

# Shaping the future of probiotics, live biotherapeutic products, and fecal microbiota transplantation: 30 scientific recommendations from the CHINAGUT Conference

Weihong Wang, Nan Bu, Hailong Cao, Ning Chen, Wei Chen, Lei Cheng, Bota Cui, Lei Dai, Huiying Gao, Meng Guo, Xingxiang He, Jia Hu, Changtao Jiang, Xianzhi Jiang, Jingnan Li, Ping Li, Wei Li, Weiwei Liao, Hongwei Liu, Jingmei Liu, Ling Liu, Shuangjiang Liu, Xingyin Liu, Muhan Lv, Yonghui Ma, Chaoxin Man, Zheshun Pi, Qian Ren, Lixuan Sang, Zhihong Sun, Huayi Suo, Yan Tan, Wanyin Tao, Guangqiang Wang, Jun Wang, Liangjing Wang, Xin Wang, Ye Wang, Kaichun Wu, Rina Wu, Zhen Wu, Xiang Xiao, Bin Xiang41, Song Yang, Huaxi Yi, Honho Yu, Jun Yu, Yue Zeng, Huihong Zhai, Qixiao Zhai, Chenhong Zhang, Guohua Zhang, Jiachao Zhang, Wenyi Zhang, Fangqing Zhao, Liang Zhao, Hongwei Zhou, Li Zhu, Canhui Lan, Heping Zhang, Shu Zhu, Faming Zhang



Ningbo R-Institute of Science Communication, Inner Mongolia Agricultural University, University of Science and Technology of China, The Second Affiliated Hospital of Nanjing Medical University

Weihong Wang, Nan Bu, Hailong Cao, Ning Chen, Wei Chen, Lei Cheng, Bota Cui, et al. 2025. Shaping the future of probiotics, live biotherapeutic products, and fecal microbiota transplantation: 30 scientific recommendations from the CHINAGUT Conference. *iMeta* 4: e70083. https://doi.org/10.1002/imt2.70083

# Introduction

# 30 Scientific Recommendations on Microbiota-Based Treatments from the 2025 CHINAGUT Conference



wicholiota-Based Treatmong

## WHY MAKE RECOMMENDATIONS?

Probiotics



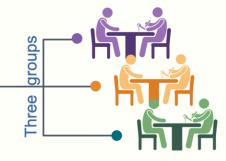


- Inconsistent therapeutic outcomes
- Live biotherapeutic products
  - Barriers in bench-tobedside translation
- Unclear mechanism
- Fecal microbiota transplantation
- Confusion in clinical application
- Insufficient regulatory frameworks

A panel of 63 experts (30 scientists, 26 physicians, and 7 corporate R&D personnel) collaborated in three groups, each contributing 10 recommendations, culminating in 30 scientific recommendations



#### 2025 CHINAGUT Conference





#### RECOMMENDATIONS ON FIVE CORE POINTS

Standardization

Translation

Supervision

Regulation

Communication

Establish scientific benchmarks at the strain level

Conduct dosage and ratio verification

Clarify the mechanism of strain-host interaction

Supported by highlevel clinical RCT research evidence Construct a global regulatory pathway

Eliminate misleading dissemination and establish a credibility system

Whole-process quality control

Improve the longterm safety monitoring and traceability system Multi-subject collaboration in industry-academiaresearch-education based on microbiota medicine



#### WHAT ARE THE HIGHLIGHTS?

These scientific recommendations synthesize cutting-edge knowledge from multidisciplinary experts to establish practical guidelines for advancing microbiota-based treatments



# Ten Scientific Recommendations for Promoting High-Quality Development of Probiotic Science and Industry

- High-quality Randomized controlled trials to verify health benefits
- Rigorous design with transparent reporting

- Clear labeling to prevent misleading claims
- Compliance with international and national regulations

- Foster innovation through industry and academia partnerships
- Science-based public and professional education

Evidence-Based

Validation

Identification

Formulation Optimization

- Genome sequencing for strain identification, international deposition and nomenclature
  - Ensure reproducibility and product safety

