Asia-Pacific Kawasaki Disease Association symposium 2026

Co-organized by Japanese Society of KD

Sponsored by Japan KD research center

Speakers

Guoying Huang, MD, Children's Hospital of Fudan University, Shanghai
Fang Liu, MD, Children's Hospital of Fudan University, Shanghai
Seigo Okada, MD, Boston Children's Hospital, Boston
Rakesh Pilania, MD, PGMER, Chandigarh
Min Seob Song, MD, Busan Inje University, Busan
Ming-Chun Yang, MD, E-DA Hospital, Taiwan

January, 31st 2026

Tokyo time :7:00-9:30 pm (GMT +9 hrs)

For more info
Please contact

Parimmaphatra Ogata
parimmaphatra-ogata@chiba-u.jp

APKDA symposium 2026 program

Jan 31st , 2026 PM7:00-9:30 (JST, GMT+9)

7:00 p.m. **Opening remarks**

Prof. Hiromichi Hamada, Chiba University, Chiba

7:05-7:45 **Session 1**

Chair: Prof. Ming-Tai Lin, NTUCH, Taiwan

Dr. Kentaro Ueno Kagoshima University, Kagoshima

Epidemiologic trends of Kawasaki disease and the potential impact of COVID-19 pandemic in Shanghai

Prof. Guoying Huang, Children's Hospital of Fudan University, Shanghai

Understanding Pathophysiology and Therapeutic Strategies of Kawasaki Disease

Dr. Seigo Okada, Boston Children's Hospital, Boston

7:50-8:30 **Session 2**

Chair: Prof. Lucy Youngmin Eun, Yonsei University, Seoul

Dr. Kenji Furuno, Fukuoka Red Cross Hospital, Fukuoka

Treatment Intensification in Kawasaki Disease: Current Perspectives and Future Directions

Dr. Rakesh Kumar Pilania, PGIMER, Chandigarh

Refining the Risk Stratification of Kawasaki Disease in Infants under 6 Months of Age: Evidence from Taiwan KD Research Network

Prof. Ming-Chun Yang, E-DA hospital, I-Shou University, Taiwan

8:40-9:20 **Session 3**

Chair: Prof. Guoying Huang, Children's Hospital of Fudan University, Shanghai

Dr. Keiichi Hirono, Toyama University, Toyama

IVIG Refractory Kawasaki Disease and Infliximab

Prof. Min Seob Song Inje University, Busan

Clinical Use of Rivaroxaban in Chinese Children with Giant Coronary Artery Aneurysms After Kawasaki Disease

Prof. Fang Liu , Children's Hospital of Fudan University, Shanghai

9:25 **Closing Remark**

Prof. Yoshihiro Onouchi , Chiba University, Chiba

Prof. Guoying Huang

- **Academic and Clinical Positions**
  - Professor of Pediatrics / Pediatric Cardiology
  - President of Children's Hospital of Fudan University at Xiamen
  - Director of Shanghai Key Laboratory of Birth Defects
  - President of the Chinese Association of Pediatrician
  - Vice Chairman of the Chinese Pediatric Society
  - Vice Editor-in-Chief of *Chinese Journal of Pediatrics*
  - Editor-in-Chief of *Pediatric Medicine*
- **Areas of Expertise**
  - Congenital heart disease
  - Kawasaki disease with coronary arterial lesions
- **Publications**
  - Published over 500 papers, including more than 200 in international journals such as:-

    The Lancet,
    Annals of Internal Medicine
    European Heart Journal,
    Circulation
    Pediatrics
- **Honors**
  - Established the dual-index screening program for congenital heart disease in early neonatal stage, and collaborative network of Kawasaki disease clinical research which has been promoted nationwide in Mainland China since 2018, saving tens of thousands of critical and serious babies with cardiac defects and lesions.

Epidemiologic Trends of Kawasaki Disease and the Potential Impact of COVID-19 Pandemic in Shanghai from 2018 through 2022

Background: Shanghai Kawasaki Disease Research Group has systematically quinquennial conducted four epidemiological surveys of Kawasaki disease (KD) since 1998 once every 5 years. This study was to analysis the epidemiologic trends of KD and the potential impacts of the COVID-19 pandemic in Shanghai from 2018 through 2022.

