| Scientific publications | | | | | |
|---|---|---|---|---|---|
| | **scientific evidence/year** | **carried out:** | **head of the study** | **proof** | **result** |
| 1 | **1999**<br>First scientific study of the therapeutic applicability of MR-signals to cartilage structures in vivo | - German University for Sports and Rehabilitation in Cologne<br>- University Munich: "Clinic Grosshadern" department for diagnostic radiology<br>- University Munich: Anatomic Institute | Prof. Ingo Froböse | MRI before and 10 weeks after treatment | Regeneration of cartilage structures were evident<br>Increase of volume up to 30% |
| 2 | **2005**<br>NMR In Vitro Effects on Proliferation, Apoptosis and Viability of<br>Human Chrondocytes and Osteoblasts | Laboratory for Medical and Molecular Biology, Aachen - University of Applied Sciences | | cell count | Chondrocytes: 271% above Placebo<br>Osteoblasts: 290% above Placebo |
| 3 | **2008**<br>Functional improvement in finger joint osteoarthritis with therapeutic use of NMR | - Ludwig Boltzmann Cluster for Rheumatology, Balneology and Rehabilitation<br>(non profit research institute, Austria) | Univ. Doz. Dr. W. Kullich | QUABA score and VAS (visual analog scale) | - Physical function of the hand $p < 0,00001$<br>- reduction of peak, burden and resting pain $p < 0,000001$ |
| 4 | **2006**<br>The effect of MBST-NuclearResonanceTherapy on patients with low back pain | Ludwig Boltzmann Cluster for Rheumatology, Balneology and Rehabilitation<br>(non profit research institute, Austria) | Univ. Doz. Dr. W. Kullich | VAS<br>(visual analog scale)<br>Roland-Morris and Owestry questionnaire | $p < 0,00001$<br>significant improvement in the MBST-group, peak, mean and resting pain and level of disability (24 questions) |
| 5 | **2013**<br>One-year-survey with multicenter (61) data of more than 4,500 patients with degenerative rheumatic diseases treated with therapeutic nuclear magnetic resonance (knee, hip, ankle joint and low back pain) | Ludwig Boltzmann Cluster for Rheumatology, Balneology and Rehabilitation<br>(non profit research institute, Austria) | Univ. Doz. Dr. W. Kullich | VAS<br>(visual analog scale)<br>Lequesne, Mazur and Owestry questionnaire | $p < 0,00001$<br>significant reduction of peak, burden and resting pain |
| 6 | **2011**<br>Analysis of the Long-Term Effect of the MBST Nuclear Magnetic Resonance Therapy on Gonarthrosis | Analysis of the Long-Term Effect of the MBST Nuclear Magnetic<br>Resonance Therapy on Gonarthrosis | Prof. Dr. med. Walter van Laack | Anonymized patient questionnaire,<br>Lequesne index | sustained improvement in the patients health status with a significant pain relief even after 4 years |
| 7 | **2014**<br>Non-pharmacological treatment of osteoporosis with Nuclear Magnetic Resonance Therapy (NMR-Therapy) | Prof. Dalibor Krpan, Dr. Barbara Stritzinger, Ivan Lukenda Dr. Joachim Overbeck,<br>Univ. Doz. Dr. W. Kullich | Prof. Dalibor Krpan | T-scores (DEXA), laboratory measurement of osteocalcin and Beta Crosslaps | BMD and serum levels of osteocalcin increased significantly ($p < 0,001$) from baseline to 12 months ß-CTX (Beta Crosslaps) remained stable |

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# MedTec Medizintechnik

## Scientific publications

- More than 100 expert publications
- Most of the publications are scientific studies

# MedTec Medizintechnik

## Scientific publications – Selected studies

1. First scientific study of the therapeutic applicability of MR-signals to cartilage structures in vivo
   Carried out 1999 by:
   - German University for Sports and Rehabilitation in Cologne
   - University Munich: “Clinic Grosshadern” – department for diagnostic radiology
   - University Munich: Anatomic Institute

