



# Holistic management of juvenile idiopathic arthritis across all ages: British Society for Rheumatology Guideline scope

Sandrine Compeyrot-Lacassagne<sup>1,\*</sup>, Richard P. Beesley<sup>2,3</sup>, Lisa Bray<sup>4</sup>, Angharad Bridges<sup>5</sup>, Hema Chaplin<sup>6,7</sup>, Coziana Ciurtin<sup>8</sup>, Gavin Cleary<sup>9</sup>, Samantha Cooray<sup>1</sup>, Octavio Aragon Cuevas<sup>9,10</sup>, Verna Cuthbert<sup>11</sup>, Samundeeswari Deepak<sup>12</sup>, Emily Earle<sup>13,14</sup>, Andreia Ferreira<sup>15</sup>, Lianne Kearsley-Fleet<sup>16</sup>, Jo Gupta<sup>8</sup>, Rebecca Houston<sup>17</sup>, Ryan Malcolm Hum<sup>18,19</sup>, Jenny H. Humphreys<sup>19,20</sup>, Hirushi S. Jayasekera<sup>21,22</sup>, Sarah Jones<sup>23</sup>, Christine MacFadyen<sup>24,25</sup>, Jennifer Nisbet<sup>11</sup>, Visvalingam Arunath<sup>26,27</sup>, Yeliz Prior<sup>28</sup>, Valerie Rogers<sup>29,30</sup>, Stephanie J.W. Shoop-Worrall<sup>16</sup>, Ameenat Lola Solebo<sup>1,31</sup>, Rosemary Waller<sup>24</sup>, Luke Daniel Williamson<sup>32</sup>, Debbie Wilson<sup>33,34</sup>, Catherine Wright<sup>35,36</sup>, Ethan S. Sen<sup>37,38</sup>, for the British Society for Rheumatology Guideline Steering Group<sup>†</sup>

<sup>1</sup>Department of Paediatric Rheumatology and NIHR Biomedical Research Centre, Great Ormond Street Hospital for Children NHS Foundation Trust, London, UK

<sup>2</sup>Expert by Experience, Tonbridge, UK

<sup>3</sup>Juvenile Arthritis Research, Tonbridge, UK

<sup>4</sup>Department of Paediatrics, University Hospitals Sussex, St Richard's Hospital, Chichester, UK

<sup>5</sup>Expert by Experience, London, UK

<sup>6</sup>Health Psychology Section, Institute of Psychiatry, Psychology and Neuroscience, King's College London, London, UK

<sup>7</sup>School of Health and Society, Centre for Applied Health Research, University of Salford, Salford, UK

<sup>8</sup>Centre for Adolescent Rheumatology, Department of Ageing, Rheumatology and Regenerative Medicine, Division of Medicine, University College London, London, UK

<sup>9</sup>Rheumatology Department, Alder Hey Children's NHS Foundation Trust, Liverpool, UK

<sup>10</sup>Pharmacy Department, Alder Hey Children's NHS Foundation Trust, Liverpool, UK

<sup>11</sup>Paediatric Rheumatology, Royal Manchester Children's Hospital, Manchester, UK

<sup>12</sup>Paediatric & Adolescent Rheumatology, Nottingham University Hospitals NHS Trust, Nottingham, UK

<sup>13</sup>Expert by Experience, London, UK

<sup>14</sup>CCAA—Kids With Arthritis, London, UK

<sup>15</sup>Adult Rheumatology, University Hospitals Bristol and Weston NHS Foundation Trust, Bristol, UK

<sup>16</sup>Children and Young Person's Rheumatology Research Programme, Centre for Epidemiology Versus Arthritis, Centre for Musculoskeletal Research, University of Manchester, Manchester Academic Health Sciences Centre, Manchester, UK

<sup>17</sup>Pharmacy Department, Robert Jones & Agnes Hunt NHSFT, Gobowen, UK

<sup>18</sup>Rheumatology, Manchester University NHS Foundation Trust, Manchester, UK

<sup>19</sup>Manchester Biomedical Research Centre, National Institute for Health and Care Research, Manchester, UK

<sup>20</sup>Centre for Musculoskeletal Research, University of Manchester, Manchester, UK

<sup>21</sup>Rheumatology Department, Shrewsbury and Telford Hospital NHS Trust, Shrewsbury, UK

<sup>22</sup>General Internal Medicine, Shrewsbury and Telford Hospital NHS Trust, Shrewsbury, UK

<sup>23</sup>Paediatric Rheumatology, Cardiff and Vale University Health Board, Cardiff, UK

<sup>24</sup>Rheumatology Department, Great Western NHS Foundation Trust, Swindon, UK

<sup>25</sup>Department of Rheumatology, Royal National Hospital for Rheumatic Diseases, Bath, UK

<sup>26</sup>General Paediatrics, Manchester University NHS Foundation Trust, Manchester, UK

<sup>27</sup>Postgraduate Institute of Medicine, University of Colombo, Colombo, Sri Lanka

<sup>28</sup>Centre for Human Movement and Rehabilitation, School of Health and Society, University of Salford, Salford, UK

<sup>29</sup>Paediatric Rheumatology, University Hospitals Bristol and Weston NHS Foundation Trust, Bristol, UK

<sup>30</sup>Bath Centre for Pain Services, Royal United Hospitals, Bath, UK

<sup>31</sup>Great Ormond Street Institute of Child Health, University College London, London, UK

<sup>32</sup>Rheumatology Department, Barts Health NHS Trust, London, UK

<sup>33</sup>Expert by Experience, Rickmansworth, UK

<sup>34</sup>Inflammatory Arthritis UK, Rickmansworth, UK

<sup>35</sup>Expert by Experience, Belfast, UK

<sup>36</sup>Young People and Families Service, Arthritis UK, Belfast, UK

<sup>37</sup>Department of Paediatric Rheumatology, Great North Children's Hospital, Newcastle upon Tyne Hospitals NHS Foundation Trust, Newcastle upon Tyne, UK

<sup>38</sup>Faculty of Medical Sciences, Newcastle University, Newcastle, UK

\*Correspondence to: Sandrine Compeyrot-Lacassagne, Department of Paediatric Rheumatology, Great Ormond Street Hospital for Children, Great Ormond Street, London WC1N 3JH, UK. E-mail: sandrine.lacassagne@gosh.nhs.uk

<sup>†</sup>See [supplementary data](#) available at *Rheumatology Advances in Practice* online for a list of BSR Guideline Steering Group members.

