



Universiteit
Leiden
The Netherlands

Health and imaging outcomes in axial spondyloarthritis

Machado, P.M.

Citation

Machado, P. M. (2016, October 18). *Health and imaging outcomes in axial spondyloarthritis*. Retrieved from <https://hdl.handle.net/1887/43590>

Version: Not Applicable (or Unknown)

License: [Licence agreement concerning inclusion of doctoral thesis in the Institutional Repository of the University of Leiden](#)

Downloaded from: <https://hdl.handle.net/1887/43590>

Note: To cite this publication please use the final published version (if applicable).

Cover Page



Universiteit Leiden



The handle <http://hdl.handle.net/1887/43590> holds various files of this Leiden University dissertation

Author: Machado, Pedro

Title: Health and imaging outcomes in axial spondyloarthritis

Issue Date: 2016-10-18

LIST OF PUBLICATIONS

1. Machado PM, Baraliakos X, van der Heijde D, Braun J, Landewé R. **MRI vertebral corner inflammation followed by fat deposition is the strongest contributor to the development of new bone at the same vertebral corner: a multilevel longitudinal analysis in patients with ankylosing spondylitis.** Ann Rheum Dis 2016;75:1486-93
2. Rothwell S, Cooper RG, Lundberg IE, Miller FW, Gregersen PK, Bowes J, Vencovsky J, Danko K, Limaye V, Selva-O'Callaghan A, Hanna MG, Machado PM, Pachman LM, Reed AM, Rider LG, Cobb J, Platt H, Molberg Ø, Benveniste O, Mathiesen P, Radstake T, Doria A, De Bleecker J, De Paepe B, Maurer B, Ollier WE, Padyukov L, O'Hanlon TP, Lee A, Amos CI, Gieger C, Meitinger T, Winkelmann J, Wedderburn LR, Chinoy H, Lamb JA; Myositis Genetics Consortium. **Dense genotyping of immune-related loci in idiopathic inflammatory myopathies confirms HLA alleles as the strongest genetic risk factor and suggests different genetic background for major clinical subgroups.** Ann Rheum Dis. 2016;75:1558-66.
3. Navarro-Compán V, Machado PM. **Spondyloarthropathies: Sacroiliac joint radiographic progression - speed and determinants.** Nat Rev Rheumatol. 2016;12:380-2.
4. Moltó A, Etcheto A, van der Heijde D, Landewé R, van den Bosch F, Bautista Molano W, Burgos-Vargas R, Cheung PP, Collantes-Estevez E, Deodhar A, El-Zorkany B, Erdes S, Gu J, Hajjaj-Hassouni N, Kiltz U, Kim TH, Kishimoto M, Luo SF, Machado PM, Maksymowych WP, Maldonado-Cocco J, Marzo-Ortega H, Montecucco CM, Ozgocmen S, van Gaalen F, Dougados M. **Prevalence of comorbidities and evaluation of their screening in spondyloarthritis: results of the international cross-sectional ASAS-COMOSPA study.** Ann Rheum Dis. 2016;75:1016-23.
5. Gouveia N, Rodrigues A, Ramiro S, Eusébio M, Machado PM, Canhão H, Branco JC. **The Use of Analgesic and Other Pain-Relief Drugs to Manage Chronic Low Back Pain: Results from a National Survey.** Pain Pract. 2016 May 21. [Epub ahead of print]
6. Machado PM. **Measurements, composite scores and the art of 'cutting-off'.** Ann Rheum Dis. 2016;75:787-90.
7. Herbert MK, Stammen-Vogelzangs J, Verbeek MM, Rietveld A, Lundberg IE, Chinoy H, Lamb JA, Cooper RG, Roberts M, Badrising UA, De Bleecker JL, Machado PM, Hanna MG, Plestilova L, Vencovsky J, van Engelen BG, Puijn GJ. **Disease specificity of autoantibodies to cytosolic 5'-nucleotidase 1A in sporadic inclusion body myositis versus known autoimmune diseases.** Ann Rheum Dis. 2016;75:696-701.
8. Ahmed M*, Machado PM*, Miller A*, Spicer C*, Herbelin L, He J, Noel J, Wang