Methods: Medical records of KD patients diagnosed from January 2018 through December 2022 were retrospectively analyzed. Data was based on the Shenkang Kawasaki Disease Specific Database established by Shanghai Shenkang Hospital Development Center. Additional data were collected through questionnaires distributed to 48 hospitals providing pediatric medical care via the network of the Shanghai Kawasaki disease research group. The primary outcomes were the number and incidence of children with KD. The secondary outcomes included clinical features and changes observed during the COVID-19 pandemic.

Results: A total of 5791 cases were enrolled including 3,549 permanent residents of Shanghai. The incidence of KD was 61.07 to 94.84 per 100,000 children aged <5 years from 2018 to 2022, with an average annual incidence of 80.7 per 100,000. The incidence decreased compared to the last survey (94.7), with pronounced declines in 2020 (62.74) and 2022 (61.07), periods that coincided with the implementation of COVID-19 containment measures. Male-to-female ratio was 1.58:1. The median age at onset was 25.3 (IQR:14.1, 46.1) months. Out of 3654 cases with treatment information, 3310 cases were treated with intravenous immunoglobulin (IVIG), of which 317 cases (9.58%) were IVIG non-response. Out of 4099 echocardiogram reports, 553 cases (13.49%) developed coronary artery lesions, and 191 (4.87%) were medium to large coronary artery aneurysms. No death was found in this survey.

Conclusions: The incidence of KD in Shanghai has shown a decline trend during the period of 2018-2022 as compared to that in the survey of 2013-2017. The containment measures implemented during the COVID-19 pandemic, such as citywide suspension of work and school closures, may have affected the incidence of KD.

Dr. Seigo Okada

. • **Academic and Clinical Appointments**
  - o Department of Pediatrics, Yamaguchi University Graduate School of Medicine (2010)
  - o Assistant Professor, Department of Pediatrics, Yamaguchi University Graduate School of Medicine (2019–Present)
  - o Research Fellow, Division of Immunology, Boston Children's Hospital, Harvard Medical School (2025–Present)

- **Education**
  - o MD, Yamaguchi University (2008)
  - o PhD, Yamaguchi University (2014)

- **Licensure and Board Certification**
  - o Certified Pediatric Cardiologist, Japanese Society of Pediatric Cardiology and Cardiac Surgery
  - o Delegate, Japanese Society of Kawasaki Disease
  - o Editorial Board Member, Scientific Reports

- **Areas of Expertise**
  - o Pediatric Cardiology

- **Selected Publications**
  1. Okada S, et al. The future of Kawasaki disease management: data-driven innovations from bedside to bench and back again. Pediatr Res 2025;98:1630-1632.
  2. Okada S, et al. Necrotic Change of Tunica Media Plays a Key Role in the Development of Coronary Artery Lesions in Kawasaki Disease. Circ J 2024;88:1709–1714.

- **Honors and Awards**
  - o 2025 Kawasaki Award, 26th Japanese Society of Kawasaki Disease

Understanding Pathophysiology and Therapeutic Strategies of Kawasaki Disease

Kawasaki disease (KD) is an acute, self-limited systemic vasculitis of unknown etiology that predominantly affects infants and young children. A major complication of KD, coronary artery abnormalities (CAAs), remains the leading cause of acquired heart disease in childhood. Although the precise cause of KD remains unclear, aberrant activation of immune cells and the resulting hypercytokinemia are considered central drivers of the pathogenesis of KD.

Since the early days of KD research, our laboratory has been investigating the dynamics of peripheral blood immune cells in patients with KD using flow cytometry. In particular, a series of studies by Furukawa, Matsubara, and their colleagues has demonstrated that monocytes/macrophages play a central role in the immunopathogenesis of KD, and that there is a marked elevation in blood levels of tumor necrosis factor (TNF)-α. These findings have significantly contributed to a deeper understanding of the pathophysiology and the establishment of therapeutic strategies, such as anti-TNF therapy.

The primary goal of this presentation is to deepen our understanding of the pathophysiology of KD, based on immunophenotyping studies of peripheral blood mononuclear cells, particularly monocytes. Furthermore, we will discuss how current therapeutic interventions exert their effects on the immune dysregulation observed in KD.

