

Efficient adaptation of high-quality international guidelines for Chinese children with primary immune thrombocytopenia

Over the last few decades, a plethora of guidelines for primary immune thrombocytopenia (ITP) in children have been developed and published. However, the guidelines developed by one country or organization are not always appropriate to other countries or regions due to differences in local circumstances.¹ Guidelines specific to China are therefore warranted. The article published by Dr. Wu in the current issue of *Pediatric Investigation* is an adapted guideline tailored to Chinese children.² This guideline was developed based on three high-quality international guidelines utilizing ADAPTE method with reference to the key processes in the *WHO Handbook for Guideline Development*.³

During the adaptation of the guidelines, the following were considered:

1. The need for guidance adapted for Chinese children. There are 31 published guidelines or statements of consensus about ITP and children worldwide, 19 of which were published from 2010 to 2020. Two evidence-based guidelines – the International Consensus Report (ICR) and the American Society of Hematology (ASH) guidelines – were published in 2019.^{4,5} These guidelines on ITP in children were developed by high-income countries; however, they are not fully applicable to China or other middle and low-income countries and/or regions. The development of adapted guidance based on existing high-quality guidelines could greatly facilitate the efficient utilization of existing guidelines and save resources.¹
2. The options available regarding the method for developing adapted guidelines. The most representative of the many methodological frameworks for guideline adaptation are ADAPTE and GRADE (Grading of Recommendations, Assessment, Development, and Evaluation)-ADOLOPMENT (Adaptation, Adoption, and De Novo Development)^{1,6}: ADAPTE is a more generally applicable approach. In contrast, GRADE-ADOLOPMENT,
- which is based on GRADE evidence-to-decision (EtD) frameworks, requires additional resources. More specifically, the system “levels of evidence and grading of recommendations” adapted and developed by ICR working group were used and references for some evidence were not provided in 2019 ICR.⁴ This would present challenges for the adaptation of guidelines using the GRADE-ADOLOPMENT framework, and an enormous amount of work would be required to develop necessary EtD tables by guideline adapters. Our guideline working group decided to use the ADAPTE methodological framework for this guideline adaptation after discussion.² For the convenience of clinicians, the ICR “levels of evidence and grading of recommendations” were chosen instead of the GRADE or Oxford Levels of Evidence.²
3. The selection of source guidelines. The guideline-working group first conducted a systematic review of guidelines related to the topic of ITP in children and then thoroughly searched for, screened, evaluated, and selected source guidelines following steps 2–9 of the 24 steps in the ADAPTE framework. To identify source guidelines that covered both diagnostic and therapeutic components, we searched for guidelines published after 2010. Given the lack of universal selection criteria for the methodological quality of source guidelines, the working group referred to other adapted guidelines and proposed a score of >70% for the third domain “Rigor Development” of AGREE II with a comprehensive assessment of overall quality.²
4. The search for supplementary evidence. We looked for updated evidence published before May 2020. Local evidence from Chinese children with ITP before May 2020 was explored. This makes the evidence up-to-date and more applicable to China.
5. Formulation of recommendations. Based on the recommendations from source guidelines for each clinical

DOI: 10.1002/ped4.12313

This is an open access article under the terms of the Creative Commons Attribution-NonCommercial-NoDerivs License, which permits use and distribution in any medium, provided the original work is properly cited, the use is non-commercial and no modifications or adaptations are made.

© 2022 Chinese Medical Association. *Pediatric Investigation* published by John Wiley & Sons Australia, Ltd on behalf of Futang Research Center of Pediatric Development.

question, the supplementary evidence was added. At the same time, Chinese culture, the medical environment, economics, feasibility, preferences, and values of Chinese children or their guardians, and other influencing factors, were also taken into account. After Delphi surveys and consensus meetings, recommendations of the adapted guidance were established, making it more suitable for the clinical diagnosis and treatment of Chinese children with ITP.²

However, the diagnosis-related evidence of ITP in children mostly consisted of case reports and case series reports rather than classic diagnostic tests and randomized controlled trials.² Treatment-related studies failed to do the subgroup analysis based on disease severity, such as degree of bleeding, platelet count and/or the patient's and family's quality of life. We hope that future clinical studies of ITP will be designed to take this issue into consideration, and to provide high-quality clinical evidence of the efficacy and safety of various interventions across different bleeding grades.

This adapted guideline represents our attempts to formulate local guidelines on the basis of high-quality international guidelines. In the next 3–5 years, it is also expected to be updated for the first time. The adapted guidance is not only more applicable to Chinese children with ITP but also can provide a reference for other developing countries to develop or adapt guidelines.

Yali Liu¹ , Runhui Wu²

¹Center for Clinical Epidemiology and Evidence-based Medicine, Beijing Children's Hospital, Capital Medical University, National Center for Children's Health, Beijing, China

²Hematology Center, Beijing Children's Hospital, Capital Medical University, National Center for Children's Health, Beijing, China

Correspondence

Runhui Wu, Beijing Children's Hospital, Capital Medical University, National Center for Children's Health, Beijing 100045, China.

Email: wurunhui@bch.com.cn

ACKNOWLEDGMENTS

This work was supported by the National Science and Technology Major Project (no. 2017ZX09304029001) and

Pediatric Special Project, Center for Collaborative Development of Pediatric Discipline, Beijing Hospital Administration (no. XTZD20180205).

CONFLICT OF INTEREST

The authors declare that they have no conflicts of interest.

REFERENCES

1. Fervers B, Burgers JS, Voellinger R, Brouwers M, Browman GP, Graham ID, et al. Guideline adaptation: an approach to enhance efficiency in guideline development and improve utilisation. *BMJ Qual Saf.* 2011;20:228-236. DOI: 10.1136/bmjqs.2010.043257
2. Working Group of Chinese Guideline for the Diagnosis and Treatment of Childhood Primary Immune Thrombocytopenia; Subspecialty Group of Hematologic Diseases, Society of Pediatrics, Chinese Medical Association; Editorial Board. *Chinese Journal of Pediatrics.* Adapted guideline for the diagnosis and treatment of primary immune thrombocytopenia for Chinese children (2021). *Pediatr Investig.* 2022;6:63-74. DOI: 10.1002/ped4.12305
3. World Health Organization. *WHO Handbook for Guideline Development.* 2nd ed. World Health Organization; 2014. <https://apps.who.int/iris/handle/10665/145714>. Accessed September 1, 2021.
4. Provan D, Arnold DM, Bussel JB, Chong BH, Cooper N, Gernsheimer T, et al. Updated international consensus report on the investigation and management of primary immune thrombocytopenia. *Blood Adv.* 2019;3:3780-3817. DOI: 10.1182/bloodadvances.2019000812
5. Neunert C, Terrell DR, Arnold DM, Buchanan G, Cines DB, Cooper N, et al. American Society of Hematology 2019 guidelines for immune thrombocytopenia. *Blood Adv.* 2019;3:3829-3866. DOI: 10.1182/bloodadvances.2019000966
6. Schünemann HJ, Wiercioch W, Brozek J, Etxeandia-Ikobaltzeta I, Mustafa RA, Manja V, et al. GRADE Evidence to Decision (EtD) frameworks for adoption, adaptation, and de novo development of trustworthy recommendations: GRADE-ADOLOPMENT. *J Clin Epidemiol.* 2017;81:101-110. DOI: 10.1016/j.jclinepi.2016.09.009

How to cite this article: Liu Y, Wu R. Efficient adaptation of high-quality international guidelines for Chinese children with primary immune thrombocytopenia. *Pediatr Investig.* 2022;6:149–150. <https://doi.org/10.1002/ped4.12313>