   Head of the study: Prof. Ingo Froboese

   Result: Regeneration of cartilage structures were evident
   Increase of volume up to 30%

   Proof: MRI before and 10 weeks after treatment

   Published in 2000

# MedTec Medizintechnik

## Scientific publications – Selected studies

2. NMR *In Vitro* Effects on Proliferation, Apoptosis and Viability of Human Chrondocytes and Osteoblasts
   Carried out 2005 by:
   - Laboratory for Medical and Molecular Biology, Aachen University of Applied Sciences
   - controlled, double-blind and randomized

   Results: treatment did not induce apoptosis or inhibit cell viability but revealed a tendency of an elevated cell proliferation rate
   - Chrondrocytes: 271% above placebo
   - Osteoblasts: 290% above placebo

   Proof: cell count

   Published in 2005

# MedTec Medizintechnik

## Scientific publications – Selected studies

3. Functional improvement in finger joint osteoarthritis with therapeutic use of NMR
   Carried out 2008 by:
   - Ludwig Boltzmann Cluster for Rheumatology, Balneology and Rehabilitation (non profit research institute, Austria)
   - placebo controlled, randomized and double-blind

   Head of the study: Univ. Doz. Dr. W. Kullich

   Results: significant ($p < 0{,}00001$) improvement in the physical function of the hand as well as reduction of peak, burden and resting pain ($p < 0{,}000001$)

   Proof: QUABA score and VAS (visual analog scale)

   Published in 2008

# MedTec Medizintechnik

## Scientific publications – Selected studies

4. The effect of MBST-NuclearResonanceTherapy on patients with low back pain
   Carried out 2006 by:
   - Ludwig Boltzmann Cluster for Rheumatology, Balneology and Rehabilitation (non profit research institute, Austria)
   - placebo controlled, randomized and double-blind

   Head of the study: Univ. Doz. Dr. W. Kullich

   Results: significant ($p < 0{,}00001$) improvement in the MBST-group, peak, mean and resting pain and level of disability (24 questions)

   Proof: VAS (visual analog scale), Roland-Morris and Owestry questionnaire

   Published in 2006

# MedTec Medizintechnik

## Scientific publications – Selected studies

5. One-year-survey with multicenter (61) data of more than 4,500 patients with degenerative rheumatic diseases treated with therapeutic nuclear magnetic resonance (knee, hip, ankle joint and low back pain)
   Carried out 2013 by:
   - Ludwig Boltzmann Cluster for Rheumatology, Balneology and Rehabilitation (non profit research institute, Austria)

   Head of the study: Univ. Doz. Dr. W. Kullich

   Results: significant ($p < 0{,}00001$) reduction of peak, burden and resting pain

   Proof: VAS (visual analog scale), Lequesne, Mazur and Owestry questionnaire

   Published in 2013

# MedTec Medizintechnik

## Scientific publications – Selected studies

6. Analysis of the Long-Term Effect of the MBST Nuclear Magnetic Resonance Therapy on Gonarthrosis

   Carried out 2011 by:
   - Institute of Bio-Engineering for Biomechanics, Laboratory of Biomechanics, Aachen University

   Head of the study: Prof. Dr. med. Walter van Laack

   Results: sustained improvement in the patients health status with a significant pain relief even after 4 years

   Proof: Anonymized patient questionnaire, Lequesne index

   Published in 2011

# MedTec Medizintechnik

## Scientific publications – Selected studies

7. Non-pharmacological treatment of osteoporosis with Nuclear Magnetic Resonance Therapy (NMR-Therapy)

   Carried out 2014 by:
   - Prof. Dalibor Krpan, Dr. Barbara Stritzinger, Ivan Lukenda Dr. Joachim Overbeck, Univ. Doz. Dr. W. Kullich

   Head of the study: Prof. Dalibor Krpan

   Results: BMD and serum levels of osteocalcin increased significantly ($p < 0{,}001$) from baseline to 12 months ß-CTX (Beta Crosslaps) remained stable

