Online Resource 2 – Rheumatologist questionnaire

**Journal:** Clinical Rheumatology

**Title:** Investigating the safety and compliance of using csDMARDs in rheumatoid arthritis treatment through face-to-face interviews: a cross-sectional study in China

**Authors:** Jiaying Sun, Siming Dai, Ling Zhang, Yajing Feng, Xin Yu, Zhiyi Zhang*

* Corresponding author:

Zhiyi Zhang

Department of Rheumatology and Immunology, First Affiliated Hospital of Harbin Medical University, Harbin 150086, Heilongjiang, China

Email: zhangzhiyi2014@163.com
Standard wording for interviewers before the investigational interview in the recruitment period

Interviewer:

We are going to have an investigational interview with you. We need to inform our client of the adverse events and product technical complaints that we learn from the investigational interview. Although this is an investigational interview, we will keep what you said confidential, but if you put forward one or more adverse events or product technical complaints in the interview, we will need to report on it.

In this case, we will ask for your opinion if you are willing to give up your right to request confidentiality of adverse events or product technical complaints provided by the Code of Conduct for Market Investigation. We will still keep the other contents you said during the interview confidential.

On this basis, are you willing to participate in this interview?

| Respondent | Name | Tel |
|------------|------|-----|
| Hospital   |      |     |
| Department |      |     |

| Date of interview | MM-DD | Interview time | From HH:MM to HH:MM, ___ minute(s) in total |
|-------------------|-------|----------------|--------------------------------------------|

| Staff | Name of interviewer | Name of first reviewer | Time of first review |
|-------|----------------------|------------------------|----------------------|
|       | Name of coder        | Name of entry clerk    | Supervision          |

Self-introduction:

My name is _________, and I’m an interviewer from Adelphi FocusRx. We are conducting an investigation on rheumatoid arthritis. In view of your rich experience in this field, we sincerely invite you to participate in this interview. This interview will last for about 45 minutes. All information you provide will be kept confidential. Please speak freely. Thank you!

The interviewer promises:

I am absolutely aware of the impact of my attitude on the investigation results.

I ensure that all the information in this questionnaire is completed by me in accordance with the interview procedure and is absolutely true. If one fraud is found, all the documents will be invalidated and I will compensate the company for the loss.

Signature of interviewer:
### S-screening questionnaire

**S1. [Circled by the interviewer] City of Respondent?**

| First-tier city | Beijing | 1 | Shanghai | 2 | Guangzhou | 3 |
|-----------------|---------|---|----------|---|-----------|---|
| Second-tier city| Xi'an   | 4 | Wuhan    | 5 | Fuzhou    | 6 |
|                 | Nanjing | 7 | Hangzhou | 8 | Chengdu   | 9 |
|                 | Shenyang| 10| Ji'nan   | 11| Zhengzhou| 12|
|                 | Changsha| 13|          |   |           |   |

**S2. [Single answer] What level of hospital are you in?**

| Tertiary hospital | 1 | Continue |
|-------------------|---|-----------|
| Others            | 2 | Thank and end |

**S3. [Single answer] Which department are you in?**

| Rheumatology     | 1 | Continue |
|------------------|---|-----------|
| Others           | 2 | Thank and end |

**S4. [Single answer] What is your professional title?**

| Chief physician  | 1 | Continue |
|------------------|---|-----------|
| Associate chief physician | 2 | Continue |
| Attending physician (5 years and above) | 3 | Continue |
| Others           | 4 | Thank and end |

**S5. [Complete] How many rheumatoid arthritis patients do you receive on average every week?**

| Rheumatoid arthritis patients | _________(number) | ≥30, continue | < 30, thank and end |

**S6. [Single answer] Do you personally formulate a therapeutic regimen for patients with rheumatoid arthritis?**

| Yes   | 1 | Continue |
|-------|---|-----------|
| No    | 2 | Thank and end |
S7. [Transverse single answer] How well do you know about the following drugs for rheumatoid arthritis?

| Drug type | Knowledge about the drug |
|-----------|--------------------------|
|            | □ Never heard □ Heard, but know nothing else □ Know but not yet prescribed □ Occasional prescription □ Conventional prescription |
| csDMARD    | Methotrexate             |
|            | □ Never heard □ Heard, but know nothing else □ Know but not yet prescribed □ Occasional prescription □ Conventional prescription |
|            | Leflunomide              |
|            | □ Never heard □ Heard, but know nothing else □ Know but not yet prescribed □ Occasional prescription □ Conventional prescription |
|            | Sulfasalazine            |
|            | □ Never heard □ Heard, but know nothing else □ Know but not yet prescribed □ Occasional prescription □ Conventional prescription |
|            | Hydroxychloroquine       |
|            | □ Never heard □ Heard, but know nothing else □ Know but not yet prescribed □ Occasional prescription □ Conventional prescription |
| bDMARD     | Etanercept               |
|            | □ Never heard □ Heard, but know nothing else □ Know but not yet prescribed □ Occasional prescription □ Conventional prescription |
|            | Rituximab                |
|            | □ Never heard □ Heard, but know nothing else □ Know but not yet prescribed □ Occasional prescription □ Conventional prescription |
|            | Infliximab               |
|            | □ Never heard □ Heard, but know nothing else □ Know but not yet prescribed □ Occasional prescription □ Conventional prescription |
|            | Adalimumab               |
|            | □ Never heard □ Heard, but know nothing else □ Know but not yet prescribed □ Occasional prescription □ Conventional prescription |
|            | Tocilizumab              |
|            | □ Never heard □ Heard, but know nothing else □ Know but not yet prescribed □ Occasional prescription □ Conventional prescription |
| tsDMARD    | Tofacitinib              |
|            | □ Never heard □ Heard, but know nothing else □ Know but not yet prescribed □ Occasional prescription □ Conventional prescription |
Main Questionnaire

