

RESULTS

Table 1. Patients characteristics

| | | Standard deviation |
|----------------------------|-------|--------------------|
| Age (year) | 60.00 | 13.08 |
| Duration of disease (year) | 14.1 | 10.35 |
| CQR result (%) | 76.43 | 13.07 |
| Survey result (%) | 84.72 | 16.17 |
| | N | % |
| Gender | | |
| Male | 45 | 28.48 |
| Female | 113 | 71.52 |
| Smoking | 26 | 16.46 |
| Caucasian | 151 | 95.57 |
| Situation (n=144) | | |
| Employed | 63 | 43.75 |
| Unemployed | 36 | 25.00 |
| Retired | 45 | 31.25 |
| Income (n=114) | | |
| 0 – 39 999 \$ | 70 | 61.40 |
| 40 – 79 999 \$ | 34 | 29.82 |
| ≥ 80 000 \$ | 10 | 8.77 |
| Education (n=137) | | |
| High school or less | 61 | 44.53 |
| Collegial study | 25 | 18.25 |
| University study | 51 | 37.23 |
| Localisation | | |
| Urban | 112 | 70.89 |
| Rural | 46 | 29.11 |

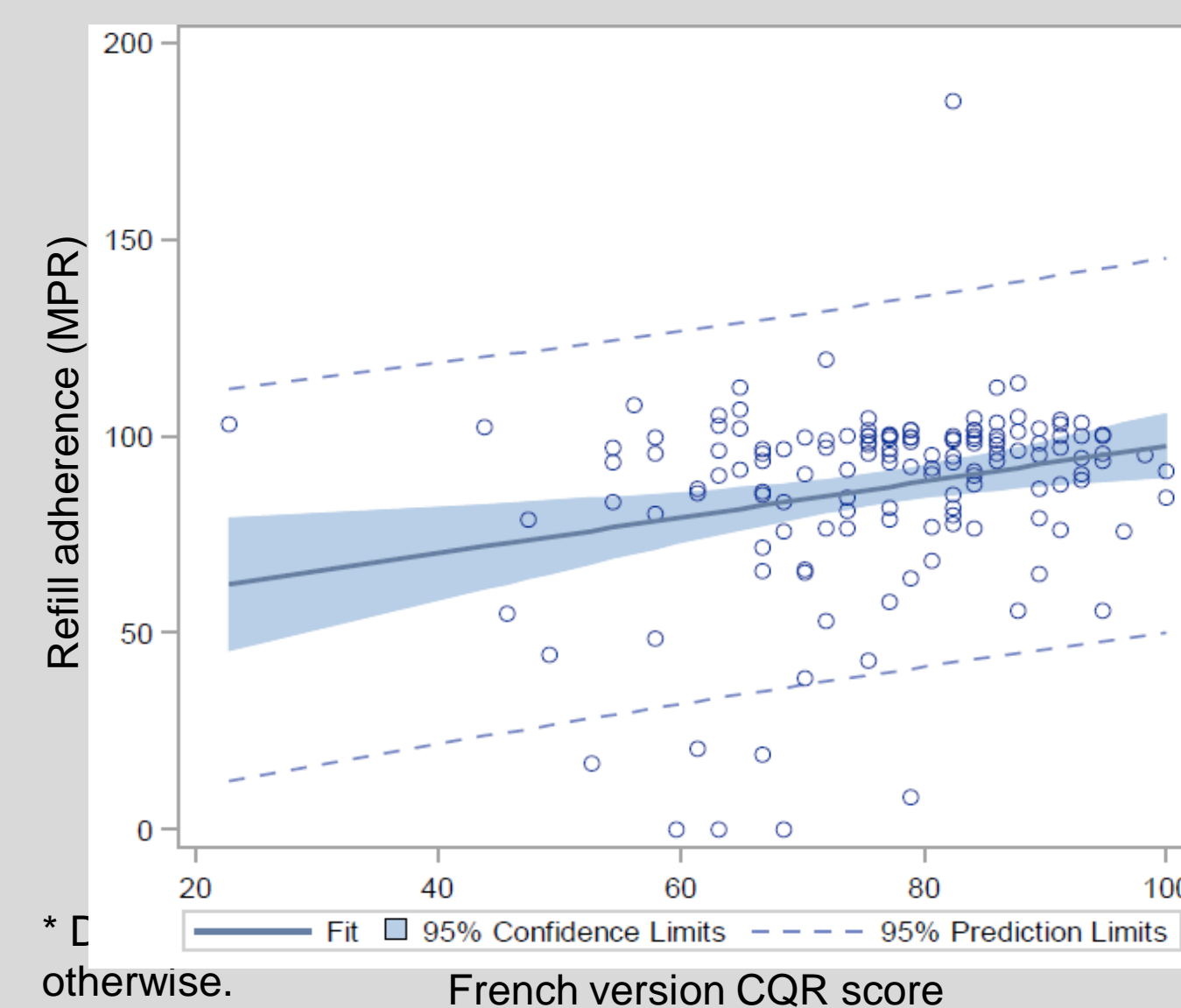


Figure 1. Correlation between refill adherence (MPR) and the french version of the CQR.

Table 2. Adherence calculated by the MPR in the 6 previous months

| Medications | Nbr patients | Adherence (%) |
|------------------------|--------------|---------------|
| DMARDs | | |
| Methotrexate | 106 | 75.5 |
| MTX PO | 74 | 78.4 |
| MTX s/c | 32 | 68.8 |
| Hydroxychloroquine | 66 | 78.8 |
| Leflunomide | 5 | 100.0 |
| Sulfasalazine | 4 | 75.0 |
| Azathioprine | 4 | 75.0 |
| Biologics | | |
| Actemra | 22 | 81.8 |
| Orencia | 20 | 95.0 |
| Enbrel | 10 | 90.0 |
| Remicade | 10 | 90.0 |
| Rituxan | 8 | 62.5 |
| Humira | 4 | 50.0 |
| Monotherapy | | |
| DMARDs | 55 | 76.4 |
| Biologic | 15 | 100.0 |
| Combination | | |
| 2 DMARDs | 29 | 69.0 |
| 3 DMARDs | 2 | 50.0 |
| 1 DMARD et 1 biologic | 48 | 71.0 |
| 2 DMARDs et 1 biologic | 8 | 75.0 |
| Total | 158 | 75.0 |