## Lay Summary

### What does this mean for patients?

Juvenile idiopathic arthritis (JIA) is the most common type of arthritis that starts before the age of 16 years. Many children and young people (CYP) continue to be affected by JIA and may need to be on treatment when they are adults. Most CYP with JIA have swollen, stiff and painful joints for at least 6 weeks. JIA can also affect other parts of the body. This includes the skin, the places where tendons join bones (called entheses) and sometimes internal organs. Some young people may also develop inflammation in their eyes, called uveitis. If this is not treated, it can affect eyesight and could lead to sight loss. People with JIA often need medicines to control inflammation. They are usually cared for by a team of healthcare professionals called a multidisciplinary team. This team may include doctors, nurses, pharmacists, physiotherapists, occupational therapists, podiatrists, psychologists and youth workers. They work together to help manage symptoms and prevent long-term damage. The British Society for Rheumatology (BSR) is the main organisation in the UK for healthcare professionals who care for people with JIA. BSR writes guidelines that help healthcare teams provide high-quality care. These guidelines are written with input from experts and people with lived experience. They help make sure that everyone receives good care wherever they live, including during the move from child to adult services. This article explains how BSR will develop a new guideline to diagnose, treat and monitor children, young people and adults with JIA. The guideline will follow the BSR protocol for creating clinical guidelines.

**Keywords** Juvenile Idiopathic Arthritis, Holistic management, Life course, Guideline scope

## Introduction

JIA is the most common childhood-onset inflammatory rheumatic disease, with an age-standardised prevalence of 43.5–70.2 per 100 000 [1]. Although the onset of disease is before the age of 16 years, JIA can affect people <1 year of age, with many having symptoms and requiring ongoing treatment throughout adulthood [2, 3]. JIA encompasses a heterogeneous group of related conditions that are often distinct from adult-onset arthritides. In a UK study, >60% of people diagnosed with JIA in childhood continued to receive specialist care (rheumatology or ophthalmology) beyond the age of 18 years [4]. In many cases, when young people with JIA transfer to adult care their diagnosis is inappropriately reclassified as an adult-onset disease such as RA [5]. This can lead to the use of disease activity measures that are not validated for JIA [6].

The current classification of JIA is based on the ILAR system, which groups people into seven categories: persistent or extended oligoarticular, RF-negative polyarticular, RF-positive polyarticular, psoriatic, enthesitis-related arthritis (ERA), systemic and undifferentiated JIA [7]. For the purpose of clinical trials and treatment pathways, the term polyarticular-course JIA is used to describe any ILAR category in which five or more joints are involved. Childhood arthritis can also occur in association with IBD, coeliac disease, IgA deficiency, type 1 diabetes [8], trisomy 21 (Down syndrome) [9] and cystic fibrosis, among others.

Systemic JIA is also referred to as Still's disease and is considered equivalent to adult-onset Still's disease [10]. Systemic JIA has the potential to affect multiple organ systems, particularly if complicated by macrophage activation syndrome (MAS), a type

of secondary haemophagocytic lymphohistiocytosis. There are clinical and underlying pathogenesis similarities between RF-positive polyarticular JIA and RA in adults, between ERA and axial SpA, between IBD-related arthritis and enteropathic axial and peripheral arthritis, and between psoriatic JIA and PsA in adults [11]. There is also a group of people with ANA-positive persistent or extended oligoarticular and RF-negative polyarticular JIA and a high frequency of uveitis where there is no directly comparable adult disease [12].

The most common extra-articular manifestation of JIA is uveitis. It affects 20–25% of people with JIA [13]. Chronic anterior uveitis is usually asymptomatic and detected only by regular ocular examination as recommended by the 2006 guideline for screening for uveitis in JIA, produced jointly by the Royal College of Ophthalmologists and the British Society for Paediatric and Adolescent Rheumatology (BSPAR) [14]. Risk factors for development of uveitis are female gender, onset of arthritis at <7 years of age, oligoarticular pattern and ANA positivity. Uveitis is a serious complication of JIA that can be sight threatening. It is frequently bilateral and can remain active into adulthood. All categories of JIA may affect people's joints and eyes, although uveitis is rarer in systemic and RF-positive polyarticular subtypes [4]. However, ERA-/SpA-associated uveitis typically presents as acute, symptomatic, unilateral anterior uveitis with recurrent flares, strongly associated with HLA-B27 and more common in older children and adolescents. It mirrors the phenotype seen in adult SpA and may persist into adulthood [15].

JIA and its treatment can impact physical function, social development, including participation in education and

employment, and mental health [16, 17]. The approach to management of JIA should be holistic across the life course from infancy to adulthood and should involve the full multidisciplinary team (MDT).

## Why is the guideline needed?

This will be the first BSR guideline on the management of JIA and the first guideline internationally to take a whole-life-course approach and include recommendations regarding non-pharmacological management. A National Confidential Enquiry into Patient Outcome and Death (NCEPOD) report and the Getting It Right First Time (GIRFT) Paediatric Rheumatology report highlighted that there is no standardised, UK-wide guideline for the management of JIA [18, 19]. Development of the current guideline will address this gap. The report highlighted key recommendations, including access to intra-articular steroid injections, MDT care (including physiotherapy, occupational therapy, pain, podiatry and psychology services), patient and family education about JIA and its treatment and holistic and developmentally appropriate care across all ages.

The pharmacological management of JIA in England is currently based on the National Health Service (NHS) England clinical commissioning policy statement and flow chart published in 2015 that provides recommendations on treatment up to the age of 18 years [20]. There have been numerous clinical trials of biologic and targeted synthetic DMARDs (b/tsDMARDs) since 2015. An evidence-based update of this treatment pathway, which is applicable across all four nations of the UK, is needed. However, there have been only a few head-to-head comparison clinical trials in JIA to inform treatment sequencing. Where appropriate, we may draw on treatment pathways for the corresponding adult disease phenotypes to support the evaluation of evidence in JIA.

The screening process for JIA-associated uveitis is based on guidelines from 2006 [14]. There is a need to review more recent evidence to determine whether these guidelines remain valid. Only adalimumab is currently approved by NHS England for treatment of JIA-associated uveitis and a review of the evidence for other b/tsDMARDs is required to extend equitable access to people with uveitis that has not responded fully to adalimumab or for whom this drug is not suitable.

