Publications - Full Papers

Validity and diagnostic performance of fluorescence optical imaging measuring synovitis in hand osteoarthritis: baseline results from the Nor-Hand cohort
Ø. Maugesten, A. Mathiessen, H. B. Hammer, S. V. Hestetun, T. K. Kvien, T. Uhlig, S. Ohrndorf, I. K. Haugen
Arthritis research & therapy 2020, 22:98

The first composite score predicting Digital Ulcers in systemic sclerosis patients using Clinical data, Imaging and Patient history—CIP-DUS
S. Friedrich, S. Lüders, J. Klotsche, G. R. Burmester, G. Riemekasten, S. Ohrndorf
Arthritis research & therapy 2020, 22:144

Detection of subclinical skin manifestation in patients with psoriasis and psoriatic arthritis by fluorescence optical imaging
A. Schmidt, A. M. Glimm, I. K. Haugen, P. Hoff, G. Schmittat, G. R. Burmester, J. Klotsche, S. Ohrndorf
Arthritis research & therapy 2020, 22:192

Evaluation of three scoring methods for Fluorescence Optical Imaging in erosive hand osteoarthritis and rheumatoid arthritis
Ø. Maugesten, S. Ohrndorf, D. Glinatsi, M. Ammitzbøll-Danielsen, I. K. Haugen
Osteoarthritis and Cartilage Open, Volume 1, Issues 3–4, January–February 2020, Article 100017.

Association between baseline clinical and imaging findings and the development of digital ulcers in patients with systemic sclerosis
S. Friedrich, S. Lüders, A. M. Glimm, S. G. Werner, G. Schmittat, G. R. Burmester, M. Backhaus, G. Riemekasten, S. Ohrndorf
Arthritis research & therapy 2019, 21:96

Fluorescence optical imaging for treatment monitoring in patients with early and active rheumatoid arthritis in a 1-year follow-up period
Glimm A-M, Sprenger L I, Haugen I K, Mansmann U, Hermann S, Häupl T, Hoff P, Burmester G-R, Backhaus M, Le L, Ohrndorf S
Arthritis research & therapy 2019, 21:209

Fluorescence optical imaging for the detection of potential psoriatic arthritis in comparison to musculoskeletal ultrasound
Erdmann-Keding M, Ohrndorf S, Werner S G, Glimm A-M, Burmester G-R, Kokolakis G, Zuberbier T, Sterry W, Backhaus M, Philipp S
Journal der Deutschen Dermatologischen Gesellschaft 2019, 17(9):913-921

Feasibility, inter-reader reliability, and comparison of fluorescence optical imaging enhancement in patients with erosive hand osteoarthritis and rheumatoid arthritis
Maugesten O, Ohrndorf S, Glinatsi D, Ammitzbøll-Danielsen M, Kisten Y, Ostergaard M, Terslev L, Uhlig T, Kvien TK, Haugen IK
Osteoarthritis and Cartilage 2019, 27:S319-S320

THE RHEUMATOID HAND IN THE LIGHT OF FLUORESCENCE: A DIAGNOSTIC TECHNIQUE OF THE FUTURE?
ŻUCHOWSKI P, WASZCZAK-JEKA M, KUDLICKI S, JEKA S
REUMATOLOGIA 2019; 57, 1: 45–49

THE "GREEN NAIL" PHENOMENON IN ICG-ENHANCED FLUORESCENCE OPTICAL IMAGING - A POTENTIAL TOOL FOR THE DIFFERENTIAL DIAGNOSIS OF PSORIATIC ARTHRITIS.
Wiemann O, Werner SG, Langer HE, Backhaus M, Chatelain R.
Dtsch Dermatol Ges. 2019 Feb;17(2):138-147

Comparison of fluorescence optical imaging, ultrasonography and clinical examination with magnetic resonance imaging as a reference in active rheumatoid arthritis patients
Hirano F, Yokoyama-Kokuryoa W, Yamazakia H, Tsutsuminoa M, Sakaia R, Satohc S, Kimurac T, Tojod N, Kohsakaa H, Harigaia M
Immunological Medicine 2018

Fluorescence optical imaging in paediatric rheumatology
Beck M
Pädiatrische Praxis, 2018 89(3):387-397

Update on imaging in rheumatology – recent advances
Cheung K K, Hall-Craggs M A
Medicine 2018; 46 (3): 170-174

Fluorescence optical imaging enhancement is associated with joint pain in hand osteoarthritis
Maugesten Ö, Ohrndorf S, Hestetun S V, Slatkowsky-Christensen B, Kvien T K, Uhlig T, Haugen I K
Osteoarthritis and Cartilage 2018; 26 S10-S59

Noninvasive quantitative assessment of microcirculatory disorders of the upper extremities with 2D fluorescence optical imaging
Neumann J, Schmaderer C, Finsterer S, Zimmermann A, Steubl D, Helfen A, Berninger M, Lohöfer F, Rummeny E J, Meier R
Clinical Hemorheology and Microcirculation 2018, vol. Pre-press, no. Pre-press, pp. 1-13

Fluorescence optical imaging in pediatric patients with inflammatory and non- inflammatory joint diseases: a comparative study with ultrasonography
Beck MC, Glimm A-M, Ohrndorf S, Minden K, Trauzeddel R., Werner SG, Horneff G, Backhaus M, Burmester GR, Kallinich T, Girschick H, Klotsche J
Arthritis research & Therapy 2017; 19:233

