1. Flowcharts and data content in the eCRF

1.1. Patients with severe sepsis/septic shock

Activity	Base-line	Exam 1	Treat-ment	Exam 2	Follow-up
Inclusion criteria	x				
Indication	x				
Demographics and type of admission	x				
Comorbidities for APACHE II / SAPS II	x				
Sepsis criteria	x				
Site and source of infection	x				
Physiological parameters for APACHE II / SAPS II		x			
Physiological parameters for the SOFA-Score		x		x	
Relevant diagnostic tests		x		x	
Treatments with CytoSorb® (duration, anticoagulation, blood pump speed, vasopressors, hydrocortison)			x		
Renal replacement therapy (type, filter)		x	x	x	
Complications				x	
Length of stay on ICU and in hospital					x
ICU and hospital survival status					x
Days with mechanical ventilation					x
Days with renal replacement therapy					x
Days on vasopressors					x
Assessment of treatment effect					x

Exam 1: Time period of up to 24 h before CytoSorb® use

Exam 2: Time period of 24 h after end of CytoSorb® use

Follow-up: Discharge from hospital

1.2. Patients with cardiac surgery with CPB: preemptive use

Activity	Base-line	Exam 1	Treat-ment	Exam 2	Follow-up
Inclusion criteria	x				
Indication	x				
Demographics and type of admission	x				
Comorbidities	x				
Clinical parameters for EuroScore	x				
Relevant diagnostic tests		x		x	
Treatments with CytoSorb® (duration, anticoagulation, blood pump speed, vasopressors, hydrocortison)			x		
Renal replacement therapy (type, filter)		x	x	x	
Information about surgery				x	
Physiological parameters for the SOFA-Score		x		x	
Complications				x	
Length of stay on ICU and in hospital					x
ICU and hospital survival status					x
Days with mechanical ventilation					x
Days with renal replacement therapy					x
Days on vasopressors					x
Assessment of treatment effect					x

Exam 1: Time period of up to 24 h before CytoSorb® use

Exam 2. Time period of 24h on post-op day 2

Follow-up: Discharge from hospital

1.3. Patients with cardiac surgery with CPB: postoperative use

Activity	Base-line	Exam1	Treat-ment	Exam 2	Follow-up
Inclusion criteria	x				
Indication	x				
Demographics and type of admission	x				
Comorbidities for APACHE II / SAPS II	x				
Clinical parameters for EuroScore	x				
Information about surgery	x				
Physiological parameters for APACHE II / SAPS II		x			
Physiological parameters for the SOFA-Score		x		x	
Relevant diagnostic tests		x		x	
Treatments with CytoSorb® (duration, anticoagulation, blood pump speed, vasopressors, hydrocortison)			x		
Renal replacement therapy (type, filter)			x		
Complications					x
Length of stay on ICU and in hospital					x
ICU and hospital survival status					x
Days with mechanical ventilation					x
Days with renal replacement therapy					x
Record days on vasopressors					x
Assessment of treatment effect					x

Exam 1: Time period of up to 24 h before CytoSorb® use

Exam 2. Time period of 24h after end of CytoSorb® use

Follow-up: Discharge from hospital

1.4. Patients with other indications

Activity	Base-line	Exam 1	Treat-ment	Exam 2	Follow-up
Inclusion criteria	x				
Indication	x				
Demographics and type of admission	x				
Comorbidities for APACHE II / SAPS II	x				
Physiological parameters for APACHE II / SAPS II		x			
Physiological parameters for the SOFA-Score		x		x	
Relevant diagnostic tests		x		x	
Treatments with CytoSorb® (duration, anticoagulation, blood pump speed, vasopressors, hydrocortison)			x		
Renal replacement therapy (type, filter)		x	x	x	
Complications				x	
Length of stay on ICU and in hospital					x
ICU and hospital survival status					x
Days with mechanical ventilation					x
Days with renal replacement therapy					x
Days on vasopressors					x
Assessment of treatment effect					x

Exam 1: Time period of up to 24 h before CytoSorb® use

Exam 2. Time period of 24h after end of CytoSorb® use

Follow-up: Discharge from hospital

1.5. Data content (eCRF)

The hospital/ICU questionnaire requires information on the following aspects:

