Dear colleague,

thank you for participating in this survey. We want to examine any differences in preferences in treatment for Juvenile Idiopathic Arthritis in countries with comparable health systems and certified Subspecialists in Pediatric Rheumatology. We are surveying Pediatric Rheumatologists in Canada and Germany, Austria & Switzerland. Results will be analyzed anonymously. We would like to emphasize that there are no ‘right’ answers; all options presented are alternatives currently practised.

Thank you for your time!

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Abbreviations used: JIA – Juvenile Idiopathic Arthritis; NSAID – Non-Steroidal Anti-Inflammatory Drug; DMARD – Disease-Modifying Anti-Rheumatic Drug; ANA – Anti-Nuclear Antibodies; RF – Rheumatoid Factor; ESR – Erythrocyte Sedimentation Rate

Please answer these brief questions about your person.

1. Please enter your email adress.

2. Please state your age.

   Age in years

3. Please state your gender.

   j\n   Female

   j\n   Male

4. What is your level of training in Pediatric Rheumatology?

   j\n   Resident

   j\n   Specialty Degree in Pediatrics

   j\n   Subspecialty Degree in Pediatric Rheumatology

   Other (please specify)

5. What year did you graduate from medical school?

   Graduation year
6. Please describe your type of practice.

- Hospital-based, academic
- Hospital-based, non-academic
- Community based

Other (please specify)

7. In which country do you mainly practice?

- Canada
- United States of America

Other (please specify)

8. Please consider the following hypothetical patient: A 3 year old girl is presented in your practice. The parents report that for the last 2 months she has had a swollen right knee and is limping, especially in the morning. Further history elicits no trauma or preceding infection. On examination you find an effusion in both knees and both ankles with no contracture, with an otherwise normal general and musculoskeletal examination. Bloodwork shows normal CBC, liver/kidney parameters and inflammatory parameters, and a positive ANA, but a negative RF and negative HLA-B27. An eye examination (including slit lamp examination) 2 days previously was unremarkable. You diagnose her with oligoarticular JIA.

8. Which of the following medications would you prefer for your initial treatment?

- NSAID
- Intraarticular corticosteroid joint injections
- DMARD
- Oral Corticosteroids
- Biologic treatment

Other (please specify)

9. What would be your recommendation regarding physiotherapy and activity in this patient?

- Regular weekly physiotherapy by a trained physiotherapy professional (with home exercise)
- Continued home exercise after initial coaching by the doctor or a trained physiotherapy professional
- Encourage a high level of physical activity at home

Other (please specify)
Approaches to treatment of seronegative JIA in Canada and Germany

Please consider the following hypothetical patient: A patient with the same characteristics as the one described under A was treated by another Pediatric Rheumatologist with an NSAID. After her family moved, she presents in your office, 6 months after onset of her symptoms. She still complains of morning stiffness, and you find an effusion in both knees. The remaining examination including the ankles is unremarkable. A recent eye examination was unremarkable.

10. Which of the following medications would you prefer for treatment at this time?

- NSAID
- Intraarticular corticosteroid joint injections
- DMARD
- Oral Corticosteroids
- Biologic treatment

Other (please specify)

Please consider the following hypothetical patient: A patient with the same characteristics as the one described under A was treated by another Pediatric Rheumatologist with an NSAID. After her family moved, she presents in your office, 6 months after onset of her symptoms. She has no joint complaints, but she was diagnosed with chronic anterior uveitis refractory to topical steroids 3 months after her initial visit. The musculoskeletal examination including ankles and knees is unremarkable.

11. Which of the following medications would you prefer for treatment at this time?

- NSAID
- DMARD
- Oral Corticosteroids
- Biologic treatment

Other (please specify)

Please consider the following hypothetical patient: A 14 year old female patient presents in your office. She reports that for the last 3 months she has increasing swelling of both knees, ankles, wrists and elbows, with morning stiffness lasting for approximately 2 hours. Further history elicits no trauma or preceding infection. On examination you find effusions in a total of 9 joints, with an otherwise normal general and musculoskeletal examination. Bloodwork shows normal CBC, liver and kidney parameters, elevated inflammatory parameters (ESR), and a positive ANA, but a negative RF and negative HLA-B27. An eye examination (including slit lamp examination) 2 days previously was unremarkable. You diagnose her with seronegative polyarticular JIA.
Approaches to treatment of seronegative JIA in Canada and Germany