   Proof: T-scores (DEXA), laboratory measurement of osteocalcin and Beta Crosslaps

   Published in 2015

# Innovation Ace!


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# - Medical information –

## MBST®-MagneticResonanceTreatment

- Professional publications, studies
- Articles in specialized media
- Published scientific lectures and posters
- Specialised book publications
- Expertise

Status: February 2016

## 2016:

**1) Therapeutic Application of Magnetic Resonance in Osteoporosis**

Kullich, W.[1], Lukenda, I.[2], Stritzinger, B. [1], Overbeck, J. [2,3], Krpan, D.[2], [1]Ludwig Boltzmann Cluster for Rheumatology, Balneology and Rehabilitation, Ludwig Boltzmann Department for Rehabilitation, Saalfelden, Austria, [2]Poliklinik K-CENTAR, Zagreb, Croatia, [3]Private Consultant Surgeon, Deggendorf, Germany; published in: Ber. nat.-med. Ver. Salzburg, Vol. 18, p. 7-17, Salzburg 2016.

Language: German

## 2015:

**2) Effects of MagneticResonanceTreatment on the dynamics of liver regeneration**

Inaugural Dissertation for Gaining the 'Doctor Medicinae' from the Medical Faculty of the Westphalian Wilhelms University of Muenster. Budny, N., University Hospital of Muenster, Department of General and Visceral Surgery, Surgical Research Department, Muenster, Germany; October 2015.

**3) Modulation of NF-kB activity by the therapeutic Nuclear Magnetic Resonance (NMR) to explain pain reduction in patients with osteoarthritis**

B. Steinecker-Frohnwieser[1], W. Kullich[1], A. Mann[2], B. Stritzinger[1], H. G. Kress[2], L. Weigl[2], [1]Ludwig Boltzmann Cluster for Rheumatology, Balneology and Rehabilitation, LBI for Rehabilitation of Internal Diseases Saalfelden, Austria, [2]Department of Special Anaesthesia and Pain Therapy, Medical University Vienna, Austria; poster presentation at the International Pain Congress of the European Pain Federation EFIC, Vienna, Austria, 2nd-5th September 2015.

**Non-pharmacological treatment of osteoporosis with Nuclear Magnetic Resonance Therapy (NMR-Therapy)**

( 7 )

Dalibor Krpan[1], Barbara Stritzinger[2], Ivan Lukenda[1], Joakim Overbeck[3,1], Werner Kullich[2], [1]Poliklinika K-CENTAR, Zagreb, Croatia, [2]Ludwig Boltzmann Cluster for Rheumatology, Balneology and Rehabilitation, Department for Rehabilitation, Saalfelden, Austria, [3]Private Consultant Surgeon, Deggendorf, Germany; published in: PERIODICUM BIOLOGORUM VOL. 117, No. 1, 161–165, 2015.

**5) A new concept of integrated holistic approach in treatment of chronic musculoskeletal diseases The "BAR" method**



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Prof. Dr. sc. Dalibor Krpan, Polyclinic K-CENTAR, Zagreb, Croatia; published in: PERIODICUM BIOLOGORUM VOL. 117, No 1, 119–124, 2015.

6) **Effects of Therapeutic-NMR (MBST-Nuclear Magnetic Resonance) on the Circadian Clock and the Hypoxic Signaling Pathway in Zebrafish Cells**
R. Oliva, Master thesis for the acquisition of the academic degree Master of Science (MSc), Faculty of Biology, Department of Ecophysiology, Leopold Franzens University of Innsbruck, Innsbruck, Austria.

## 2014:

1) **Nuclear magnetic resonance treatment (MBST®) of clinical symptoms caused by osteoarthritis: a double-blinded placebo-controlled study in dogs**
M.C. Mueller, K. Wittek, B. A. Bockstahler, Department for Small Animals and Horses, Small Animal Surgery, Section for Physical Therapy and Rehabilitation, University of Veterinary Medicine Vienna, Austria; poster presentation at the International Symposium in Animal Musculoskeletal Practice, Coventry, England, 29.-30. November 2014.