- Y, McVey AL, Pasnoor M, Gallagher P, Statland J, Lu CH, Kalmar B, Brady S, Sethi H, Samandouras G, Parton M, Holton JL, Weston A, Collinson L, Taylor JP, Schiavo G, Hanna MG, Barohn RJ, Dimachkie MM, Greensmith L. **Targeting protein homeostasis in sporadic inclusion body myositis.** Sci Transl Med. 2016;8:331ra41. *[Joint first authors].
9. Gouveia N, Rodrigues A, Eusébio M, Ramiro S, Machado P, Canhão H, Branco JC. **Prevalence and social burden of active chronic low back pain in the adult Portuguese population: results from a national survey.** Rheumatol Int. 2016;36:183-97.
10. Beyer C, Ramiro S, Sivera F, Mandl P, Machado PM, Ospelt C, Moltó A, Radner H, Iagnocco A, Bijlsma JW, Lundberg IE. **Educational needs and preferences of young European clinicians and physician researchers working in the field of rheumatology.** RMD Open. 2016;2:e000240.
11. Branco JC, Rodrigues AM, Gouveia N, Eusébio M, Ramiro S, Machado PM, da Costa LP, Mourão AF, Silva I, Laires P, Sepriano A, Araújo F, Gonçalves S, Coelho PS, Tavares V, Cerol J, Mendes JM, Carmona L, Canhão H; EpiReumaPt study group. **Prevalence of rheumatic and musculoskeletal diseases and their impact on health-related quality of life, physical function and mental health in Portugal: results from EpiReumaPt- a national health survey.** RMD Open. 2016;2:e000166.
12. Morrow JM, Sinclair CD, Fischmann A, Machado PM, Reilly MM, Yousry TA, Thornton JS, Hanna MG. **MRI biomarker assessment of neuromuscular disease progression: a prospective observational cohort study.** Lancet Neurol. 2016;15:65-77.
13. Gang Q, Bettencourt C, Houlden H, Hanna MG, Machado PM. **Genetic advances in sporadic inclusion body myositis.** Curr Opin Rheumatol. 2015;27:586-94.
14. Castrejon I, Carmona L, Agrinier N, Andres M, Briot K, Caron M, Christensen R, Consolaro A, Curbelo R, Ferrer M, Foltz V, Gonzalez C, Guillemin F, Machado PM, Prodingier B, Ravelli A, Scholte-Voshaar M, Uhlig T, van Tuyl LH, Zink A, Gossec L. **The EULAR Outcome Measures Library: development and an example from a systematic review for systemic lupus erythematosus instruments.** Clin Exp Rheumatol. 2015;33:910-6.
15. Vieira-Sousa E, Machado PM, Costa J, Ribeiro A, Aguiar R, Cerqueira M, Neto A, Bernardo A, Cordeiro A, Duarte C, Vinagre F, Canhão H, Santos H, Neves JS, Cunha-Miranda L, Silva M, Santos MJ, Bernardes M, Bogas M, Abreu P, Viana-Queiroz M, Barros R, Falcão S, Pimenta S, Teixeira V, Fonseca JE, Barcelos A; Portuguese Society of Rheumatology. **Portuguese recommendations for the use of biological therapies in patients with psoriatic arthritis – 2015 update.** Acta Reumatol Port. 2015;40:275-90.