12. Which of the following medications would you prefer for initial treatment?
   - NSAID
   - Intraarticular corticosteroid joint injections
   - DMARD
   - Oral Corticosteroids
   - Biologic treatment
   Other (please specify)

13. What would be your recommendation regarding physiotherapy and activity in this patient?
   - Regular weekly physiotherapy by a trained physiotherapy professional (with home exercise)
   - Continued home exercise after initial coaching by the doctor or a trained physiotherapy professional
   - Encourage a high level of physical activity at home
   Other (please specify)

E. Please consider the following hypothetical patient: A patient with the same characteristics as the one described in D was treated by another Pediatric Rheumatologist with a DMARD. After her family moved, she presents in your office, one month after start of DMARD treatment. She has ongoing joint complaints, and the physical examination still shows 8 active joints.

14. Assuming that the patient described in E remains unchanged on subsequent presentations, approximately how long after institution of the DMARD treatment would you wait before you would consider changing her management?

| Time       | 1 month | 2 months | 3 months | 4 months | 6 months | 9 months | 12 months | 18 months | 24 months |
|------------|---------|----------|----------|----------|----------|----------|-----------|-----------|-----------|
|            | j       | j        | j        | j        | j        | j        | j         | j         | j         |

15. At the time point you gave in the last question, what would be your preferred choice for changing the management of the patient described in E?
   - Switch to a different DMARD
   - Treat with an additional DMARD
   - Treat with intraarticular Steroids
   - Add or switch to a biologic agent
   Other (please specify)
16. Assuming that the patient described in E remains unchanged on subsequent presentations, approximately how long would you treat with NSAID, DMARD or steroids before you would consider a biologic agent?

| Time    | 1 month | 2 months | 3 months | 4 months | 6 months | 9 months | 12 months | 18 months | 24 months |
|---------|---------|----------|----------|----------|----------|----------|-----------|-----------|-----------|
| napro    | j       | j        | j        | j        | j        | j        | j         | j         | j         |
| indomethacin | j    | j        | j        | j        | j        | j        | j         | j         | j         |
| ibuprofen    | j      | j        | j        | j        | j        | j        | j         | j         | j         |
| diclofenac    | j      | j        | j        | j        | j        | j        | j         | j         | j         |
| piroxicam    | j      | j        | j        | j        | j        | j        | j         | j         | j         |

The following questions are designed to assess your preferences for various medications within their respective groups.

17. If you would use an NSAID for treatment of a 3 year old female patient with oligoarticular JIA (ANA positive, HLA-B27 negative, RF negative) with no uveitis, which would be your initial choice?

- Naproxen
- Indomethacin
- Ibuprofen
- Diclofenac
- Piroxicam

Other (please specify)

18. If you would use an NSAID for treatment of a 13 year old female patient with polyarticular JIA (ANA positive, HLA-B27 negative, RF negative) with no uveitis, which would be your initial choice?

- Naproxen
- Indomethacin
- Ibuprofen
- Diclofenac
- Piroxicam

Other (please specify)
19. Which would be the corticosteroid preparation of your choice for intraarticular steroid injection of the knee in oligoarticular JIA?

- Triamcinolone Acetonid (e.g. Kenalog®)
- Triamcinolone Hexacetonide (e.g. Aristospan®)
- Betamethasone Acetate (e.g. Soluspan®)
- Dexamethasone (e.g. Decadron®)
- Methylprednisolone Acetate (e.g. Depo-Medrol®)

Other (please specify)

20. If you would use a DMARD for treatment of a 13 year old female patient with polyarticular Juvenile Idiopathic Arthritis (ANA positive, HLA-B27 negative, Rheumatoid Factor negative) with no uveitis, which would be your initial choice?

- Methotrexate
- Leflunomide
- Cyclosporine
- Mycophenolate Mofetil or enteric-coated Mycophenolate
- Sulfasalazine

Other (please specify)

21. If you would use a biologic agent for treatment of a 13 year old female patient with refractory polyarticular JIA (ANA positive, HLA-B27 negative, rheumatoid factor negative) with no uveitis, which would be your initial choice?

- Infliximab (Remicade®)
- Etanercept (Enbrel®)
- Adalimumab (Humira®)
- Abatacept (Orencia®)

Other (please specify)

Thank you for taking the time to complete this survey!