Fluorescence optical imaging and musculoskeletal ultrasonography in juvenile idiopathic polyarticular disease before and during antirheumatic treatment - a multicenter non-interventional diagnostic evaluation
Klein A, Just GW, Werner SG, Oommen PT, Minden K, Becker I, Langer H-E, Klee D, Horneff G
Arthritis Research & Therapy 2017; 19:147

A hospital-based observational cohort study exploring pain and biomarkers in patients with hand osteoarthritis in Norway: The Nor-Hand protocol
Gloersen M, Mulrooney E, Mathiessen A, Hammer HB, Slatkowsky-Christensen B, Faraj K, Isaksen T, Neogi T, Kvien TK, Magnusson K, Haugen IK
BMJ Open 2017; 7(9):e016938

Disturbed microcirculation in the hands of patients with systemic sclerosis detected by fluorescence optical imaging: A pilot study
Friedrich S, Lüders S, Werner SG, Glimm A-M, Burmester G-R, Riemekasten R, Backhaus M, Ohrndorf S
Arthritis Research & Therapy 2017; 19:87

Fluorescence optical imaging and 3T-MRI for detection of synovitis in patients with rheumatoid arthritis in comparison to a composite standard of reference
Thuermel K, Neumann J, Jungmann PM, Schäffeler C, Waldt S, Heinze A, Beckmann A, Hauser C, Hasenau A-L, Wildgruber M, Clotten S, Sievert M, Haller B, Woertler K, Harasser N, Rummeny EJ, Meier R
EuropJournalRadiology 2017; 90:6-13

Fluoreszenzoptische Bildgebung
Werner S, Langer H-E
Aktuelle Rheumatologie 2016

A novel arthritis in vivo fluorescence optical imaging technology pushed to the limits continued-unravelling the signals: Quantitative analysis does not distinguish inflammatory skin lesions from active synovitis
Finsterer S, Moog P, Meier R, Thürmel K
Rheumatology 2016; 273-274

Diagnosis and management of rheumatoid arthritis; What is the current role of established and new imaging techniques in clinical practice?
D'Agostino MA, Haavardsholm EA, van der Laken CJ
Best Practice & Research Clinical Rheumatology 2016; Vol. 30, Pages 586-607

ICG-gestützte fluoreszenzoptische Bildgebung: ein neues diagnostisches Verfahren zur Früherkennung und Therapiekontrolle bei Psoriasis-Arthritis
Chatelain R, Wiemann O, Werner S G, Langer H-E
Akt Dermatol 2016; 42(10): 398-405

Analysis of distribution and severity of inflammation in patients with osteoarthritis compared to rheumatoid arthritis by ICG-enhanced fluorescence optical imaging and musculoskeletal ultrasound: a pilot study.
Glimm AM, Werner SG, Burmester GR, Backhaus M, Ohrndorf S
Ann Rheum Dis. 2016 Mar; 75(3):566-70

A need for new imaging modality to detect inflammation in rheumatoid arthritis and osteoarthritis?
Haugen IK, Hammer HB
Ann Rheum Dis 2015; 75(3) 479-480

The association between endothelial microparticles and inflammation in patients with systemic sclerosis and Raynaud's phenomenon as detected by functional imaging.
Jung C, Drummer K, Oelzner P, Figulla HR, Boettcher J, Franz M, Betge S, Foerster M, Wolf G, Pfeil A
Clin Hemorheol Microcirc. 2015; 61(3):549-57

Near-infrared Fluorescence Optical Imaging in Early Rheumatoid Arthritis: A Comparison to Magnetic Resonance Imaging and Ultrasonography.
Krohn M, Ohrndorf S, Werner SG, Schicke B, Burmester GR, Hamm B, Backhaus M, Hermann KG
J Rheumatol. 2015 Jul; 42(7):1112-8

The Application of Fluorescence Optical Imaging in Systemic Sclerosis.
Pfeil A, Drummer KF, Böttcher J, Jung C, Oelzner P, Renz DM, Franz M, Hansch A, Wolf G
BioMed Research International, 2015, Article ID 658710

Detection of clinically manifest and silent synovitis in the hands and wrists by fluorescence optical imaging.
Kisten Y, Györi N, af Klint E, Rezaei H, Levitsky A, Karlsson A, van Vollenhoven R.
RMD Open 2015;1:e000106. doi:10.1136/rmdopen-2015-000106

Validity of additional use of optical immunofluorescence imaging technique (Xiralite (R)) in detection of active psoriatic arthritis and measurement of disease activity in patients with psoriasis and psoriatic arthritis
Koehm M, Rossmanith T, Burkhardt H, Behrens F
Zeitschrift für Rheumatologie 2014; 73:10-10

Fluorescence optical imaging as a novel technique for visualization of inflammation in patients with systemic sclerosis with Raynaud's phenomenon: a pilot study.
Pfeil A, Drummer KF, Oelzner P, Boettcher J, Jung C, Wolf G.
Ann Rheum Dis 2014; 73:1279-1280