Part I: Number of Patients
Q1. [Complete] How many half-days do you receive patients every week? What is your weekly outpatient volume? How many rheumatoid arthritis patients do you receive every week?

| No. | Item                                      | Number                      |
|-----|-------------------------------------------|-----------------------------|
| 1   | Number of days on duty per week           | ___________ half-days      |
| 2   | Outpatient volume per week                | ___________ patients        |
| 3   | Number of **rheumatoid arthritis** patients visiting the outpatient per week | ___________ patients        |

Q2. [Complete] What is the proportion of newly diagnosed patients in the rheumatoid arthritis patients visiting the outpatient? What is the proportion of follow-up patients?

| No. | Patient type                          | Total proportion=100% |
|-----|---------------------------------------|-----------------------|
| 1   | Proportion of newly diagnosed patients | ___________ %         |
| 2   | Proportion of follow-up patients      | ___________ %         |

Q3. [Complete] How many hospitalized patients do you manage on average per month? How many rheumatoid arthritis patients are there?

| No. | Item                                      | Number                      |
|-----|-------------------------------------------|-----------------------------|
| 1   | Number of inpatients per month           | ___________ patients        |
| 2   | Number of **rheumatoid arthritis inpatients** per month | ___________ patients        |

Part II: Diagnosis, Treatment and Follow-up of Rheumatoid Arthritis Patients at Outpatient
Q4. [Complete] How long does it take on average from the first visit to diagnosis for a rheumatoid arthritis patient?

| Item | Time |
|------|------|
| Average time from the first visit to the diagnosis of rheumatoid arthritis | ___________ month(s) |

Q5. [Complete] What is the proportion of **newly diagnosed** rheumatoid arthritis patients who receive drug therapy at outpatient?

| Item | Proportion≤100% |
|------|-----------------|
| Proportion of patients receiving drug therapy | ___________ % |

Q6. [Complete] For **newly diagnosed rheumatoid arthritis** patients, what are the prescription proportions of the following first-line therapeutic regimens?

| No. | Prescription drug regimen | Proportion |
|-----|----------------------------|------------|
| 1   | csDMARD alone             | ___________ % |
| 2   | One csDMARD + glucocorticoid | ___________ % |
| 3   | One csDMARD + NSAIDs      | ___________ % |
| 4   | Combination of two csDMARDs | ___________ % |
| 5   | bDMARD/tsDMARD alone      | ___________ % |
| 6   | Others, please specify    | ___________ % |

Total longitudinal proportion=100%
Q7. [Longitudinal multiple answers] Under what conditions you will not prescribe the following drugs?

Q8. [Complete] [Selected 1/2/8 for any drug in Q7] What is the examination indicator corresponding to the contraindication?

| No. | Condition | csDMARD | TNFi | IL-6i | JAKi | Indicator |
|-----|-----------|---------|------|-------|------|-----------|
| 1   | Severe renal insufficiency | ☐       | ☐    | ☐     | ☐    | ☐ Serum creatinine > ____ μmol/L |
|     |           |         |      |       |      | ☐ GFR < _____ ml/min |
| 2   | Severe hepatic insufficiency | ☐       | ☐    | ☐     | ☐    | ALT/AST > ____ u/L |
|     |           |         |      |       |      | GGT > ____ u/L |
| 3   | Pregnant/lactating women | ☐       | ☐    | ☐     | ☐    |                   |
| 4   | Alcoholism or alcoholic liver disease | ☐       | ☐    | ☐     | ☐    |                   |
| 5   | Peptic ulcer or ulcerative colitis | ☐       | ☐    | ☐     | ☐    |                   |
| 6   | Bone marrow suppression or existing blood dyscrasias | ☐       | ☐    | ☐     | ☐    |                   |
| 7   | Overt or laboratory evidence of immunodeficiency | ☐       | ☐    | ☐     | ☐    | WBC count < ____ *10^9/L |
| 8   | Allergic to csDMARD and its metabolites | ☐       | ☐    | ☐     | ☐    |                   |
| 9   | Interstitial lung disease | ☐       | ☐    | ☐     | ☐    |                   |
| 10  | Latent tuberculosis | ☐       | ☐    | ☐     | ☐    |                   |
| 11  | History of hepatitis B or C | ☐       | ☐    | ☐     | ☐    |                   |
| 12  | Others, please specify_________ | ☐       | ☐    | ☐     | ☐    |                   |

Q9. [Complete] What are the proportions of the following drugs in newly diagnosed rheumatoid arthritis patients who are prescribed with csDMARD as the first-line therapy? Oral administration or injection? What is the initial dose? What is the ideal dose? What is the proportion of patients who reach the ideal dose? What is the actual dose for most patients?

