

# IOF MENA

## Osteo News

A Review of Osteoporosis Action in the Middle East & North Africa



### **World Osteoporosis Day Launch from Dubai**

MENA countries mark day

### **Third IOF METCOP**

### **Bone & Joint Decade Events**

### **Orthopaedic Surgeons' Initiative**

A call to arms to improve osteoporosis care



International  
Osteoporosis  
Foundation



**IOF Patron**  
Her Majesty Queen Rania of Jordan

"Although we have effective treatments for osteoporosis, each year millions of our grandmothers are crippled and disfigured because they don't have easy and sufficient access to diagnosis and medication".

## MENA OSTEOPOROSIS SOCIETIES

**Bahrain:** Bahrain Osteoporosis Society, **Egypt:** Egyptian Osteoporosis Prevention Society, **Iran:** Endocrinology & Metabolism Research Center, **Iraq:** Iraqi Society of Osteoporosis, **Jordan:** Jordanian Osteoporosis Prevention Society, **Kuwait:** Kuwait Osteoporosis Prevention Society, **Lebanon:** Lebanese Osteoporosis Prevention Society, **Libya:** Libyan Osteoporosis Prevention Society, **Morocco:** Moroccan Society for Rheumatology, **Pakistan:** Osteoporosis Society of Pakistan, **Palestine:** Palestine Osteoporosis Prevention Society, **Saudi Arabia:** Saudi Osteoporosis Society, **Syria:** Syrian National Osteoporosis Society, **Tunisia:** Tunisian Osteoporosis Prevention Society, **UAE:** Emirates Osteoporosis Society.

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## WORLD OSTEOPOROSIS DAY 2007

World Osteoporosis Day (WOD) got off to a special start with the first-ever global launch of this event from the Middle East. As ever, numerous countries organized special events to mark this occasion.

### Dubai Launch of WOD

On October 21st, the Emirates Osteoporosis Society (EOS), in partnership with the IOF, held the global launch of the 'Beat the Break' campaign, which is the WOD theme for this year.

In her message of welcome at the IOF World Osteoporosis Day media launch on October 21, 2007 in Dubai, HRH Princess Haya Bint Al Hussein stated,



HRH Princess Haya Bint Al Hussein

**'Osteoporosis is a global problem and a growing health problem here in the Middle East region, where it is estimated that one woman in three over the age of fifty will suffer an osteoporosis-related fracture. There is no doubt that the key to ending this tragedy is to take action before the first fracture occurs...the good news is that there are ways of slowing or**

**preventing osteoporosis - if people know that they are at risk'.**

The media launch, held in English and Arabic and hosted by IOF and the Emirates Osteoporosis Society (EOS), enjoyed additional high profile support from



Dr. Ali Bin Chakar, Under Secretary of the Minister of Health, who delivered a speech on behalf of H.E. the UAE Minister of Health. Dr. Mariam Matar, Assistant Undersecretary for Public Health & Primary Health Care and Dr. Muna Al Kuwari, Women's Health Project Manager in PHC and Public Health also showed their tremendous support for the IOF-UAE event.

The journalists and other attendees also heard welcome remarks from IOF President Pierre D. Delmas, which were followed by an overview on osteoporosis given by IOF General Secretary Prof. Jean-Yves Reginster. IOF CEO Daniel Navid introduced World Osteoporosis Day and the 'Beat the Break' campaign which focuses on awareness of risk factors.

Dr. Al Suhaili, EOS Vice President spoke about the state of osteoporosis and its management in the Middle East and Dr. Jamal Al Saleh, EOS President, discussed the specific issues relating to osteoporosis in the United Arab Emirates.



In addition, the EOS held a 2-3 hour walkathon and public events in several shopping malls to raise public awareness of osteoporosis and prevention through early recognition of risk factors.



Dr. Abdul Rahim Al Suhaili, EOS' Vice President and IOF CEO Dan Navid with EOS members

The impact of WOD activities in the Emirates was enormous, both in terms of media response and the increase of awareness about osteoporosis. EOS President, Dr. Jamal Ali Al Saleh noted that one of the shopping mall managers informed him that shoppers had come in 'from as afar as Ajman'.