16. Cruz A, Machado P, Hill J, Campos M, Apóstolo J, Marques A, Malcata A, Ndosi M. **Cross-cultural validation of the Portuguese version of the educational needs assessment tool (PortENAT).** Acta Reumatol Port. 2015;40:242-53.
17. Rodrigues AM, Gouveia N, da Costa LP, Eusébio M, Ramiro S, Machado P, Mourão AF, Silva I, Laires P, Sepriano A, Araújo F, Coelho PS, Gonçalves S, Zhao A, Fonseca JE, de Almeida JM, Tavares V, da Silva JA, Barros H, Cerol J, Mendes J, Carmona L, Canhão H, Branco JC. **EpiReumaPt- the study of rheumatic and musculoskeletal diseases in Portugal: a detailed view of the methodology.** Acta Reumatol Port. 2015;40:110-24.
18. Gouveia N, Rodrigues AM, Ramiro S, Machado P, da Costa LP, Mourão AF, Silva I, Rego T, Laires P, André R, Mauricio L, Romeu JC, Tavares V, Cerol J, Canhão H, Branco JC. **EpiReumaPt: how to perform a national population based study - a practical guide.** Acta Reumatol Port. 2015;40:128-36.
19. Gang Q, Bettencourt C, Machado PM, Fox Z, Brady S, Healy E, Parton M, Holton JL, Hilton-Jones D, Shieh PB, Zanoteli E, De Paepe B, De Bleecker J, Shaibani A, Ripolone M, Violano R, Moggio M, Barohn RJ, Dimachkie MM, Mora M, Mantegazza R, Zanotti S, Hanna MG, Houlden H; Muscle Study Group and the International IBM Genetics Consortium. **The effects of an intronic polymorphism in TOMM40 and APOE genotypes in sporadic inclusion body myositis.** Neurobiol Aging. 2015;36:1766.e1-3.
20. Machado P, Navarro-Compán V, Landewé R, van Gaalen FA, Roux C, van der Heijde D. **Calculating the ankylosing spondylitis disease activity score if the conventional C-reactive protein level is below the limit of detection or if high-sensitivity C-reactive protein is used: an analysis in the DESIR cohort.** Arthritis Rheumatol. 2015;67:408-13.
21. van der Heijde D, Aletaha D, Carmona L, Edwards CJ, Kvien TK, Kouloumas M, Machado P, Oliver S, de Wit M, Dougados M. **2014 Update of the EULAR standardised operating procedures for EULAR-endorsed recommendations.** Ann Rheum Dis. 2015;74:8-13.
22. Machado PM, Ahmed M, Brady S, Gang Q, Healy E, Morrow JM, Wallace AC, Dewar L, Ramdharry G, Parton M, Holton JL, Houlden H, Greensmith L, Hanna MG. **Ongoing developments in sporadic inclusion body myositis.** Curr Rheumatol Rep. 2014;16:477.
23. Ndosi M, Bremander A, Hamnes B, Horton M, Kukkurainen ML, Machado P, Marques A, Meesters J, Stamm TA, Tennant A, de la Torre-Aboki J, Vliet Vlieland TP, Zangi HA, Hill J. **Validation of the educational needs assessment tool as a generic instrument for rheumatic diseases in seven European countries.** Ann Rheum Dis. 2014;73:2122-9.
24. Frank-Bertoncelj M, Hatemi G, Ospelt C, Ramiro S, Machado P, Mandl P, Gossec

- L, Buch MH. **Mentoring of young professionals in the field of rheumatology in Europe: results from an EMerging EUlar NETwork (EMEUNET) survey.** Clin Exp Rheumatol. 2014;32:935-41.
25. Machado PM, Raychaudhuri SP. **Disease activity measurements and monitoring in psoriatic arthritis and axial spondyloarthritis.** Best Pract Res Clin Rheumatol. 2014;28:711-28.
 26. Machado PM, Dimachkie MM, Barohn RJ. **Sporadic inclusion body myositis: new insights and potential therapy.** Curr Opin Neurol. 2014;27:591-8.
 27. Brady S, Healy EG, Machado P, Parton M, Holton JL, Hanna MG. **Inclusion Body Myositis: clinical review and current practice.** Clinical Practice. 2014;11:623-37.
 28. Gang Q, Bettencourt C, Machado P, Hanna MG, Houlden H. **Sporadic inclusion body myositis: the genetic contributions to the pathogenesis.** Orphanet J Rare Dis. 2014;19:88.
 29. Hiscock A, Dewar L, Parton M, Machado P, Hanna M, Ramdharry G. **Frequency and circumstances of falls in people with inclusion body myositis: a questionnaire survey to explore falls management and physiotherapy provision.** Physiotherapy. 2014;100:61-5.
 30. Machado P, Brady S, Hanna MG. **Update in inclusion body myositis.** Curr Opin Rheumatol. 2013;25:763-71.
 31. Machado P. **Anti-tumor necrosis factor and new bone formation in ankylosing spondylitis: the controversy continues.** Arthritis Rheum. 2013;65:2537-40.
 32. Machado P, Landewé R. **Spondyloarthritis: Is it time to replace BASDAI with ASDAS?** Nat Rev Rheumatol. 2013;9:388-90.
 33. Machado P, Landewé R, Braun J, Baraliakos X, Hermann KG, Hsu B, Baker D, van der Heijde D. **Ankylosing spondylitis patients with and without psoriasis do not differ in disease phenotype.** Ann Rheum Dis. 2013;72:1104-7.
 34. Cortese A, Machado P, Morrow J, Dewar L, Hiscock A, Miller A, Brady S, Hilton-Jones D, Parton M, Hanna MG. **Longitudinal observational study of sporadic inclusion body myositis: implications for clinical trials.** Neuromuscul Disord. 2013;23:404-12.
 35. Marques A, Mota A, Canhão H, Romeu JC, Machado P, Ruano A, Barbosa AP, Dias AA, Silva D, Araújo D, Simões E, Aguas F, Rosendo I, Silva I, Crespo J, Alves JD, Costa L, Mascarenhas M, Lourenço Ó, Ferreira PL, Lucas R, Roque R, Branco JC, Tavares V, Johansson H, Kanis J, Pereira da Silva JA. **A FRAX model for the estimation of osteoporotic fracture probability in Portugal.** Acta Reumatol Port. 2013;38:104-12.
 36. Machado P, Landewé R, van der Heijde D. **New developments in the diagnosis and treatment of axial spondyloarthritis.** Clinical Investigation. 2013;3:153-71.