Synovitis in Patients with Early Inflammatory Arthritis Monitored with Quantitative Analysis of Dynamic Contrast-enhanced Optical Imaging and MR Imaging
Meier R, Thuermel K, Noël PB, Moog P, Sievert M, Ahari C, Nasirudin RA, Golovko D, Haller B, Ganter C, Wildgruber M, Schaeffeler C, Waldt S, Rummeny EJ.
Radiology 2014; 270: 176-85

The diagnostic utility of hand and wrist fluorescence optical imaging in evaluating active synovitis
Kisten Y, Györi N, Rezaei H, Karlsson A, af Klint E, van Vollenhoven R
Scandinavian Journal of Rheumatology 2014; 43:13-13

Subclinical synovitis of the hands and wrists detected by fluorescence optical imaging and ultrasound
Kisten Y, Györi N, Rezaei H, Karlsson A, af Klint E, van Vollenhoven R
Scandinavian Journal of Rheumatology 2014; 43:16-17

Comparison of ICG-based fluorescence optical Imaging and Joint Ultrasound in Patients with rheumatoid Arthritis and Osteoarthrosis
Glimm A, Werner SG, Ohrndorf S, Schwenke C, Schmittat G, Burmester G, Backhaus M
Zeitschrift für Rheumatologie 2013; 72:27-28

Comparing the fluorescence-optischen Imaging Method Xiralite with Arthrosonography in Patients with a secured resp have a suspected Psoriasis Arthritis
Erdmann M, Ohrndorf S, Werner SG, Schmittat G, Schwenke C, Burmester G, Sewerin P, Backhaus M
Zeitschrift für Rheumatologie 2013; 72:28-28

Bildgebende Verfahren bei Psoriasisarthritis
Hermann KG, Ohrndorf S, Werner SG, Finzel S, Backhaus M.
Z Rheumatol 2013; 72: 771-8

Spatiotemporal analysis for indocyanine green-aided imaging of rheumatoid arthritis in hand joints
Mohajerani P, Meier R, Noël PB, Rummeny EJ, Ntziachristos V.
J Biomed Opt. 2013; 18(9): 97004

Indocyanine green enhanced fluorescence optical imaging in early and very early arthritis patients: A comparative study with magnetic resonance imaging
Werner SG, Langer HE, Schott P, Bahner M, Schwenke C, Lind-Albrecht G, Spiecker F, Kurtz B, Burmester GR, Backhaus M.
Arthritis & Rheumatism 2013; 65: 3036-44

Musculoskeletal ultrasound and other imaging modalities in rheumatoid arthritis
Ohrndorf S, Werner SG, Finzel S, Backhaus M.
Curr Opin Rheumatol 2013; 25: 367-74

QUANTITATIVE ASSESSMENT OF SYNOVITIS IN PATIENTS WITH RHEUMATOID ARTHRITIS USING FLUORESCENCE OPTICAL IMAGING.
Schäfer VS, Hartung W, Hoffstetter P, Berger J, Stroszczynski C, Müller M, Fleck M, Ehrenstein BP
Arthritis research & therapy 2013; 15(5):R124

Visualizing therapeutical Effects of Vasodilators in secondary Raynaud's Syndrome by means of fluorescence optical Imaging
Koehler B, Wassenberg S
Zeitschrift für Rheumatologie 2013; 72:23-24

Descriptive Analysis der ICG-based fluorescence-optical Imaging in Patients with CTD
Granzow N, Werner SG; Ohrndorf S, Schmittat G, Burmester G, Backhaus M
Zeitschrift für Rheumatologie 2013; 72:20-21

Diagnostic potential of optical fluorescence imaging for therapy monitoring of rheumatoid arthritis
Eisenblaetter M, Bremer C
Zeitschrift für Rheumatologie 2013; 72:5-6

Comment on: A novel arthritis in vivo fluorescence optical imaging technology pushed to the limits
Werner SG, Langer H-E, Burmester GR, Backhaus M
Rheumatology (Oxford, England) 2012; 52(6)

Detection of synovitis in the hands of patients with rheumatologic disorders: diagnostic performance of optical imaging in comparison with magnetic resonance imaging.
Meier R, Thürmel K, Moog P, Noël PB, Ahari C, Sievert M, Dorn F, Waldt S, Schaeffeler C, Golovko D, Haller B, Ganter C, Weckbach S, Woertler K, Rummeny EJ.
Arthritis & Rheumatism; 2012; 64: 2489-2498

Moderne Bildgebung in der Diagnostik der frühen Arthritis
Werner SG, Ostendorf B, Backhaus M
arthritis+rheuma 2012; 32: 207-214

Fluoreszenzoptische Bildgebung mit dem Xiralite-System in der Kinderrheumatologie
Werner SG, Langer HE, Backhaus M, Horneff G
arthritis+rheuma 2012; 32: 161-166

Fluoreszenzoptisches Bildgebungssystem Xiralite® zur Einschätzung der Therapieeffizienz bei JIA
Horneff G, Werner SG, Langer HE, Backhaus M
arthritis+rheuma 2012; 29: 42-44

INFL AMMATION ASSESSMENT IN PATIENTS WITH ARTHRITIS USING A NOVEL IN VIVO FLUORESCENCE OPTICAL IMAGING TECHNOLOGY
Werner SG, Langer HE, Ohrndorf S, Bahner M, Schott M, Schwenke C, Schirner M, Bastian H, Lind-Albrecht G, Kurtz D, Burmester G, Backhaus M
Annals of Rheumatic Disease 2012; 71:504-510