There is evidence available on developmentally appropriate care and a successful transition from paediatric into adult care [21–23]. This should lead to a proposed evidence-based transition pathway for people with JIA.

Quality improvement for JIA is embedded in the ethos of paediatric rheumatology teams across the UK. Implementing the recommendations from this guideline will require a collaborative approach, supported by improvement methodologies underpinning the BSR/GIRFT JIA Learn shared learning model [24] and recommendations arising from the GIRFT paediatric rheumatology report [19]. This approach aims to ensure equitable access to care and improved outcomes and experiences for people with JIA, regardless of their age, geographical location and socio-economic status.

The guideline will be in line with the three shifts described in the new NHS 10-year plan ‘Fit for the future’: hospital to community,

analogue to digital and sickness to prevention [25]. This new strategic plan, launched in July 2025, will shape care delivery in the UK for the next 10 years. Following recent publications and the GIRFT paediatric rheumatology review, factors driving potential health inequalities should be considered in this guideline.

## Current practice

JIA is a chronic rheumatic condition with onset in childhood. The aim of treatment is to achieve complete remission of arthritis, uveitis and other extra-articular features (enthesitis, psoriasis, IBD), including systemic features [in systemic JIA (sJIA)] and complications (MAS); to avoid any joint, ocular or organ damage; to restore and maintain full physical activity with no functional impairment; to optimise quality of life and to avoid side effects of any treatments.

Current pharmacological treatment generally follows a step-wise pathway based on NHS England recommendations from 2015 [20]. In oligoarticular JIA, treatment usually starts with glucocorticoid intra-articular injections. In polyarticular or systemic JIA, induction treatment will often require systemic glucocorticoids. If a person has MAS associated with sJIA, multispecialty management and treatment will be required [26]. If methotrexate is not effective in controlling disease, or is not tolerated, the next step in treatment is a bDMARD. People with JIA who have axial or sacroiliac joint involvement or MAS unresponsive to steroids should be treated directly with a bDMARD without the need for prior methotrexate.

Treatment in England is governed by the NHS England pathway, while health services in Wales, Scotland and Northern Ireland have independent pathways.

Multiple b/tsDMARDs have undergone trials in children with JIA and are licenced, but not all are routinely funded in all nations of the UK. The treatments include bDMARDs directed against cytokines, cytokine receptors and cell surface proteins (TNF, IL-6 receptor, IL-1, cytotoxic T-lymphocyte associated protein 4, IL-17, IL-12/23, IL-23 and CD20) and tsDMARDs (Janus kinase inhibitors).

Access to bDMARD treatment specifically for JIA-associated uveitis is limited in England to the single anti-TNF adalimumab. The 2010 BSPAR/Arthritis and Musculoskeletal Alliance standards of care set out key recommendations for the management of JIA, including ophthalmology review within 6 weeks of diagnosis, education about JIA, training on treatment provided by appropriately qualified nurse specialists and access to the full MDT [27, 28].

## Who the guideline is for

This guideline is for all healthcare practitioners involved in the management of JIA. This includes, but is not restricted to, paediatricians with an interest in rheumatology, paediatric rheumatologists, adolescent rheumatologists, adult rheumatologists, clinical researchers, physiotherapists, occupational therapists, psychologists, podiatrists, specialist nurses and pharmacists involved in the care of people with JIA. The guideline is also for people with lived experience of JIA and their families, caregivers and support networks. It is also for NHS managers, healthcare commissioners and other stakeholders such as patient organisations.

## Equality considerations

Although the onset of JIA is in childhood, people of all ages can be affected by the condition. It occurs in all genders and ethnicities. Socio-economic, language, cultural and geographic barriers need to be considered and addressed to ensure equitable and optimal care of people with JIA. Access to drug treatments for JIA varies between the four nations of the UK. This guideline will make recommendations based on the scientific evidence, irrespective of whether funding is approved in one or more of the UK nations. Recent analysis has identified regional variations in access and funding, with inconsistency of NHS care affecting the most vulnerable [29, 30]. Recommendations will be made based on relevant published evidence to create a framework to tackle health inequalities in the management of JIA.

## Target clinical population

The guideline will cover people of all ages with JIA, including all ILAR categories and JIA-associated uveitis. It will also include IBD-associated arthritis and Down syndrome arthritis.

## Setting

Settings that will be covered include JIA in hospital-based settings, including secondary care rheumatology and tertiary hospital paediatric rheumatology, and in shared care with primary health services within the UK NHS.

## What will the guideline cover?

A survey was conducted to obtain consensus on the content of the guideline. The questions were based on the proposed scope and population, intervention, comparison and outcome (PICO) and agreed among the JIA guideline working group (GWG) members. One survey was directed to health professionals while a second one was developed by the experts by experience in the GWG and distributed to people with JIA and their families, caregivers and support networks. Responses were received from 127 health professionals and 37 people with JIA or their families. These responses were considered by the GWG in the process of developing the guideline scope.

The GWG will evaluate the most up-to-date evidence relating to the following aspects of JIA across all ages: screening and diagnosis of comorbidities associated with JIA, including uveitis; use of imaging for monitoring of disease activity and damage, and to aid treatment decisions; intra-articular steroid injections; non-pharmacological management of JIA, including physiotherapy, occupational therapy and psychology; pharmacological management of JIA and associated uveitis, including evidence for treat-to-target approaches and therapeutic drug monitoring; developmentally appropriate care and transition from paediatric to adult rheumatology services; and holistic care, including the interaction between JIA and education/employment, mental health, neurodiversity, growth and puberty

Further details relating to the scope of these topics are shown in [Table 1](#).

## Areas that will not be covered

This guideline will not cover forms of arthritis not diagnosed as JIA, such as septic arthritis or arthritis as part of other autoimmune/inflammatory diseases, including SLE and JDM (although IBD-associated arthritis and Down syndrome arthritis will be included); uveitis associated with conditions other than JIA (such as sarcoidosis, tubulointerstitial nephritis and uveitis, infection-associated uveitis) and isolated idiopathic uveitis; referral pathways for JIA (which will be covered in the 'Hot, swollen or stiff joints in children and young people' guideline) [31]; pretreatment screening, monitoring and safety of conventional synthetic DMARDs (csDMARDs) (which is covered in another BSR guideline) [32]; pre-treatment screening, monitoring and safety of bDMARDs and tsDMARDs (which is covered in another BSR guideline) [33, 34]; safety of DMARDs in pregnancy (which is covered in another BSR guideline) [35]; pain management in people with JIA (which is covered in another BSR guideline) [36] and joint repair/replacement and other surgical management of joint disease in JIA.