**Probiotics** 

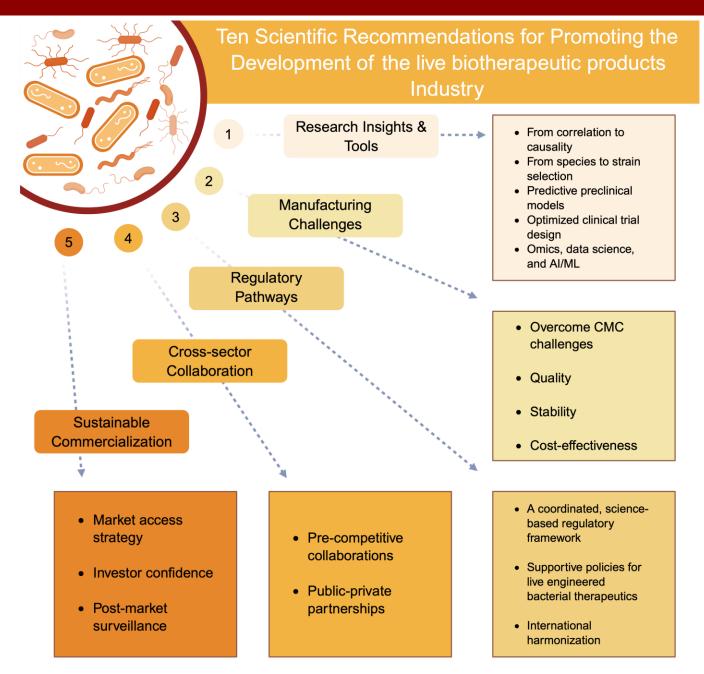
- Evaluate synergistic or antagonistic effects to determine optimal ratios
- Dose determination based on clinical data, balancing cost-effectiveness

Aysno blos

Regulatory Compliance

- Screen for antibiotic resistance genes, with focus on vulnerable populations
- Full lifecycle quality control, optimized production processes

# Part 2





# Ten Scientific Recommendations for Translational and Sustainable Development of Fecal Microbiota Transplantation

## Regulation



- A National Regulatory Framework
- Nonprofit Medical Service Models
- High-Quality Public
   Fecal Microbiota Banks

## Clinical Practice



- Evidence-Based Application
- Full-Process
   Standardization
- Robust Long-Term
   Follow-Up Systems

### Research



- Public and Private Investment
- Multi-Stakeholder
   Collaboration
- Stringent Ethical Principles

#### Education

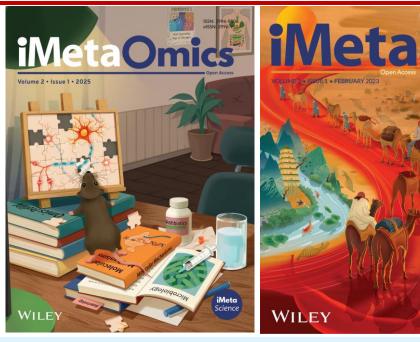


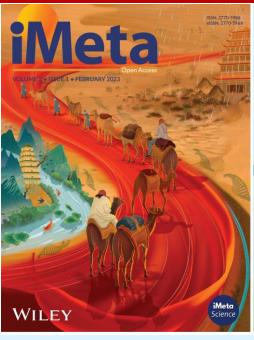
- Incorporation into General Medical Education
- Responsible Science Popularization

# iMeta: To be top journals in biology and medicine

# WILEY











"iMeta" launched in 2022 by iMeta Science Society, impact factor (IF) 33.2, ranking top 65/22249 in world and 2/161 in the microbiology. It aims to publish innovative and high-quality papers with broad and diverse audiences. Its scope is similar to Cell, Nature Biotechnology/Methods/Microbiology/Medicine/Food. Its unique features include video abstract, bilingual publication, and social media with 600,000 followers. Indexed by SCIE/ESI, PubMed, Google Scholar etc.

"iMetaOmics" launched in 2024, with a target IF>10, and its scope is similar to Nature Communications, Cell Reports, Microbiome, ISME J, Nucleic Acids Research, Briefings in Bioinformatics, etc.

"iMetaMed" launched in 2025, with a target IF>15, similar to Med, Cell Reports Medicine, eBioMedicine, eClinicalMedicine etc.

Society: http://www.imeta.science

Publisher: https://wileyonlinelibrary.com/journal/imeta

iMeta: https://wiley.atyponrex.com/journal/IMT2

Submission: iMetaOmics: https://wiley.atyponrex.com/journal/IMO2

iMetaMed: https://wiley.atyponrex.com/journal/IMM3

**iMetaScience** 







Update 2025/7/6

**Promotion Video**