2) **The Influence of Nuclear Magnetic Resonance Therapy (NMRT) and Interleukin IL1-β Stimulation on Cal 78 Chondrosarcoma Cells and C28/I2 Chondrocytes**
B. Steinecker-Frohnwieser, Ludwig Boltzmann Institute for Rehabilitation of Internal Diseases, Ludwig Boltzmann Cluster for Rheumatology, Balneology and Rehabilitation, Saalfelden, Austria; scientific lecture at the Scientific Symposium: Microbiome Research / Personalized Medicine, Graz, Austria, 17th – 18th July 2014.*

3) **MBST - Nuclear Magnetic Resonance Therapy, the new opportunity in the treatment of chronic skeleton diseases and sport injuries**
D. Krpan, Policlinica K-Centar, Zagreb, Croatia; lecture at the Russian Slovenian scientific meeting, Terme Olimia, Slovenia, June 2014.

4) **New active principle: Therapy with nuclear magnetic resonance**
W. Kullich; Ludwig Boltzmann Institute for Rehabilitation of Internal Diseases, Ludwig Boltzmann Cluster for Rheumatology, Balneology and Rehabilitation, Saalfelden, Austria; scientific lecture at the "Special pain therapy" course, Pain diploma of the Austrian Medical Chamber, Leogang, Austria, 19th June 2014.* Language: German

5) **The Influence of Nuclear Magnetic Resonance Therapy (NMRT) and Interleukin IL1-β Stimulation on Cal 78 Chondrosarcoma Cells and C28/I2 Chondrocytes**
B. Steinecker-Frohnwieser[1], L. Weigl[2], G. Weberhofer[2], W. Kullich[1], H.G. Kress[2]; [1]Ludwig Boltzmann Institute for Rehabilitation of Internal Diseases, Ludwig Boltzmann Cluster for Rheumatology, Balneology and Rehabilitation, Saalfelden, Austria; [2]Department of Special Anaesthesia and Pain Management, Medical University Vienna, Austria; published in: J Orthopedics Rheumatology, 2014; 1(3):9.

6) **Application of Nuclear Magnetic Resonance Therapy as treatment of degenerative diseases of locomotor system**
I. Mařík, A. Maříková, R. Myslivec; Ambulantní centrum pro vady pohybového aparátu s.r.o, Prague, Czech Republic; scientific lecture at the 19th Kubat's Podiatric day, 08th or March 2014, Prague. Language: Czech



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7) **Top 100 2014: Innovation Aces: Ranga Yogeshwar introduces Germany's innovation elite**
Bantle, F.; Blath, M.; Borges, H.; Goebel, B.; Hess, D.; Heubeck, R.; Olschner, S.; Pesch, U.; Rauch, S.; Weiand-Schütt, R.; Redline Verlag, Munich 2014, p. 100-103.

## 2013:

1) **Clinical Efficiency of Nuclear Magnetic Resonance Therapy in Osteoarthritis**
W. Kullich, B. Stritzinger, B. Steinecker, Ludwig Boltzmann Institute for Rehabilibation of Internal Diseases, Ludwig Boltzmann Cluster for Rheumatology, Balneology and Rehabilitation, Saalfelden, Austria; poster presentation at the First LBG Meeting for Health Science, Vienna, Austria, 2nd December 2013.*

( 5a ) **Long-term efficacy of Nuclear Magnetic Resonance Therapy on Osteoarthritis proved by multicentric data of more than 4,500 patients**
W. Kullich, B. Stritzinger, B. Steinecker, Ludwig Boltzmann Institute for Rehabilitation of Internal Diseases, Saalfelden; Ludwig Boltzmann Cluster for Rheumatology, Balneology and Rehabilitation, Saalfelden, Austria; Poster presentation at the first LBG meeting for Health Sciences 2013, 2nd December 2013, Vienna. Language: German