A related event 'Breaking the Silence of Bone Health', was hosted by Fonterra Brands just prior to the IOF launch. It included a presentation of the "State of the Nation" Bone Health Reports with international Bone Health Ambassadors from Indonesia, New Zealand, the Philippines and Malaysia pledging their support in the fight against osteoporosis and calling for other high profile women from across the globe to join the cause.



## Lebanon

The celebrated Lebanese singer, Magida El Roumi, made her debut appearance as the new Patron of the Lebanese Osteoporosis Prevention Society and of the Bone & Joint Decade (Lebanon) at a large press conference, organized by MSD, and held at Beirut's Phoenicia Hotel on the 31st October, following a week-long campaign of television interviews by various members of LOPS committee on the occasion of World Osteoporosis Day.



Prof. Yasser Yaghi of BJD, Magida El Roumi and Prof. Ghassan Maalouf of the IOF and BJD

In her acceptance speech, Magida said, **'While pursuing our dreams and hopes, we tend to forget the importance of our bones, and we end up wearing them out - we realize only when it is too late that we didn't take care of them. This is why I am participating in this campaign, to shed light on this truth, because if we are aware we can avoid this terrible disease and thereby avoid misery, sadness and a poor quality of life.'**

## Pakistan

The Provincial Minister of Health inaugurated the Osteoporosis Society of Pakistan's annual National Osteoporosis Seminar (OSTEOCON-07) which was held in connection with World Osteoporosis Day activities on 27th October 2007 in Lahore. More than 300 physicians from a wide variety of disciplines attended, including orthopaedic surgeons, endocrinologists, gynaecologists and diagnosticians. In the welcoming address Dr. Akhtar Ahmed, President of the Osteoporosis Society of Pakistan, high-lighted the background of the society's activities and the World Osteoporosis Day theme of 'Beat the Break'. In his inaugural address Ch. Muhammad Iqbal, Punjab Minister of Health, stated his appreciation for the role of the medical community in providing health care education to people regarding osteoporosis.



From left: Prof. Yasser Yaghi, Prof. Ghassan Maalouf, Magida El Roumi, Prof. Socrates Papapoulos and Mrs. Lydia Maamarbachi

Speeches were also made by Prof. Yasser Yaghi, Chairman of the NAN of the BJD in Lebanon, Prof. Socrates Papapoulos of Leiden Univ. Medical Center (Neth.), Prof. Ghassan Maalouf, Pres. of LOPS and IOF M.E. Rep. and LOPS' Lydia Maamarbachi and a film was shown giving a brief account of the 12 Years of Achievements in Osteoporosis Advocacy in the Middle East and North Africa.

The conference received huge media coverage, appearing on several television channels, in newspapers and magazines.



## Palestine

The Palestinian Osteoporosis Prevention Society (POPS) organized several events for WOD, as in previous years and despite the difficult political and economic conditions. The activities for this year encompassed a campaign in approximately 100 kindergartens in various regions of Palestine, a

## Iran

The Endocrinology and Metabolism Research Center (EMRC) of Iran focused on the importance of nutrition and exercise for WOD 2007.

Various events and meetings were organized to educate people of different ages and social, economic and educational backgrounds. Events took place in kindergartens, schools and public venues and posters were displayed throughout Iran.

Studies carried out under the supervision of Dr. Bagher Larijani, Head of the EMRC, have shown serious insufficiencies in calcium and vitamin D

## Saudi Arabia

Saudi Arabia's national SMS drive to raise awareness of osteoporosis was reported in an article in the daily 'Arab News'. The report states that more than a million SMS text messages would be sent by the Ministry of Health to the public about the importance of combating osteoporosis. This is part of a national campaign against the spread of osteoporosis in the Kingdom.

**'We want to take possible preventive measures against the disease, which is common mostly among women over the age of 50',** said Dr. Yacoub Al-Mazroei,

## Syria

The Syrian National Osteoporosis Society (SYNOS) organized a huge march through the streets of Damascus for WOD and the Minister of Social Affairs contributed to this event producing a statement on this occasion.

SYNOS also organized its annual dinner in November, which was very well-attended.

From left: Prof. Ghassan Maalouf, President of SYNOS  
Dr. Gemma Adib and the Canadian Ambassador

children's festival for approximately 1,500 children and a women's open day, featuring lectures about osteoporosis, screening and information stands.

amongst the general population. With this in mind, the EMRC has carried out a successful and far-reaching national campaign focusing on increasing milk intake. As of November 2007, 12 million children aged between 7 and 16 will be receiving school milk free-of-charge.