Dr. Rakesh Kumar Pilania

- **Academic and Clinical Appointments**
  - Associate Professor Pediatric Allergy Immunology Unit, Advanced Pediatrics Centre, PGIMER,
  - WHO Collaborating Centre for Education, Research and training in Pediatric Immunology (2022-2026)
  - ICMR Collaborating Centre of Excellence in Pediatric Immunology (2023-28)
  - Centre of Excellence APLAR (2020-2028)
  - Secretary, Indian Society for Kawasaki Disease (2025-2026)
  - EB Member, Pediatric Rheumatology Society of India (2025-2026)
  - EB Member, Indian Society for Primary Immune Deficiency (2025-2026)
  - ESID Junior Country Representative for India (2018 - 2022)
- **Education**
  - MD (Pediatrics),
  - DM (Pediatric Clinical Immunology and Rheumatology)
  - MAMS, Assoc-FAMS, Assoc.FINSA
- **Publications**
  - Published more than 175 papers in peer-reviewed international and national journals; Book chapters: 10
- **Honors and Awards**
  - IRA Young Rheumatologist Oration (2024)
  - Early Career Investigator Highlight Award in Pediatric Research
  - Science Digest Award at the IKDS Montreal, Canada (2024)
  - Young Investigator Award from APSID (2024 and 2025)
  - IAP awards: Dr. James Flett Endowment Award (2024)
  - Dr. Balagopal Raju Endowment Award (2022); Young Investigator Award at IKDS Japan (2018)
  - American College of Rheumatology / IRA Fellowship exchange program (2019)
  - Dr. Satya Gupta Award and Medal NAMS

Treatment Intensification in Kawasaki Disease: Current Perspectives and Future Directions

Kawasaki disease (KD) is the leading cause of acquired heart disease in children worldwide. Although the timely administration of intravenous immunoglobulin (IVIg) significantly reduces the risk of coronary artery abnormalities (CAA), 10–20% of patients remain IVIg-resistant and continue to face a substantial burden of coronary and myocardial complications. Emerging evidence indicates that the current “one-size-fits-all” approach may be insufficient for children with high-risk disease profiles.

This talk reviews the evolving rationale, evidence, and strategies for treatment intensification in KD. High-risk features—including young or adolescent age, male sex, IVIg resistance, delayed or incomplete presentation, macrophage activation syndrome, KD shock syndrome, and elevated coronary z-scores at diagnosis—are increasingly recognised as predictors of poor outcomes. Randomized controlled trials and observational studies now support early intensification of primary therapy using adjunctive agents such as corticosteroids, infliximab, ciclosporin, and interleukin-1 blockade, particularly in patients predicted to be IVIg non-responders. Dual therapy approaches, including IVIg combined with steroids or biologics, have demonstrated reductions in fever duration, inflammatory burden, and progression of coronary artery disease. Advances in immunopathogenesis and genetic risk stratification offer promising avenues for personalized therapy. Future directions include multi-ethnic validation of risk scores, integration of genetic and biomarker-based prediction models, and exploration of novel and combination biologic therapies. Early identification of high-risk patients and judicious primary treatment intensification may represent a critical step toward eliminating cardiovascular sequelae of KD.

