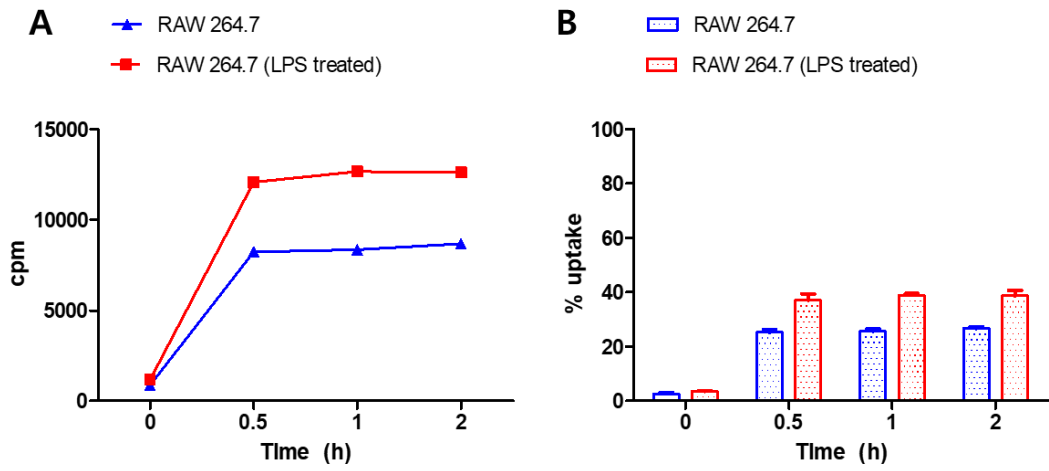
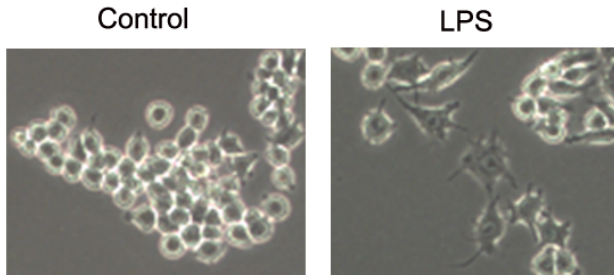


Supplemental figure 1.



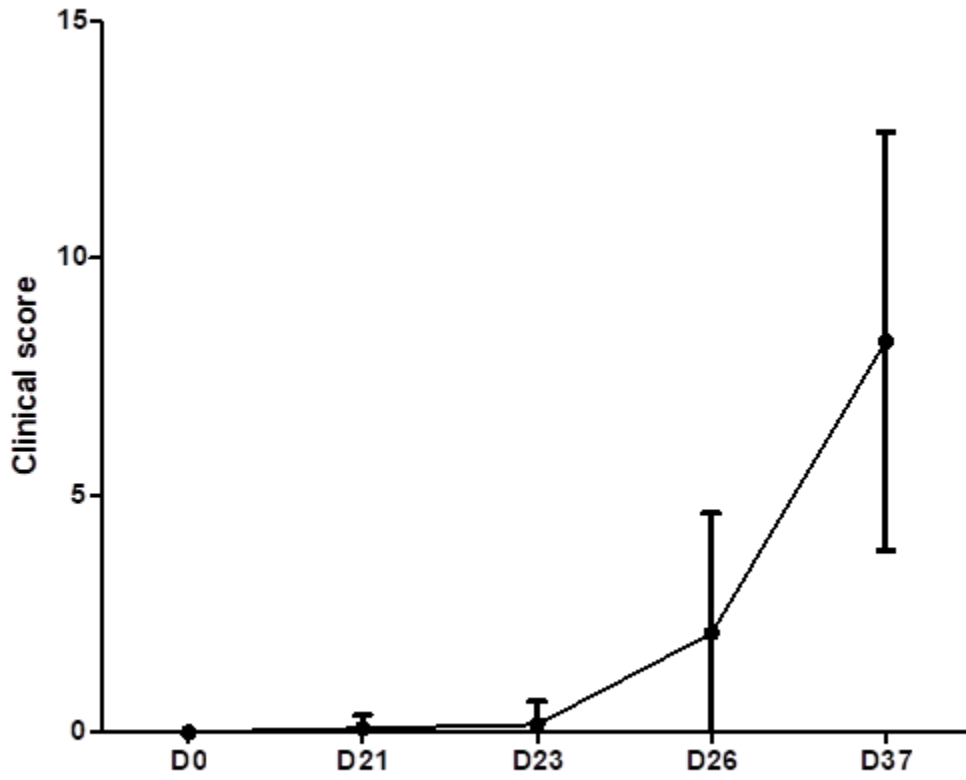
To select a proper time point for in vitro uptake test, we measured ^{18}F -FEDAC uptake of RAW 264.7 cells at different time points (0 h, 0.5 h, 1 h and 2 h). ^{18}F -FEDAC uptake at 0.5 h, 1 h, and 2 h was not significantly different. Thus, we performed 1 h incubation for subsequent dose-dependent uptake test.

