

Research question: association between joint inflammation and altered pain processing in patients with knee OA			
NAME OF DATABASE (interface): MEDLINE (via PubMed interface)			
Concept	Line number	Search strategy	Results (13 Dec 2022)
Concept 1: Knee OA	1a: OA, knee	("Osteoarthritis, Knee"[Mesh] OR "osteoarthritis knee"[TIAB] OR "knee osteoarthritis"[TIAB] OR "gonarthrosis"[TIAB] OR "Osteoarthritis of Knee"[TIAB] OR "Osteoarthritis of Knees"[TIAB] OR "Knee OA"[TIAB])	32.043
	1b: knee	("Knee Joint"[Mesh] OR "Knee"[Mesh] OR "knee"[TIAB] OR "knees"[TIAB] OR "Patella"[Mesh] OR "patella"[TIAB])	199.333
	1c: OA	("Osteoarthritis"[Mesh] OR "osteoarthriti*"[TIAB] OR "osteo-arthriti*"[TIAB] OR "osteoarthrotic"[TIAB] OR "osteoarthros*"[TIAB] OR "osteo-arthros*"[TIAB] OR "arthrosis"[TIAB] OR "degenerative joint disease"[TIAB] OR "Arthritis"[TIAB] OR "Arthritides"[TIAB])	299.464
Concept 2: Inflammation	2	"Synovitis"[Mesh] OR "Synovitis"[TIAB] OR "hoffasynovitis"[TIAB] OR "hoffa-synovitis"[TIAB] OR "synovium"[TIAB] OR "Synovial Membrane"[Mesh] OR "Synovial Membrane"[TIAB] OR "synovial fluid*"[TIAB] OR "synovial thickening"[TIAB] OR "synovial proliferation"[TIAB] OR "Hydrarthrosis"[Mesh] OR "Hydrarthrosis"[TIAB] OR "effusion"[TIAB] OR "Cytokines"[Mesh] OR "Cytokine*"[TIAB] OR "chemokine*"[TIAB] OR "interleukin*"[TIAB] OR "IL-*"[TIAB] OR "Tumor Necrosis Factor*"[TIAB] OR "TNF"[TIAB] OR "C-Reactive Protein"[Mesh] OR "C-Reactive Protein"[TIAB] OR "CRP"[TIAB] OR "Matrix Metalloproteinases"[Mesh] OR "Matrix Metalloproteinase*"[TIAB] OR "MMP"[TIAB] OR "Bradykinin"[Mesh] OR "Bradykinin"[TIAB] OR "Inflammation"[Mesh] OR "Inflammation"[TIAB] OR "Inflammation Mediators"[Mesh] OR "Biomarkers"[Mesh] OR "Biomarker*"[TIAB] OR "biological marker*"[TIAB] OR "Bone Marrow Diseases"[Mesh] OR "Bone Marrow Disease*"[TIAB] OR "bone marrow lesion*"[TIAB] OR "BML"[TIAB] OR "BMLs"[TIAB] OR "bone marrow edema"[TIAB] OR "Magnetic Resonance Imaging"[Mesh] OR "Magnetic Resonance Imaging"[TIAB] OR "MRI"[TIAB] OR "Ultrasonography"[Mesh] OR "Ultrasonography"[TIAB] OR "US"[TIAB] OR "synovial sample*"[TIAB] OR "synovial biopsy"[TIAB] OR "synovial biopsy*"[TIAB]	4.601.086
Concept 3: Pain	3	"Central Nervous System Sensitization"[Mesh] OR "Sensitization"[TIAB] OR "Sensitisation"[TIAB] OR "pain receptor*"[TIAB] OR "Nociceptors"[Mesh] OR "Nociceptor*"[TIAB] OR "quantitative sensory testing"[TIAB] OR "QST"[TIAB] OR "Postsynaptic Potential Summation"[Mesh] OR "Postsynaptic Potential Summation"[TIAB] OR "temporal summation"[TIAB] OR "TS"[TIAB] OR "pain modulation"[TIAB] OR "CPM"[TIAB] OR "Pain pressure threshold"[TIAB] OR "PPT"[TIAB] OR "algometry"[TIAB] OR "HPT"[TIAB] OR "sensory	614.810