Prof. Ming-Chun Yang

- **Academic and Clinical Appointments**
  - Associate professor, School of Medicine, College of Medicine, I-Shou University
  - Director, division of pediatric cardiology, E-DA hospital, I-Shou University, 2010-present
  - Director, division of pediatric cardiology, E-DA hospital, I-Shou University, 2010-present
  - Director, department of pediatric intensive care medicine, E-DA hospital, I-Shou University, 2012-present
  - Director, pediatric intensive care unit, E-DA hospital, I-Shou University, 2012-present
  - Instructor of Pediatric Cardiology Training Program, Taiwan Society of Cardiology. 2016-present
  - Instructor of Pediatric Advanced Life Support (PALS) Program, 2019-present
- **Education**
  - College of medicine, National Taiwan University (1996-2003)
  - Graduate Institute of Clinical Medicine, College of medicine, National Taiwan University, 2012-2014
- **Licensure and Board Certification**
  - Pediatrics
  - Pediatric cardiology
  - Pediatric intensive care medicine
- **Honors and Awards**
  - Invited speaker, Congress of the Asia-Pacific Pediatric Cardiology Society (2021)
  - Invited speaker, The First International Cardiovascular Disease Symposium at Taichung Veterans General Hospital (2021)
  - Invited speaker, Annual Meeting of Taiwan Society of Pediatric Cardiology (2021)
  - Invited speaker, Academic Conference of Taiwan Society of Pediatric Cardiology (2022)
  - Invited speaker, Adolescent Medicine Education and Training Program, Taiwan Pediatric Association (2023)
  - Invited speaker, Annual Meeting of Taiwan Pediatric Association (2023)
  - Conference moderator, Academic Conference of Taiwan Society of Pediatric Cardiology (2023)
  - Taiwan Pediatric Association Young Investigator Award Review Committee Member (2023)
  - Invited speaker, Annual Meeting of Taiwan Pediatric Association (2023)
  - Invited speaker, Academic Conference of Taiwan Society of Pediatric Cardiology (2024)
  - Invited speaker, Pulmonary hypertension Symposium, Taiwan (2025)
  - Conference moderator, Annual Meeting of Taiwan Pediatric Association (2023)

Refining the Risk Stratification of Kawasaki Disease in Infants under 6 Months of Age: Evidence from Taiwan Kawasaki Disease Research Network

Kawasaki disease (KD) in infants younger than six months carries a distinctly higher risk of early coronary artery aneurysm (CAA) formation. Multiple studies show that 40% to 50% of infants in this age group develop CAAs, a vulnerability linked to more frequent incomplete presentations and heightened inflammatory responses. The 2024 scientific statement from the American Heart Association notes that standard intravenous immunoglobulin (IVIG) plus intensification therapy may benefit infants < 6 months.

A multi-center cohort study conducted by the Taiwan KD Research Network from 2019 to 2023 examined children who received initial IVIG within ten days of illness and underwent baseline echocardiography before treatment. The study included 44 infants < six months and 354 children older than six months. Infants demonstrated substantially higher rates of early CAAs at diagnosis compared with older children.
A key finding was that infants < 6 months without CAAs at baseline rarely developed new coronary abnormalities. In contrast, KD shock syndrome and IVIG resistance were linked to a higher likelihood of subsequent CAA development in the infant group with initial normal coronary arteries.
Early echocardiography is therefore essential in infants < 6 months with KD. When the initial study shows no coronary involvement, standard therapy is generally adequate. Intensified treatment should be reserved for infants with early CAAs, KD shock syndrome, or IVIG resistance.

Prof. Min Seob Song

- Academic and Professional Appointments
  - Full-time Instructor to Professor of Pediatrics, Inje University College of Medicine, Busan Paik Hospital (1996–2009)
  - Professor, Department of Pediatrics, Inje University College of Medicine, Haeundae Paik Hospital (2010–Present)
  - Visiting Professor, KD Research Center, University of California San Diego, USA (2020–2021)
  - President, The Korean Society of Kawasaki Disease (Mar 2021–Feb 2025)

- Education
  - M.D., Inje University College of Medicine (1980–1986)

- Clinical Training and Fellowships
  - Internship, Inje University Busan Paik Hospital (1986–1987)
  - Residency in Pediatrics, Inje University Busan Paik Hospital (1988–1990)
  - Clinical Fellow, Division of Pediatric Cardiology, Children's Hospital, Seoul National University (Mar–Aug 1993)
  - Research Fellow, Division of Pediatric Cardiology, Hospital for Sick Children, Toronto (1999)

- Recent Publications
  - 2019. Song MS. Predictors and management of intravenous immunoglobulin-resistant Kawasaki disease. Korean J Pediatr. 2019;62:119-23.
  - 2024. Yu JJ, Choi HJ, Cho HJ, Kim SH, Cheon EJ, Kim GB, Eun LY, Jung SY, Jun HO, Woo HO, Park SA, Yoon S, Ko H, Ban JE, Choi JW, Song MS, Han JW. Newly Developed Sex-Specific Z Score Model for Coronary Artery Diameter in a Pediatric Population. J Korean Med Sci. 2024;39:e144.
  - 2024. Song MS. The Usefulness of Infliximab Treatment in the Acute Phase of Kawasaki Disease. Kawasaki Dis. 2024;2:e1
  - 2024. Lam JY, Song MS, Kim GB, Shimizu C, Bainto E, Tremoulet AH, Nemati S, Burns JC. Intravenous immunoglobulin resistance in Kawasaki disease patients: prediction using clinical data. Pediatr Res. 2024;95:692-7