1. **Information about the hospital**
   - Name and address
   - Type of hospital
     - University Hospital
     - Academic Teaching Hospital
     - General Hospital / Acute Care Hospital
   - Level of care
     - Primary health care
     - Regular health care
     - Specialized health care
     - Central health care
     - Maximum health care
     - In-patient hospital
     - others
   - Number of beds
   - Number of specialty departments
   - Number of ICUs

2. **Information about the ICU**
   - Name of ICU
   - Type of specialization
     - surgical
     - surgical-internistic
     - internistic
     - neurosurgical
     - cardio-, vascular-, thoracic surgical
     - cardio-internistic
     - neurological
     - traumatological
     - others
   - Management
     - anesthesiological
     - internistic
     - surgical
     - interdisciplinary
     - other
   - Number of ICU beds
   - Information about cardiac surgery
     - Number of procedures/year with CPB
     - Extent of care
       - Elective surgery
       - Emergency care
     - High technology organ replacement therapies
       - ECMO
       - ECLS

- RRT
- MARS

The patient data collection questionnaire consists of the following items that apply either to all or only to some indications and have to be completed accordingly.

1. **Baseline**
   - Inclusion criteria
   - CytoSorb® indications
   - Demographic data
   - Comorbidities (APACHE II, SAPS II)
   - Indication criteria for severe sepsis/septic shock
   - Information about the infection that caused severe sepsis/septic shock
   - Risk assessment of cardiac surgical patients (EuroSCORE)
   - In case of cardiac surgery use (according to CRF): Information about type of surgery

2. **Exam 1**
   - Physiological data (APACHE II, SAPS II, SOFA-Score)
   - Relevant diagnostic tests

3. **Treatment**
   - Treatment with CytoSorb®
   - Renal replacement therapy

4. **Exam 2**
   - In case of cardio surgical preemptive indication: Information about type of surgery
   - Physiological data (SOFA-Score)
   - Relevant diagnostic tests
   - Treatment related complications

5. **Final assessment/Follow-up**
   - Outcome
   - Assessment of the treatment success

The following items are recorded in the eCRF:

<u>Part 1: Baseline</u>

- Inclusion criteria
  - Use of CytoSorb®
  - Age >= 18 years
  - Signed informed consent

- CytoSorb®-Indications
  - Severe sepsis/septic shock
  - Cardiac surgery with CPB
    - Preemptive CytoSorb® use in OR
    - Postoperative CytoSorb® use on ICU
  - Other indications
    - Liver failure
    - Acute pancreatitis
    - Trauma
    - Burns
    - ARDS, patients with ECMO
    - others (including patients with ECLS)

- Demographic data
  - Age
  - Gender
  - Weight in kg
  - Height in cm
  - Type of admission (surgical emergency, non-surgical emergency, elective operation)

- Comorbidities (APACHE II / SAPS II)
  - Parameters see Annex

- Indication criteria for severe sepsis/septic shock
  - Diagnostic criteria see part 8.3. „Patients with severe sepsis/septic shock
  - Source of infection
    - Community-acquired
    - Nosocomial (ICU / IMC)
    - Nosocomial (normal ward / nursing home)
  - Localization of infection
    - Pneumonia
    - Other upper or lower airways
    - Thoracic (empyema / mediastinitis)
    - Gastrointestinal
    - Primary bacteremia
    - Catheter infection
    - Bones / soft tissue
    - Surgical wound infection
    - Intraabdominal
    - CNS
    - Cardiovascular
    - Urogenital
    - Others

- Risk factors of cardiosurgical patients (EuroSCORE)
  - Parameters see Annex

- Information about the surgery (cardiosurgical postoperative indication)
    - Type of surgery
        - Heart valve surgery
        - If yes, endocarditis present?
        - Conorary surgery
        - Aortic surgery
        - Maze procedure
        - Others
    - Time on CPB
    - Duration of cross clamp use
    - Lowest body temperature

