Tabla 1S. Criteria selection of the patients to be selected in the MOZART study.

| weeks before the baseline visit. 2. Patients diagnosed with moderate or severe astive RA in accordance with the ACR 1987 criteria at least six months before inclusion 3. Older 18 years of age 4. DAS-28 > 32 in baseline visit. 5. If a patient is receiving corticosteroids, the dose must consist of <10 mg of prednisone (or equivalent) at least during one month prior to the start of treatment with TCZ (day 1). A patient may have been receiving treatment with NSAIDs during one month before enceiving treatment with NSAIDs during one month before receiving treatment with NSAIDs during one month before receiving treatment with NSAIDs during one month before enceiving treatment with NSAIDs during one month before significance and concomitations. 6. Patients having previously failed with more than two biologic agents. 7. Prior treatment with TCZ at any time before the baseline visit. 8. Treatment with any agent used in the study within the last four weeks before the selection visit (or a period equivalent to five halfives of that drug, the longer period to be taken into account). 8. Treatment with any agent used in the study within the last four weeks before the selection visit (or a period equivalent to five halfives of that drug, the longer period to be taken into account). 9. Patients with poor peripheral venous access. 9. Patients with poor peripheral venous access. 9. Patients with poor peripheral venous access. 10. Prior treatment with therapies causing cellular depletion, including experimental agents or approved treatments such as CAMPATII, antiCD4, antiCD5, antiCD19, anticD19, and antiCD20 in the contraceptive method, or intraceptive general period and the selection visit may present a negative result. 11. Patients receiving treatment on an outpatient basis. 12. Women of reproductive age and men with partners of reproductive age can only take part in the study if they use reliable methods of contraception (for example), barrier methods in the case of adherance, or after prevising the selection visi | Inclusion criteria | Exclusion criteria | | |
|--|---|--|--|--|
| weeks before the baseline visit. 3. Older 18 years of age: 4. DAS-28 > 3.2 in baseline visit 5. If a patient is receiving corticosteroids, the dose must consist of ≤10 mg of prednisone (or equivalent) at least during one month prior to the start of treatment with TCZ (day 1). A patient may have been receiving treatment with TAZ (day 1). A patient may have been receiving treatment with TAZ (day 1). A patient may have been receiving treatment with TAZ (day 1). A patient may have been receiving treatment with TAZ (day 1). A patient may have been genits. 6. Patients having previously failed with more than two biologic agents. 6. Patients having previously failed with more than two biologic agents. 7. Prior treatment with TCZ at any time before the baseline visit. 8. Treatment with any agent used in the study within the last four weeks before the selection visit (or a period equivalent to five half-lives of that drug, the longer period to be taken into account). 8. Treatment with any agent used in the study within the last four weeks before the selection visit (or a period equivalent to five half-lives of that drug, the longer period to be taken into account). 8. Treatment with poor peripheral venous access. 9. Patients with poor peripheral venous access. 10. Prior treatment with therapies causing cellular depletion, including experimental agents or approved treatments such as CAMPATH, antiCD3, antiCD3, antiCD4, antiCD4, antiCD5, antiCD4, antiCD4, antiCD5, antiCD4, antiCD5, antiCD4, antiCD5, antiCD4, antiCD5, a | | 1. Intra-articular or parenteral corticosteroids within the four | | |
| 4. DAS-28 > 3.2 in baseline visit 5. If a patient is receiving corticosteroids, the dose must consist of ≤10 mg of prednisone (or equivalent) at least during one month prior to the start of treatment with TCZ (day 1). A patient may have been receiving treatment with NSAIDs during one month before encollment. 6. Patients having previously failed with more than two biologic agents. 7. Prior treatment with TCZ at any time before the baseline visit. 8. Treatment with TCZ at any time before the baseline visit. 9. Patients with any agent used in the study within the last four weeks before the selection visit (or a period equivalent to five half-lives of that drug, the longer period to be taken into account). 9. Patients with poor peripheral venous access. 9. Patients with poor peripheral venous access. 9. Active TB requiring treatment in the last year. TB sen will be performed in all patients are discovered and at least three months after receiving the last TCZ dose. 10. Prior treatment with therapies causing cellular depletion, including experimental agents or approved treatments such as CAMPATH, amiCDA, antiCD3, a | | | | |