( 5 ) **Long-term efficacy of Nuclear Magnetic Resonance Therapy on osteoarthritis proven by multicentric data of more than 4,500 patients**
B. Stritzinger, B. Steinecker, W. Kullich, Ludwig Boltzmann Institute for Rehabilitation of Internal Diseases, Saalfelden; Ludwig Boltzmann Cluster for Rheumatology, Balneology and Rehabilitation, Saalfelden, Austria; published in: Journal für Mineralstoffwechsel 2013; 20(4):159.
Language: German

4) **Intracellular Calcium Is Influenced by Nuclear Magnetic Resonance Therapy (NMRT) in Cal-78 Chondrosarcoma Cells**
B. Steinecker-Frohnwieser[1], L. G. Weigel[2], H. G. Kress[2], W. Kullich[1,3], [1]Ludwig Boltzmann Institute for Rehabilitation of Internal Diseases, Saalfelden; [2]Department of Special Anesthesia and Pain Management, Medical University of Vienna; [3]Ludwig Boltzmann Cluster for Rheumatology, Balneology and Rehabilitation, Saalfelden, Austria; scientific lecture at the annual meeting of the ÖGR 2013; published in: Journal für Mineralstoffwechsel, Volume 20 2013, Number 4, pp. 161-162.

5) **Innovative medical technology – Made in Germany**
A. Muntermann, A. Oelsner, MedTec Medizintechnik GmbH, Wetzlar, Germany; scientific lecture at the Dr. Sulaiman Al Habib Hospital, Riyadh, Saudi Arabia, 26th November 2013.*

6) **MBST-Nuclear Magnetic Resonance Therapy – innovative medical technology made in Germany**
A. Muntermann, A. Oelsner, MedTec Medizintechnik GmbH, Wetzlar, Germany; scientific lecture at the National Guard Hospital, Riyadh, Saudi Arabia, 27th November 2013.*

7) **Innovative medical technology – Made in Germany**
A. Muntermann, A. Oelsner, MedTec Medizintechnik GmbH, Wetzlar, Germany; scientific lecture at the Saad Specialist Hospital, Dammam, Saudi Arabia, 28th November 2013.*

8) **MBST - Nuclear Magnetic Resonance Therapy, the new opportunity in the treatment of chronic skeleton diseases and sport injuries**
D. Krpan, Policlinica K-Centar, Zagreb, Croatia; lecture at the scientific meeting, Bucharest, Romania, September 2013.



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9) **NUCLEAR MAGNETIC RESONANCE THERAPY. A SHORT ANALYSIS OF THE SCIENTIFIC STUDIES FOCUSED ON THE SPINE**
Assoc. Professor Ivo Mařík, Md, PhD Ambulant Centre for defects of Locomotor apparatus, l. l. c., Prague, Czech Republic, M. Schmitz, A. Oelsner, MedTec Medizintechnik GmbH, Wetzlar; scientific lecture at the THE 15TH PRAGUE-LUBLIN-SYDNEY SYMPOSIUM, Children's Rehabilitation Center of Orthopaedics and Traumatology „Ogonyok, St. Petersburg, Russia, 15th – 22nd September 2013.

10) **Long-term reduction of pain in different types of Osteoarthritis after the treatment with nuclear magnetic resonance**
W. Kullich, B. Steinecker, J. Overbeck, Ludwig Boltzmann Cluster for Rheumatology, Balneology, and Rehabilitation, Ludwig Boltzmann Institute for Rehabilitation of Internal Diseases, Saalfelden, Austria; private consultant surgeon, Deggendorf, Germany; published in: Schmerznachrichten 4 / 2013, pp. 20-23. Language: German

11) **MBST – Nuclear Magnetic Resonance Therapy on Gonarthrosis, Long-Term Effects**
W. van Laack, University of Applied Science Aachen, Germany; abstract in the congress catalogue of the "Safety and Security", Innovation Alliance of North-Rhine Westphalia Universities, Brussels, Belgium, 18th June 2013.