	thresholds"[TIAB] OR "allodynia"[TIAB] OR "pain DETECT"[TIAB] OR "PD-Q"[TIAB] OR "PDQ"[TIAB] OR "central sensitization inventory" OR "CSI"[TIAB] OR "Hyperexcitability"[TIAB] OR "Pain Perception"[Mesh] OR "Pain Perception"[TIAB] OR "Pain Threshold"[Mesh] OR "Pain Threshold"[TIAB] OR "Central Sensitivity"[TIAB] OR "Neural Inhibition"[Mesh] OR "Neural Inhibition"[TIAB] OR "Hyperalgesia"[Mesh] OR "Hyperalgesia"[TIAB] OR "nociception"[TIAB] OR "Hypersensitivity"[Mesh] OR "Hypersensitivity"[TIAB] OR "pain processing"[TIAB] OR "pain modulation"[TIAB] OR "neuropathic pain"[TIAB] OR "neuropathic-like pain"[TIAB] OR "nociceptive pain"[TIAB] OR "pain pathophysiology"[TIAB] OR "pain mechanism*"[TIAB] OR "intermittent pain"[TIAB] OR "ICOAP"[TIAB] OR "widespread pain"[TIAB] OR "Neuropathic Pain Questionnaire"[TIAB] OR "NPQ"[TIAB] OR "Douleur neuropathique"[TIAB] OR "DN-4"[TIAB] OR "DN4"[TIAB] OR "Leeds Assessment of Neuropathic Symptoms and Signs"[TIAB] OR "LANSS"[TIAB]	
Pubmed Combination of concepts	(1a OR (1b AND 1c)) AND 2 AND 3	634

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NAME OF DATABASE (interface): EMBASE			
Concept	Line number	Search strategy	Results (13 Dec 2022)
Concept 1: Knee OA	#1	'knee osteoarthritis'/exp OR 'knee osteoarthritis':ti,ab,kw OR 'osteoarthritis knee':ti,ab,kw OR gonarthrosis:ti,ab,kw OR 'osteoarthritis of Knee':ti,ab,kw OR 'Osteoarthritis of Knees':ti,ab,kw OR 'Knee OA':ti,ab,kw	47.477
	#2	'knee'/exp OR 'knee':ti,ab,kw OR 'knees':ti,ab,kw OR 'patella'/exp OR 'patella':ti,ab,kw	251.661
	#3	'osteoarthritis'/exp OR 'osteoarthriti*':ti,ab,kw OR 'osteo-arthritis*':ti,ab,kw OR 'osteoarthrotic':ti,ab,kw OR 'osteoarthros*':ti,ab,kw OR 'osteo-arthros*':ti,ab,kw OR 'arthrosis':ti,ab,kw OR 'degenerative joint disease':ti,ab,kw OR 'arthritis':ti,ab,kw OR 'Arthritides':ti,ab,kw	463.296
Concept 2: Inflammation	#4	'synovitis'/de OR 'synovitis':ti,ab,kw OR 'hoffasynovitis':ti,ab,kw OR 'hoffa-synovitis':ti,ab,kw OR 'synovium'/exp OR 'synovium':ti,ab,kw OR 'Synovial Membrane':ti,ab,kw OR 'synovial fluid'/exp OR 'synovial fluid':ti,ab,kw OR 'synovial thickening':ti,ab,kw OR 'synovial proliferation':ti,ab,kw OR 'hydrarthrosis':ti,ab,kw OR 'joint effusion'/exp OR 'effusion':ti,ab,kw OR 'cytokine'/de OR 'cytokine*':ti,ab,kw OR 'chemokine*':ti,ab,kw OR 'interleukin*':ti,ab,kw OR 'IL-':ti,ab,kw OR 'Tumor Necrosis Factor*':ti,ab,kw OR 'TNF':ti,ab,kw OR 'c reactive protein'/exp OR 'c reactive protein':ti,ab,kw OR 'crp':ti,ab,kw OR 'matrix metalloproteinase'/exp OR 'matrix metalloproteinase':ti,ab,kw OR 'MMP':ti,ab,kw OR 'Bradykinin'/exp OR 'Bradykinin':ti,ab,kw OR 'inflammation'/de OR 'inflammation':ti,ab,kw OR 'biological marker'/exp OR 'biological marker*':ti,ab,kw OR 'biomarker*':ti,ab,kw OR 'bone marrow disease*':ti,ab,kw OR 'bone marrow lesion*':ti,ab,kw OR 'BML':ti,ab,kw OR 'BMLs':ti,ab,kw OR 'bone marrow edema':ti,ab,kw OR 'nuclear magnetic resonance imaging'/de OR 'nuclear magnetic resonance imaging':ti,ab,kw OR 'MRI':ti,ab,kw OR 'Ultrasonography':ti,ab,kw OR 'ultrasound'/exp OR 'ultrasound':ti,ab,kw OR 'US':ti,ab,kw OR 'synovial sample*':ti,ab,kw OR 'synovial biopsy':ti,ab,kw OR 'synovial biopsy*':ti,ab,kw	4.889.875
Concept 3: Pain	#5	'central nervous system sensitization'/exp OR 'sensitization'/de OR 'sensitization':ti,ab,kw OR 'sensitisation':ti,ab,kw OR 'pain receptor'/exp OR 'pain receptor*':ti,ab,kw OR 'nociceptor*':ti,ab,kw OR 'quantitative sensory testing'/exp OR 'quantitative sensory testing':ti,ab,kw OR 'QST':ti,ab,kw OR 'postsynaptic potential summation'/exp OR 'postsynaptic potential summation':ti,ab,kw OR 'temporal summation':ti,ab,kw OR 'TS':ti,ab,kw OR 'pain modulation':ti,ab,kw OR 'CPM':ti,ab,kw OR 'Pain pressure threshold':ti,ab,kw OR 'PPT':ti,ab,kw OR 'algometry'/exp OR 'algometry':ti,ab,kw OR 'HPT':ti,ab,kw OR 'pain threshold'/exp OR 'pain threshold':ti,ab,kw OR 'sensory thresholds':ti,ab,kw OR 'allodynia'/exp OR 'allodynia':ti,ab,kw OR 'pain DETECT':ti,ab,kw OR 'PD-Q':ti,ab,kw OR 'PDQ':ti,ab,kw OR 'central sensitization inventory':ti,ab,kw OR 'CSI':ti,ab,kw OR 'hyperexcitability':ti,ab,kw OR 'Pain Perception':ti,ab,kw OR 'Central Sensitivity':ti,ab,kw OR 'Neural Inhibition':ti,ab,kw OR 'nociception'/exp OR 'nociception':ti,ab,kw OR 'Hypersensitivity':ti,ab,kw OR 'pain	413.203