| s. If a patient is receiving corticosteroids, the dose must consist of ≤10 mg of prechaisons (or equivalent) at least during one month prior to the start of treatment with NSAIDs during one month perior of the start of treatment with NSAIDs during one month before cortollment. 6. Patients having previously failed with more than two biologic agents. 7. Prior treatment with TCZ at any time before the baseline visit. 8. Treatment with any agent used in the study within the last four weeks before the selection visit (or a period equivalent to five half-lives of that drug, the longer period to be taken into account). 8. Treatment with any agent used in the study within the last four weeks before the selection visit (or a period equivalent to five half-lives of that drug, the longer period to be taken into account). 9. Patients with poor peripheral venous access. 9. Patients with poor peripheral venous access. 9. Active TB requiring treatment in the last year. TB service will be performed in all patients according to STERA guidelines. Patients under treatment for TB without recurrences within the last three years will not be excelled by the prince of the patients or their partners, or all or patients and the selection visit under the selection visit under the patients or their partners, or all or patients and the selection visit under the selection visit under the patients or their partners, or all or patients and the patients or their partners, or all or patients and the patients or their partners, or all or patients and the patients or their partners, or all or patients and the patients or their partners, or all or patients and the patients or their partners, or all or patients are three months after receiving the last TCZ dose. 11. Patients who, according to the researcher's judgement, are candidates for monotherapy treatment or in combination with a biologic agent, or under receival the last tree sell. 12. Women of reproductive age, the pregnancy test performed at the selection visit must present a nega | 3. Older 18 years of age | | | |
| mg of prednisone (or equivalent) at least during one month prior to the start of treatment with TCZ (day 1). A patient may have been receiving treatment with NSAIDs during one month before enrollment. 6. Patients having previously failed with more than two biologic agents. 7. Prior treatment with TCZ at any time before the baseline visit. 8. Treatment with any agent used in the study within the last four weeks before the selection visit (or a period equivalent to five half-lives of that drug, the longer period to be taken into account). 8. Treatment with poor peripheral venous access. 9. Patients with poor peripheral venous access. 9. Patients with poor peripheral venous access. 9. Patients mith therapies causing cellular depletion, including experimental agents or approved treatments such as CAMPATH, antiCD4, antiCD5, antiCD19, and antiCD20). 10. Prior treatment with therapies causing cellular depletion, including experimental agents or approved treatments such as CAMPATH, antiCD4, antiCD5, antiCD19, and antiCD20). 11. Patients receiving treatment on an outpatient basis. 12. Women of reproductive age and men with partners of reproductive age can only take part in the study if they use reliable methods of contraception (for example, barrier methods in the case of the patients or their partners, oral or patch contraceptives, spermicide plus barrie method, or intraterine device) during the study period and at least three months after receiving the last TCZ dose. 12. Women of reproductive age and men with partners of reproductive age can only take part in the study if they use reliable methods of contraception (for example, barrier method, or intraterine device) during the study period and at least three months after receiving the last TCZ dose. 13. As for women of reproductive age, the pregnancy test performed at the selection visit must present a negative result. 14. Patients who, according to the researcher's judgement, are candidates for monotherapy with a biologic agent, without excluding previou | 4. DAS-28 >3.2 in baseline visit | 8 1 3 | | |
| sagents. with antibioties, or chronic ulcerative disease of the los such as the Crohn's disease, ulcerative colitis or other los symptomatic conditions that create a predispositive perforations. 7. Prior treatment with TCZ at any time before the baseline visit. 8. Treatment with any agent used in the study within the last four weeks before the selection visit (or a period equivalent to five half-lives of that drug, the longer period to be taken into account). 8. Treatment with any agent used in the study within the last four weeks before the selection visit (or a period equivalent to five half-lives of that drug, the longer period to be taken into account). 9. Patients with poor peripheral venous access. 9. Patients with poor peripheral venous access. 9. Patients with poor peripheral venous access. 