSCLC beyond first-line progression: A retrospective real-world study. Annals of Oncology. ESMO Conference. **Poster.** (2022)
5. **Yang Y**, Wang Y. The Value of Predictive Markers of Progression and Prognosis in ALK-positive patients treated with Crizotinib. Global Academic Conference. **Poster.** (2019)

Projects

1. Drug resistance mechanism of novel targeted agents targeting EGFR 20 exon insertion-mutated non-small cell lung cancer and synergistic mechanism of combined antiangiogenetic therapy.
2. RRx-001 sequentially with a platinum doublet or a platinum doublet in third-Line or beyond in patients with small cell lung cancer (REPLATINUM), a phase III, global multi-center clinical trial. (NCT03699956).

Sub-Investigator

- 3. Phase II clinical trial for advanced non-small cell lung cancer harboring HER2 amplification or mutations treated with first-line pyrotinib plus apatinib targeted therapy. (ChiCTR2100052156). **Sub-Investigator**
- 4. Chidamide combined with sintilimab for advanced and refractory non-small cell lung cancer: an open-label, single-center, single-arm, multi-cohort, phase Ib/II study. (ChiCTR2000034888). **Sub-Investigator**
- 5. Phase I/II Clinical Study of the Safety, Tolerability, Pharmacokinetics, and Efficacy of SHR-A1811 for Injection in Subjects With Advanced Non-small Cell Lung Cancer Who Have HER2 Expression, Amplification, or Mutation. (NCT04818333). **Sub-Investigator**

Work Experience

National Cancer Center, Cancer Hospital, Chinese Academy of Medical Sciences and Peking Union Medical College	Beijing, China Sep .2021 – Mar. 2023
Chief resident	
Peking Hospital & Cancer Hospital	Beijing, China
Standardized training of resident physician	Sep .2018 – Jun. 2021
Qualification certificate for physicians	Sep .2019
Tongji Hospital	Wuhan, China
Internship	Mar. .2016 – Jun. 2018

Skills

- **Experimental:** cell culture, transfection, Cas 9, western blot, PCR, flow cytometric analysis, animal surgery, drug injections
- **Coding:** R language
- **Languages:** Chinese (native), English (fluent, IELTS 7.0)