Preservation of Cognition and Mobility

Advances in intensive care medicine greatly improved survival rates following critical illness. However, the long-term consequences of these life-saving interventions were generally overlooked, only coming to light in recent years through large prospective studies and systematic analysis of data registers.

Survivors of intensive therapy often suffer from significant limitations. Cognitive disorders, loss of mobility, and psychiatric disorders are among the serious, and sometimes permanent, consequences of intensive care. It is not uncommon that patients remain dependent on organ replacement procedures, such as long-term ventilation. This complex of functional limitations is today collectively known as „Post-Intensive Care Syndrome“ (PICS), while the need for long-term application of intensive care measures is labeled „Chronic Critical Illness (CCI)“. CCI in particular involves long-term stays in intensive care facilities, which often lead to disability.

Germany has a higher density of intensive care beds than any other country, thus proportionally also a greater responsibility in the prevention of long-term consequences associated with intensive care. Aside from mortality, clinical studies are increasingly focusing on functional outcome, so as to evaluate the actual benefits of new interventions more accurately and transparently. In clinical routine, a prescient treatment of patients in respect to the preservation of cognition and mobility is seen as a hallmark of quality in intensive care. This was taken into consideration in the establishment of guidelines, e.g. concerning analgesia, sedation and delirium management, as it was declared by the German Interdisciplinary Association for Intensive and Emergency Medicine (DIVI) as a national quality indicator for intensive care medicine.

The realignment of intensive care medicine poses new scientific, social, and economic challenges. New strategies will be discussed with international experts at the Leopoldina Symposium „The Evolution of Intensive Care Medicine“, with the ultimate goal of improving the well-being of our patients.
# Leopoldina-Symposium: The Evolution of Intensive Care
From recumbency to fully functioning in every day life

## Friday, 24th of February 2017

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<td>10.30 - 11.30</td>
<td>Scientific Press Conference</td>
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<td>11.30 - 12.00</td>
<td>Opening – Representative Leopoldina, Representative ESICM, Representative Charité</td>
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<td>12.00 - 12.45</td>
<td>Surviving critical illness: A patient’s interview</td>
<td>Michael Felli, Gottfried Heinz, Jörg Naumann, Claudia Denke</td>
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| 12.45 - 14.15 | Intensive Care 2017: A high price for everyone | Chair: Giuseppe Citerio, Jozef Kesecioglu  
- What’s the personal price for innovation? Looking back on 10 years of enforcing and managing a new ICU concept - Jozef Kesecioglu  
- An economical analysis of intensive care and the time after survival: It’s expensive to save at the wrong end - Reinhard Busse  
- Designing a healing environment: What’s personal and public investment - Thomas Willemot  
- Political decisions: What role does intensive care medicine play - Jean-Daniel Chiche |
| 14.45 - 16.45 | Innovations and basic conditions      | Chair: Nathan Brummel, Claudia Spies (ML)  
- Glucose utilization and critical illness - Steffen Weber-Carstens  
- EEG-based diagnostics of delirium - Arjen Slooter  
- GABA-A: The forgotten target - Ullrich Zeilhofer  
- Reducing stress, increasing strengths: mobilization and impact on long-term outcome - Nicholas Hart |
| 17.00 - 18.00 | Round table: My dream of ICM 2020    | Moderation: Christina Berndt                                              |

## Saturday, 25th of February 2017

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| 9.00 - 11.00 | Sleep function and dysfunction       | Chair: Margaret Pisani, Ingo Fietze  
- Prevention of Delirium by a Modification in ICU Environment - Alawi Lütz  
- Delirium and circadian integrity - Margaret Pisani  
- Melatonin: Panacea or futile hope? - Kotaro Hatta  
- Early goal-directed sedation, pain, agitation and delirium - Yahya Shehabi |
| 11.20 - 13.20 | Reduction of stress                 | Chair: Arjen Slooter, Bernhard Zwißler (ML)  
- Glucose utilization and critical illness - Steffen Weber-Carstens  
- EEG-based diagnostics of delirium - Arjen Slooter  
- GABA-A: The forgotten target - Ullrich Zeilhofer  
- Reducing stress, increasing strengths: mobilization and impact on long-term outcome - Nicholas Hart |
| 14.20 - 15.50 | Surviving the ICU                    | Chair: Maria Deja, Yahya Shehabi  
- What goes on in the brain: Neuroprotection on the ICU - Georg Winterer  
- Regaining strength after ICU - Ursula Müller-Werdan  
- Perioperative optimization and postoperative outcome: From alpha to omega - Michael Sander  
- How to improve things: A relative’s perspective - Nicci Gerrard |