37. Machado P, Landewé RB, Braun J, Baraliakos X, Hermann KG, Hsu B, Baker D, van der Heijde D. **MRI inflammation and its relation with measures of clinical disease activity and different treatment responses in patients with ankylosing spondylitis treated with a tumour necrosis factor inhibitor.** Ann Rheum Dis. 2012;71:2002-5.
38. Januário F, Almeida J, Serra S, Amaral C, Machado P, Rodrigues LA. **Characterization of patients with ankylosing spondylitis in hidrokinestherapy - a multidimensional assessment.** Acta Med Port. 2012;25:301-7.
39. Gaujoux-Viala C, Knevel R, Mandl P, Nagy G, Frank M, Machado P, Hatemi G, Buch MH, Aletaha D, Gossec L; EMEUNET working group. **Who are the young professionals working in the field of rheumatology in Europe and what are their needs? An EMEUNET (EMerging EUlar NETwork) survey.** Ann Rheum Dis. 2012;71:1432-3.
40. Chung HY, Machado P, van der Heijde D, D'Agostino MA, Dougados M. **Smokers in early axial spondyloarthritis have earlier disease onset, more disease activity, inflammation and damage, and poorer function and health-related quality of life: results from the DESIR cohort.** Ann Rheum Dis. 2012;71:809-16.
41. van der Heijde D, Machado P, Braun J, Hermann KG, Baraliakos X, Hsu B, Baker D, Landewé R. **MRI inflammation at the vertebral unit only marginally predicts new syndesmophyte formation: a multilevel analysis in patients with ankylosing spondylitis.** Ann Rheum Dis. 2012;71:369-73.
42. Machado P, Bernardo A, Cravo AR, Rodrigues A, Malcata A, Nour D, Vieira-Sousa E, Godinho F, Pimentel F, Canhão H, Santos H, Cunha I, Fonseca JE, Costa J, Costa L, Cunha-Miranda L, Maurício L, Cruz M, Santos MJ, Bernardes M, Bogas M, Valente P, Ramiro S, Barcelos A; Portuguese Society of Rheumatology. **Portuguese recommendations for the use of biological therapies in patients with axial spondyloarthritis - December 2011 update.** Acta Reumatol Port. 2012;37:40-7.
43. Machado P, Bogas M, Ribeiro A, Costa J, Neto A, Sepriano A, Raposo A, Cravo AR, Vilar A, Furtado C, Ambrósio C, Miguel C, Vaz C, Catita C, Nour D, Araújo D, Vieira-Sousa E, Teixeira F, Brandão F, Canhão H, Cordeiro I, Gonçalves I, Ferreira J, Fonseca JE, da Silva JA, Romeu J, Ferreira J, Costa L, Maurício L, Cunha-Miranda L, Parente M, Coutinho M, Cruz M, Oliveira M, Salvador MJ, Santos MJ, Pinto P, Valente P, Abreu P, Roque R, Ramiro S, Capela S, Las V, Barcelos A; Portuguese Society of Rheumatology. **2011 Portuguese recommendations for the use of biological therapies in patients with psoriatic arthritis.** Acta Reumatol Port. 2012;37:26-39.
44. Laires PA, Canhão H, Araújo D, Fonseca JE, Machado P, Mourão AF, Ramiro S, Romeu JC, Santos MJ, Silva I, Silva JA, Sousa E, Tavares V, Gouveia N, Branco JC. **CoReumaPt protocol: the Portuguese cohort of rheumatic diseases.** Acta