Preliminary Clinical Results: An Analyzing Tool for 2D Optical Imaging in Detection of Active Inflammation in Rheumatoid Arthritis.
Nasirudin R, Meier R, Ahari C, Sievert M, Fiebich M, Rummeny EJ, Noël PB
SPIE 2012; 7965:12-1 12-6

Rheumatology reviews: October–December 2011*
Uppal S
Indian Journal of Rheumatology 2011; Vol. 6, Number 4; pp. 204–212

OPTICAL IMAGING OF RHEUMATOID ARTHRITIS
Golokov D, Meier R, Rummeny E, Daldrup-Link H.
Int J Clin Rheumatol 2011; 6(1): 67-75

FLUORESCENCE OPTICAL IMAGING OF JUVENILE ARTHRITIS
Werner SG, Langer HE, Horneff G
J Rheumatol 2011; 38; 1447

DETECTION OF RHEUMATOID ARTHRITIS USING NON-SPECIFIC CONTRAST ENHANCED FLUORESCENCE IMAGING
Fischer T, Ebert B, Voigt J, McDonald R, Schneider U, Thomas A, Hamm B, Hermann KG
Academic Radiology 2010; 17: 375-381

DETECTION OF RHEUMATOID ARTHRITIS IN HUMANS BY FLUORESCENCE IMAGING
Ebert B, Dziekan T, Weissbach C, Mahler M, Schirner M, Berliner B, Bahner M L, MacDonald R
Proceedings of SPIE - The International Society for Optical Engineering 2010; 7555

ASSESSING ACTIVITY OF RHEUMATIC ARTHRITIS WITH FLUORESCENCE OPTICAL IMAGING
Bremer C, Werner SG, Langer HE
European Musculoskeletal Review 2010; 4: 2-6

Keine Utopie: Frühe Diagnose + frühe Therapie = Remission: Mit Hausarzt, Spezialsprechstunde und Rheumascan
Huber M
CME Premium-Fortbildung für die medizinische Praxis 2010; 7(11):28-30

Abstracts

EULAR

AB0325 FLUORESCENCE OPTICAL IMAGING (FOI) AIDS DIFFERENTIAL DIAGNOSIS OF RHEUMATIC DISEASES AND INCREASES TREATMENT RESPONSE RATE IN RA THROUGH PATIENT STRATIFICATION
Ferl M, Ohrndorf S, Berger J, Briel A, Welker P
Annals of the Rheumatic Diseases 2020, 79 (Suppl 1):1461 (AB0325)

AB1138 ASSESSMENT OF FLUORESCENCE-OPTICAL IMAGING TECHNIQUE OF THE HANDS IN PSORIASIS AND PSORIATIC PATIENTS USING AN INNOVATIVE OBJECTIVE METHOD
Zerweck L, Henkemeier U, Nguyen PH, Rossmanith T, Pippow A, Burkhardt H, Behrens F, Köhm M
Annals of the Rheumatic Diseases 2020, 79 (Suppl 1):1859 (AB1138)

FRI0630 DIAGNOSTIC UTILITY OF FLUORESCENCE OPTICAL IMAGING IN INDIVIDUALS WITH SUSPECTED ARTHRITIS – A PROBABILISTIC APPROACH
Kisten Y, Levitsky A, Rezaei H, Hensvold A, Klint E A, Van Vollenhoven R, Catrina A
Annals of the Rheumatic Diseases 2019, 78(Suppl 2):A1012 (FRI0630)

AB1165 FLUORESCENCE OPTICAL IMAGING XIRALITE® IS HELPFUL IN THE DECISION FOR RITUXIMAB RE-THERAPY IN PATIENTS WITH RHEUMATOID ARTHRITIS
Ohrndorf S, Ridha L, Glimm A-M, Burmester G-R, Schmittat G, Backhaus M, Klotsche J
Annals of the Rheumatic Diseases 2019, 78(Suppl 2):2043-2044 (AB1165)

AB1159 INTER-READER RELIABILITY AND COMPARISON OF FLUORESCENCE OPTICAL IMAGING ENHANCEMENT IN PATIENTS WITH EROSIVE HAND OSTEOARTHRITIS AND RHEUMATOID ARTHRITIS
Maugesten O, Ohrndorf S, Glinatsi D, Ammitzboell-Danielsen M, Kisten Y, Ostergaard Mikkel, Terselv L, Uhlig T, Kvien T K, Haugen I K
Annals of the Rheumatic Diseases 2019, 78(Suppl 2):A2040 (AB1159)

AB 0396 MONITORING OF PATIENTS WITH RHEUMATOID ARTHRITIS BY INDOCYANINE GREEN (ICG) ENHANCED FLUORESCENCE OPTICAL IMAGING TREATED WITH ANTI-TNFI THERAPY
Hertrampf S, Klotsche J, Schefer Q, Glimm A-M, Burmester G R, Schmittat G, Häupl T, Hermann S, Backhaus M, Ohrndorf S
Annals of the Rheumatic Diseases 2019, 78(Suppl 2):A1658 (AB0396)