Supplemental figure 2.



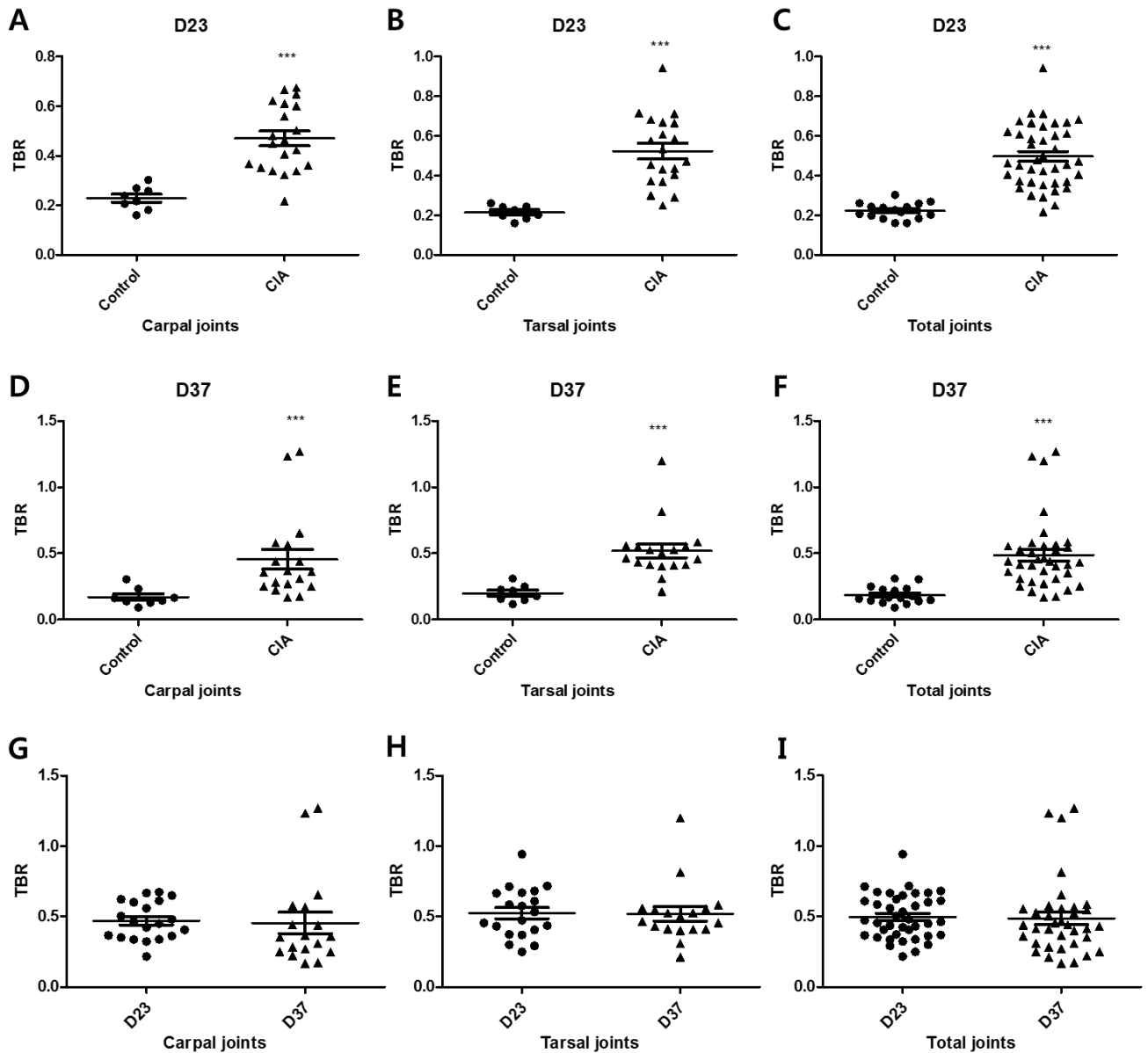
Morphological changes of macrophages induced by activation. Round and loosely adherent non-activated RAW 264.7 cells became more elongated and firmly adherent 24 h after lipopolysaccharide (LPS) stimulation.