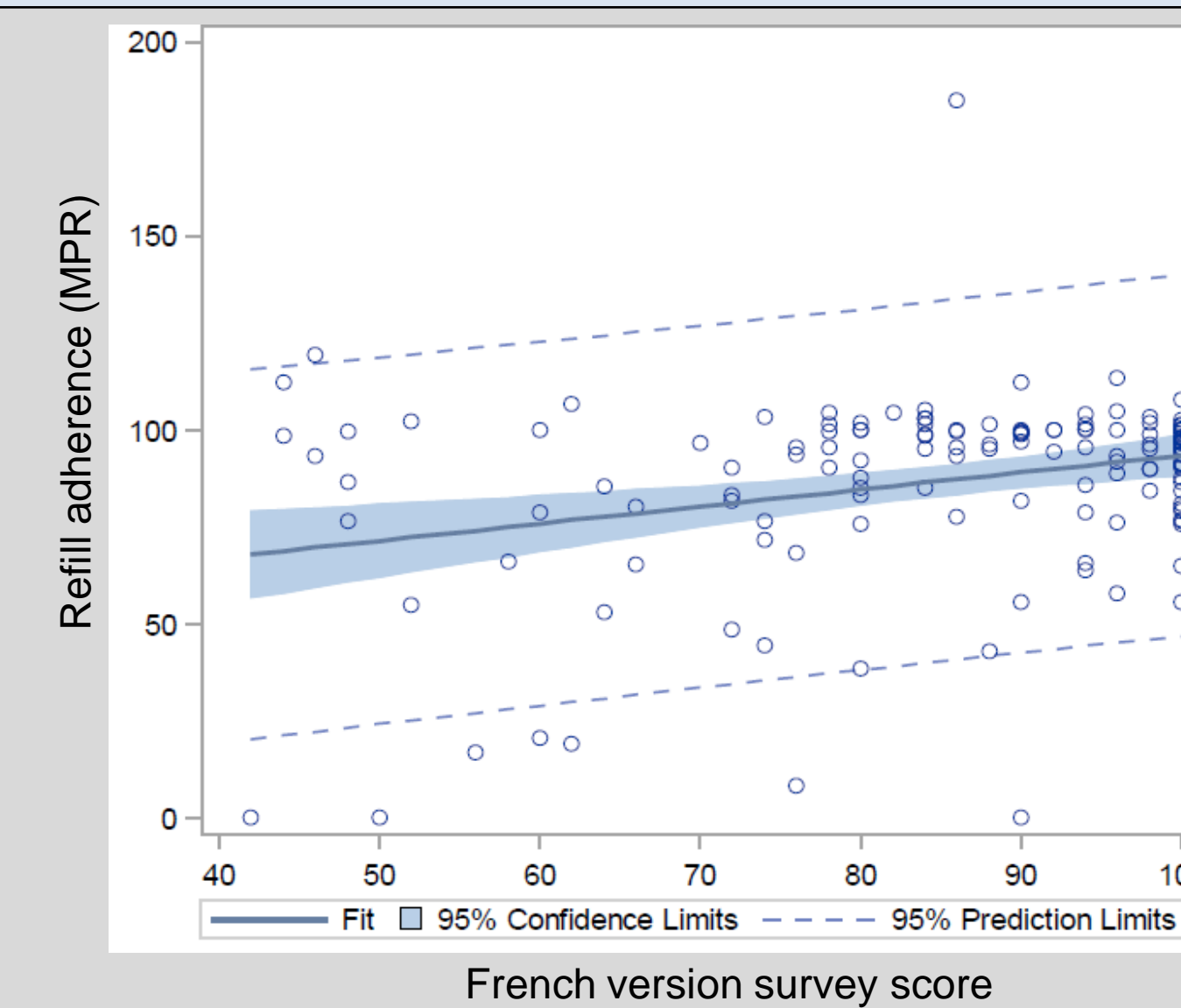


Figure 2. Correlation between refill adherence (MPR) and the french version of the survey.

INTRODUCTION: Rheumatoid arthritis (RA) is a prevalent autoimmune disease affecting nearly 1% of the adult population. Adherence to prescribed drugs is important to prevent irreversible joint damage. Unfortunately, adherence in this population is low and is estimated at 60-70%. Hence, a clinical approach to screen for risk of non-adherence would be valuable. Although a number of self-reported medication adherence questionnaires exist, the «Compliance Questionnaire on Rheumatology» (CQR), a 19-item questionnaire developed and validated par Klerk and al. in 1999, is the only questionnaire validated in patients with inflammatory arthropathies.

OBJECTIVES: The primary objective of this study is to evaluate the validity of a quebec french version of the CQR and of a short 5 questions survey, and assess there possible uses as adherence screening tool.

METHODS: The translate, re-translate method was use to obtain the quebec french version of the CQR and the 5 questions survey. The reliability of these questionnaires were certified by the test-retest method at 2 weeks. The inclusion criteria were: age over 18 years, RA duration \geq 1 year, and RA treatment for at least the previous six months (DMARD and/or biologic agent) prior to entering in the study. The patients completed the french version of these two questionnaire during a medical visit. Then, we compared the questionnaires results to the refill adherence for the **six months** preceding the medical visit. The refill adherence was obtained by calculating the medical possession ratio (MPR).