## Related guidelines and recommendations

Related guidelines and recommendations include the following:

- 2006 Guidelines for Screening for Uveitis in Juvenile Idiopathic Arthritis, produced jointly by the BSPAR and the Royal College of Ophthalmology [14]
- 2010 BSPAR Standards of Care for children and young people with juvenile idiopathic arthritis [27]
- 2015 National Institute for Health and Care Excellence evidence-based recommendations on abatacept, adalimumab, etanercept and tocilizumab for treating juvenile idiopathic arthritis in children, young people and adults [37]
- 2019 American College of Rheumatology/Arthritis Foundation Guideline for the Treatment of Juvenile Idiopathic Arthritis: Therapeutic Approaches for Non-Systemic Polyarthritis, Sacroiliitis, and Enthesitis [38]
- 2019 American College of Rheumatology/Arthritis Foundation Guideline for the Screening, Monitoring, and Treatment of Juvenile Idiopathic Arthritis-Associated Uveitis [39]
- 2021 American College of Rheumatology Guideline for the Treatment of Juvenile Idiopathic Arthritis: Therapeutic Approaches for Oligoarthritis, Temporomandibular Joint Arthritis, and Systemic Juvenile Idiopathic Arthritis [40]
- 2021 American College of Rheumatology Guideline for the Treatment of Juvenile Idiopathic Arthritis: Recommendations for Nonpharmacologic Therapies, Medication Monitoring, Immunizations, and Imaging [41]
- 2024 EULAR/Paediatric Rheumatology European Society (PREs) recommendations for the diagnosis and management of Still's disease, comprising systemic juvenile idiopathic arthritis and adult-onset Still's disease [42]
- 2025 French protocol for the diagnosis and management of juvenile idiopathic arthritis including paediatric-onset Still's disease [43]

**Table 1** Key topics that will be included in the guideline for holistic management of JIA across all ages.

|                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Screening of comorbidities in JIA                           | Screening of comorbidities (uveitis, IBD, psoriasis, coeliac disease, type 1 diabetes, IgA deficiency, growth impairment, puberty delay, bone density, hypercholesterolaemia, pain, mental health problems, psychosocial issues, neurodiversity, overweight/obesity and others) and monitoring during the disease                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Role of imaging in JIA                                      | Assessment of disease activity and damage using X-ray, ultrasound and MRI at diagnosis and during monitoring (including definition of remission) in CYP and adults diagnosed with JIA. This includes imaging of the spine, sacroiliac joints, temporomandibular joints and entheses                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Intra-articular steroid injections in the management of JIA | <ul style="list-style-type: none"> <li>• How to use intra-articular steroid injections (timing, Entonox/general anaesthetic/distrac-tion techniques, stand-alone treatment/adjuvant treatment)</li> <li>• Choice of drug and efficacy (triamcinolone hexacetonide/acetanide), dosing and contraindications</li> <li>• Role of imaging to guide injection</li> <li>• Monitoring of side effects (local and systemic)</li> <li>• Maximum number of joint injections (how many at one time, how frequently) individual-ised to the person based on previous experience in the management of CYP and adults with JIA</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Non-pharmacological management of JIA                       | <p>Evidence-based non-pharmacological MDT interventions examining impact on pain, fatigue, function, quality of life, engagement, concordance and overall outcome:</p> <ul style="list-style-type: none"> <li>• Physiotherapy—exercise program and hydrotherapy</li> <li>• Occupational therapy—splints, school adjustments</li> <li>• Podiatry—foot health</li> <li>• Education and training of people with JIA and their families/caregivers by clinical nurse specialists and -s with age-appropriate counselling, informed and shared deci-sion making</li> <li>• Psychology—mental health support, treatment concordance, pain/fatigue management, neurodiversity-informed approaches to communication and care</li> <li>• Nutrition</li> <li>• Peer support for people with JIA arranged by the MDT or third sector</li> </ul>                                                                                                                                                                                                                                                                     |
| Pharmacological management of JIA                           | <p>Evidence-based pharmacological interventions, including</p> <ul style="list-style-type: none"> <li>• NSAIDs, csDMARDs, bDMARDs and tsDMARDs with a timely escalation pathway and taper-ing strategies using outcome measures and based on classification criteria (in particular ILAR), medications in combination, use of biosimilars and use of bone marrow transplant</li> <li>• Use of steroid, including doses, route of administration and side effects (and how to re-duce these)</li> <li>• Treat-to-target approaches and biomarker stratification strategies</li> <li>• Therapeutic drug monitoring</li> <li>• Definition of remission (including using biomarkers and imaging)</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                  |
| Quality improvement and clinical research in JIA            | <ul style="list-style-type: none"> <li>• Learning network (with collection of minimal data set to assess outcomes allowing benchmarking across the four nations, creation of a formal network structure, experi-ence sharing)</li> <li>• Contribution to registries to continue learning from data, including linkage of paediatric and adult datasets through national trusted research environments to explore long-term outcomes of JIA into adulthood</li> <li>• Contribution to clinical research</li> <li>• Cost-effectiveness of intervention and commissioning underpinning access to medica-tions across the four nations</li> <li>• Evidence-based suggestions to improve data capture and reporting regarding disease ac-tivity and medication prescribing</li> <li>• Digital health strategy to improve care through the National Centre for Child Health Technology</li> <li>• Evidence-based care pathways within a regional network describing the role of stake-holders to support community-based care, build effective collaboration, reduce inequal-ities and improve care</li> </ul> |

(continued)

## Developmentally appropriate care in JIA

Developmentally appropriate care for CYP and adults with JIA, including

- Planning of transition from paediatric to adult rheumatology
- Presence of a chaperone
- Guideline for parents'/guardians' attendance
- Timing of appointments
- Lifestyle counselling
- Role of youth workers
- Empowerment of people with JIA
- Developmentally appropriate education with injection training
- Mental health evaluation
- Monitoring of growth, including weight

This guideline will summarise current and relevant evidence in developmentally appropriate care, including systematic reviews and national recommendations