12) **MBST - Analysis of the scientific studies and its relevance to the daily application**
J. G. Overbeck, Private Consultant, Deggendorf, Germany; scientific lecture at the Park Hotel, New Delhi, India, 7th June 2013.

13) **MBST – Nuclear Magnetic Resonance Therapy, Analysis of the Scientific Studies and its Relevance to the Daily Application**
J. G. Overbeck, Private Consultant, Deggendorf, Germany; scientific lecture at the East Delhi Gynae Forum, Delhi, India, 7th June 2013.

14) **Magnetic resonance therapy**
J. G. Overbeck, Private Consultant, Deggendorf; scientific lecture at the 32nd Annual Conference of North Zone Chapter of The Indian Orthopaedic Association, Srinagar, Indien, 1st June 2013.*

15) **Therapy with Magnetic Resonance – Sustainable Improvement of Osteoarthritis Pain (Multicentric Observational Study on 4.518 patients)**
W. Kullich, B. Steinecker, Ludwig Boltzmann Institute for Rehabilitation of Internal Diseases, Saalfelden, Austria, Ludwig Boltzmann Cluster for Rheumatology, Balneology and Rehabilitation, Saalfelden, Austria; published in: "Dream and Reality. Pain Therapy in the Conflict between Ethics and Economy", ÖSG lectures, Leykam book publisher, 2013:43-44. Language: German

16) **Therapy with Magnetic Resonance – Sustainable Improvement of Osteoarthritis Pain (Multicentric Observational Study on 4.518 patients)**
W. Kullich, B. Steinecker, Ludwig Boltzmann Institute for Rehabilitation of Internal Diseases, Saalfelden, Austria, Ludwig Boltzmann Cluster for Rheumatology, Balneology and Rehabilitation; scientific poster presentation at the 21st Scientific Conference of the Austrian Pain Society, winner of the 1st prize for the poster presentation, Klagenfurth, Austria, 9th – 11th May 2013.
Language: German

17) **Multicentric data from more than 4.500 patients with degenerative rheumatic diseases proof sustainable effect of Magnetic Resonance Therapy**
W. Kullich, Ludwig Boltzmann Institute for Rehabilitation of Internal Diseases, Ludwig Boltzmann Cluster for Rheumatology, Balneology and Rehabilitation, Saalfelden, Austria; scientific poster presentation at the 61st Annual Conference of the South German Orthopaedists and Orthopaedic Surgeons, 1st – 4th May 2013, Baden-Baden, Germany, poster no. p32. Language: German



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18) **Multicentric data from more than 4.500 patients with degenerative rheumatic diseases proof sustainable effect of Magnetic Resonance Therapy**
W. Kullich, Ludwig Boltzmann Institute for Rehabilitation of Internal Diseases, Ludwig Boltzmann Cluster for Rheumatology, Balneology and Rehabilitation, Saalfelden, Austria; published in the Special Edition of the Journal für Orthopädie und unfallchirurgische Praxis (abstracts VSOU), Deutscher Ärzteverlag, 2013:305-306. Language: German

19) **Intracellular Calcium is influenced by the Nuclear Magnetic Resonance Therapy in Cal-78 chondrosarcoma cells**
B. Steinecker-Frohnwieser[1], L. Weigl[2], W. Kullich[1]; [1]Ludwig Boltzmann Institute for Rehabilitation of Internal Diseases, Ludwig Boltzmann Cluster for Rheumatology, Balneology and Rehabilitation, Saalfelden, Austria; [2]Department of Special Anesthesia and Pain Management, Medical University of Vienna, Austria; published in: Bone – Abstracts (ECTS 2013, Lisbon), 2013; 1:248.

