CORRECTION

Correction to: Association between inflammation and systolic blood pressure in RA compared to patients without RA

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Following publication of the original article [1], it has come to our attention that we did not appropriately convert the units for CRP from the National Health and Nutrition Examination Survey (NHANES) from mg/dL to mg/L. In this study, NHANES was considered the general population cohort for this study; interestingly, the correction resulted in changes to a broader range of CRP values in NHANES from 0.01 to 18.0 mg/dL to 0.10 to 180.0 mg/L.

The overall results did not change the message for this study. We continued to observe a general positive association between CRP and blood pressure (BP) in all three groups, RA, non-RA and NHANES. For RA and non-RA this relationship held until a CRP level of approximately 7 mg/L when an inverse association was observed between CRP and systolic BP. In NHANES, we also observed a similar association of higher CRP associated with SBP until approximately 7 mg/L when the there is no association between CRP and SBP. In NHANES, 15% have a CRP above 7 mg/L compared to 32% in the RA and 21% non-RA cohorts. Thus, with the smaller percentage of subjects with a CRP above 7 mg/L in NHANES, there was potentially less power to detect an association.

Line-by-line corrections of our results are given below:

1. Results, page 3, last sentence in the right column should read: "...in the non-RA outpatient population, and 1.80 mg/L (range 0.10 to 180.10 mg/L)."

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2. Results, page 4, 2nd paragraph, first sentence. The range of CRP was "0.10-180.10 mg/L in NHANES."

- 3. Results, page 4, 3rd paragraph. "In comparison, within NHANES, we generally observed a positive association between CRP and SBP also until 7mg/dL when there is no association between CRP and SBP."
- 4. Results, page 4, 2nd column, last sentence of the second paragraph, "Findings from the sensitivity analysis showed a general linear association between CRP and SBP in NHANES after trimming of the CRP outliers; this finding is consistent with previous studies in the general population. For RA and non-RA where higher levels are typically observed, the relationships were similar to the main analyses."
- 5. In Table 1, the median (IQR) of CRP in NHANES should be 1.80 (0.70, 4.30) mg/L.
- 6. Figure 1 The relationship between C-reactive protein levels (CRP) and systolic blood pressure with 95% confidence intervals, in the rheumatoid arthritis (RA) outpatient population and the general population (National Health and Nutrition Examination Survey (NHANES)). RA outpatient population CRP range 0.20–126.90 mg/L; NHANES CRP range 0.10–180.10 mg/L (attached)
- Figure 2 The relationship between C-reactive protein (CRP) levels and systolic blood pressure with 95% confidence intervals, in the nonrheumatoid arthritis (RA) outpatient population and the general population (National Health and Nutrition Examination Survey (NHANES)). Non-RA outpatient population CRP range 0.10–416.20 mg/L; NHANES 0.10–180.10 mg/L (attached)
- 8. We have also updated the supplementary figures to reflect the updated data:

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Fig. 1 The relationship between C-reactive protein levels (CRP) and systolic blood pressure with 95% confidence intervals, in the rheumatoid arthritis (RA) outpatient population and the general population (National Health and Nutrition Examination Survey (NHANES)). RA outpatient population CRP range 0.20–126.90 mg/L; NHANES CRP range 0.10–180.10 mg/L

C-reactive Protein(mg/L)

10

100



135

130

125

120

115

110

0.1

Systolic Blood Pressure(mm/Hg)

Additional files

Additional file 1: Figure S1. The relationship between C-reactive protein levels (CRP) and diastolic blood pressure (A), pulse pressure (B), and mean arterial pressure (C) with 95% confidence intervals, in the RA outpatient population and general population (NHANES). RA, rheumatoid arthritis; NHANES, National Health and Nutrition Examination Survey. (PDF 108 kb)

Additional file 2: Figure S2. The relationship between C-reactive protein levels (CRP) and diastolic blood pressure (A), pulse pressure (B), and mean arterial pressure (C) with 95% confidence intervals, in the non-RA outpatient population and the general population (NHANES). RA, rheumatoid arthritis; NHANES, National Health and Nutrition Examination Survey. (PDF 111 kb)

Additional file 3: Figure S3. The relationship between C-reactive protein levels (CRP) and systolic blood pressure with 95% confidence intervals, in the RA outpatient population and the general population (NHANES) with trimming of extreme measurements of CRP (< 0.5% and > 99.5%). RA outpatient population CRP range 0.20–92.40 mg/L; NHANES CRP range 0.20–42.20 mg/L. RA, rheumatoid arthritis; NHANES, National Health and Nutrition Examination Survey. (PDF 12 kb)

Additional file 4: Figure S4. The relationship between C-reactive protein levels (CRP) and systolic blood pressure with 95% confidence intervals, in the non-RA outpatient population and general population (NHANES) with trimming of extreme measurements of CRP (< 0.5% and > 99.5%). Non-RA outpatient population CRP range 0.10–142.20 mg/L; NHANES CRP range 0.20–42.20 mg/L. RA, rheumatoid arthritis; NHANES, National Health and Nutrition Examination Survey. (PDF 13 kb)

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