Deputy Minister of Health, who launched the campaign on behalf of Minister of Health, Dr. Hamad Al-Manie. He said the Ministry would be distributing a million pamphlets throughout the Kingdom's 20 health regions to highlight the disease and advise people to take preventative measures. In addition, he said, the print and electronic media would carry relevant articles to keep readers and viewers abreast of the growing dangers of the disease in the Kingdom.

The ministry will also open on Saturdays a toll-free telephone line: 800-2494444, offering medical advice



## THIRD IOF METCOP



Speakers and society members at METCOP

Once again, the IOF Middle East Training Course on Osteoporosis (METCOP) took place at the Grand Hills, Broumana against a backdrop of political tension and once again, despite the situation, the event proved to be a great success, attracting more than 120 doctors from the region.

International speakers: Course Leader, Prof. Jean-Philippe Bonjour and Profs. Serge Ferrari, Marius Kraezlin and Karsten Dreinhofer, along with Prof. Ghassan Maalouf and Dr. Basel Masri presented an extremely full and varied agenda. Feedback from those attending was extremely positive, and congratulations poured in, particularly from visiting participants.



From left: Profs. Serge Ferrari, Ghassan Maalouf and Jean-Philippe Bonjour

Question-and-answer sessions sparked many interesting debates and the subject of Vitamin D insufficiency in the MENA region once again found center stage with much speculation and discussion as to its causes. As every year, the audience was updated on the very latest to emerge from studies and research, with particular attention being given to subjects of special relevance to countries of the region.

As part of a new initiative by LOPS, and much to the enthusiasm and excitement of the audience, LOPS'

new Patron, the celebrated singer, Magida El Roumi, very graciously attended a special public session at which Prof. Serge Ferrari gave a very comprehensive lecture on osteoporosis, explaining its causes, risk factors and treatments.



Magida El Roumi

Mrs. Maya Haddad of LOPS MC'd the event and Dr. Farid Badran, Gen. Sec. of LOPS, moderated. The lecture was preceded by a film clip showing the 12 Years of Achievements in Osteoporosis Advocacy in the MENA countries.



## BJD Executive Board Meets at Clarence House

Upon the invitation of Camilla, Duchess of Cornwall and Patron of the National Osteoporosis Society, a meeting of the Executive Board of the Bone & Joint Decade (BJD), presided by Prof. Lars Lidgren, took place at Clarence House in London on June 1st.

It was officially declared at this gathering that the BJD will be extending its work beyond the decade (past the year 2010). New strategies were announced for this international body, which focuses on all musculoskeletal conditions and public and professional awareness.



The Executive Committee of the BJD



From left: Prof. Marcos Musafir, First Sec. Omani Embassy, Prof. Ghassan Maalouf and Dr. Wahid El Kharousi

## Duchess of Cornwall Centre for Osteoporosis

The Duchess of Cornwall made a special visit to Truro in Cornwall on the 5th July 2007 for the opening of a new centre for Osteoporosis, named in her honor: 'The Duchess of Cornwall Centre for Osteoporosis'. On this occasion, a book about Lebanon called 'Decade' was presented to the Duchess by Dr. Tony Woolf, on behalf of Prof. Ghassan Maalouf.



Dr. Tony Woolf presenting 'Decade' to the Duchess of Cornwall

## Dinner Hosted on Behalf of Musculoskeletal Diseases

Mrs. Angelique Chartouny, a well-known Lebanese philanthropist, who has shown great support of the IOF and the BJD, hosted a memorable dinner in Rio de Janeiro on 2 July 2007. Among the guests of honor were the NAN coordinators for Brazil, Profs. Marcos Musafir and Jose Sergio Franco. Profs. Rubem Lederman and Ghassan Maalouf, Board Members of IOF, also attended the dinner.



## BJD Meeting in Thailand

Dr. Suthom Bavonratavech and other members of the BJD, near the painting of the King of Thailand after a meeting on Fragility Fractures, organized by the Thai Royal Orthopaedic Association.