		processing':ti,ab,kw OR 'pain modulation':ti,ab,kw OR 'neuropathic pain'/exp OR 'neuropathic pain':ti,ab,kw OR 'neuropathic-like pain':ti,ab,kw OR 'nociceptive pain':ti,ab,kw OR 'pain pathophysiology':ti,ab,kw OR 'pain mechanism*':ti,ab,kw OR 'intermittent pain':ti,ab,kw OR 'ICOAP':ti,ab,kw OR 'widespread pain':ti,ab,kw OR 'Neuropathic Pain Questionnaire':ti,ab,kw OR 'NPQ':ti,ab,kw OR 'Douleur neuropathique':ti,ab,kw OR 'DN-4':ti,ab,kw OR 'DN4':ti,ab,kw OR 'Leeds Assessment of Neuropathic Symptoms and Signs':ti,ab,kw OR 'LANSS':ti,ab,kw	
EMBASE Combination of concepts	(#1 OR (#2 AND #3)) AND #4 AND #5		1.280

Research question: association between joint inflammation and altered pain processing in patients with knee OA			
NAME OF DATABASE (interface): Web of Science			
Concept	Line number	Search strategy	Results (13 Dec 2022)
Concept 1: Knee OA	#1	TS=("osteoarthritis knee" OR "knee osteoarthritis" OR "gonarthrosis" OR "Osteoarthritis of Knee" OR "Osteoarthritis of Knees" OR "Knee OA")	30.499
	#2	TS=("knee" OR "knees" OR "Patella")	214.028
	#3	TS=("osteoarthriti*" OR "osteo-arthritis*" OR "osteoarthrotic" OR "osteoarthros*" OR "osteo-arthros*" OR "arthrosis" OR "degenerative joint disease" OR "arthritis" OR "Arthritides")	393.347
Concept 2: Inflammation	#4	TS=("Synovitis" OR "hoffasynovitis" OR "hoffa-synovitis" OR "Synovial Membrane" OR "synovial fluid*" OR "synovial thickening" OR "synovial proliferation" OR "Hydrarthrosis" OR "Effusion" OR "Cytokine*" OR "chemokine*" OR "interleukin*" OR "IL-" OR "Tumor Necrosis Factor*" OR "TNF" OR "C-Reactive Protein" OR "CRP" OR "Matrix Metalloproteinases" OR "Matrix Metalloproteinase*" OR "MMP" OR "Bradykinin" OR "Inflammation" OR "Biomarker*" OR "biological marker*" OR "bone marrow disease*" OR "bone marrow lesion*" OR "BML" OR "BMLs" OR "bone marrow edema" OR "Magnetic Resonance Imaging" OR "MRI" OR "Ultrasonography" OR "US" OR "synovial sample*" OR "synovial biopsy" OR "synovial biopsy*")	3.894.593
Concept 3: Pain	#5	TS=("Sensitization" OR "Sensitisation" OR "pain receptor*" OR "Nociceptor*" OR "quantitative sensory testing" OR "QST" OR "Postsynaptic Potential Summation" OR "temporal summation" OR "TS" OR "pain modulation" OR "CPM" OR "Pain pressure threshold" OR "PPT" OR "algometry" OR "HPT" OR "sensory thresholds" OR "allodynia" OR "pain DETECT" OR "PD-Q" OR "PDQ" OR "central sensitization inventory" OR "CSI" OR "Hyperexcitability" OR "Pain Perception" OR "Pain Threshold" OR "Central Sensitivity" OR "Neural Inhibition" OR "Hyperalgesia" OR "nociception" OR "Hypersensitivity" OR "pain processing" OR "pain modulation" OR "neuropathic pain" OR "neuropathic-like pain" OR "nociceptive pain" OR "pain pathophysiology" OR "pain mechanism*" OR "intermittent pain" OR "ICOAP" OR "widespread pain" OR "Neuropathic Pain Questionnaire" OR "NPQ" OR "Douleur neuropathique" OR "DN-4" OR "DN4" OR "Leeds Assessment of Neuropathic Symptoms and Signs" OR "LANSS")	365.027
WoS		(#1 OR (#2 AND #3)) AND #4 AND #5	956