9. Active IB requiring treatment in the last year. TB servill be performed in all patients according to SER/A guidelines. Patients under treatment for TB without recurrences within the last three verses will not be excluding the very large thanks. 10. Liver disease in progress, to be decided by the prince age can only take part in the study if they use reliable methods of contraception (for example, barrier method, or intrauterine device) during the study period and at least three months after receiving the last TCZ dose. 11. Patients under MTX monotherapy treatment or in contination with a biologic agent, or under treatment with a biologic agent, monotherapy, presenting intolerance, or lack of adherence, or safety problems to MTX treatment. 15. Patients who, according to the researcher's judgmenut, are candidates for monotherapy with a biologic agent, without excluding previous use of other DMDs different from MTX. 16. Serum creatings > 1.4 mg/dl (124 µmol/l) in women an mg/dl (141 µmol/l) in men. 17. Alanite aminotransferase or aspartate aminotransferase or separtate aminotransf | mg of prednisone (or equivalent) at least during one month prior to the start of treatment with TCZ (day 1). A patient may have been receiving treatment with NSAIDs during one month before | cardiovascular, nervous system, pulmonary (chronic obstructive pulmonary disease included), renal, hepatic, endocrine (uncontrolled diabetes mellitus included) or | | |
| infections of mycobacterial, fungal, viral or bacterial (including, but not limited to, TB, atypical mycoba infection, hepatitis B and C and herpes zoster; exc. 8. Treatment with any agent used in the study within the last four weeks before the selection visit (or a period equivalent to five half-lives of that drug, the longer period to be taken into account). 9. Patients with poor peripheral venous access. 9. Patients with poor peripheral venous access. 9. Active TB requiring treatment in the last year. TB scr will be performed in all patients according to SER/A guidelines. Patients under treatment for TB without recurrences within the last three years will not be excluding experimental agents or approved treatments such as CAMPATH, antiCD4, antiCD5, antiCD3, antiCD19, and antiCD20). 11. Patients receiving treatment on an outpatient basis. 12. Women of reproductive age and men with partners of reproductive age can only take part in the study if they use reliable methods of contraception (for example, barrie methods in the case of the patients or their partners, oral or patch contraceptives, spermicide plus barrier method, or intrauterine device) during the study period and at least three months after receiving the last TCZ dose. 13. As for women of reproductive age, the pregnancy test performed at the selection visit must present a negative result. 14. Patients under MTX monotherapy treatment or in combination with a biologic agent, or under treatment with a biologic agent in monotherapy, presenting intolerance, or lack of adherence, or safety problems to MTX treatment. 15. Patients who, according to the researcher's judgement, are candidates for monotherapy with a biologic agent, without excluding previous use of other DMDs different from MTX. 16. Serum creatinine >1.4 mg/dl (124 µmol/l) in women an mg/dl (141 µmol/l) in men. 17. Alanine aminotransferase or aspartate aminotransferas times the upper limit of normal (ULN). | | with antibiotics, or chronic ulcerative disease of the lower GI such as the Crohn's disease, ulcerative colitis or other lower GI symptomatic conditions that create a predisposition to | | |
| weeks before the selection visit (or a period equivalent to five half-lives of that drug, the longer period to be taken into account). 9. Patients with poor peripheral venous access. 10. Prior treatment with therapies causing cellular depletion, including experimental agents or approved treatments such as CAMPATH, antiCD4, antiCD5, antiCD3, antiCD19, and antiCD20). 11. Patients receiving treatment on an outpatient basis. 12. Women of reproductive age and men with partners of reproductive age can only take part in the study if they use reliable methods of contraception (for example, barrier methods in the case of the patients or their partners, oral or patch contraceptives, spermicide plus barrier method, or intrauterine device) during the study period and at least three months after receiving the last TCZ dose. 13. As for women of reproductive age, the pregnancy test performed at the selection visit must present a negative result. 14. Patients under MTX monotherapy treatment or in combination with a biologic agent, or under treatment with a biologic agent in monotherapy, presenting intolerance, or lack of adherence, or safety problems to MTX treatment. 15. Patients who, according to the researcher's judgement, are candidates for monotherapy with a biologic agent, without excluding previous use of other DMDs different from MTX. 16. Serum creatinine > 1.4 mg/dl (124 µmol/l) in mean mg/dl (141 µmol/l) in mean times the upper limit of normal (ULN). | 7. Prior treatment with TCZ at any time before the baseline visit. | infections of mycobacterial, fungal, viral or bacterial origin (including, but not limited to, TB, atypical mycobacterial infection, hepatitis B and C and herpes zoster; excluding | | |