AB0880 The objective automated measurement of fluorescence-signal intensities in fluorescence-optical imaging technique discriminates between disease activity and its response in antitnf treated psoriatic arthritis patients – an interims analysis of the x
M. Köhm, S. Ohrndorf, T. Rossmanith, A. Foldenauer, U. Henkemeier, G. Schmittat, J. Berger, H. Burkhardt, F. Behrens
Annals of the Rheumatic Diseases 2018, 77:A1566 (AB0880)

FRI0584 Fluorescence optical imaging enhancement is associated with joint pain in hand osteoarthritis
Ø. Maugesten, S. Ohrndorf, S.V. Hestetun, B. Slatkowsky-Christensen, T.K. Kvien, T. Uhlig, I.K. Haugen
Annals of the Rheumatic Diseases 2018, 77:A815 (FRI0584)

OP0354 Radiographic erosions are associated with fluorescence optical imaging enhancement in hand osteoarthritis
Ø. Maugesten, S. Ohrndorf, S.V. Hestetun, T.K. Kvien, T. Uhlig, I.K. Haugen
Annals of the Rheumatic Diseases 1028, 77:A204 (OP0354)

AB 1202 Is fluorescence optical imaging assessment associated with ultrasonography synovitis in the wrist and hand of rheumatoid arthritis patients?
M.A. Danielsen, M. Østergaard, L. Terselv, D. Glinatsi
Annals of the Rheumatic Diseases 2018, 77:A1700 (AB1202)

The objective automated measurement of fluorescence-signal intensities in fluorescence-optical imaging technique discriminates between disease activity and its response in antitnf treated psoriatic arthritis patients – an interims analysis of the Xplore-study
M. Köhm, S. Ohrndorf, T. Rossmanith, A. Foldenauer, U. Henkemeier, G. Schmittat, J. Berger, H. Burkhardt, F. Behrens
Annals of the Rheumatic Diseases 2018; 77 (Suppl 2):1566 (AB0880)

OP0057 Fluorescence optical imaging in juvenile idiopathic polyarticular disease before and during antirheumatic treatment
Klein A, Just GW, Werner SG, Becker I, Oommen P, Minden K, Langer H-E, Horneff G
Annals of the Rheumatic Diseases 2017; 76(2):74 (OP0057)

Fluorescence optical imaging in juvenile patients with and without inflammatory pediatric rheumatic joint diseases
Beck M, Klotsche J, Glimm A-M, Ohrndorf S, Werner SG, Horneff G, Backhaus M, Trauzeddel R, Minden K, Girschick H
Annals of the Rheumatic Diseases 2017; 76(2):400 (THU0512)

Disturbances of the acral perfusion detected by fluorescence optical imaging are associated with the development of ischemic complications in patients with systemic sclerosis
Lüders S, Friedrich S, Ohrndorf S, Werner S G, Burmester G-R, Riemekasten G, Backhaus M
Annals of the Rheumatic Diseases 2017; 76(2):1008 (SAT0618)

AB1013 Development and validation of a flourescence optical imaging rheumatoid arthritis scoring system for synovitis in the wrist and hand
Glinatsi D, Ostergaard M, Terslev L, Ohrndorf S, Ammitsboll-Danielsen M
Annals of the Rheumatic Diseases 2017; 76(2):1409 (AB1013)

HAND JOINT INFLAMMATION IN EARLY RA: CLINICAL ULTRASOUND AND FLUORESCENCE OPTICAL IMAGING DIAGNOSTICS
Kisten Y, af Klingt E, Györi N, Karlsson A, Levitsky A, Rezaei H, Arnaud L, van Vollenhoven R
Annals of the Rheumatic Diseases 2016; 75(2): 1236 (AB0981)

DETECTION OF PSORIATIC ARTHRITIS IN PATIENTS WITH PSORIASIS IN DAILY ROUTINE CARE USING QUESTIONNAIRES FOR DIAGNOSIS OF PSORIATIC ARTHRITIS AND FLUORESCENCE-OPTICAL IMAGING TECHNIQUE: DIAGNOSTIC VALUE FOR DETECTION OF SUBCLINICAL SIGNS OF MUSCULOSKELETAL INFLAMMATION IN PSORIASIS?
Köhm M, Rossmanith T, Langer HE, Burmester G, Wassenberg S, Kaesser U, Backhaus M, Burkhardt H, Behrens F
Annals of the Rheumatic Diseases 2016; 75(2): 1158 (AB0741)

HAND JOINT INFLAMMATION ON FLUORESCENCE OPTICAL IMAGING REVEAL DISTINCT PATTERNS IN SEROPOSITIVE AND SERONEGATIVE EARLY RHEUMATOID ARTHRITIS*Y.*
Kisten E, af Klint A, Levitsky, Rezaei H, Györi N, Karlsson A, van Vollenhoven R, Arnaud L
Annals of the Rheumatic Diseases 2016; 75(2): 698 (SAT0093)

Fluorescence optical imaging coupled with ultrasound radiography for detecting subtle hand inflammation in early rheumatoid arthritis
Kisten Y, af Klint E, Györi N, Rezaei H, Levitsky A, Karlsson A, van Vollenhoven RF
Annals of the Rheumatic Diseases 2016; 75(1):A41.3-A42 (A5.02) - Poster