| csDMARD | Proportion of patients | Route of administration | Initial dose | Ideal dose (minimum dose to achieve ideal curative effect) | Proportion of patients reaching ideal dose | Actual dose for most patients |
|---------|------------------------|-------------------------|--------------|------------------------------------------------------------|------------------------------------------|-------------------------------|
| 1 Methotrexate | ____% | ☐ Oral ☐ Injection | Weekly dose: ☐ 5mg ☐ 7.5mg ☐ 10mg ☐ 12.5mg ☐ 15mg ☐ ___mg | Weekly dose: ☐ 10mg ☐ 12.5mg ☐ 15mg ☐ 17.5mg ☐ 20mg ☐ 22.5mg ☐ 25mg ☐ ___mg | ____% | Weekly dose: ☐ 10mg ☐ 12.5mg ☐ 15mg ☐ 17.5mg ☐ 20mg ☐ 22.5mg ☐ 25mg ☐ ___mg |
| 2 Leflunomide | ____% | ☐ Oral ☐ Injection | Daily dose: ☐ 5mg ☐ 10mg ☐ 15mg ☐ 20mg ☐ ___mg | Daily dose: ☐ 10mg ☐ 15mg ☐ 20mg ☐ 25mg ☐ ___mg | ____% | Daily dose: ☐ 10mg ☐ 15mg ☐ 20mg ☐ 25mg ☐ ___mg |
| 3 Sulfasalazine | ____% | ☐ Oral ☐ Injection | Daily dose: ☐ 1g ☐ 1.5g ☐ 2g ☐ 2.5g ☐ 3g ☐ ___g | Daily dose: ☐ 1g ☐ 1.5g ☐ 2g ☐ 2.5g ☐ 3g ☐ ___g | ____% | Daily dose: ☐ 1g ☐ 1.5g ☐ 2g ☐ 2.5g ☐ 3g ☐ ___g |
| 4 Hydroxychloroquine | ____% | ☐ Oral ☐ Injection | Daily dose: ☐ 200mg ☐ 300mg ☐ 400mg ☐ ___mg | Daily dose: ☐ 200mg ☐ 300mg ☐ 400mg ☐ ___mg | ____% | Daily dose: ☐ 200mg ☐ 300mg ☐ 400mg ☐ ___mg |
| 5 Others______ | ____% | ☐ Oral ☐ Injection | Daily dose: ☐ ___mg | Daily dose: ☐ ___mg | ____% | Daily dose: ☐ ___mg |
Q10. [Single answer] For patients treated with methotrexate, under what conditions will folic acid be supplemented?

| No. | Conditions of supplementation                                                      | Option |
|-----|----------------------------------------------------------------------------------|--------|
| 1   | Folic acid is routinely supplemented as long as methotrexate is used.             | □      |
| 2   | Folic acid is supplemented when side effect occurs.                               | □      |
| 3   | Folic acid is supplemented when serious side effect occurs.                       | □      |
| 4   | Others, please specify_________________________                                 | □      |

Q11. [Complete] What are the proportions of the following drugs in newly diagnosed rheumatoid arthritis patients who are prescribed with bDMARD/tsDMARD?

| No. | bDMARD/tsDMARD                |       |
|-----|-------------------------------|-------|
| 1   | Etanercept (Enbrel)           | ______% |
| 2   | Etanercept (Etanar)           | ______% |
| 3   | Rituximab (MabThera)          | ______% |
| 4   | Infliximab (Remicade)         | ______% |
| 5   | Adalimumab (Humira)           | ______% |
| 6   | Tocilizumab (Actemera)        | ______% |
| 7   | Tofacitinib (Xeljanz)         | ______% |
| 8   | Others, please specify_________| ______% |

Total longitudinal proportion=100%

Q12. [Complete] How long will the first follow-up begin after starting first-line drug therapy for the newly diagnosed rheumatoid arthritis patients to evaluate the efficacy and adverse reactions?

| Item          | Time of first follow-up | Time |
|---------------|-------------------------|------|
|               |                         | After___________ weeks |

Q13. [Multiple answers] Which of the following indicators do you mainly use to evaluate the efficacy of rheumatoid arthritis drugs?

| Examination/evaluation method | Tick |
|-------------------------------|------|
| 1 Evaluation scale            |      |
| 1 DAS-28 score                | □    |
| 2 CDAI score                  | □    |
| 3 SDAI score                  | □    |
| 4 VAS score of patients       | □    |
| 5 Others, please specify_______| □    |
| 2 Laboratory examination     |      |
| 1 RF                          | □    |
| 2 CRP                         | □    |
| 3 ESR                         | □    |
| 4 ACPA                        | □    |
| 5 CCP                         | □    |
| 6 Others, please specify_______| □    |
| 3 Imaging                     |      |
| 1 X-ray                       | □    |
| 2 Ultrasound                  | □    |
| 3 CT                          | □    |
| 4 MRI                         | □    |
| 5 Others, please specify_______| □    |
| 4 Others, please specify_______| □    |
Q14. [Complete] After first-line treatment, what is the proportion of outpatients who achieve clinical remission? What are the proportions of low disease activity and moderate/high disease activity respectively?