20) **Intracellular Calcium is influenced by the Nuclear Magnetic Resonance Therapy in Cal-78 chondrosarcoma cells**
B. Steinecker-Frohnwieser[1], L. Weigl[2], W. Kullich[1]; [1]Ludwig Boltzmann Institute for Rehabilitation of Internal Diseases, Ludwig Boltzmann Cluster for Rheumatology, Balneology and Rehabilitation, Saalfelden, Austria; [2]Department of Special Anesthesia and Pain Management, Medical University of Vienna, Austria; scientific lecture at the ECTS 2013, Lisbon, 18th-21st May 2013.*

21) **Functional ability of skeleton and how we can improve it by MBST**
D. Krpan, Policlinica K-Centar, Zagreb, Croatia; Croatian national congress of osteoporosis, Opatia, Croatia, April 2013.* Language: Croatian

22) **(N)MRT – Nuclear Magnetic Resonance Therapy, Analysis of the Scientific Studies and its Relevance to Sport Injuries and its Ramifications**
J. G. Overbeck, Private Consultant, Deggendorf, Germany; scientific lecture at the Connective Tissues in Sports Medicine, University of Ulm, Germany, 12th – 14th April 2013.*

23) **One-year-survey with multicenter data of more than 4,500 patients with degenerative rheumatic diseases treated with therapeutic nuclear magnetic resonance**
W. Kullich, J. Overbeck, H.U. Spiegel, Ludwig Boltzmann Cluster for Rheumatology, Balneology, and Rehabilitation, Ludwig Boltzmann Institute for Rehabilitation of Internal Diseases, Saalfelden, Austria; private consultant surgeon, Deggendorf, Germany; Department Surgery Research, Clinic and Polyclinic for Primary Surgery and Visceral Surgery, University Hospital Muenster, Muenster, Germany; published in: Journal of Back and Musculoskeletal Rehabilitation 26 (2013) 93-104; DOI 10.3233/BMR 2012-00362, IOS Press.

## 2012:

1) **MBST - Nuclear Magnetic Resonance Therapy, the new opportunity in the treatment of chronic skeleton diseases and sport injuries**
D. Krpan, Policlinica K-Centar, Zagreb, Croatia; lecture on the symposium "The best practices in the health evaluation of elite athletes – post Olympic analyses", Belgrade, Serbia, October 2012.

2) **Guide to naturopathic treatment for the doctors practice**
Published by: André-Michael Beer, Martin Adler, Munich 2012, p. 296. Language: German



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2011:

( 6 )

**Analysis of the Long-term Effect of the MBST® Nuclear Magnetic Resonance Therapy on Gonarthrosis**
W. van Laack, G. Froning, Institute for Bioengineering (IfB), Laborator of Biomechanics, FH Aachen, Campus Juelich, Orthopedic Practice and Center for ambulant arthroscopic surgery, Herzogenrath, Germany; published in: Orthopaedic Practice 47, 11, 2011, pp. 536-543.

2) **Impact of Magnetic Resonance Therapy on Sickness Absence of Patients with Nerve Root Irritation Following a Lumbar Disc Problem**
G. Salomonowitz, H. Salfinger, J. Hahne, M. Friedrich, Technology of Radiology, University of applied Sciences-Campus Vienna, Austria; Orthopaedic Pain Therapy, Orthopaedic Hospital Speising, Vienna, Austria; CEOPS, Orthopaedic Spital Speising, Vienna, Austria; published in: Z Orthop Unfall 2011; 149(5): 575-581. (DOI: 10.1055/s-0031-1280121).

