



UNIVERSITY OF LEEDS

This is a repository copy of *In anti-CCP+ at-risk individuals, radiographic bone erosions are uncommon and are not associated with the development of clinical arthritis.*

White Rose Research Online URL for this paper:  
<https://eprints.whiterose.ac.uk/166595/>

Version: Accepted Version

---

**Article:**

Di Matteo, A [orcid.org/0000-0003-0867-7051](https://orcid.org/0000-0003-0867-7051), Mankia, K, Nam, JL et al. (5 more authors) (2020) In anti-CCP+ at-risk individuals, radiographic bone erosions are uncommon and are not associated with the development of clinical arthritis. *Rheumatology*. ISSN 1462-0324

<https://doi.org/10.1093/rheumatology/keaa761>

---

© 2020, Oxford University Press. This is an author produced version of an article published in *Rheumatology*. Uploaded in accordance with the publisher's self-archiving policy.

**Reuse**

Items deposited in White Rose Research Online are protected by copyright, with all rights reserved unless indicated otherwise. They may be downloaded and/or printed for private study, or other acts as permitted by national copyright laws. The publisher or other rights holders may allow further reproduction and re-use of the full text version. This is indicated by the licence information on the White Rose Research Online record for the item.

**Takedown**

If you consider content in White Rose Research Online to be in breach of UK law, please notify us by emailing [eprints@whiterose.ac.uk](mailto:eprints@whiterose.ac.uk) including the URL of the record and the reason for the withdrawal request.



[eprints@whiterose.ac.uk](mailto:eprints@whiterose.ac.uk)  
<https://eprints.whiterose.ac.uk/>

Table 3. Clinical, demographic and imaging characteristics of the CCP+ at risk individuals with bone erosions on CR who did not develop IA (“non-progressors”)

Individual	Age and sex	Hands/feet CR-BE distribution	SENS score (BE)	SvdH score (BE)	US synovitis	US-BE	Radiologist's diagnosis	Hands and/or feet tenderness	EMS (min)	Anti-CCP Ab titre	RF	Smoking	Follow-up duration (days)
1	45, fem	R radiocarpal and 1 <sup>st</sup> MCP joints	2	4	N	N	IA	H & F	30	High	Pos	Never	4071
2	77, male	R 2 <sup>nd</sup> and 3 <sup>rd</sup> MCP joints, R 2 <sup>nd</sup> DIP joint, L 5 <sup>th</sup> MCP and 5 <sup>th</sup> PIP joints, bilateral 1 <sup>st</sup> MTP joints, L 1 <sup>st</sup> IP joint (foot)	7	13	Y (R 2 <sup>nd</sup> MCP joint and 1 <sup>st</sup> MTP joints)	Y (R 2 <sup>nd</sup> MCP joint)	IA	N	30	High	Neg	Previous	2933
3	67, fem	L 3 <sup>rd</sup> MCP joint, R 2 <sup>nd</sup> PIP joint, bilateral 3 <sup>rd</sup> PIP joints *, L 4 <sup>th</sup> PIP joint, R 4 <sup>th</sup> PIP joint *, bilateral 5 <sup>th</sup> PIP joints, bilateral 1 <sup>st</sup> MTP joints, 5 <sup>th</sup> R MTP joint	11	17	N	N	Erosive OA	H	0	High	Neg	Never	2228
4	38, fem	L 3 <sup>rd</sup> MTP joint *, bilateral 1 <sup>st</sup> IP joint (foot)	3	4	N	N	IA	F	50	High	Neg	Current	1387
5	62, fem	L 4 <sup>th</sup> PIP joint, bilateral 2 <sup>nd</sup> DIP joints and 4 <sup>th</sup> R DIP joint ('central erosions')	1	2	Y (L 4 <sup>th</sup> PIP joint)	N	Erosive OA	H	30	Low	Neg	Never	345
6	69, fem	L 5 <sup>th</sup> PIP joint ('central erosions')	1	4	N	N	Erosive OA	H	30	High	Neg	Never	197
7	52, male	R 2 <sup>nd</sup> MCP joint *, R 5 <sup>th</sup> MCP joint	2	5	N	N	IA	H	2	High	Neg	Previous	282
8	51, fem	Bilateral 4 <sup>th</sup> MTP joints	2	11	Y (L 4 <sup>th</sup> MTP joint)	N	IA	N	5	High	Pos	Current	322
9	53, fem	R 1 <sup>st</sup> MTP joint	1	6	Y	N	OA	F	15	High	Neg	Never	828
10	71, fem	Bilateral 2 <sup>nd</sup> tarso-metatarsal joints	0	0	Not included	Not included	OA	N	10	High	Pos	Current	428

Legend. Ab: antibodies, BE: bone erosions, CCP: cyclic citrullinated peptide; CR: conventional radiography, DIP: distal interphalangeal, EMS: early morning stiffness, F: feet, fem: female, IA: inflammatory arthritis, IP: interphalangeal, H: hands, L: left, MCP: metacarpophalangeal, min: minutes, MTP: metatarsophalangeal, N: no, neg: negative, OA:

osteoarthritis, PIP: proximal interphalangeal, pos: positive, R: right, RF: rheumatoid factor, SENS: Simple Erosions Narrowing Score, SvdH: Sharp van der Heijde, US: ultrasound, Y: yes. Joints with \* were tender on physical examination.