| No. | Patient type                                             | Proportion |
|-----|---------------------------------------------------------|------------|
| 1   | After first-line treatment: Patients with clinical remission | __________% |
| 2   | After first-line treatment: Patients with low disease activity | __________% |
| 3   | After first-line treatment: Patients with moderate/high disease activity | __________% |

Q15. [Complete] How do you adjust the subsequent therapeutic regimen for rheumatoid arthritis patients who use different csDMARDs for first-line treatment without clinical remission?

| First-line | Subsequent therapeutic regimen                          | Proportion |
|------------|---------------------------------------------------------|------------|
| One csDMARD | 1 Maintain the original therapy                         | __________% |
|            | 2 Increase dose                                         | __________% |
|            | 3 Add one csDMARD                                       | __________% |
|            | 4 Add two csDMARDs                                      | __________% |
|            | 5 Change to one bDMARD/tsDMARD                           | __________% |
|            | 6 Add one bDMARD/tsDMARD                                 | __________% |
|            | 7 Others, please specify                                 | __________% |
| Total longitudinal proportion=100%                  |             |

Two csDMARDs

| First-line | Subsequent therapeutic regimen                          | Proportion |
|------------|---------------------------------------------------------|------------|
|            | 1 Maintain the original therapy                         | __________% |
|            | 2 Increase dose                                         | __________% |
|            | 3 Change to another csDMARD                              | __________% |
|            | 4 Add one csDMARD                                        | __________% |
|            | 5 Change to one bDMARD/tsDMARD                            | __________% |
|            | 6 Add one bDMARD/tsDMARD                                 | __________% |
|            | 7 Others, please specify                                 | __________% |
| Total longitudinal proportion=100%                  |             |

Q16. How long will the first follow-up begin after adjustment of therapeutic regimen to evaluate the efficacy and adverse reactions? How often is the routine follow-up thereafter?

| No. | Item                                               | Time            |
|-----|----------------------------------------------------|-----------------|
| 1   | The first follow-up time after adjustment of regimen | After __________ weeks |
| 2   | Routine follow-up frequency                        | Every __________ weeks |

Part IV: Drug Treatment for Inpatients with Rheumatoid Arthritis

Q17. [Multiple answers] What type of rheumatoid arthritis patients do you require hospitalization?

| No. | Patient type                                                                 |
|-----|------------------------------------------------------------------------------|
| 1   | The patient's condition is still beyond control after drug treatment, thus hospitalization is required for standard treatment. |
| 2   | Consider surgical treatment                                                  |
| 3   | Combined with other complications                                            |
| 4   | Others, please specify                                                       |
Q18. [Complete] For inpatients with rheumatoid arthritis, what are the prescription proportions of the following drug therapeutic regimens?

| No. | Prescription drug regimen | Total proportion=100% |
|-----|---------------------------|-----------------------|
| 1   | csDMARD alone             |                       |
| 2   | One csDMARD + glucocorticoid |                 |
| 3   | One csDMARD + NSAIDs      |                       |
| 4   | Combination of two csDMARDs |                     |
| 5   | Combination of three csDMARDs |                 |
| 6   | bDMARD/tsDMARD alone      |                       |
| 7   | csDMARD+bDMARD/tsDMARD    |                       |
| 8   | Others, please specify    |                       |

Q19. [Complete] What are the proportions of the following drugs in rheumatoid arthritis inpatients who are prescribed with csDMARD?

Q20. [Transverse single answer] What are the recommended doses of different drugs?

| No. | csDMARD     | Total proportion≥100% | Dose                      |
|-----|-------------|------------------------|---------------------------|
| 1   | Methotrexate | _____%                  | Weekly dose: □ <5mg □ 5-10mg □ 10-20mg □ >20mg |
| 2   | Leflunomide  | _____%                  | Daily dose: □ <10mg □ 10-15mg □ 15-20mg □ >20mg |
| 3   | Sulfasalazine | _____%                | Daily dose: □ <1.5g □ 1.5-2g □ 2-3g □ >3g |
| 4   | Hydroxychloroquine | _____%          | Daily dose: □ <200mg □ 200-300mg □ 300-400mg □ >400mg |
| 5   | Others, please specify | _____%              |                           |

Q21. [Complete] What are the proportions of the following drugs in rheumatoid arthritis inpatients who are prescribed with bDMARD/tsDMARD?

| No. | b/tsDMARD     | Total proportion=100% |
|-----|---------------|-----------------------|
| 1   | Etanercept (Enbrel) | _____%           |
| 2   | Etanercept (Etanar)  | _____%           |
| 3   | Rituximab (MabThera) | _____%        |
| 4   | Infliximab (Remicade) | _____%      |
| 5   | Adalimumab (Humira)  | _____%           |
| 6   | Tocilizumab (Actemera) | _____%     |
| 7   | Tofacitinib (Xeljanz) | _____%        |
| 8   | Others, please specify | _____%    |
## Part V: Adverse Reactions of csDMARD drugs

### Q22. [Complete] What is the proportion of patients with side effects who use the following csDMARD drugs?

| No. | Drug used       | Proportion of patients with side effects |
|-----|-----------------|------------------------------------------|
| 1   | Methotrexate    |                                          |
| 2   | Leflunomide     |                                          |
| 3   | Sulfasalazine   |                                          |
| 4   | Hydroxychloroquine |                                      |