## Healthcare inequality in JIA across the UK

- Raise awareness of JIA to improve early recognition

- Language and neurodiversity barriers

- Sociodemographic circumstances

- Health professionals' resources in primary and secondary care to provide patient-centred local care

- Cultural access support

- Inequality of medication access in CYP and adults with JIA, including the time between the decision to start a new treatment and the first dose being given

This guideline will summarise current and relevant evidence in healthcare inequality, including systematic reviews and national recommendations

- 2025 treatment of polyarticular juvenile idiopathic arthritis in Latin America: recommendations from the Pan-American League of Associations for Rheumatology [44]
- 2025 recommendations for the treatment of juvenile idiopathic arthritis with oligoarthritis or polyarthritis from the 2024 update of the Japan College of Rheumatology Clinical Practice Guidelines for the management of rheumatoid arthritis including juvenile idiopathic arthritis with oligoarthritis or polyarthritis—secondary publication [45]
- 2025 Taiwan guideline for the diagnosis and management of juvenile idiopathic arthritis: consensus statement of the Taiwan Academy of Pediatric Allergy, Asthma and Immunology [46]
- 2025 African guidelines for diagnosis and management of polyarticular juvenile idiopathic arthritis: PAFLAR initiative [47]
- 2025 Pediatric Society of the African League Against Rheumatism juvenile idiopathic arthritis recommendations for enthesitis-related arthritis and juvenile psoriatic arthritis [48]
- 2025 National Confidential Enquiry into Patient Outcome and Death: a review of the quality of care provided to children and young adults with juvenile idiopathic arthritis [18]
- 2025 paediatric rheumatology national GIRFT report [19]
- British Society for Rheumatology guideline: Hot, swollen or stiff joints in children and young people: British Society for Rheumatology guideline scope [31]
- 2025 British Society for Rheumatology guideline for the prescription and monitoring of conventional synthetic disease-modifying anti-rheumatic drugs [32]
- British Society for Rheumatology biologic DMARD safety guidelines in inflammatory arthritis [33, 34]
- Pain management in people with inflammatory arthritis: British Society for Rheumatology guideline scope [36].

## Methods

The guideline development will follow the BSR 'Creating Clinical Guidelines' protocol version 6.0 (October 2025) [49]. The methodology will include

- Systematic evidence searches and, where relevant and feasible, evidence synthesis by an independent evidence synthesis team.
- Expert committee review: A panel of clinical experts, academics and experts by experience (people living with JIA and family representatives) will review the gathered evidence.
- Public and professional consultation: A draft will be available for consultation among health professionals and patient/family groups to ensure it meets clinical needs.
- Final revisions and publishing: Incorporate feedback and finalise the guideline.

This guideline will be created by a working group consisting of healthcare professionals and experts by experience: young people and their parents/caregivers who have experience living with JIA. The healthcare professionals include paediatric rheumatologists, paediatricians with an interest in rheumatology, adolescent and adult rheumatologists, a paediatric ophthalmologist, specialist nurses, physiotherapists, occupational therapists, pharmacists, psychologists and epidemiologists.

Evidence reviews will be conducted by an independent evidence synthesis team to inform guideline recommendations. Each review will address one or more key topics (Table 1) and associated questions and involve systematic searches of relevant sources, e.g. bibliographic databases or grey literature, and

screening of results with reference to predefined selection criteria. Where appropriate, full systematic reviews will be undertaken, e.g. for pharmacological and non-pharmacological treatments. This will additionally include data extraction using a pretested form and critical appraisal of each study to assess study limitations and risk of bias. This evidence will then be synthesised narratively with the quality of evidence for prioritised outcomes assessed using a Grading of Recommendations Assessment, Development, and Evaluation-informed approach [50].

## Structured questions using PICO or SPIDER (sample size, phenomenon of interest, study design, evaluation and research type) frameworks for evidence reviews

The PICO and SPIDER frameworks are the most appropriate frameworks to assist in structuring research questions in the JIA

guideline [51]. The PICO framework (or adapted PICO framework such as PI-O) has been used for evidence-based clinical practice (Table 2) and the SPIDER framework for qualitative research and mixed-methods research (Table 3).

We are developing this guideline to ensure that people with JIA will receive updated holistic MDT care with a treatment pathway updated with the latest evidence. This guideline will follow the recommendations of the NCEPOD JIA national audit and the GIRFT paediatric rheumatology national review. We plan to issue recommendations that may contribute to future audits, benchmarking, quality improvement and research. We anticipate that the guideline will be in a format that facilitates its use in clinical practice, with a focus on graphical abstracts and a breakdown of information based on topics and on health professionals' use in routine care.

## Timeline for publication of guideline

The guideline is expected to be published in 2027.

**Table 2** PICO framework applied to some JIA guideline topics.

| PICO topics                              | Population | Intervention                                                                                                                            | Comparison                                                                                                                                                         | Outcome <sup>a</sup>                                                                                                  |
|------------------------------------------|------------|-----------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| Imaging                                  | JIA        | Diagnostic investigations: X-ray, ultrasound or MRI (with or without contrast)                                                          | Clinical assessment only                                                                                                                                           | Disease activity<br>Damage<br>Comorbidities<br>Treatment decision-making escalation and weaning                       |
| Uveitis screening (length and frequency) | JIA        | Screening based on ILAR criteria/age                                                                                                    | Absence of screening or different screening protocols                                                                                                              | Early diagnosis (detection rate or time to diagnosis)<br>Damage-free uveitis                                          |
| Joint injection                          | JIA        | Corticosteroid injection, as listed in Table 1                                                                                          | No additional corticosteroid injection<br>Ultrasound-guided vs unguided<br>Triamcinolone vs hexacetonide                                                           | Complications and side effects<br>Role in the treatment pathway                                                       |
| Non-pharmacological management           | JIA        | Non-pharmacological MDT interventions, as listed in Table 1                                                                             | Only pharmacological intervention<br>Comparison between different non-pharmacological interventions<br>Waiting list or sham/attention control                      | Outcome improvement: pain, function, quality of life education, engagement adherence                                  |
| Pharmacological management               | JIA        | NSAIDs or DMARDs, as listed in Table 1                                                                                                  | Placebo, no additional drug or comparison between different types of drugs. Evidence-based escalation pathway based on ILAR classification and presence of uveitis | Early damage-free remission<br>Quality of life<br>Cost-effectiveness and side effects of corticosteroids<br>Adherence |
| Non-pharmacological monitoring           | JIA        | Monitoring using digital health, biomarkers, treat-to-target approaches, therapeutic drug monitoring, patient-reported outcome measures | Clinical and radiological monitoring only                                                                                                                          | Optimisation of care pathway<br>Cost-effectiveness<br>Quality of life                                                 |

<sup>a</sup> Design: randomized controlled trials, non-randomised controlled trials, other comparative observational designs.

