At 8 and 16 weeks post DMM surgery, there was more effector microglia expression in the DH, particularly at the L4 level of the spinal cord (Fig 1).

Conclusions: The temporal correlation of fractalkine release with microglial activation suggests that fractalkine may contribute to microglial activation in the DH of the spinal cord. Microglial activation in the DH has been reported in murine mono-iodoacetate (MIA) arthritis as well as nerve injury models. Results from this study will help elucidate how pain signals propagate from the peripheral to the central nervous system in osteoarthritis.

Conclusions: These results suggest that three not five repeats are required for testing the QST modalities of heat pain threshold, mechanical pain threshold and mechanical pain sensitivity. For warm detect threshold the first measure should be omitted before calculating an average measure. Mechanical pain sensitivity was able to distinguish painful ROA positive knees from pain-free ROA positive knees. The fact that sensitivity at the sternum, as well as the knee, was able to predict concordant pain and structural status supports previous work showing that centrally mediated widespread pain sensitisation is present and highlights its potential use in future clinical research.