



## 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: Infection

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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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The original article can be found online at <https://doi.org/10.1007/s15010-018-1183-8>.

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

<b>Study Design</b> (WG-1)	1. Survival follow-up should reasonably reflect the clinical time course of the sepsis model	<b>R</b>
	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.	
<b>Humane Modeling</b> (WG-2)	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).	<b>C</b>
	b. In addition to rodents (mice and rats), consider modeling sepsis also in other (mammal) species.	
	c. Consider need for source control	
	5. The development and validation of standardized criteria to monitor the well-being of septic animals is recommended	
	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	<b>R</b>
	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

<b>Infection Types</b> (WG-3)	8. We recommend that challenge with LPS is not an appropriate model for replicating human sepsis	<b>R</b>
	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)	
<b>Organ Failure/ Dysfunction</b> (WG-4)	10. Organ/system dysfunction is defined as life threatening deviation from normal for that organ/system based on objective evidence	<b>R</b>
	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	<b>C</b>

R: Recommendation strength; C: consideration strength

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

<b>Fluid Resuscitation</b> (WG-5)	14. Fluid resuscitation is essential unless part of the study	<b>R</b>
	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	
	h. Avoid fluid overload	
<b>Anti-microbial Therapy</b> (WG-6)	18. Antimicrobials are recommended for pre-clinical studies assessing potential human therapeutics	<b>R</b>
	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	<b>C</b>

R: Recommendation strength; C: consideration strength

The original article has been corrected.

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