**Table 3** SPIDER framework applied to three JIA guideline topics.

| SPIDER topics                    | Sample      | Phenomenon of interest                                                                                                                                                    | Design                                                               | Evaluation                                                                                                                        | Research             |
|----------------------------------|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|----------------------|
| Screening for comorbidities      | JIA         | IBD, chronic non-bacterial osteomyelitis, psoriasis, type 1 or 2 diabetes, IgA deficiency, growth, bone health, hypercholesterolaemia, pain, psychosocial issues, obesity | Observational designs: cross-sectional studies, longitudinal cohorts | Disease outcome<br>Additional needs<br>Experience                                                                                 | Quantitative studies |
| Developmentally appropriate care | JIA all age | Parent/guardian attendance<br>Lifestyle counselling<br>Empowerment<br>Readiness evaluation<br>Education with injection training<br>Mental health evaluation               | Qualitative designs and observational studies (e.g. surveys)         | Disease outcome<br>Experience of care<br>Attendance<br>Concordance                                                                | Mixed methods        |
| Health inequalities              | JIA         | Awareness of JIA<br>language barriers<br>Support based on sociodemographic circumstances<br>Patient-centred local care<br>Inequality of medication access                 | Qualitative designs and observational studies (e.g. audits, surveys) | Variability in access, uptake or delivery of care across population groups (ethnicity, geography, deprivation)<br>Disease outcome | Mixed methods        |

## GWG

The multidisciplinary GWG comprises the following members from across the UK: Sandrine Compeyrot-Lacassagne (co-chair, consultant paediatric rheumatologist), Ethan S. Sen (co-chair, consultant paediatric rheumatologist), Richard P. Beesley (expert by experience), Lisa Bray (consultant in paediatrics and paediatric rheumatology), Angharad Bridges (expert by experience), Hema Chaplin [chartered psychologist (researcher)], Coziana Ciurtin (consultant in adolescent/young adult and adult rheumatology), Gavin Cleary (consultant paediatric rheumatologist), Samantha Cooray (specialist registrar in paediatric rheumatology), Octavio Aragon Cuevas (lead paediatric rheumatology pharmacist), Verna Cuthbert (advanced physiotherapist paediatric rheumatology), Samundeeswari Deepak (consultant paediatric rheumatologist), Emily Earle (expert by experience), Andreia Ferreira (lead clinical nurse specialist), Lianne Kearsley-Fleet (research fellow epidemiology), Jo Gupta (clinical nurse specialist), Rebecca Houston (lead pharmacist—rheumatology, bone health and clinical trials), Ryan Malcolm Hum (clinical PhD fellow and speciality registrar in rheumatology), Jenny H. Humphreys (senior clinical lecturer and honorary consultant rheumatologist), Hirushi S. Jayasekera (rheumatology and general internal medical registrar), Sarah Jones (clinical specialist physiotherapist in paediatric rheumatology), Christine

MacFadyen (rheumatology registrar), Jennifer Nisbet (highly specialised paediatric occupational therapist), Visvalingam Arunath (senior clinical fellow), Yeliz Prior (occupational therapist), Valerie Rogers (consultant in paediatric rheumatology and chronic pain), Stephanie J. W. Shoop-Worrall (research fellow epidemiology), Ameenat Lola Solebo (consultant paediatric ophthalmologist), Rosemary Waller (consultant rheumatologist), Luke Daniel Williamson (consultant rheumatologist), Debbie Wilson (expert by experience), Catherine Wright (expert by experience).

## Supplementary data

[Supplementary data](#) are available at *Rheumatology Advances in Practice* online.

## Data availability

No new data were generated or analysed in support of this article.

## Authors' contributions

S.C.L. and E.S.S. drafted the article. All authors contributed to developing the guideline scope, provided critical manuscript editing and revision and approved the final submitted version.

## Funding

No specific funding was received from any bodies in the public, commercial or not-for-profit sectors to carry out the work described in this article.

**Disclosure statement:** G.C. received fees from Pfizer for an educational event and Fresenius Kabi for advisory board work. S.C. L. received fees from Novartis to attend a conference and from Johnson & Johnson, Galapagos/Alfasigma, Lilly, Novartis, Sobi and Sanofi for clinical trials (paid to her employer). O.A.C. received fees from Novartis to attend a conference. R.H. received fees from Novartis and Lilly to attend conferences. R.M.H. received fees from AbbVie, Novartis, Ferring and UCB for consultancy and support to attend conferences. R.M.H. is supported by a Wellcome Trust 4ward North Clinical PhD Fellowship (323724/Z/24/Z). J.H. received fees for consultancy work from Versus Arthritis. A.L.S. received fees from Alimera Sciences for consultancy and honorarium from Heidelberg Engineering. L.D.W. received fees from UCB, Lilly, AbbVie and Novartis for conference and course attendance and from AbbVie for advisory board work. All other authors declare no conflicts of interest.

## Acknowledgements

This work was supported by BSR. The authors would like to thank the children, young people and adults living with JIA, as well as healthcare professionals, who have contributed to this project. The authors would also like to thank James Prior, Nadia Corp and Danielle Van der Windt from Keele University for their methodological support. S.S.W. is funded by the Medical Research Council (MR/W027151/1). L.K.F. is supported by Arthritis UK (23126).