IVIG Refractory Kawasaki Disease and Infliximab

Abstract

Infliximab, a monoclonal antibody that blocks tumor necrosis factor (TNF)-α, is considered an effective and safe adjunctive therapy for Kawasaki disease (KD). In clinical practice, its administration has been associated with a shorter duration of fever and a reduced length of hospital stay. Studies suggest that infliximab is beneficial not only as a second-line treatment for intravenous immunoglobulin (IVIG)-refractory KD but also as part of first-line intensification therapy for high-risk patients, even though accurate prediction of such patients can be challenging. Although there is no conclusive evidence that infliximab reduces the incidence of coronary artery lesions (CALs), several recent studies indicate that it may decrease the incidence and progression of CALs. One study suggests that a higher dose infliximab (10 mg/kg) may offer better coronary outcomes than a lower dose (5mg/kg) in KD. Further studies are required to establish the optimal dosing regimen and timing, as well as to determine its long-term effects on coronary artery outcomes.

Prof. Fang Liu

Professor of Pediatrics/Pediatric Cardiology,
Director of Heart Center and Department of Cardiovascular Medicine
Children's Hospital of Fudan University
National Children's Medical Center, Shanghai, China

Clinical Use of Rivaroxaban in Chinese Children with Giant Coronary Artery Aneurysms After Kawasaki Disease

Abstract

Background Data on the use of rivaroxaban in children with giant coronary artery aneurysm (GCAA) after Kawasaki disease (KD) remain limited.

Objectives To evaluate the feasibility of rivaroxaban in Chinese children with GCAA after KD.

Methods This study was conducted at the Children's Hospital of Fudan University. Children aged one month to 18 years with persistent GCAA (diameter ≥8 mm or Z-score ≥10) during the postacute period of KD were included and followed for at least 6 months. The study consisted of two stages. During the first stage (January-December 2023), patients received rivaroxaban following the 20 mg-equivalent regimen. In the second stage (January-November 2024), a pharmacometric model-informed rivaroxaban regimen was implemented. The primary outcome was a composite of GCAA thrombosis and major adverse cardiovascular event within 6 months. The secondary outcome included major bleeding and clinically relevant non-major (CRNM) bleeding.

Results In the first stage, six patients were enrolled (median [range] age, 14.6 (4.7, 130.8) months; weight, 9.9 [6.6, 33] kg, Z-score, 14.9 [10.6-28.0]. No primary outcome or major bleeding occurred. Four CRNM bleedings were documented, leading to six dose adjustments. Two patients discontinued rivaroxaban due to improved coronary status. In the second stage, fourteen patients received the 15 mg-equivalent rivaroxaban regimen (age, 69.7 [16.4-143.1] months; weight, 19.5 [12.5-57.5] kg, Z-score, 14.7 [10.6-39.1]. No primary or secondary outcome occurred. Two patient important bleeding no intervention events were documented. All patients remained on rivaroxaban beyond 6 months. External validation supported the predictive performance of model extrapolation.

Conclusion The 15 mg-equivalent rivaroxaban regimen appeared feasible in Chinese children with GCAA after KD, with no GCAA thrombosis, major bleeding or CRNM bleeding observed within 6 months. Larger studies are required to confirm these preliminary findings.

Keywords: Rivaroxaban; Kawasaki disease; Giant coronary artery aneurysm; Model-informed study design; Population pharmacokinetics

Essentials

- Children with GCAA after KD require both antiplatelet and anticoagulant therapy.
- Rivaroxaban can be used as long-term oral anticoagulant in children with GCAA after KD
- Rivaroxaban dose optimization may be necessary for Chinese children with GCAA after KD.
- A model-informed rivaroxaban regimen showed favorable feasibility during 6 months of treatment.