Reumatol Port. 2012;37:18-24.

45. Machado P, Santos MJ, Fonseca JE. **Recommendations of the Portuguese Society of Rheumatology: a contribution towards improving the quality of health care.** Acta Reumatol Port. 2012;37:7-8.
46. Chung HY, Machado P, van der Heijde D, D'Agostino MA, Dougados M. **HLA-B27 positive patients differ from HLA-B27 negative patients in clinical presentation and imaging: results from the DESIR cohort of patients with recent onset axial spondyloarthritis.** Ann Rheum Dis. 2011;70:1930-6.
47. Fonseca JE, Bernardes M, Canhão H, Santos MJ, Quintal A, Malcata A, Neto A, Cordeiro A, Rodrigues A, Mourão AF, Ribeiro AS, Cravo AR, Barcelos A, Cardoso A, Vilar A, Braña A, Faustino A, Silva C, Duarte C, Araújo D, Nour D, Sousa E, Simões E, Godinho F, Brandão F, Ventura F, Sequeira G, Figueiredo G, Cunha I, Matos JA, Branco J, Ramos J, Costa JA, Gomes JA, Pinto J, Silva JC, Silva JA, Patto JV, Costa L, Miranda LC, Inês L, Santos LM, Cruz M, Salvador MJ, Ferreira MJ, Rial M, Queiroz MV, Bogas M, Araújo P, Reis P, Abreu P, Machado P, Pinto P, André R, Melo R, Garcês S, Cortes S, Alcino S, Ramiro S, Capela S; Portuguese Society of Rheumatology. **Portuguese guidelines for the use of biological agents in rheumatoid arthritis - October 2011 update.** Acta Reumatol Port. 2011;36:385-8.
48. Machado P, Landewé R, Braun J, Hermann KG, Baraliakos X, Baker D, Hsu B, van der Heijde D. **A stratified model for health outcomes in ankylosing spondylitis.** Ann Rheum Dis. 2011;70:1758-64.
49. Machado PM, Landewé RB, van der Heijde DM. **Endorsement of definitions of disease activity states and improvement scores for the Ankylosing Spondylitis Disease Activity Score: results from OMERACT 10.** J Rheumatol. 2011;38:1502-6.
50. Machado P, van der Heijde D. **How to measure disease activity in axial spondyloarthritis?** Curr Opin Rheumatol. 2011;23:339-45.
51. Ndosi M, Tennant A, Bergsten U, Kukkurainen ML, Machado P, de la Torre-Aboki J, Vlieland TP, Zangi HA, Hill J. **Cross-cultural validation of the Educational Needs Assessment Tool in RA in 7 European countries.** BMC Musculoskelet Disord. 2011;12:110.
52. Koevoets R, Machado P, Bombardier C, van der Heijde DM. **The value of conventional radiographs in undifferentiated arthritis: a systematic review.** J Rheumatol Suppl. 2011;87:26-30.
53. Machado PM, Koevoets R, Bombardier C, van der Heijde DM. **The value of magnetic resonance imaging and ultrasound in undifferentiated arthritis: a systematic review.** J Rheumatol Suppl. 2011;87:31-7.
54. Hazlewood G, Aletaha D, Carmona L, Landewé RB, van der Heijde DM, Bijlsma