## References

- Costello R, McDonagh J, Hyrich KL, Humphreys JH. Incidence and prevalence of juvenile idiopathic arthritis in the United Kingdom, 2000–2018: results from the Clinical Practice Research Datalink. *Rheumatology (Oxford)* 2022; 61:2548–54.
- Chhabra A, Robinson C, Houghton K *et al.* Long-term outcomes and disease course of children with juvenile idiopathic arthritis in the ReACCh-Out cohort: a two-centre experience. *Rheumatology (Oxford)* 2020;59:3727–30.
- Armon K. Outcomes for juvenile idiopathic arthritis. *Paediatr Child Health* 2018;28:64–72.
- Costello RE, Kearsley-Fleet L, McDonagh JE, Hyrich KL, Humphreys JH. Continuing specialist care into adulthood in young people with juvenile idiopathic arthritis: a retrospective cohort study using electronic health records in England. *Rheumatology (Oxford)* 2023;62:1936–43.
- Demirci Yıldırım T, İşgüder R, Karaçura E *et al.* Pediatric to adult rheumatology transition: success rates, influencing factors, and evolving diagnoses and treatments. *Arch Rheumatol* 2024;39:662–9.
- Wu Q, Chaplin H, Ambrose N *et al.* Juvenile arthritis disease activity score is a better reflector of active disease than the disease activity score 28 in adults with polyarticular juvenile idiopathic arthritis. *Ann Rheum Dis* 2016;75:635–6.
- Petty RE, Southwood TR, Manners P *et al.* International League of Associations for Rheumatology classification of juvenile idiopathic arthritis: second revision, Edmonton, 2001. *J Rheumatol* 2004;31:390–2.
- Dahlberg A, Tydén H, Jöud AS, Kahn F, Berthold E. Screening for comorbid autoimmune disease should be considered in children with ANA positive juvenile idiopathic arthritis – results from the south-Swedish juvenile idiopathic arthritis cohort. *Pediatr Rheumatol Online J* 2024;22:92.
- Jones JT, Smith C, Becker ML, Lovell D. Down syndrome-associated arthritis cohort in the new childhood arthritis and rheumatology research alliance registry: clinical characteristics, treatment, and outcomes. *Arthritis Care Res (Hoboken)* 2021;73:1739–45.
- De Matteis A, Bindoli S, De Benedetti F *et al.* Systemic juvenile idiopathic arthritis and adult-onset Still's disease are the same disease: evidence from systematic reviews and meta-analyses informing the 2023 EULAR/PreS recommendations for the diagnosis and management of Still's disease. *Ann Rheum Dis* 2024;83:1748–61.
- Zisman D, Gladman DD, Stoll ML *et al.* The juvenile psoriatic arthritis cohort in the CARRA registry: clinical characteristics, classification, and outcomes. *J Rheumatol* 2017; 44:342–51.
- Naddei R, Burrone M, Ridella F *et al.* Clinical insights into heterogeneity of rheumatoid factor negative polyarticular juvenile idiopathic arthritis across the world. *Pediatr Rheumatol Online J* 2025;23:30.
- Maccora I, Simonini G, Guly CM, Ramanan AV. Management of JIA associated uveitis. *Best Pract Res Clin Rheumatol* 2024;38:101979.
- British Society for Paediatric and Adolescent Rheumatology, Royal College of Ophthalmology. Guidelines for screening for uveitis in juvenile idiopathic arthritis. 2006. [https://www.rcophth.ac.uk/wp-content/uploads/2022/02/2006\\_PROF\\_046\\_JuvenileArthritis-updated-crest-2.pdf](https://www.rcophth.ac.uk/wp-content/uploads/2022/02/2006_PROF_046_JuvenileArthritis-updated-crest-2.pdf)
- Walscheid K, Glandorf K, Rothaus K *et al.* Enthesitis-related arthritis: prevalence and complications of associated uveitis in children and adolescents from a population-based nationwide study in Germany. *J Rheumatol* 2021;48:262–9.
- Gor K, Lee YS, Sprong ME, Hollender H, Shrestha J, Huang X. Modifications of the effect of juvenile idiopathic arthritis (JIA) on anxiety and depression in children and adolescents: a pseudo-longitudinal study of 192,019 children in the United States. *Clin Pract Epidemiol Ment Health* 2025;21: e17450179372640.
- Medrano L, Bursch B, Weiss JE *et al.* Medical post-traumatic stress disorder symptoms in children and adolescents with chronic inflammatory arthritis: prevalence and associated factors. *Children (Basel)* 2025;12:1004.
- National Confidential Enquiry into Patient Outcome and Death. Joint Care? A review of the quality of care provided to children and young adults with juvenile idiopathic arthritis. London: National Confidential Enquiry into Patient Outcome and Death, 2025. [https://ncepod.org.uk/2025jia/Summary%20report\\_JIA\\_Joint%20Care.pdf](https://ncepod.org.uk/2025jia/Summary%20report_JIA_Joint%20Care.pdf)