### Q23. [Longitudinal multiple answers] What are the common side effects in patients taking the following csDMARD drugs?

| Side effects                          | Methotrexate | Leflunomide | Sulfasalazine | Hydroxychloroquine |
|---------------------------------------|--------------|-------------|---------------|--------------------|
| Gastrointestinal reaction            |              |             |               |                    |
| Abdominal pain                        | ☐            | ☐           | ☐             | ☐                  |
| Diarrhoea                             | ☐            | ☐           | ☐             | ☐                  |
| Constipation                          | ☐            | ☐           | ☐             | ☐                  |
| Nausea, vomiting                      | ☐            | ☐           | ☐             | ☐                  |
| Dental ulcer                          | ☐            | ☐           | ☐             | ☐                  |
| Acid regurgitation, abdominal distension and insufficient gastric motility | ☐ | ☐ | ☐ | ☐ |
| Others                                 | ☐            | ☐           | ☐             | ☐                  |
| Behavioral expression                 |              |             |               |                    |
| Insomnia                              | ☐            | ☐           | ☐             | ☐                  |
| Disgusted with the name/shape of the drug | ☐ | ☐ | ☐ | ☐ |
| Memory loss, difficulty in concentration | ☐ | ☐ | ☐ | ☐ |
| Anxiety, depression                   | ☐            | ☐           | ☐             | ☐                  |
| Others                                 | ☐            | ☐           | ☐             | ☐                  |
| Nonspecific manifestation             |              |             |               |                    |
| Weakness, fatigue                     | ☐            | ☐           | ☐             | ☐                  |
| Hair loss, rash                       | ☐            | ☐           | ☐             | ☐                  |
| Dryness, heat and chest burning       | ☐            | ☐           | ☐             | ☐                  |
| Others                                 | ☐            | ☐           | ☐             | ☐                  |
| Laboratory/imaging examination        |              |             |               |                    |
| Interstitial lung disease             | ☐            | ☐           | ☐             | ☐                  |
| Leukopenia                            | ☐            | ☐           | ☐             | ☐                  |
| Neutropenia                           | ☐            | ☐           | ☐             | ☐                  |
| Thrombocytopenia                      | ☐            | ☐           | ☐             | ☐                  |
| Impairment of liver and kidney functions (such as hematuresis) | ☐ | ☐ | ☐ | ☐ |
| Others                                 | ☐            | ☐           | ☐             | ☐                  |
Q24. [Transverse single answer] Under what circumstances do you think the following side effects are serious? *(Mild: the patient passively confirms and the side effect is tolerable; medium: the patient actively confirms, asks whether the treatment can be adjusted, and expresses tolerance after communication; serious: the patient actively confirms and complains of intolerance and insists on intervention or adjustment of treatment)*

| Side effects | Severity of side effect |
|--------------|------------------------|
| **Gastrointestinal reaction** | |
| Abdominal pain | □ upon occurrence □ mild □ moderate □ serious □ in no case |
| Diarrhoea | □ upon occurrence □ mild □ moderate □ serious □ in no case |
| Constipation | □ upon occurrence □ mild □ moderate □ serious □ in no case |
| Nausea, vomiting | □ upon occurrence □ mild □ moderate □ serious □ in no case |
| Dental ulcer | □ upon occurrence □ mild □ moderate □ serious □ in no case |
| Acid regurgitation, abdominal distension and insufficient gastric motility | □ upon occurrence □ mild □ moderate □ serious □ in no case |
| Others | □ upon occurrence □ mild □ moderate □ serious □ in no case |
| **Behavioral expression** | |
| Insomnia | □ upon occurrence □ mild □ moderate □ serious □ in no case |
| Disgusted with the name/shape of the drug | □ upon occurrence □ mild □ moderate □ serious □ in no case |
| Memory loss, difficulty in concentration | □ upon occurrence □ mild □ moderate □ serious □ in no case |
| Anxiety, depression | □ upon occurrence □ mild □ moderate □ serious □ in no case |
| Others | □ upon occurrence □ mild □ moderate □ serious □ in no case |
| **Nonspecific manifestation** | |
| Weakness, fatigue | □ upon occurrence □ mild □ moderate □ serious □ in no case |
| Hair loss, rash | □ upon occurrence □ mild □ moderate □ serious □ in no case |
| Dryness-heat and chest burning | □ upon occurrence □ mild □ moderate □ serious □ in no case |
| Others | □ upon occurrence □ mild □ moderate □ serious □ in no case |
| **Laboratory/imaging examination** | |
| Interstitial lung disease | □ upon occurrence □ slight imaging change □ moderate imaging change □ serious imaging change □ in no case |
| Leukopenia | □ As long as it is lower than normal value □ 3*10^9/L □ 2*10^9/L □ 1*10^9/L □ in no case |
| Neutropenia | □ As long as it is lower than normal value □ 2*10^9/L □ 1*10^9/L □ 0.5*10^9/L □ in no case |
| Thrombocytopenia | □ As long as it is lower than normal value □ 100*10^9/L □ 50*10^9/L □ 25*10^9/L □ in no case |
| Impairment of liver and kidney functions (such as hematuria) | □ As long as it is higher than normal value □ 1-3 times normal value □ more than 3 times normal value □ in no case |
| Others | □ upon occurrence □ mild □ moderate □ serious □ in no case |
Q25. [Single answer] Under which of the following circumstances do you think the patient is intolerant to csDMARD?