From left: Dr. Suthom Bavonratavech, Founding Member of the Thai Osteoporosis Foundation and IOF Board Member, Prof. Marcos Musafir, BJD NAN Coordinator for Brazil, Prof. Ghassan Maalouf, BJD and IOF Board Member, Mrs. Lars Lidgren and Prof. Lars Lidgren, President of the BJD



## THE ORTHOPAEDIC SURGEONS' INITIATIVE A CALL TO ARMS TO IMPROVE OSTEOPOROSIS CARE

### Authors

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Over the last Decade, concern from osteoporosis groups has been rising about the growing menace of fragility fractures, which affects a staggering 1 in 3 women and 1 in 5 men over the age of 50. But despite countless lectures quoting undeniable statistics of fracture risk, its associated mortality, morbidity and costs in our aging populations, little seems to have changed in the way fracture patients are treated - still today shamefully few receive any evaluation or treatment for osteoporosis - the underlying cause of most of these fractures.

The Orthopaedic Surgeons' Initiative is set on a path to change this. Key international groups, specifically The Bone and Joint Decade (BJD), the International Osteoporosis Foundation (IOF), and the International Society for Fracture Repair (ISFR), have banded together with a call to arms to improve awareness of the scope and magnitude of fragility fractures as a global public health problem, to improve orthopaedic surgeons' understanding of osteoporosis and recognition of its cause of fragility fractures, and to motivate them to take an active role in optimising care of the fragility fracture patient with the ultimate goal of preventing future fractures.

The Orthopaedic Surgeons' Initiative believes that orthopaedic surgeons have a unique opportunity to transform the landscape of osteoporosis care: a fragility fracture is often the first indication that a patient has osteoporosis, and orthopaedists are often the first and possibly the only physicians involved in the treatment. By the very nature of this position, the orthopaedic surgeon has a pivotal role in optimising care, not only of the fracture, but also of the underlying disease, and the prevention of future fractures.

### The Growing Magnitude

There is no lack of data to tell us that the prevalence and incidence of osteoporotic fractures is vast and increases exponentially with age.

\* Every third woman and every fifth man over the age of 50 will eventually suffer from an osteoporosis-related fracture.

\* The lifetime risk for an osteoporotic fracture of the hip, spine or wrist is 40% for Caucasian women in Europe.

\* The risk for a hip fracture is between 11% and 18% in women, which is equal to the combined risk for breast, uterine, and ovarian cancers.

\* Vertebral fractures are between 2 and 3 times more prevalent than those in the hip but only a third are ever diagnosed.

But this is only the beginning. The number of people over age 65 is expected to almost double by the year 2040, and as the population ages the number of hip fractures is predicted to rise exponentially. Cooper et al projects that by 2050 the total number of hip fractures worldwide will rise to 6.26 million.<sup>1</sup>

Furthermore, the economic costs associated with osteoporosis and fragility fractures are overwhelming. In Europe the total direct costs of osteoporotic fractures are over 31 billion euros and are expected to increase to more than 76 billion euros in 2050.<sup>2,3</sup>

But it is not just about the economics. The negative impact on quality of life after a hip or vertebral fracture is a foremost concern. According to Cooper, et al, 20% of patients who sustain fracture of the hip will die as a result within the first year. 30% will suffer permanent disability, 40% will no longer be able to walk independently, 80% will be unable to carry out at least one independent daily living activity, and up to 25% will have to go into long-term residential care.<sup>4</sup>

### A Vicious Circle

A fragility fracture is the strongest indicator of risk of future fracture. It's a known-fact in orthopaedic circles: patients who have had a fracture at any site have more than twice the risk of sustaining a future fracture compared with individuals who have never experienced such an injury as an adult.<sup>5</sup> Up to 50% of patients with a vertebral fracture will experience additional vertebral fractures within three years, many within the first year.

### Under-Diagnosis

Yet, still fragility fractures are under-diagnosed and under-treated. Despite availability of therapies proven to reduce fracture risk, even in patients who have already suffered a fracture, diagnosis and treatment of osteoporosis among fragility fracture patients remains low. In an example from Freedman et al: researchers looked at 1162 women over age 50 with low-energy distal radius fracture, at 6 months post-fracture, and found 266 (23%) had been prescribed osteoporosis medication, 33 (2.8%) had received a bone density scan, and only 20 (1.7%) had received a bone density scan plus osteoporosis medication. So a handful of women received correct care, but 883 (76%) received neither bone density test nor medical treatment for their obvious osteoporosis.<sup>6</sup> In 2000, Gehlbach et al. found that of 132 women over age 60 who sustained osteoporotic vertebral compression fractures, which were identified during radiological examinations, only 20% actually received any treatment for either the fracture or the osteoporosis.<sup>7</sup>