19. Cleary G, McErlane F. Paediatric rheumatology: GIRFT Programme National Speciality Report. London: NHS England, 2025. <https://gettingitrightfirsttime.co.uk/wp-content/uploads/2025/12/Paediatric-Rheumatology-National-Report-FINAL-December-2025-exec-summary.pdf>
20. NHS England. Clinical commissioning policy statement: biologic therapies for the treatment of juvenile idiopathic arthritis (JIA). 2015. London: NHS England. <https://www.england.nhs.uk/wp-content/uploads/2018/08/Biologic-therapies-for-the-treatment-of-juvenile-idiopathic-arthritis.pdf>
21. Bitencourt N, Lawson E, Bridges J *et al*. Pediatric to adult transition literature: scoping review and rheumatology research prioritization survey results. *J Rheumatol* 2022; 49:1201–13.
22. Kelly A, Niddrie F, Tunnicliffe DJ *et al*. Patients' attitudes and experiences of transition from paediatric to adult healthcare in rheumatology: a qualitative systematic review. *Rheumatology (Oxford)* 2020;59:3737–50.
23. Griffin K, Pearce F, Packham J. A meta-analysis and systematic review of the use of transition tools for patients transitioning from paediatric to adult rheumatology services. *Rheumatol Adv Pract* 2024;8:rkaf130.
24. British Society for Rheumatology. JIA Learning Collaborative. 2026. <https://www.rheumatology.org.uk/improving-care/quality-improvement/jia-learning-collaborative>
25. UK Government. Fit for the future: 10 year health plan for England. 2025. 8 December 2025. <https://assets.publishing.service.gov.uk/media/6888a0b1a11f859994409147/fit-for-the-future-10-year-health-plan-for-england.pdf>
26. GIRFT. Haemophagocytic lymphohistiocytosis (HLH): guidance on the diagnosis, treatment, management and governance. 2025. <https://gettingitrightfirsttime.co.uk/wp-content/uploads/2025/11/HLH-Guide-final-version-v1.4-November-2025.pdf>
27. Davies K, Cleary G, Foster H, Hutchinson E, Baildam E. BSPAR standards of care for children and young people with juvenile idiopathic arthritis. *Rheumatology (Oxford)* 2010; 49:1406–8.
28. NHS England. Paediatric Medicine (Rheumatology) Quality Dashboard. 2014. <https://www.england.nhs.uk/commissioning/wp-content/uploads/sites/12/2014/03/paediatric-rheumatol.pdf>
29. Cooray S, Compeyrot-Lacassagne S, Sen ES *et al*. Variation in biologic and targeted synthetic DMARD use in JIA subtypes: results of a national UK survey [Abstract P291]. *Pediatr Rheumatol* 2025;23:93. <https://doi.org/10.1186/s12969-025-01138-8>
30. Dey M, Budhathoki S, Elwell H *et al*. Association of health literacy with disease outcomes in inflammatory arthritis: a systematic review. *Ann Rheum Dis* 2026;85:195–209.
31. Bray L, Leahy A, Aarvold A *et al*. Hot, swollen or stiff joints in children and young people: British Society for Rheumatology guideline scope. *Rheumatol Adv Pract* 2025;9:rkaf047.
32. Bechman K, Song K, Abhishek A *et al*. The 2025 British Society for Rheumatology guideline for the prescription and monitoring of conventional synthetic disease-modifying anti-rheumatic drugs. *Rheumatology (Oxford)* 2026;65:keaf522.
33. Holroyd CR, Seth R, Bukhari M *et al*. The British Society for Rheumatology biologic DMARD safety guidelines in inflammatory arthritis. *Rheumatology (Oxford)* 2019; 58:e3–42.
34. Ling SF, Bennett JL, Reid VJ *et al*. Biologic and targeted synthetic DMARD safety in inflammatory arthritis: British Society for Rheumatology guideline scope. *Rheumatol Adv Pract* 2025;9:rkaf104.
35. Russell MD, Dey M, Flint J *et al*. British Society for Rheumatology guideline on prescribing drugs in pregnancy and breastfeeding: immunomodulatory anti-rheumatic drugs and corticosteroids. *Rheumatology (Oxford)* 2023; 62:e48–88.
36. Scott IC, Babatunde O, Barker C *et al*. Pain management in people with inflammatory arthritis: British Society for Rheumatology guideline scope. *Rheumatol Adv Pract* 2024; 8:rkaf128.
37. National Institute for Health and Care Excellence. Abatacept, adalimumab, etanercept and tocilizumab for treating juvenile idiopathic arthritis. TA373. London: National Institute for Health and Care Excellence, 2015.
38. Ringold S, Angeles-Han ST, Beukelman T *et al*. 2019 American College of Rheumatology/Arthritis Foundation guideline for the treatment of juvenile idiopathic arthritis: therapeutic approaches for non-systemic polyarthritis, sacroiliitis, and enthesitis. *Arthritis Care Res (Hoboken)* 2019; 71:717–34.
39. Angeles-Han ST, Ringold S, Beukelman T *et al*. 2019 American College of Rheumatology/Arthritis Foundation guideline for the screening, monitoring, and treatment of juvenile idiopathic arthritis-associated uveitis. *Arthritis Care Res (Hoboken)* 2019;71:703–16.
40. Onel KB, Horton DB, Lovell DJ *et al*. 2021 American College of Rheumatology guideline for the treatment of juvenile idiopathic arthritis: therapeutic approaches for oligoarthritis, temporomandibular joint arthritis, and systemic juvenile idiopathic arthritis. *Arthritis Care Res (Hoboken)* 2022; 74:521–37.
41. Onel KB, Horton DB, Lovell DJ *et al*. 2021 American College of Rheumatology guideline for the treatment of juvenile idiopathic arthritis: recommendations for nonpharmacologic therapies, medication monitoring, immunizations, and imaging. *Arthritis Care Res (Hoboken)* 2022;74:505–20.
42. Fautrel B, Mitrovic S, De Matteis A *et al*. EULAR/PreS recommendations for the diagnosis and management of Still's disease, comprising systemic juvenile idiopathic arthritis and adult-onset Still's disease. *Ann Rheum Dis* 2024; 83:1614–27.
43. Quartier P, Belot A, Breton S *et al*. French protocol for the diagnosis and management of juvenile idiopathic arthritis including pediatric-onset Still's disease. *Rev Med Interne* 2025; 46:449–81.
44. Gutiérrez-Suárez R, Appenzeller S, Silva CA *et al*. Treatment of polyarticular juvenile idiopathic arthritis in Latin America: recommendations from the Pan-American League of Associations for Rheumatology. *Lancet Child Adolesc Health* 2025;9:508–18.
45. Miyamae T, Okamoto N, Inoue Y *et al*. Recommendations for the treatment of juvenile idiopathic arthritis with oligoarthritis or polyarthritis from the 2024 update of the Japan College of Rheumatology clinical practice guidelines for the

- management of rheumatoid arthritis including juvenile idiopathic arthritis with oligoarthritis or polyarthritis – secondary publication. *Mod Rheumatol* 2025;35:894–908.
46. Sun HL, Kao YH, Yu HH *et al.* Taiwan guideline for the diagnosis and management of juvenile idiopathic arthritis: consensus statement of the Taiwan Academy of Pediatric Allergy, Asthma and Immunology. *J Microbiol Immunol Infect* 2026;59:1–11.
47. Abu-Zaid MH, Migowa AN, Kassa HL *et al.* African guidelines for diagnosis and management of polyarticular juvenile idiopathic arthritis: PAFLAR initiative. *Pediatr Rheumatol Online J* 2025;23:27.
48. Hamdi W, Migowa A, Ferjani HL *et al.* Pediatric Society of the African League Against Rheumatism juvenile idiopathic arthritis recommendations for enthesitis-related arthritis and juvenile psoriatic arthritis. *Clin Rheumatol* 2025;44:901–22.
49. British Society for Rheumatology. Creating clinical guidelines: British Society for Rheumatology protocol. London: British Society for Rheumatology, 2025.
50. Prasad M. Introduction to the GRADE tool for rating certainty in evidence and recommendations. *Clin Epidemiol Glob Health* 2024;25:101484.
51. Calderon Martinez E, Flores Valdés JR, Castillo JL *et al.* Ten steps to conduct a systematic review. *Cureus* 2023;15:e51422.