| No. | Item                                      | Tick |
|-----|-------------------------------------------|------|
| 1   | Any ≥1 serious side effect occurs         |      |
| 2   | Any ≥2 serious side effects occur         |      |
| 3   | Any ≥3 serious side effects occur         |      |
| 4   | Others, please specify ________           |      |

Q26. [Complete] According to the above criteria for intolerance of csDMARD, what are the respective proportions of patients with intolerance when using the following drugs?

| No. | Drug used         | Proportion of patients with intolerance |
|-----|-------------------|----------------------------------------|
| 1   | Methotrexate      |                                        |
| 2   | Leflunomide       |                                        |
| 3   | Sulfasalazine     |                                        |
| 4   | Hydroxychloroquine|                                        |

Q27. [Horizontal Selection] Based on your clinical experience, what dose of the following three drugs is likely to make Chinese patients suffer from intolerance?

| No. | Drug used            | Dose                                          |
|-----|----------------------|-----------------------------------------------|
| 1   | Methotrexate         | Weekly dose: □>10mg □>15mg □>20mg            |
| 2   | Leflunomide          | Daily dose: □>10mg □>15mg □>20mg             |
| 3   | Sulfasalazine        | Daily dose: □>1.5g □>2g □>3g                 |
| 4   | Hydroxychloroquine   | Daily dose: □>200mg □>300mg □>400mg          |

Q28. [Complete] What is the proportion you will adjust the regimen in patients with csDMARD intolerance?

| Item                                      | Proportion≤100% |
|-------------------------------------------|-----------------|
| Proportion of patients with therapeutic regimen adjusted |                   |
Q29. [Complete] What is the proportion of patients who adopt various subsequent therapeutic regimens after intolerance occurs with the following csDMARD drugs?

| csDMARD used | Subsequent therapeutic regimen | Proportion |
|--------------|--------------------------------|------------|
| 1 Methotrexate | 1 Discontinue the drug for observation | __________ % |
| | 2 Maintain the original dose and supplement folic acid regularly. | __________ % |
| | 3 Change to another csDMARD | 1 Leflunomide | __________ % |
| | | 2 Sulfasalazine | __________ % |
| | | 3 Hydroxychloroquine | __________ % |
| | | 4 Others | __________ % |
| | 4 Change to one bDMARD | 1 Etanercept (Enbrel) | __________ % |
| | | 2 Etanercept (Etanar) | __________ % |
| | | 3 Rituximab (MabThera) | __________ % |
| | | 4 Infliximab (Remicade) | __________ % |
| | | 5 Adalimumab (Humira) | __________ % |
| | | 6 Tocilizumab (Actemera) | __________ % |
| | 5 Change to one tsDMARD | 1 Tofacitinib (Xeljanz) | __________ % |
| | 6 Others, please specify | __________ % |

Total longitudinal proportion=100%

| 2 Leflunomide | 1 Discontinue the drug for observation | __________ % |
| | 2 Change to another csDMARD | 1 Methotrexate | __________ % |
| | | 2 Sulfasalazine | __________ % |
| | | 3 Hydroxychloroquine | __________ % |
| | | 4 Others | __________ % |
| | 3 Change to one bDMARD | 1 Etanercept (Enbrel) | __________ % |
| | | 2 Etanercept (Etanar) | __________ % |
| | | 3 Rituximab (MabThera) | __________ % |
| | | 4 Infliximab (Remicade) | __________ % |
| | | 5 Adalimumab (Humira) | __________ % |
| | | 6 Tocilizumab (Actemera) | __________ % |
| | 4 Change to one tsDMARD | 1 Tofacitinib (Xeljanz) | __________ % |
| | 5 Others, please specify | __________ % |

Total longitudinal proportion=100%
Q30. [Longitudinal multiple answers] Which replacement regimen do you prefer when csDMARD intolerance occurs?

| Regimen adjustment                                      | Gastrointestinal reaction (abdominal pain/diarrhea/constipation/nausea, vomiting/dental ulcer, etc.) | Behavioral expression (insomnia/alopecia/aversion to drug name and shape/hypomnesia, etc.) | Nonspecific manifestation (weakness, fatigue/alopecia, rash/dryness-heat, chest burning, etc.) | Laboratory examination (white blood cells decreased/myelosuppression/interstitial lung disease/liver and kidney function damage, etc.) |
|----------------------------------------------------------|-------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|--------------------------------------------------------------------------------|----------------------------------------------------------------------------------|
| Maintain the original regimen (not intolerance)          | ☐                                                                                               | ☐                                                                                 | ☐                                                                 | ☐                                                                                           |
| Discontinue the drug for observation                     | ☐                                                                                               | ☐                                                                                 | ☐                                                                 | ☐                                                                                           |
| Change to another csDMARD                                | ☐                                                                                               | ☐                                                                                 | ☐                                                                 | ☐                                                                                           |
| Change to bDMARD                                         | Etanercept (Enbrel)                                                                             | ☐                                                                                 | ☐                                                                 | ☐                                                                                           |
|                                                         | Etanercept (Etanar)                                                                             | ☐                                                                                 | ☐                                                                 | ☐                                                                                           |
|                                                         | Rituximab (MabThera)                                                                            | ☐                                                                                 | ☐                                                                 | ☐                                                                                           |
|                                                         | Infliximab (Remicade)                                                                            | ☐                                                                                 | ☐                                                                 | ☐                                                                                           |
|                                                         | Adalimumab (Humira)                                                                             | ☐                                                                                 | ☐                                                                 | ☐                                                                                           |
|                                                         | Tocilizumab (Actemra)                                                                            | ☐                                                                                 | ☐                                                                 | ☐                                                                                           |
| Change to tsDMARD                                        | Tofacitinib (Xeljanz)                                                                            | ☐                                                                                 | ☐                                                                 | ☐                                                                                           |
| Others, please specify                                   | ☐                                                                                               | ☐                                                                                 | ☐                                                                 | ☐                                                                                           |

