

## **World Patient Safety Day: Magnesium implants help avoid unnecessary operations and risks**

- **On 17.09.2019 is the World Patient Safety Day.**
- **The action day is supported by the World Health Organization (WHO) and numerous national initiatives, various actions and events are taking place around the world.**
- **The action day is intended to inform about effective solutions for more quality and safety in medical care, and to sensitize the media and the public to central topics relating to patient safety.**
- **According to the WHO, 4 out of 10 patients are harmed in the primary and ambulatory settings of which up to 80% of harm could be avoided; 134 million adverse events occur each year due to unsafe care in hospitals in low- and middle-income countries, contributing to 2.6 million deaths annually.**
- **Hundreds of millions of patients worldwide are affected by health care-associated infections each year.**
- **The use of MAGNEZIX® implants eliminates the need for removal of material and the corresponding risk of infection during a second operation or in-patient stay is completely avoided. MAGNEZIX® implants thus make a significant contribution to patient safety.**

Singapore, 17. September 2019.

The healthcare systems around the world still have a lot to catch up in the area of patient safety. For example, according to the World Health Organization (WHO), out of every 100 hospitalized patients, at any given time, seven in high-income countries and 10 in low- and middle-income countries will acquire one or more health care-associated infections (HAIs). Hundreds of millions of patients worldwide are affected by HAIs each year. People with methicillin-resistant Staphylococcus aureus (MRSA), a bacterium increasingly found in hospital settings that is resistant to most antibiotics, are estimated to be 64% more likely to die than people with a non-resistant form of the infection.

However, necessary preventive measures are generally difficult to implement in everyday clinical practice. Patient safety is a cost factor that places a heavy burden on hospital and clinic operators, who are under considerable cost pressure. The lack

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## Press Release

For immediate publication



of training/information, understaffing and enormous work overload of medical personnel also limit the scope available for action.

In order to achieve a sustained improvement in patient safety, modern, internationally developed and proven measures and methods would have to be introduced more quickly and on a broader front. Experts therefore are calling for reformation and more willingness to innovate in the healthcare sector, they also demand more transparency and information, as well as a strengthening of the information base and position of patients.

Within the framework of the World Patient Safety Day, all health care stakeholders are therefore encouraged to actively present their solutions and contributions to greater patient safety.

With MAGNEZIX®, Syntellix has developed and patented an innovative magnesium technology that defines a new standard for implants in orthopaedics and trauma surgery and offers great potential in the field of patient safety.

Up to now, titanium and steel implants were primarily used to fix bone fractures. But these metals are foreign material for the body, which can result in pain, infections and bone resorption. To minimize later complications and problems, the metal implants must resp. should be removed after bone healing in a subsequent operation, which in turn can entail considerable risks for patients, ranging from anaesthesia over nerve and vascular injuries to infections.

This is not the case with the technologically leading magnesium implants made of MAGNEZIX®: these are not only degraded by the body, but converted into bone tissue – there is no need for further removal surgery. Magnesium is a natural, essential metabolic element and indispensable for many important functions in the body (including bone formation). Its excellent tolerability has been clinically tested and scientifically proven in detail. In addition, it has an antibacterial effect and can help to prevent infections in the bone. According to experimental trials, magnesium can even potentially prevent bone cancer.

MAGNEZIX® implants meet the highest safety requirements and are "Made in Germany", currently have approvals and registrations in around 60 countries and have been successfully used in thousands of operations worldwide. Numerous studies and publications show and confirm the effectiveness, quality and safety of the implants. In current publications on various clinical applications, MAGNEZIX® implants are also rated by medical professionals as "advantageous" or even "clinically superior" to conventional titanium implants. A leading surgeon from Singapore even speaks of the "new gold standard" in this context.

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All MAGNEZIX® implants are already delivered sterile and individually packaged; they do not have to be confectioned and sterilized in the hospital – the risk of contamination is further reduced. They are handled in accordance with established surgical techniques and offer surgeons routine safety in the use of the latest implant technology thanks to proven and known procedures.

In addition to the direct benefits in the best interest of the patient and the relief of the medical staff, magnesium implants also offer considerable savings potential for the cost bearers in the health care system – while at the same time improving the quality of treatment. Based on data from the WHO, recent evidence shows that 15% of total hospital expenditure and activities in Organisation of Economic Co-operation and Development (OECD) countries is a direct result of adverse events, with the most burdensome events being blood clots (venous thromboembolism), bed sores (pressure ulcers) – and infections. It is estimated that the total cost of harm in these countries alone amounts to trillions of US dollars every year. A widespread use of MAGNEZIX® could help to reduce this cost burden, whereby all participants in the health care system could profit sustainably.

In addition to orthopaedics and trauma surgery, the transfer of MAGNEZIX® applications to other medical fields such as neurosurgery, oral and maxillofacial surgery or dental implantology offers enormous potential benefits for better, safer and at the same time more cost-efficient care for patients in the future.

### **About Syntellix Asia Pte. Ltd.:**

Syntellix Asia Pte Ltd, with headquarters in Singapore Science Park and a production site in Tuas Biomedical Park, is a 100% subsidiary of Syntellix AG, an internationally operating medical technology company with headquarters in Hannover, Germany, that is undergoing dynamic growth globally. Syntellix specialises in the research and development as well as the marketing and sales of highly innovative transformable metallic implants. Products made from the company's patented MAGNEZIX® alloy are unique. In a widely acclaimed publication, they were evaluated as being clinically superior to the titanium implants commonly used. The implants degrade in the human body, and are transformed into the body's own bone tissue, and in doing so they offer an ideal combination of stability, elasticity and bioabsorbability.

Syntellix is the world's market and technology leader in the field of bioabsorbable metallic orthopaedic implants, and has already been honoured with numerous important national and international awards and prizes. These include the Innovation Award of the German Economy 2012/13, the Future Award 2016 of the German Healthcare Economy, the German Medical Award 2017, the STEP Award 2017 and the Innovator of the Year 2017 award – and now in 2019 the German Innovation Award in Gold; the implants were also a winner in the Product of the Year category of the Sustainability Award 2018 program announced by the Business Intelligence Group in Philadelphia/USA.