Part 2: Exam 1

- Physiological data(APACHE II, SAPS II, SOFA-Score)
    - Parameters see Annex

- Relevant diagnostic tests
    - CRP
    - PCT
    - IL-6
    - Myoglobin
    - Free hemoglobin

Part 3: Treatment

- Treatment with CytoSorb® (documentation for each adsorber applied)
    - Duration of treatment
    - Reason for termination of the treatment
        - Regular
        - Clotting
        - Death
    - Anticoagulation
        - Heparin
        - Citrate
        - Others
    - Blood pump rate
    - Supporting supplementary therapies within the timeframe of 1 h before, during and 1 h after treatment, with highest dose:
        - none
        - Epinephrine
        - Norepinephrine
        - Dopamine
        - PDE-3-inhibitor
        - Prostaglandin inhalation
        - Vasopressin
        - Others (e.g. hydrocortisone)

- Renal replacement therapy (documentation of each absorber applied)
  - Type of application
    - intermittent (up to 6h)
    - prolonged intermittent
    - continuous
  - Filter (on/off)

Part 4: Exam 2

- Information about the surgery (cardiac surgical preemptive indication)
  - Type of surgery
    - Heart valve surgery
    - If yes, endocarditis
    - Coronary surgery
    - Aortic surgery
    - Others
  - Time on CPB
  - Duration of cross clamp use
  - Lowest body temperature

- Physiological data (SOFA-Score)
  - Parameters see Annex

- Physiological data (APACHE II, SAPS II) after surgery (cardiac surgical preemptive indication)
  - Parameters see Annex

- Relevant diagnostic tests
  - CRP
  - PCT
  - IL6
  - Myoglobin
  - Free hemoglobin

- Treatment related complications (no/yes)
- If yes:
  - Organs/system
    - Infections
    - Blood
    - Electrolyte imbalance
    - Heart/circulation
    - Kidneys/excretion
    - Nervous system
    - Respiration
    - Digestive system (incl. liver)
    - Others
  - Description

Part 5: Final assessment/Follow-up

- Outcome
    - ICU stay (days)
    - ICU mortality
    - Length of hospital stay (days)
    - Hospital mortality
    - Ventilator days
    - Days with renal replacement therapy
    - Days on vasopressors
- Assessment of treatment effect (in accordance with the GCI scale)
    - Not assessed
    - Very much improved
    - Much improved
    - Minimally improved
    - No change
    - Minimally worse
    - Much worse
    - Very much worse

2. Severity Scores

2.1. SOFA-Score

Organ failure is defined according to the SOFA-Score variables. The worst parameter value of each 24 h interval is taken for the CRF assessment.

Parameters for the SOFA-Score are assessed on ICU only. The SOFA-Score is calculated from the sum of the different organ system assessment points. Parameters for calculating the SOFA-sub-score are also part of the CRF. Assessment points for the organ systems range from 0 to 4. The SOFA-Score is calculated for analyses. Sub-scores of the SOFA-Score are defined as followed:

Cardiovascular System:

Mean arterial pressure and catecholamine (vasopressor) administration determine the number of assessment points. The lowest MAP value of the last 24 h is part of the CRF. The highest catecholamine (vasopressor) dose is part of the CRF assessment.

Score	*Situation of circulation*
0	MAP ≥ 70 and no vasopressors
1	MAP < 70 and no vasopressors
2	Dopamine ≤5 µg/kg/min or Dobutamine (any dose)
3	Dopamine >5 – ≤15 µg/kg/min **or** (Nor)Epinephrine ≤0,1 µg/kg/min
4	Dopamin >15 µg/kg/min **or** (Nor)Epinephrine >0,1 µg/kg/min

Lung:

This sub-score is determiend by the PaO_2/FiO_2-Ratio. In case the blood gas analysis for the day in question is not available or the patient is no longer intubated but still needs oxygen therapy, conversion tables are used

Score	*PaO_2/FiO_2*
0	> 400 mmHg (> 53,2 kPa)
1	301–400 mmHg (39,9–53,1 kPa)
2	201–300 mmHg (26,6–39,8 kPa)
3	101–200 mmHg (13,3–26,5 kPa)
4	≤ 100 mmHg (< 13,3 kPa)

Coagulation system:

These sub-scores are determined by the number of thrombocytes. Record of the lowest number of thrombocytes in the last 24 h is part of the CRF.