Q31. [Complete] What is the proportion of your rheumatoid arthritis patients who voluntarily refuse methotrexate/csDMARD drug? If no one, please fill in "0"

| Item                                                   | Proportion≤100% |
|--------------------------------------------------------|-----------------|
| Proportion of patients who voluntarily refuse methotrexate/csDMARD drug | _____________%  |
Q32. [Multiple answers] What are the common reasons for patients to refuse methotrexate/csDMARD drug? (Select up to 3 items)

| No. | Reason                                                                 | Select up to 3 items |
|-----|------------------------------------------------------------------------|----------------------|
| 1   | csDMARD drug in use or ever used causes side effects.                  | □                    |
| 2   | The patient never used csDMARD drugs, but is worried about the side   | □                    |
|     | effect he/she heard of.                                               |                      |
| 3   | The patient never used csDMARD drugs, but is worried about the long-  | □                    |
|     | term side effect he/she heard of.                                     |                      |
| 4   | The patient has reproductive needs.                                    | □                    |
| 5   | Tired of laboratory examination related to the drug used               | □                    |
| 6   | Tired of taking medicine every week, or worried about forgetting to    | □                    |
|     | take medicine.                                                        |                      |
| 7   | Questioning the curative effect                                        | □                    |
| 8   | Others                                                                 | □                    |

Q33. [Complete] What do you estimate is the proportion of patients who stop or reduce their medication by themselves? If no one, please fill in "0"

| Item                                               | Proportion≤100% |
|----------------------------------------------------|----------------|
| Proportion of patients who stop or reduce their    |                |
| medication                                         |                |

Q34. [Multiple answers] What do you think are the most common reasons for patients to stop or reduce their medication? (Select up to 3 items)

| No. | Reason                                                                 | Select up to 3 items |
|-----|------------------------------------------------------------------------|----------------------|
| 1   | Joint symptoms have improved, but there are still mild side effects.  | □                    |
| 2   | Symptoms are not controlled, but the side effects have more influence | □                    |
|     | on the quality of life than the disease itself.                       |                      |
| 3   | Worried about the possible long-term side effects                     | □                    |
| 4   | The patient has reproductive needs.                                    | □                    |
| 5   | Tired of laboratory examination related to the drug used               | □                    |
| 6   | Tired of taking medicine every week, or worried about forgetting to   | □                    |
|     | take medicine.                                                        |                      |
| 7   | Questioning the curative effect                                        | □                    |
| 8   | Others                                                                 | □                    |

Part VI: Drug Evaluation

Q35. [Complete] How important are the following consideration factors when prescribing the bDMARD/tsDMARD drugs? Please rank by importance.

[Answer Q36-Q37 for bDMARD/tsDMARD drugs prescribed in Q11 and Q21]

Q36. [Complete] How do you think the following drugs perform against each consideration factor? Please score from 1 to 7, with 1 for "poor performance" and 7 for "very good performance".
Q37. [Complete] What is your degree of satisfaction with the following drugs in treatment of rheumatoid arthritis? Please score from 1 to 7, with 1 for “very dissatisfied” and 7 for “very satisfied”.

| No. | Consideration factor | Ranking of importance | Satisfaction score |
|-----|----------------------|-----------------------|--------------------|
|     |                      | Etanercept | Rituximab | Infliximab | Adalimumab | Tocilizumab | Tofacitinib |
| 1   | Quick action Rank    | □          | □          | □          | □          | □          | □          |
| 2   | Good effect in joint detumescence Rank | □ | □ | □ | □ | □ | □ |
| 3   | Good effect in relieving pain Rank | □ | □ | □ | □ | □ | □ |
| 4   | Good effect in alleviating anemia Rank | □ | □ | □ | □ | □ | □ |
| 5   | Lasting curative effect Rank | □ | □ | □ | □ | □ | □ |
| 6   | Good safety/few side effects Rank | □ | □ | □ | □ | □ | □ |
| 7   | Sufficient medical evidence Rank | □ | □ | □ | □ | □ | □ |
| 8   | Affordable medical cost Rank | □ | □ | □ | □ | □ | □ |
| 9   | Others: Rank | □ | □ | □ | □ | □ | □ |

Overall satisfaction □ □ □ □ □ □ □ □ □

Q38. [Single answer] In the cases of intolerance or poor curative effect, under what circumstances are the patients inclined to change to bDMARD or tsDMARD?

| No. | Patient type | Option |
|-----|--------------|--------|
| 1   | After using one csDMARD, the patient is intolerant or the curative effect is poor. | □ |
| 2   | After using two csDMARDs, the patient is intolerant or the curative effect is poor. | □ |
| 3   | After using three csDMARDs, the patient is intolerant or the curative effect is poor. | □ |
| 4   | Others, please specify _________ | □ |

Q39. [Multiple answers] Which of the following types of rheumatoid arthritis patients do you think are suitable for biologic monotherapy?