- JW, Bykerk VP, Canhão H, Catrina AI, Durez P, Edwards CJ, Leeb BF, Mjaavatten MD, Martinez-Osuna P, Montecucco C, Ostergaard M, Serra-Bonett N, Xavier RM, Zochling J, Machado P, Thevissen K, Vercoutere W, Bombardier C. **Algorithm for identification of undifferentiated peripheral inflammatory arthritis: a multinational collaboration through the 3e initiative.** J Rheumatol Suppl. 2011;87:54-8.
55. Machado P, Castrejon I, Katchamart W, Koevoets R, Kuriya B, Schoels M, Silva-Fernández L, Thevissen K, Vercoutere W, Villeneuve E, Aletaha D, Carmona L, Landewé R, van der Heijde D, Bijlsma JW, Bykerk V, Canhão H, Catrina AI, Durez P, Edwards CJ, Mjaavatten MD, Leeb BF, Losada B, Martín-Mola EM, Martinez-Osuna P, Montecucco C, Müller-Ladner U, Østergaard M, Sheane B, Xavier RM, Zochling J, Bombardier C. **Multinational evidence-based recommendations on how to investigate and follow-up undifferentiated peripheral inflammatory arthritis: integrating systematic literature research and expert opinion of a broad international panel of rheumatologists in the 3E Initiative.** Ann Rheum Dis. 2011;70:15-24.
 56. Machado P, Landewé R, Lie E, Kvien TK, Braun J, Baker D, van der Heijde D; **Assessment of SpondyloArthritis international Society. Ankylosing Spondylitis Disease Activity Score (ASDAS): defining cut-off values for disease activity states and improvement scores.** Ann Rheum Dis. 2011;70:47-53.
 57. Ribeiro A, Machado P, Ramiro S, Duarte C, Mourão AF, Bogas M, Costa L, Bernardes M, Santos MJ, Fonseca JE, Silva JA, Canhão H. **Portuguese recommendations on “How to diagnose, monitor, and treat undifferentiated peripheral arthritis”: systematic review of the literature and the experts’ opinion.** Acta Reumatol Port. 2010;35:475-96.
 58. Machado P, Landewé R, Braun J, Hermann KG, Baker D, van der Heijde D. **Both structural damage and inflammation of the spine contribute to impairment of spinal mobility in patients with ankylosing spondylitis.** Ann Rheum Dis. 2010;69:1465-70.
 59. Machado P, Coutinho M, da Silva JA. **Selecting men for bone densitometry: performance of osteoporosis risk assessment tools in Portuguese men.** Osteoporos Int. 2010;21:977-83.
 60. Bogas M, Machado P, Mourão AF, Costa L, Santos MJ, Fonseca JE, Silva JA, Canhão H. **Methotrexate treatment in rheumatoid arthritis: management in clinical remission, common infection and tuberculosis. Results from a systematic literature review.** Clin Rheumatol. 2010;29:629-35.
 61. Santos A, Machado P, Pereira C, Loureiro C, Silva J, Malcata A, Chieira C: **Treatment with anti -TNF: Risk factor for allergic sensitization in patients with rheumatoid arthritis?** Rev Port Imunoalergologia. 2010;18:57-71.