The quantification of digital activity fluorescence optical imaging of hand and wrist inflammation in rheumatic diseases
Kisten Y, Györi N, af Klint E, Rezaei H, Levitsky A, Karlsson A, van Vollenhoven R
Annals of the Rheumatic Diseases 2015; 74(1):A44-A44 (A4.19)-Poster

Detection of Subclinical Signs of Musculoskeletal Inflammation by Use of Fluorescence-Optical Imaging Technique in Patients with Psoriasis – Data of the First Interims Analysis of the Xciting Study: Table 1
Koehm M, Rossmanith T, Langer H-E, Backhaus M, Kaesser U, Kneitz C, Wassenberg S, Burkhardt H, Behrens F
Annals of the Rheumatic Diseases 2015; 74(2):868.2-869 (SAT0574)

Quantification of Hand and Wrist Synovitis Using Digital Activity Fluorescence Optical Imaging
Kisten Y, Györi N, af Klint E, Rezaei H, Levitsky A, Karlsson A, van Vollenhoven R
Annals of the Rheumatic Diseases 2015; 74(2):890-890 (SAT0632)

THE EXTRAARTICULAR PATTERNS OF ICG-ENHANCED FLUORESCENCE OPTICAL IMAGING IN PSORIATIC ARTHRITIS
Wiemann O, Werner SG, Röver H, Lind-Albrecht G, Mettler S, Backhaus M, Langer H-E
Annals of the Rheumatic Diseases 2014; 73(2): (OP0051)

THE DETECTION OF MICROCIRCULATION DISTURBANCES IN BOTH HANDS OF PATIENTS WITH SYSTEMIC SCLEROSIS USING FLUORESCENCE OPTICAL IMAGING
Friedrich S, Riemekasten S, Werner S, Schmittat G, Burmester GR, Riemekasten G, Ohrndorf S, Backhaus M
Annals of the Rheumatic Diseases 2014; 73(2):1137-1137 (AB1019)

THE DIAGNOSTIC UTILITY OF FLUORESCENCE OPTICAL IMAGING IN EVALUATING SYNOVITIS OF THE HANDS AND WRISTS
Gyzri N, Kisten Y, Rezaei H, Karlsson A, Romanus C, af Klingt E, van Vollenhoven R
Annals of the Rheumatic Diseases 2014; 73(2): (SAT0223)

FLUORESCENCE OPTICAL IMAGING OF INFLAMMATION IN SYSTEMIC SCLEROSIS – A PILOT STUDY
Pfeil A, Drummer KF, Boettcher J, Jung C, Oelzner P, Wolf G
Annals of the Rheumatic Diseases 2014; 73(2):1007-1007 (AB0609)

CLINICALLY "SILENT" SYNOVITIS: DETECTED BY FLUORESCENCE OPTICAL IMAGING OF THE HANDS & WRISTS
Kisten Y, Györi N, Rezaei H, Karlsson A, Romanus C, af Klingt E, van Vollenhoven R
Annals of the Rheumatic Diseases 2014; 73(2): (AB1024)

New Imaging Approaches for Detecting Arthritis
Backhaus M
Annals of the Rheumatic Diseases 2013; 72(3):A18-A19 (SP0078)

TREATMENT MONITORING OF FLUORESCENCE OPTICAL IMAGING (FOI) USING AUTOMATED, COMPUTER-BASED QUANTITATIVE ASSESSMENT
Bahner M, Werner S, Cziumplik M, Berger J, Langer H-E, Schirner M
Annals of the Rheumatic Diseases 2013; 72(3):A1012-A1013 (AB0733)

COMPARISON OF ICG-ENHANCED OPTICAL IMAGING TO LOW-FIELD MRI AND MUSCULOSKELETAL ULTRASOUND IN PATIENTS WITH EARLY RHEUMATOID ARTHRITIS
Ohrndorf S, Krohn M, Werner SG, Bahner M, Schirner M, Reiche BE, Schneider S, Braum L, Burmester GR, Hamm B, Hermann KG, Backhaus M
Annals of the Rheumatic Diseases 2013; 71(3):712-712 (AB1298)

COMPARISON OF ICG-ENHANCED FLUORESCENCE OPTICAL IMAGING AND MUSCULOSKELETAL ULTRASOUND IN PATIENTS WITH RHEUMATOID ARTHRITIS AND OSTEOARTHRITIS
Glimm AM, Werner SG, Ohrndorf S, Schwenke C, Schmittat G, Burmester GR, Backhaus M
Annals of the Rheumatic Diseases 2013; 72 (3): 1005

ICG-enhanced fluorescence optical imaging detects typical inflammatory changes in asymptomatic subjects with elevated rheumatoid factor or anti-ccp antibodies
Werner SG, Spiecker F, Wiemann O, Mettler S, Burmester R, Backhaus M, Langer H-E
Annals of the Rheumatic Diseases 2013; 72(3):A1019-A1019 (AB0754)

ICG-Enhanced Fluorescence Optical Imaging (FOI) Detects Typical Inflammatory Changes in Subjects with Arthralgia and Psoriasis
Werner SG, Spiecker F, Mettler S, Lind-Albrecht G, Wiemann O, Burmester GR, Backhaus M, Langer H-E
Annals of the Rheumatic Diseases 2013; 72(3):A759-A760 (SAT0526)