Combination of concepts		
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Research question: association between joint inflammation and altered pain processing in patients with knee OA			
NAME OF DATABASE: SCOPUS			
Concept	Line number	Search strategy	Results (13 Dec 2022)
Concept 1: Knee OA	#1	("osteoarthritis knee" OR "knee osteoarthritis" OR "gonarthrosis" OR "Osteoarthritis of Knee" OR "Osteoarthritis of Knees" OR "Knee OA")	43.835
	#2	("knee" OR "knees" OR "Patella")	289.219
	#3	("osteoarthriti*" OR "osteo-arthritis*" OR "osteoarthrotic" OR "osteoarthros*" OR "osteo-arthros*" OR "arthrosis" OR "degenerative joint disease" OR "arthritis" OR "Arthritides")	471.936
Concept 2: Inflammation	#4	("Synovitis" OR "hoffasynovitis" OR "hoffa-synovitis" OR "Synovial Membrane" OR "synovial fluid*" OR "synovial thickening" OR "synovial proliferation" OR "Hydrarthrosis" OR "Effusion" OR "Cytokine*" OR "chemokine*" OR "interleukin*" OR "IL-" OR "Tumor Necrosis Factor*" OR "TNF" OR "C-Reactive Protein" OR "CRP" OR "Matrix Metalloproteinases" OR "Matrix Metalloproteinase*" OR "MMP" OR "Bradykinin" OR "Inflammation" OR "Biomarker*" OR "biological marker*" OR "bone marrow disease*" OR "bone marrow lesion*" OR "BML" OR "BMLs" OR "bone marrow edema" OR "Magnetic Resonance Imaging" OR "MRI" OR "Ultrasonography" OR "US" OR "synovial sample*" OR "synovial biopsy" OR "synovial biopsy*")	5.607.872
Concept 3: Pain	#5	("Sensitization" OR "Sensitisation" OR "pain receptor*" OR "Nociceptor*" OR "quantitative sensory testing" OR "QST" OR "Postsynaptic Potential Summation" OR "temporal summation" OR "TS" OR "pain modulation" OR "CPM" OR "Pain pressure threshold" OR "PPT" OR "algometry" OR "HPT" OR "sensory thresholds" OR "allodynia" OR "pain DETECT" OR "PD-Q" OR "PDQ" OR "central sensitization inventory" OR "CSI" OR "Hyperexcitability" OR "Pain Perception" OR "Pain Threshold" OR "Central Sensitivity" OR "Neural Inhibition" OR "Hyperalgesia" OR "nociception" OR "Hypersensitivity" OR "pain processing" OR "pain modulation" OR "neuropathic pain" OR "neuropathic-like pain" OR "nociceptive pain" OR "pain pathophysiology" OR "pain mechanism*" OR "intermittent pain" OR "ICOAP" OR "widespread pain" OR "Neuropathic Pain Questionnaire" OR "NPQ" OR "Douleur neuropathique" OR "DN-4" OR "DN4" OR "Leeds Assessment of Neuropathic Symptoms and Signs" OR "LANSS")	632.482
SCOPUS		(#1 OR (#2 AND #3)) AND #4 AND #5	1.182

Combination of concepts		
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No additional filters were applied

No publication date was restricted