62. Fonseca JE, Canhão H, Reis P, Santos MJ, Branco J, Quintal A, Malcata A, Araújo D, Ventura F, Figueiredo G, da Silva JC, Patto JV, de Queiroz MV, Santos RA, Neto AJ, de Matos Ad, Rodrigues A, Mourão AF, Ribeiro AS, Cravo AR, Barcelos A, Cardoso A, Vilar A, Braña A, Faustino A, Silva C, Godinho F, Cunha I, Costa JA, Gomes JA, Pinto JA, da Silva JA, Miranda LC, Inês L, Santos LM, Cruz M, Salvador MJ, Ferreira MJ, Rial M, Bernardes M, Bogas M, Araújo P, Machado P, Pinto P, de Melo RG, Cortes S, Alcino S, Capela S; Grupo de Estudos de Artrite Reumatóide da Sociedade Portuguesa de Reumatologia. **Portuguese guidelines for the use of biological agents in rheumatoid arthritis - March 2010 update.** Acta Reumatol Port. 2010;35:95-8.
63. Ramiro S*, Machado P*, Singh JA, Landewé RB, da Silva JA. **Applying science in practice: the optimization of biological therapy in rheumatoid arthritis.** Arthritis Res Ther. 2010;12:220. *[Joint first authors].
64. Machado P*, Santos A*, Pereira C, Loureiro C, Silva J, Chieira C, Malcata A. **Increased prevalence of allergic sensitisation in rheumatoid arthritis patients treated with anti-TNFalpha.** Joint Bone Spine. 2009;76:508-13. *[Joint first authors].
65. Machado P, Miller A, Holton J, Hanna M. **Sporadic inclusion body myositis: an unsolved mystery.** Acta Reumatol Port. 2009;34:161-82.
66. Monteiro P, Coutinho M, Machado P, Garcia J, Salvador MJ, Inês L, Silva J, Malcata A. **Interstitial lung disease as the sole manifestation of antisyntetase syndrome.** Acta Reumatol Port. 2009;34:256-60.
67. Canhão H, Santos MJ, Costa L, Bogas M, Mourão AF, Machado P, Fonseca JE, Silva JA; Multinational 3E Initiative. **Portuguese recommendations for the use of methotrexate in the treatment of rheumatoid arthritis.** Acta Reumatol Port. 2009;34:78-95.
68. Machado P*, Santos A*, Faria E, Silva J, Malcata A, Chieira C. **Arthritis and X-linked agammaglobulinemia.** Acta Reumatol Port. 2008;33:464-7. *[Joint first authors].
69. Machado P, da Silva JA. **Performance of decision algorithms for the identification of low bone mineral density in Portuguese postmenopausal women.** Acta Reumatol Port. 2008;33:314-28.
70. Machado P, Gawronski J, Gall A. **Ankylosing spondylitis and spinal cord injury.** Acta Reumatol Port. 2008;33:231-7.

CURRICULUM VITAE

Pedro Machado was born on the 2nd of August 1978 in Porto, Portugal. He studied Medicine at the University of Coimbra in Portugal and obtained his medical degree in October 2002. He obtained his MSc in Rheumatology at the same University in November 2010 (title of the thesis: 'Performance of osteoporosis risk assessment tools in Portuguese postmenopausal women: a cost-effectiveness analysis'). He trained in Rheumatology at the Department of Rheumatology of Coimbra University Hospital, in Coimbra, Portugal. As part of his training he did a 3-month rotation in musculoskeletal rehabilitation at the Royal National Orthopaedic Hospital, in Stanmore, London, United Kingdom (UK), another 3-month rotation in neuromuscular diseases at the National Hospital for Neurology and Neurosurgery, in London, UK, and a 6-month rotation in clinical research at the Department of Rheumatology of Leiden University Medical Centre (LUMC), in Leiden, The Netherlands. This rotation at the LUMC was instrumental for him to choose a clinical academic career and undertake the research work that resulted in this thesis at the same institution, focusing on the assessment (including imaging assessment) and prediction of outcomes in axial spondyloarthritis. He obtained his specialist accreditation in Rheumatology in Portugal (2013) and in the UK (2014). He has (co)-authored 70 articles (original articles, reviews and editorials) and 2 book chapters. He has been awarded 4 fellowships and 11 scientific prizes. He is currently a National Institute for Health Research (NIHR) Researcher & Honorary Consultant Rheumatologist at University College London and University College London Hospitals, in London, UK.

ACKNOWLEDGEMENTS

I would like to thank my supervisors, Professor Désirée van der Heijde and Professor Robert Landewé, for the opportunity to work in a world-class research environment and for being a continuous source of inspiration, knowledge, advice and support.

I would like to express my gratitude to Professor José António Pereira da Silva and to Dr Armando Malcata, for their guidance and for supporting me in undertaking my PhD before completing the clinical training.

Thank you to Professor Michael Hanna, Professor David Isenberg, and Dr Maria José Leandro, for their trust and support, and for helping me to build a clinical academic career in the United Kingdom.

Special thanks to my parents, Maria da Graça and José Alberto, for their unconditional love and for raising me for who I am today. Thank you to my brother Jorge and to my sister Sofia, for their positive energy and unlimited confidence in my work.

Thank you to all my old friends and colleagues for tolerating the distance and for making me feel as if I never left Portugal. Thank you to all my new friends and colleagues for helping me one way or the other and for making me feel at home in a new country. The list is too long to name them all individually.

Finally, I would like to thank Alexandra for her endless love and encouragement; and Leonardo, for the sense of fulfilment and realisation he has brought to my life.