VISUALIZATION OF REMISSION OF ARTHRITIS UNDER TNF-INHIBITION IN A PATIENT WITH JUVENILE IDIOPATHIC ARTHRITIS USING ICG-ENHANCED FLUORESCENCE OPTICAL IMAGING
Werner SG, Langer H-E, Backhaus M, Horneff E
Annals of the Rheumatic Diseases 2012; 71(3):706-706 (AB1202)

Interreader-reliability of standardized evaluation of ICG-enhanced fluorescence-optical imaging
Werner SG, Kasser U, Amberger C, Piegsa M, Spiecker F, Volberg C, Schwenke C, Langer H-E, Backhaus M
Annals of the Rheumatic Diseases 2012; 71(3):613-613 (SAT0416)

METHOD FOR AUTOMATED, COMPUTER-BASED QUANTITATIVE ASSESSMENT OF FLUORESCENCE OPTICAL IMAGING (FOI)
Schirner M, Cziumplik M, Bahner M, Berger J
Annals of the Rheumatic Diseases 2012; 71(3):711-711 (AB1288)

ICG-ENHANCED FLUORESCENCE OPTICAL IMAGING IN CLINICAL REMISSION: LONGITUDINAL DATA IN RA AND PSA PATIENTS WITH PRE/POST COMPARISONS
Werner SG, Spiecker F, Hermsen C, Bahner M, Backhaus M, Langer H-E
Annals of the Rheumatic Diseases 2012; 71(3):605-605 (SAT0392)

ICG-ENHANCED FLUORESCENCE OPTICAL IMAGING REVEALS SUBCLINICAL DISEASE ACTIVITY IN RHEUMATOID AND PSORIATIC ARTHRITIS PATIENTS WHO HAVE ACHIEVED CLINICAL REMISSION
Spiecker F, Werner SG, Hermsen C, Bahner M, Backhaus M, Langer H-E
Annals of the Rheumatic Diseases 2012; 71(3):298-298 (THU0422)

SEMIQUANTITATIVE ASSESSMENT OF INFLAMMATION IN ARTHRITIS PATIENTS WITH INDOCYANINE GREEN ENHANCED OPTICAL IMAGING USING FOR MONITORING OF TREATMENT RESPONSE
Werner SG, Langer HE, Spiecker F, Mettler S, Lind-Albrecht G, Hermsen C, Backhaus M
Annals of the Rheumatic Diseases 2012; 71(3):712-712 (AB1304)

THERANOSTIC APPROACH IN ARTHRITIS: A FEASIBILITY STUDY IN RATS
Welker P, Licha K, Gemeinhardt I, Bahner M, Berger J, Mangoldt D, Schnorr J, Schirner M
Annals of the Rheumatic Diseases 2012; 71(3):494-494 (SAT0073)

IMAGE PATTERN IN FLUORESCENCE OPTICAL IMAGING OF THE HANDS: DOES XIRALITE SUPPORT DIFFERENTIAL DIAGNOSIS? A FEASIBILITY STUDY
Bahner M, Schwenke C, Schirner M
Annals of the Rheumatic Diseases 2012; 71(3):300-301 (THU0430)

COMPARISON OF XIRALITE WITH CLINICAL EXAMINATION AND MRI
Werner S, Schott P, Bahner M, Schwenke C, Kurtz B, Langer H-E
Annals of the Rheumatic Diseases 2011; 70(3):555

COMPARISON OF XIRALITE WITH CLINICAL EXAMINATION AND ULTRASONOGRAPHY
Werner S, Ohrndorf S, Langer H-E, Bahner M, Schwenke C, Burmester GR, Backhaus M
Annals of the Rheumatic Diseases 2011; 70(3):361

XIRALITE, A NEW METHOD FOR VISUALIZATION OF INFLAMMATION IN FINGER- AND WRIST – JOINTS
Wernern S, Langer H-E, Kurtz B, Lind-Albrecht G, Bahner M
Annals of the Rheumatic Diseases 2010; 69 (3): 120

ACR

COMPARISON OF BONE SCAN WITH XIRALITE (FOI**) IN PATIENTS WITH RHEUMATOID ARTHRITIS AND PSORIATIC ARTHRITIS**
Polter J, Drynda S, Kekow J
Arthritis Rheumatol. 2015; 67 (10) – ACR 2015: 192

INDOCYANINE GREEN (ICG) -ENHANCED FLUORESCENCE OPTICAL IMAGING (FOI) IN PATIENTS WITH ACTIVE RHEUMATOID ARTHRITIS; A COMPARATIVE STUDY WITH ULTRASOUND AND ASSOCIATION WITH BIOMARKERS
Kawashiri S, Nishino A, Umeda M, Fukui S, Nakashima Y, Iwamoto N, Ichinose K, Nakamura H, Origuchi T, Aoyagi K, Kawakami A
Arthritis Rheumatol. 2015; 67 (10) – ACR 2015: 189