DISCUSSION: There were 160 patients included in this study, two were excluded. Demographic data from participants are shown in Table 1. Average age is 60.0 years (SD = 13.08) and mean duration of disease is 14.1 years (SD = 10.35). Women represented 71.5% of all participants, which is likely to reflect the higher prevalence of females in rheumatoid arthritis. Most participants are treated with at least one DMARD (90.5%) and most commonly with methotrexate and hydroxychloroquine. Adherence to these two DMARDs are similar (75.5 vs 78.8%), despite higher incidence of side effects associated to methotrexate. Results seem to show a better adherence with methotrexate *per os* compared with subcutaneous methotrexate (78.4 vs 68.8%). This is contrary to existing data showing better adherence to subcutaneous medication. Moreover, the excellent adherence to biologics (100% for monotherapy), could be explained by the fact that the drug is administered in a clinic setting. Figures 1 and 2 demonstrate the correlation between the results of the two questionnaires (CQR and survey) and the refill adherence that was calculated by the MPR. The trend of these correlations show that non-adherent patients correlate with a poorer result to their CQR questionnaire. This correlation seem stronger with the 5 questions survey than the CQR (r^2 8.25% vs 5.89%).

CONCLUSIONS The quebec french version of the CQR questionnaire and the 5 questions survey could become useful tools to evaluate adherence in quebec patients with rheumatoid arthritis.

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