### It's Time for a Change

A recent BJD-IOF-EFORT survey<sup>8</sup> clearly indicates that many orthopaedic surgeons still neglect to identify, assess and treat fragility fracture patients for osteoporosis, but not by lack of will, rather by lack of essential knowledge. This has to change. Clearly there is a need for further education and improved training. More educational opportunities should be offered to

orthopaedic surgeons through articles, web-based learning and educational seminars, and education about the disease should be integrated into the medical curriculum and postgraduate training.

To this end, the first outcome of the **Orthopaedic Surgeons' Initiative** - a combined effort of the BJD, the IOF, and the ISFR - is an educational slide kit aimed at upgrading orthopaedic surgeons' ability to manage the underlying pathology of patients presenting with fragility fractures. The new educational training package, (downloadable from [www.bjdonline.org](http://www.bjdonline.org)) is available freely to orthopaedic surgeons worldwide. It includes four keynote lectures on osteoporosis, geared specifically for orthopaedic surgeons, its appropriate fracture management, including initiating or referring for bone density evaluation, pharmacological and nonpharmacological treatment, fall prevention, patient education and follow-up, plus a summary lecture to wrap-up all of the information presented.

Development of a simple clinical pathway from evidence-based guidelines is an important step to ensure that optimal care is provided for patients with fragility fractures. Finding the time and indeed the resources to initiate further investigation in a busy orthopaedic clinic is indeed challenging - so much so that it is easy to dismiss the underlying cause and simply 'treat the fracture'. But in such a setting, the concept of a fracture liaison nurse has been put to the test in several countries and came through with resounding success. By playing a major coordinating role the nurse is able to ensure that the fragility fracture patient receives appropriate non-surgical treatment and follow-up after the initial fracture management. This service will be different in different countries; it is, therefore, important to create a pathway locally. This pathway must make it easy and not time-consuming for the orthopaedic surgeon, in order to for the system to 'stick' and ultimately succeed in preventing the next fracture.

The Bone and Joint Decade International Steering Committee decided in June 2007 to establish a

global Osteoporosis Fracture Initiative led by:

Professor Ghassan Maalouf, Lebanon  
Dr Karsten Dreinhofer, Ulm, Germany  
Professor Lars Lidgren, Lund, Sweden  
Professor Kristina Akesson, Malmo, Sweden

The BJD Fracture Initiative will be working in close cooperation with major organisations such as AAOS, IOF, ISFR, and EFORT among others.

### References

1. C Cooper, G Campion, LJ Melton 'Hip fractures in the elderly: a world-wide projection' *Osteoporosis International* 1992; 2:285-289.
2. Johnell O, Kanis J. 'Epidemiology of osteoporotic fractures.' *Osteoporosis International* 2005; 16 Suppl. 2: S3-7
3. Borgstrom F, Zethraeus N, Johnell O, Lidgren L, Ponzer S, Svensson O, Abdou P, Ornstein E, Lunsjo K, Thorgren KG, Sernbo I, Rehnberg C, Jonsson B. 'Costs and quality of life associated with osteoporosis-related fractures in Sweden'. *Osteoporosis International*. 2006;17(5):637-50.
4. Cooper C. 'The crippling consequences of fractures and their impact on quality of life'. *American Journal of Medicine* 1997;103(2A):12S-19S.
5. JA Kanis, O Johnell, A Oden, A Dawson, C De Laet. 'Ten Year Probabilities of Osteoporotic Fractures According to BMD and Diagnostic Thresholds'. *Osteoporosis International*. 1997;7:390-406.
6. Freedman K, Kaplan F, Bilker W., Strom B, Lowe R 'Treatment of Osteoporosis: Are Physicians Missing an Opportunity?' *The Journal of Bone and Joint Surgery* 2000, 82:1063.
7. Ghlbach SH, Bigelow C, Heimisdottir M, May S, Walker M, Kirkwood JR. 'Recognition of vertebral fracture in a clinical setting.' *Osteoporosis International* 2000 ;11:577-582
8. Dreinhofer KE, Anderson M, Feron JM, Herrera A, Hube R, Johnell O, Lidgren L, Miles K, Tarantino U, Simpson H, Wallace WA. 'Multinational survey of osteoporotic fracture management.' *Osteoporosis International*. 2005 Mar;16 Suppl 2:S44-53.