Q40. [Transverse single answer] [For the types of patients in Q39] Which bDMARD/tsDMARD drug do you prefer for the following types of rheumatoid arthritis patients?

| No. | Patient type | Monotherapy | bDMARD/tsDMARD |
|-----|--------------|-------------|----------------|
|     |              | Etanercept | Rituximab | Infliximab | Adalimumab | Tocilizumab | Tofacitinib |
| 1   | csDMARD intolerant patients | □ | □ | □ | □ | □ | □ |
| 2   | Patients who do not comply with or refuse csDMARD therapy | □ | □ | □ | □ | □ | □ |
| 3   | Poor response to csDMARD | □ | □ | □ | □ | □ | □ |
| 4   | Rheumatoid arthritis complicated with other diseases | □ | □ | □ | □ | □ | □ |
| 5   | Others, please specify | □ | □ | □ | □ | □ | □ |
| 6   | None of the above | □ | □ | □ | □ | □ | □ |
**Part VII: Patient Education**

**Q41.** [Multiple answers] How do you think the education or knowledge popularization in rheumatoid arthritis patients will benefit clinical diagnosis and treatment?

| No. | Benefits                                                                 | Option |
|-----|--------------------------------------------------------------------------|--------|
| 1   | Improve the communication efficiency between doctor and patient          |        |
| 2   | Improve patients’ self-management                                       |        |
| 3   | Enhance patients’ cognition of the disease, thus improving their confidence in fighting against the disease |        |
| 4   | Others, please specify_________                                         |        |

**Q42.** [Single answer] Does your department regularly carry out patient education activities?

| No. | Frequency                          | Option |
|-----|------------------------------------|--------|
| 1   | Never                              |        |
| 2   | Occasionally (every six months or more) |        |
| 3   | Every quarter                      |        |
| 4   | Every 1-2 months                   |        |
| 5   | Others, please specify_________    |        |

**Q43.** [Multiple answers] Which brands are currently carrying out educational activities for rheumatoid arthritis patients in your hospital?

| No. | Company/brand                      | Option |
|-----|------------------------------------|--------|
| 1   | Enbrel (Wyeth)                     |        |
| 2   | Etanar (CP Guojian)                |        |
| 3   | MabThera (Roche)                   |        |
| 4   | Remicade (JOHNSON & JOHNSON)       |        |
| 5   | Humira (Abbott)                    |        |
| 6   | Actemra (Roche)                    |        |
| 7   | Xeljanz (Pfizer)                   |        |
| 8   | Others, please specify_________    |        |

**Q44.** [Longitudinal multiple answers] For the brands selected in Q43, how are patient education activities conducted?

| No. | Form of education | Enbrel (Wyeth) | Etanar (CP Guojian) | MabThera (Roche) | Remicade (JOHNSON & JOHNSON) | Humira (Abbott) | Actemra (Roche) | Xeljanz (Pfizer) |
|-----|-------------------|----------------|---------------------|------------------|-------------------------------|----------------|----------------|-----------------|
| 1   | Patient Exchange  | ☐              | ☐                   | ☐                | ☐                            | ☐              | ☐              | ☐               |
| 2   | WeChat Official Account | ☐     | ☐                   | ☐                | ☐                            | ☐              | ☐              | ☐               |
| 3   | Online expert consultation  | ☐   | ☐                   | ☐                | ☐                            | ☐              | ☐              | ☐               |
| 4   | Expert video online | ☐         | ☐                   | ☐                | ☐                            | ☐              | ☐              | ☐               |
| 5   | Making patient education videos | ☐ | ☐                  | ☐                | ☐                            | ☐              | ☐              | ☐               |
| 6   | Website-based science popularization | ☐ | ☐                   | ☐                | ☐                            | ☐              | ☐              | ☐               |
| 7   | Paper publicity materials  | ☐         | ☐                   | ☐                | ☐                            | ☐              | ☐              | ☐               |
| 8   | Others, please specify_________   | ☐         | ☐                   | ☐                | ☐                            | ☐              | ☐              | ☐               |
Q45. [Multiple answers] What are your most desired forms of effective patient education activities?

*(Select up to 3 items)*

| No. | Patient education activities                         | Select up to 3 items |
|-----|-----------------------------------------------------|----------------------|
| 1   | Patient Exchange                                    | □                    |
| 2   | WeChat Official Account                             | □                    |
| 3   | Online expert consultation                          | □                    |
| 4   | Expert video online                                 | □                    |
| 5   | Making patient education videos                     | □                    |
| 6   | Website-based science popularization                | □                    |
| 7   | Paper publicity materials                           | □                    |
| 8   | Others, please specify ___________                 | □                    |

Q46. [Complete] What are the problems or your suggestions about patient education?

| No. | Problems                                                                 |
|-----|--------------------------------------------------------------------------|
| 1   | ⬅                                                                         |