Correction to: Minimum Quality Threshold in Pre-Clinical Sepsis Studies (MQTIpSS): an international expert consensus initiative for improvement of animal modeling in sepsis

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Correction to: Minimum Quality Threshold in Pre-Clinical Sepsis Studies (MQTiPSS): an international expert consensus initiative for improvement of animal modeling in sepsis

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The original version of this article unfortunately contained mistakes.

The Tables 1–3 were missing. The correct versions of Tables 1, 2 and 3 are given below.

Bettina Standhartinger was unfortunately not correctly named in the acknowledgments of the original version of this article. The correct acknowledgements are as follows:

The authors would like to thank Bettina Standhartinger for her valuable assistance in organizing the Wiggers–Bernard Conference.

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Table 1  Combined Recommendations and Considerations from the Working Group (WG) 1 and 2

| Study Design (WG-1) | 1. Survival follow-up should reasonably reflect the clinical time course of the sepsis model | R |
|                    | 2. Therapeutic interventions should be initiated after the septic insult replicating clinical care |  |
|                    | 3. We recommend that the treatment be randomized and blinded when feasible |  |
|                    | 4. Provide as much information as possible (e.g. ARRIVE guidelines) on the model and methodology, to enable replication. |  |
|                    | a. Consider replication of the findings in models that include co-morbidity and/or other biological variables (i.e., age, gender, diabetes, cancer, immuno-suppression, genetic background and others). | C |
|                    | b. In addition to rodents (mice and rats), consider modeling sepsis also in other (mammal) species. |  |
| Humane Modeling (WG-2) | 5. The development and validation of standardized criteria to monitor the well-being of septic animals is recommended | R |
|                    | 6. The development and validation of standardized criteria for euthanasia of septic animals is recommended (exceptions possible) |  |
|                    | 7. Analgesics recommended for surgical sepsis consistent with ethical considerations | C |
|                    | d. Consider analgesics for nonsurgical sepsis |  |

R: Recommendation strength; C: consideration strength

Table 2  Combined Recommendations and Considerations from the Working Group (WG) 3 and 4

| Infection Types (WG-3) | 8. We recommend that challenge with LPS is not an appropriate model for replicating human sepsis | R |
|                       | 9. We recommend that microorganisms used in animal models preferentially replicate those commonly found in human sepsis |  |
|                       | e. Consider modeling sepsis syndromes that are initiated at sites other than the peritoneal cavity (e.g. lung, urinary tract, brain) | C |
| Organ Failure/ Dysfunction (WG-4) | 10. Organ/system dysfunction is defined as life threatening deviation from normal for that organ/system based on objective evidence | R |
|                       | 11. Not all activities in an individual organ/system need to be abnormal for organ dysfunction to be present |  |
|                       | 12. To define objective evidence of the severity of organ/system dysfunction, a scoring system should be developed, validated and used, or use an existing scoring system. |  |
|                       | 13. Not all experiments must measure all parameters of organ dysfunction but animal models should be fully exploited |  |
|                       | f. Avoid hypoglycemia | C |

R: Recommendation strength; C: consideration strength

Table 3  Combined Recommendations and Considerations from the Working Group (WG) 5 and 6

| Fluid Resuscitation (WG-5) | 14. Fluid resuscitation is essential unless part of the study | R |
|                           | 15. Administer fluid resuscitation based on the specific requirements of the model |  |
|                           | 16. Consider the specific sepsis model for the timing of the start and continuation for fluid resuscitation |  |
|                           | 17. Resuscitation is recommended by the application of iso-osmolar crystalloid solutions |  |
|                           | g. Consider using pre-defined endpoints for fluid resuscitation as deemed necessary | C |
|                           | h. Avoid fluid overload |  |
| Anti-microbial Therapy (WG-6) | 18. Antimicrobials are recommended for pre-clinical studies assessing potential human therapeutics | R |
|                           | 19. Antimicrobials should be chosen based on the model and likely/known pathogen |  |
|                           | 20. Administration of antimicrobials should mimic clinical practice |  |
|                           | i. Antimicrobials should be initiated after sepsis is established | C |

R: Recommendation strength; C: consideration strength

The original article has been corrected.
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