## MIDDLE EAST & NORTH AFRICA CONSENSUS ON OSTEOPOROSIS PROTELOS UPDATE

Strontium ranelate is a new antiosteoporotic agent with a dual mode of action indicated as first line treatment in postmenopausal osteoporosis to reduce the risk of vertebral and hip fractures. Strontium ranelate dissociates the process of bone formation and bone resorption involved in bone remodeling. In-vitro and in-vivo studies have shown that it promotes bone formation by stimulating the replication of preosteoblasts, leading to an increase in the bone matrix synthesis, while simultaneously decreasing osteoclast differentiation and activity, leading to a reduction in bone resorption<sup>1</sup>. The effect of strontium

ranelate on osteoclasts differentiation has been evidenced recently through an effect on osteoprotegerin expression involving the Rank/RankL system<sup>2</sup>.

Strontium Ranelate clinical efficacy has been assessed in 2 large-scale clinical trials SOTI3 and TROPOS4 which have shown a significant decrease in vertebral and peripheral fracture risks, including hip fractures.

Strontium ranelate is taken at a dose of 2g/day and is well tolerated<sup>3,4</sup>.

1. Marie PJ, et al. *Calcif Tissue Int*. 2001;69:121-129
2. Brennan T, et al. *Calcif Tissue Int*. 2006; 78(suppl 1):S129(8356)
3. Meunier PJ, et al. *N Engl J Med*. 2004 ; 350(5) :459-468
4. Reginster JY. *J Clin Endocrinol Metab*. 2005 ; 90(5) :2816-2822

## FUTURE EVENTS

### 4th PAN ARAB OSTEOPOROSIS CONGRESS

Crowne Plaza Hotel, Dubai, UAE.  
2-4 March 2008.

The Congress will be followed by an IOF Osteoporosis Diagnosis Course with Densitometry Certification from 5-6 March 2008

#### International Speakers

- |                       |             |                          |         |
|-----------------------|-------------|--------------------------|---------|
| ▪ Socrates Papapoulos | Netherlands | ▪ Aliya Khan             | Canada  |
| ▪ Rene Rizzoli        | Switzerland | ▪ Ghassan Maalouf        | Lebanon |
| ▪ Ego Seeman          | Australia   | ▪ Hussain El Saadi       | UAE     |
| ▪ Mary Boussein       | USA         | ▪ Abdul Rahim Al Suhaili | UAE     |
| ▪ John Kanis          | UK          |                          |         |



**'Your participation at this event will be the key to success for your scientific and business interests in this growing field. Welcome to Dubai, the fastest growing and changing city on earth. Be our guest and see real hospitality.'**

**Prof. Abdul Rahim Al Suhaili, EOS Vice President**

For more information: [www.emiratesosteoporosisociety.com](http://www.emiratesosteoporosisociety.com)

### IOF OSTEOPOROSIS DIAGNOSIS COURSE WITH DENSITOMETRY CERTIFICATION

Teheran, Iran.  
8-9 March 2008

Contact the Endocrinology & Metabolism Research Center

For more information: [www.emrc.tums.ac.ir](http://www.emrc.tums.ac.ir) or write to [emrc@sina.tums.ac.ir](mailto:emrc@sina.tums.ac.ir)



### 6th INTERNATIONAL WORKSHOP, MUSCULOSKELETAL & NEURONAL INTERACTIONS

Cologne, Germany  
8-11 May 2008

For more information: [www.ismni.org](http://www.ismni.org)

### WORLD CONGRESS ON MUSCULOSKELETAL DISEASES

Beirut, Lebanon  
23-26 October 2008

For more information: [www.bmchcs.com](http://www.bmchcs.com) or E-mail: [lynnmaalouf@gmail.com](mailto:lynnmaalouf@gmail.com) or Mrs Maud Nakhal: [maud@nakhal.com.lb](mailto:maud@nakhal.com.lb)

### IOF WORLD CONGRESS ON OSTEOPOROSIS

3-7 December 2008  
Bangkok, Thailand

For more information: [www.iofbonehealth.org](http://www.iofbonehealth.org)