| will be performed in all patients according to SER/A guidelines. Patients under treatment for TB without recurrences within the last three years will not be excluding experimental agents or approved treatments such as CAMPATH, antiCD4, antiCD5, antiCD3, antiCD19, and antiCD20). 11. Patients receiving treatment on an outpatient basis. 12. Women of reproductive age and men with partners of reproductive age can only take part in the study if they use reliable methods of contraception (for example, barrier methods in the case of the patients or their partners, oral or patch contraceptives, spermicide plus barrier method, or intrauterine device) during the study period and at least three months after receiving the last TCZ dose. 13. As for women of reproductive age, the pregnancy test performed at the selection visit must present a negative result. 14. Patients under MTX monotherapy treatment or in combination with a biologic agent, or under treatment with a biologic agent in monotherapy, presenting intolerance, or lack of adherence, or safety problems to MTX treatment. 15. Patients who, according to the researcher's judgement, are candidates for monotherapy with a biologic agent, without excluding previous use of other DMDs different from MTX. 16. Serum creatinine > 1.4 mg/dl (124 μmol/l) in women an mg/dl (141 μmol/l) in men. 17. Alanine aminotransferase or aspartate aminotransferas times the upper limit of normal (ULN). | weeks before the selection visit (or a period equivalent to five half- lives of that drug, the longer period to be taken into account). | treatment with antibiotics administered intravenously within the four weeks before the selection visit or antibiotics administered orally within the two weeks before the selection | | |
| experimental agents or approved treatments such as CAMPATH, antiCD4, antiCD5, antiCD3, antiCD9, and antiCD20). 11. Patients receiving treatment on an outpatient basis. 12. Women of reproductive age and men with partners of reproductive age can only take part in the study if they use reliable methods of contraception (for example, barrier methods in the case of the patients or their partners, oral or patch contraceptives, spermicide plus barrier method, or intrauterine device) during the study period and at least three months after receiving the last TCZ dose. 13. As for women of reproductive age, the pregnancy test performed at the selection visit must present a negative result. 14. Patients under MTX monotherapy treatment or in combination with a biologic agent, or under treatment with a biologic agent in monotherapy, presenting intolerance, or lack of adherence, or safety problems to MTX treatment. 15. Patients who, according to the researcher's judgement, are candidates for monotherapy with a biologic agent, without excluding previous use of other DMDs different from MTX. 16. Serum creatinine >1.4 mg/dl (124 μmol/l) in women an mg/dl (141 μmol/l) in men. 17. Alanine aminotransferase or aspartate aminotransferas times the upper limit of normal (ULN). | | 9. Active TB requiring treatment in the last year. TB screening will be performed in all patients according to SER/AEMPS guidelines. Patients under treatment for TB without any recurrences within the last three years will not be excluded. | | |
| diagnosed within the last ten years (solid tumor hematologic tumors included, except basal cell and squ cell carcinoma, or uterine cervix carcinoma in situ th been removed and healed), or breast cancer diagnosed the last 20 years. 12. Women of reproductive age and men with partners of reproductive age can only take part in the study if they use reliable methods of contraception (for example, barrier methods in the case of the patients or their partners, oral or patch contraceptives, spermicide plus barrier method, or intrauterine device) during the study period and at least three months after receiving the last TCZ dose. 13. As for women of reproductive age, the pregnancy test performed at the selection visit must present a negative result. 14. Patients under MTX monotherapy treatment or in combination with a biologic agent, or under treatment with a biologic agent in monotherapy, presenting intolerance, or lack of adherence, or safety problems to MTX treatment. 15. Patients who, according to the researcher's judgement, are candidates for monotherapy with a biologic agent, without excluding previous use of other DMDs different from MTX. 16. Serum creatinine >1.4 mg/dl (124 µmol/l) in women an mg/dl (141 µmol/l) in men. 17. Alanine aminotransferase or aspartate aminotransferas times the upper limit of normal (ULN). | experimental agents or approved treatments such as CAMPATH, | 10. Liver disease in progress, to be decided by the principal investigator. | | |