Supplemental figure 3.



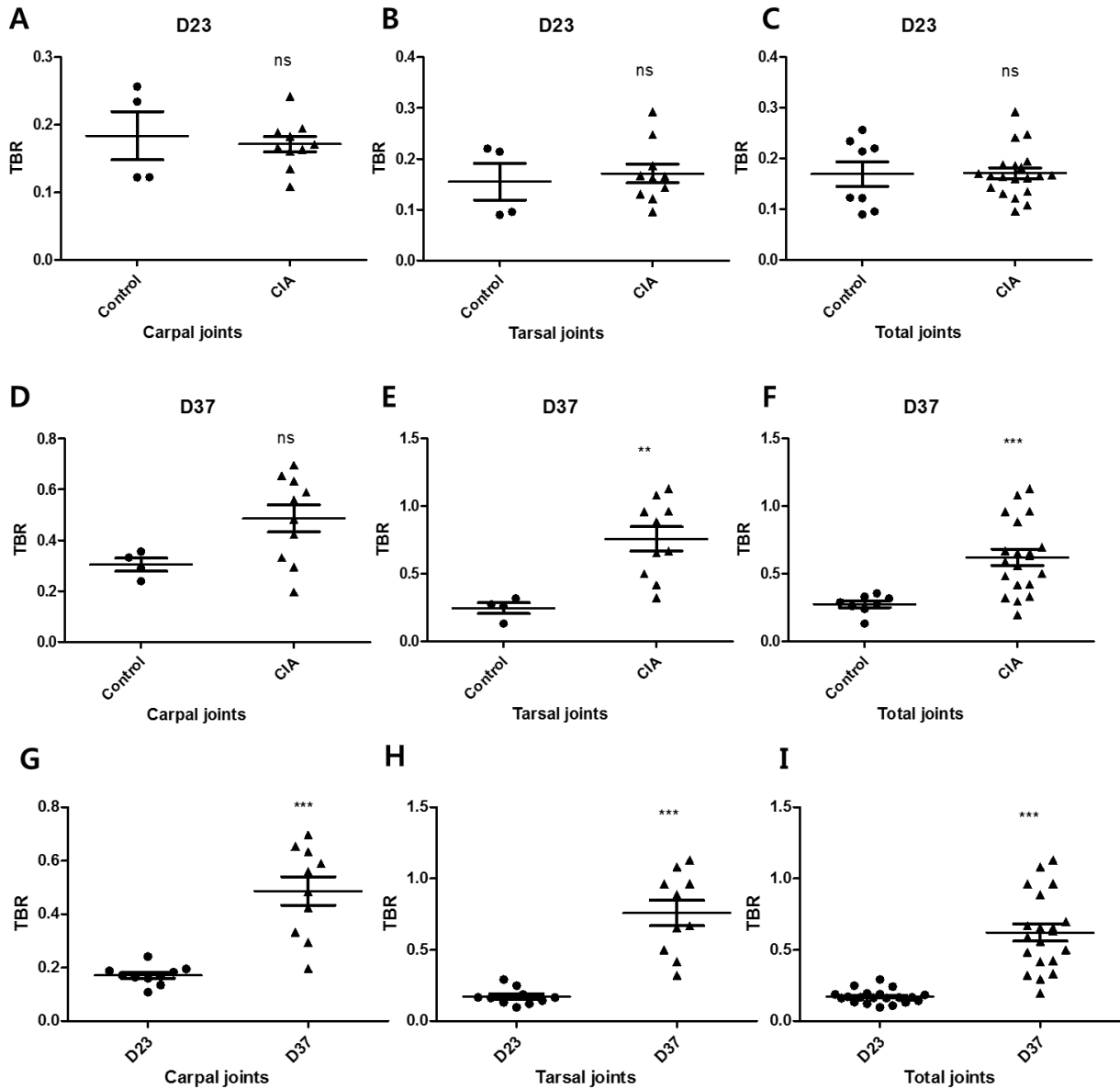
Clinical course of CIA mice

Supplemental figure 4.



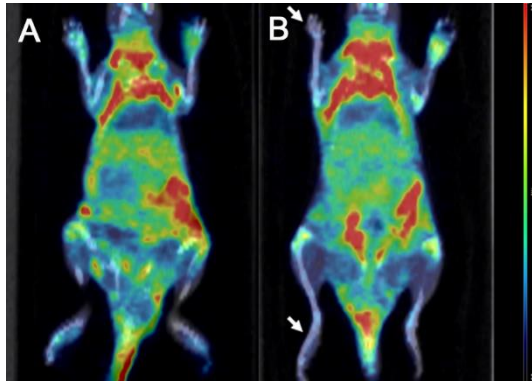
TBR of ¹⁸F-FEDAC in normal and CIA mice. On day 23, TBR in carpal (A), tarsal (B), and total (C) joints of CIA mice was significantly higher than control mice. On day 37, TBR in carpal (D), tarsal (E), and total (F) joints of CIA mice was still significantly higher than control mice. However, no significant difference of the uptake was noted between day 23 and day 37, despite the elevation of clinical score in CIA mice (G-I).

Supplemental figure 5.



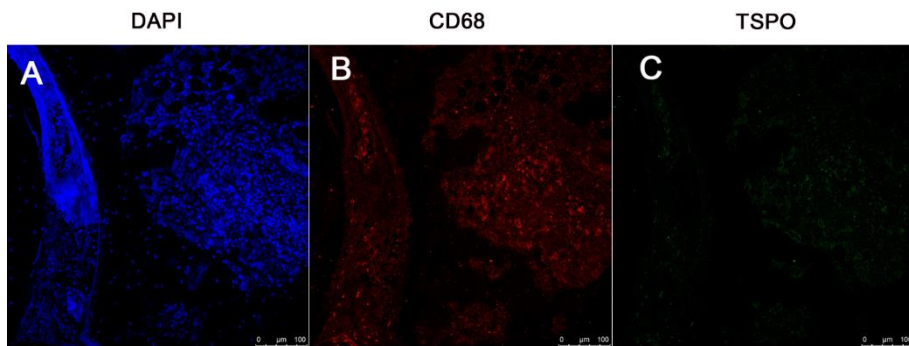
TBR of ^{18}F -FDG in normal and CIA mice. On day 23, TBR in carpal (A), tarsal (B), and total (C) joints of CIA mice did not differ significantly with control mice. However, on day 37, TBR in carpal (D), tarsal (E), and total (F) joints of CIA mice was significantly higher than control mice. In CIA mice, a significant increase of ^{18}F -FDG uptake according to the time and the clinical course was noted (G-I).

Supplemental figure 6.



Varying degrees of ^{18}F -FEDAC uptake in arthritic paws were shown in an individual CIA mouse. Arthritis can occur in all paws of the mouse (A), while often spares some paws entirely (B, *arrows*).

Supplemental figure 7.



Immunofluorescence staining with a rabbit isotype antibody as a negative control shows diffuse non-specific fluorescence throughout the tissue.