Score	*Number of thrombocytes*
0	$\geq 150 \times 10^3/mm^3$
1	$100\text{-}149 \times 10^3/mm^3$
2	$50\text{–}99 \times 10^3/mm^3$
3	$20\text{–}49 \times 10^3/mm^3$
4	$<20 \times 10^3/mm^3$

Kidney:

This sub-score is determined by the serum creatinine and the urinary excretion. The worst value is part of the CRF.

Score	*Serum-creatinine and urinary excretion*
0	<1,2 mg/dl (<110 µmol/l)
1	1,2–1,9 mg/dl (110 –170 µmol/l)
2	2,0–3,4 mg/dl (171– 299 µmol/l)
3	3,5–4,9 mg/dl (300–440 µmol/l) **or** urinary excretion <500 ml/24h
4	≥5,0 mg/dl (≥ 441 µmol/l) **or** urinary excretion <200 ml/24h

Liver:

The total bilirubin level determines this value. The worst value is part of the CRF.

Score	*Total bilirubin*
0	<1,2 mg/dl (< 20 µmol/l)
1	1,2–1,9 mg/dl (20–32 µmol/l)
2	2,0–5,9 mg/dl (33–101 µmol/l)
3	6,0–11,9 mg/dl (102–204 µmol/l)
4	≥12 mg/dl (≥205 µmol/l)

Central Nervous System (CNS):

The CNS is assessed by the Glasgow Coma Scale (GCS). In case the patient is sedated, assessment of vigilance is done assuming that the patient is not sedated. In addition to this estimated GCS, the actual GCS is documented. The worst estimated and the worst actual GCS value is part of the CRF.

Score	*Glasgow-Coma-Scale*
0	15
1	13–14
2	10–12
3	6–9
4	≤ 5

Glasgow-Coma-Scale

The Glasgow-Coma-Scale is a scoring system for neurological assessments. It consists of 3 single assessments that are added later on.

		Score
Eye opening response	Spontaneous	4
	On verbal command	3
	Opens to painful stimulus	2
	None	1
Best verbal response	Able to respond, oriented	5
	Able to respond, disoriented	4
	Inappropriate responses	3
	Incomprehensible sounds	2
	None	1
Best motor response	Obeys commands for movement	6
	Movement to painful stimulus	5
	Withdrawal to painful stimuli	4
	Abnormal flexion to painful stimuli	3
	Extension to painful stimuli	2
	None	1

2.2. Apache II-Score

Punktwert	4	3	2	1	0	1	2	3	4
Rectal temperature	≥41	39–40,9		38,5–38,9	36–38,4	34–35,9	32–33,9	30–31,9	≤29,9
Mean arterial BP (mmHg)	≥160	130–159	110–129		70–109		50–69		≤49
Heart rate (/min)	≥180	140–179	110–139		70–109		55–69	40–54	≤39
Respiratory rate (/min) *Spontaneous o. ventilation*	≥50	35–49		25–34	12–24	10–11	6–9		≤5
Oxygenation (mmHg) a) FiO_2≥0,5: $AaDO_2$ b) FiO_2<0,5: PaO_2	≥500	350–499	200–349		<200 >70	61–70		55–60	<55
Arterial pH-value	≥7,7	7,6–7,69		7,5–7,59	7,33–7,49		7,25–7,32	7,15–7,24	<7,15
Sodium (mmol/l)	≥180	160–179	155–159	150–154	130–149		120–129	110–119	<110
Potassium (mmol/l)	≥7	6–6,9		5,5–5,9	3,5–5,4	3–3,4	2,5–2,9		<2,5
Creatinine (mg/dl)[1]	≥3,5	2–3,4	1,5–1,9		0,6–1,4		<0,6		
Hematocrit (%)	≥60		50–59,9	46–49,9	30–45,9		20–29,9		<20
Leukocytes ($10^3/mm^3$)	≥40		20–39,9	15–19,9	3–14,9		1–2,9		<1
Glasgow-Coma-Scale [2]	Score=15 minus GCS								
Venous HCO_3 (mmol/l)[3]	≥52	41–51,9		32–40,9	22–31,9		18–21,9	15–17,9	<15