| age can only take part in the study if they use reliable methods of contraception (for example, barrier methods in the case of the patients or their partners, oral or patch contraceptives, spermicide plus barrier method, or intrauterine device) during the study period and at least three months after receiving the last TCZ dose. 13. As for women of reproductive age, the pregnancy test performed at the selection visit must present a negative result. 14. Patients under MTX monotherapy treatment or in combination with a biologic agent, or under treatment with a biologic agent in monotherapy, presenting intolerance, or lack of adherence, or safety problems to MTX treatment. 15. Patients who, according to the researcher's judgement, are candidates for monotherapy with a biologic agent, without excluding previous use of other DMDs different from MTX. 16. Serum creatinine >1.4 mg/dl (124 μmol/l) in women an mg/dl (141 μmol/l) in men. 17. Alanine aminotransferase or aspartate aminotransferas times the upper limit of normal (ULN). | 11. Patients receiving treatment on an outpatient basis. | 11. Evidence of active malignant neoplasm, malignant neoplasms diagnosed within the last ten years (solid tumors and hematologic tumors included, except basal cell and squamous cell carcinoma, or uterine cervix carcinoma in situ that has been removed and healed), or breast cancer diagnosed within the last 20 years. | | |
| the selection visit must present a negative result. 14. Patients under MTX monotherapy treatment or in combination with a biologic agent, or under treatment with a biologic agent in monotherapy, presenting intolerance, or lack of adherence, or safety problems to MTX treatment. 15. Patients who, according to the researcher's judgement, are candidates for monotherapy with a biologic agent, without excluding previous use of other DMDs different from MTX. 16. Serum creatinine >1.4 mg/dl (124 µmol/l) in women an mg/dl (141 µmol/l) in men. 17. Alanine aminotransferase or aspartate aminotransferase times the upper limit of normal (ULN). | age can only take part in the study if they use reliable methods of contraception (for example, barrier methods in the case of the patients or their partners, oral or patch contraceptives, spermicide plus barrier method, or intrauterine device) during the study period and at least three months after receiving the last TCZ dose. | 12. Pregnant or nursing women. | | |
| a biologic agent, or under treatment with a biologic agent in monotherapy, presenting intolerance, or lack of adherence, or safety problems to MTX treatment. 15. Patients who, according to the researcher's judgement, are candidates for monotherapy with a biologic agent, without excluding previous use of other DMDs different from MTX. 16. Serum creatinine >1.4 mg/dl (124 μmol/l) in women an mg/dl (141 μmol/l) in men. 17. Alanine aminotransferase or aspartate aminotransferase times the upper limit of normal (ULN). | | 13. Patients with reproductive potential who are not willing to use any effective contraceptive method. | | |
| candidates for monotherapy with a biologic agent, without excluding previous use of other DMDs different from MTX. 16. Serum creatinine > 1.4 mg/dl (124 µmol/l) in women an mg/dl (141 µmol/l) in men. 17. Alanine aminotransferase or aspartate aminotransferase times the upper limit of normal (ULN). | a biologic agent, or under treatment with a biologic agent in monotherapy, presenting intolerance, or lack of adherence, or safety problems to MTX treatment. | 14. History of alcoholism, drug addiction or substance abuse in the year preceding the selection visit. | | |
| mg/dl (141 μmol/l) in men. 17. Alanine aminotransferase or aspartate aminotransferas times the upper limit of normal (ULN). | candidates for monotherapy with a biologic agent, without | 15. Neuropathies or other painful conditions that can interfere with pain evaluation. | | |
| times the upper limit of normal (ULN). | | | | |
| 18. Total bilirubin > ULN. | | | | |
| † | | | | |
| 19. Platelet count < 100 x 109/1 (100,000/mm3). | | | | |
| 20. Hemoglobin <85 g/L (<8.5 g/dL, 5.3 mmol/L). | | | | |
| 21. Leukocytes <3.0 x 109/L (3000/mm3). | | | | |
| 22. Neutrophils, absolute value <2.0 x 109/L (2000/mm3). | | Neutrophils, absolute value <2.0 x 109/L (2000/mm3). Lymphocytes, absolute value <0.5 x 109 /L (500/mm3). | | |

Tabla 2S. EULAR response criteria.

| | | | DAS-28 Improvement | | | |
|--------|---------|------------------------|--------------------|---------------|-------------|--|
| | | | >1.2 | >0.6 and ≤1.2 | ≤0.6 | |
| DAS-28 | Current | ≤3.2 | Good response | Moderate | No response | |
| Score | | | | response | | |
| | | $>$ 3.2 and \leq 5.1 | Moderate | Moderate | No response | |
| | | | response | response | | |
| | | >5.1 | Moderate | No response | No response | |
| | | | response | | | |

DAS: Disease activity score -28 joints.