3) **MBST – The new treatment of osteoarthritis and osteoporosis**
D. Krpan, Policlinica K-Centar, Zagreb, Croatia; lecture at the ISCEM 2011 and the 5th Croatian congress of endocrinology with international participation, Pula, Croatia, October 2011.* Language: Croatian

4) **30 years of Boltzmann Institute and 30th conference for rheumatism in Saalfelden**
W. Kullich, Ludwig-Boltzmann Cluster for Rheumatology, Balneology and Rehabilitation, Institute for Rehabilitation of Internal Diseases, Saalfelden, Austria; published in: Jatros Orthopädie, 5/2011, p. 68.
Language: German

5) **Therapeutic use of Nuclear Magnetic Resonance in different forms of osteoarthritis**
W. Kullich, Ludwig Boltzmann Institute for Rehabilitation of Internal Diseases, Ludwig Boltzmann Cluster for Rheumatology, Balneology and Rehabilitation, Saalfelden, Austria; scientific lecture at the 30th Rheumatologic Advanced Training Conference, Saalfelden, Austria, 17th-18th June 2011.*
Language: German

6) **Intracellular $Ca^{2+}$-Regulation as potential contact point of the NMRT**
L. Weigl, Ludwig Boltzmann Institute for Rehabilitation of Internal Diseases, Ludwig Boltzmann Cluster for Rheumatology, Balneology and Rehabilitation, Saalfelden, Austria; scientific lecture at the 30th Rheumatologic Advanced Training Conference, Saalfelden, Austria, 17th-18th June 2011.*
Language: German

7) **Influence of Nuclear Magnetic Resonance on osteoarthritis-related factors**
B. Steinecker-Frohnwieser, Ludwig Boltzmann Institute for Rehabilitation of Internal Diseases, Ludwig Boltzmann Cluster for Rheumatology, Balneology and Rehabilitation, Saalfelden, Austria; scientific lecture at the 30th Rheumatologic Advanced Training Conference, Saalfelden, Austria, 17th-18th June 2011.* Language: German

8) **MBST - NUCLEAR MAGNETIC RESONANCE THERAPY THE NEW POSSIBILITY OF OSTEOARTHRITIS AND OSTEOPOROSIS TREATMENT**
Prof. Dr. SC. Dalibor Krpan, Policlinica K-Centar, Zagreb; published in: Balneoclimatologia, Dijagnostica I Leĉenje Osteoporoze, May 2011, Vol. 35, pp. 61-66.

9) **Nuclear magnetic resonance affects osteoarthritis pain**
W. Kullich, Ludwig Boltzmann Cluster for Rheumatology, Balneology and Rehabilitation, Institute for Rehabilitation of Internal Diseases, Saalfelden; scientific poster presentation at the 19th annual conference of the Austrian Pain Society, 26th-28th May 2011. Language: German



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10) **MBST – Nuclear Magentic Resonance Therapy. The new possibility of osteoarthritis and osteoporosis treatment**
D. Krpan, Policlinica K-Centar, Zagreb, Croatia; lecture at the international symposium of osteoporosis, Niška Banja, Serbien, May 2011.* Language: Croatian

11) **MBST - Treatment of chronic skeleton diseases**
D. Krpan, Policlinica K-Centar, Zagreb, Croatia; lecture on the symposium "The new methods in the treatment of degenerative diseases", Ljubljana, Slowenia, April 2011.* Language: Croatian

12) **Next Generation of Medical Technology: Therapeutic Effect of NMR-Therapy against Osteoarthritis proven**
W. Kullich, LBI for Rehabilitation, Saalfelden, Austria; published in: Arab Health Magazine, No. 1, January 2011, p. 60-62.



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## 2010:

1) **Modulation of VEGF and Cytokines by Therapeutic Nuclear Magnetic Resonance**
B. Steinecker-Frohnwieser, L. Weigl, N. Fagerer, W. Kullich, H. G. Kress, Ludwig Boltzmann Institute, Department of Special Anaesthesia and Pain Therapy, Medical University of Vienna, Austria; published in: Journal für Mineralstoffwechsel 2010; 17 (4), p. 155.

2) **MBST – The new concept of the treatment of chronic skeleton diseases**
D. Krpan, Policlinica K-Centar, Zagreb, Croatia; lecture on the orthopedic days in Maribor, Slovenia, December 2010.* Language: Croatian

3) **Modulation of VEGF and cytokines by the Therapeutic Nuclear Magnetic Resonance (Poster)**
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