NON-RESPONSE TO ANTITNF TREATMENT IN PSORIATIC ARTHRITIS CAN BE PREDICTED BY AN OBJECTIVE AUTOMATED MEASUREMENT OF FLUORESCENCE-SIGNAL INTENSITIES IN FLUORESCENCE-OPTICAL IMAGING TECHNIQUE – THE FIRST INTERIMS ANALYSIS OF THE XPLORE-STUDY
Koehm M, Rossmanith T, Henkemeier U, Aries P, Alten R, Langer H-E, Burkhardt H, Behrens F
Arthritis Rheumatol. 2015; 67 (10) – ACR 2015: 2855

SENSITIVITY AND SPECIFICITY OF THE "GREEN NAIL" SIGN IN FLUORESCENCE OPTICAL IMAGING IN PSORIATIC ARTHRITIS.
Wiemann O, Werner SG, Röver H, Lind-Albrecht G, Mettler S, Backhaus M, Langer H-E
Arthritis & Rheumatology 2014: 66(11); S931– ACR 2014: 2129

THE UTILITY OF DIGITAL ACTIVITY FLUORESCENCE OPTICAL IMAGING IN QUANTIFYING HAND AND WRIST INFLAMMATION IN RHEUMATIC DISEASES.
Kisten Y, Györi N, Rezaei H, Levitsky A, Karlsson A, af Klint E, van Vollenhoven R
Arthritis & Rheumatology 2014: 66(11); S930– ACR 2014: 2126

THE UTILITY OF FLUORESCENCE OPTICAL IMAGING FOR DETECTING CLINICALLY SILENT SYNOVITIS OF THE HANDS AND WRISTS.
Kisten Y, Györi N, Rezaei H, Karlsson A, Romanus C, van Vollenhoven R, af Klint E
Arthritis & Rheumatism 2013: 65(10); S839– ACR 2013: 1970

QUANTITATIVE ASSESSMENT OF SYNOVITIS IN PATIENTS WITH RHEUMATOID ARTHRITIS USING FLUORESCENCE OPTICAL IMAGING.
Schäfer VS, Hartung W, Hoffstetter P, Berger J, Müller M, Fleck M, Ehrenstein BP
Arthritis & Rheumatism 2012: 64 (10); S56 – ACR 2012: 128

COMPARISON OF AUTOMATED, COMPUTER-BASED ASSESSMENT AND VISUALLY ASSESSED DISEASE ACTIVITY SCORES IN ICG-ENHANCED FLUORESCENCE OPTICAL IMAGING IN PATIENTS WITH RHEUMATIC DISORDERS: A FEASIBILITY STUDY.
Werner SG, Schirner M, Langer H-E, Cziumplik M, Berger J, Backhaus M, M. Bahner
Arthritis & Rheumatism 2012: 64 (10); S56– ACR 2012: 129

INDOCYANINE GREEN ENHANCED OPTICAL IMAGING USING FOR MONITORING OF TREATMENT RESPONSE.
Werner SG, Spiecker F, Mettler S, Lind-Albrecht G, Schwenke C, Langer H-E
Arthritis & Rheumatism 2011: 63 (10); S73 - ACR 2011: 199

SENSITIVITY AND SPECIFICITY OF INDOCYANINE GREEN ENHANCED OPTICAL IMAGING (XIRALITE) IN COMPARISON TO MAGNETIC RESONANCE IMAGING AND ULTRASONOGRAPHY.
Werner SG, Schott P, Ohrndorf S, Schwenke C, Bahner M, Kurtz B, Backhaus M, Burmester GR, Langer H-E
Arthritis & Rheumatism 2011: 63 (10); S73 - ACR 2011: 198

Weitere

Differentiation between arthrosis (Art) and psoriatic arthritis (PA) using fluorescence optical imaging
Kopetsch C, Tesch K, Sauer F, Zeuner R, Mrowietz U, Oltmann Schröder J, Jansen O, Wulff A, Both M
RöFo - Fortschritte auf dem Gebiet der R 2014; 186(S 01)

Dissertationen

Fluoreszenzoptische Bildgebung bei Patienten mit juvenilen rheumatischen Erkrankungen
Beck MC
Dissertation 2018, Medizinische Fakultät Charité - Universitätsmedizin Berlin

Analyse der Verteilung und Schweregrade von Gelenkentzündungen bei Patienten mit Osteoarthrose oder Rheumatoider Arthritis durch ICG-verstärkte fluoreszenzoptische Bildgebung und Gelenkultraschall
Glimm A
Dissertation 2017, Medizinische Fakultät Charité - Universitätsmedizin Berlin

Vorstellung eines neuen Verfahrens zur Diagnostik der Rheumatoiden Arthritis: ein Nahinfrarot-Fluoreszenzbildgebungssystem
Bauer D F W
Dissertation 2016, Justus-Liebig-Universität Gießen

Implementierung, Standardisierung und Evaluierung einer neuen ICG-gestützten fluoreszenzoptischen Bildgebungstechnologie mit dem Xiralite -Verfahren zur Entzündungsdiagnostik bei rheumatischen Krankheitsbildern
Werner SG
Dissertation 2012; Charite-Universitätsmedizin Berlin

Habilitationsschrift

Neue bildgebende Verfahren (Arthrosonographie, Rheumascan und Lichtscan) in der Diagnostik und Differentialdiagnostik von Gelenkbeschwerden an den Händen.

Ohrndorf S

Habilitationsschrift 2017, Medizinische Fakultät Charite – Universitärsmedizin Berlin