[1] in case of acute renal failure ×2

[2] s. part 2.1

[3] only if arterial blood gas is lacking

The following points are given for the patient's age: <=42 years: 0 points; 45 – 54 years: 2 points, 55 – 64 years: 3 points, 65 – 74 years: 5 points, >=75 years: 6 points

Details on the following chronic diseases are assessed (Yes/No questions):

Liver: Cirrhosis (biopsy) and proven portal hypertension or
Gastrointestinal bleeding caused by portal hypertension or
Previous liver failures, encephalopathy, coma

cardiovascular: NYHA IV

Respiratory: chronic, restrictive, obstructive or vascular diseases that lead to severe impairments (e.g. disability of climbing stairs or do one's household chores); proven chronic hypoxia, hypercapnia, secondary polycythemia, severe pulmonary hypertension (> 40 mmHg), need of ventilation

Renal: Need for chronic dialysis

Immuno-

suppresive: Therapies that reduce infection resistance (e.g. immunosuppression, chemotherapy, radiotherapy, long-term treatment (up to 30 days prior to hospitalization) or current treatment with highly dosed steroids (>16mg/kg for 5 days)); presence of a disease that has advanced to the point that the immune system is sorely afflicted (e.g. leukemia, lymphoma, AIDS)

- 0 points if all five questions are answered NO.
- 2 points if at least one question is answered YES and the patient is in an elective postoperative state
- 5 points if at least one question is answered YES and the patient is in a critical postoperative state or was not operated.

2.3. SAPS II

The value that differs most from the norm within 24 h is included.

Parameter	Result	Points
Age (years)	<40	0
	40–59	7
	60–69	12
	70–74	15
	75–79	16
	≥80	18
Heart rate (/min)	<40	11
	40–69	2
	70-119	0
	120–159	4
	≥160	7
Systolic BP (mmHg)	<70	13
	70–99	5
	100–199	0
	≥200	2
Temperature (°C)	<39	0
	≥39	3
PaO_2/FiO_2 (on ventilation or CPAP) (mmHg)	<100	11
	100–199	9
	≥200	6
Diuresis (l/24h)	<0,5	11
	0,5–0,999	4
	≥1,0	0
Urea (mg/dl) [mmol/l]	<28 [4,6]	0
	≥84 [13,9]	10
Leukocytes ($10^3/mm^3$)	<1,0	12
	1,0–19,9	0
	≥20	3
Potassium (mmol/l)	<3,0	3
	3,0–4,9	0
	≥5,0	3
Sodium (mmol/l)	<125	5
	125–144	0
	≥145	1
Bicarbonate (mmol/l)	<15	6
	15–19	3
	≥20	0
Bilirubin (mg/dl) [µmol/l]	<4,0 (68,4)	0
	4,0–5,9 (68,4–102,5)	4
	≥6,0 (102,5)	9
Glasgow Coma Score	<6	26
	6–8	13
	9–10	7
Chronic diseases	Metastasizing carcinoma	9
	Hematological malignoma	10
	AIDS	17
Type of admission	Scheduled operation	0
	Medical reason	6
	Emergency operation	8

2.4. EuroSCORE II

Risk factor	Manifestation	Definition
Age (years)		
Gender	male/female	
Renal impairment	normal	Creatinine Clearance > 85 ml/min)
	moderate	Creatinine Clearance > 50 und < 85 ml/min
	severe	Creatinine Clearance < 50 ml/min
	dialysis	Dialysis, regardless of Creatinine Clearance
Extracardiac arteriopathy	no / yes	One or more of the following: - claudication - carotid occlusion or >50% stenosis - amputation for arterial disease - previous or planned intervention on the abdominal aorta, limb arteries or carotids
Poor mobility	no / yes	Severe impairment of mobility secondary to musculoskeletal or neurological dysfunction
Previous cardiac surgery	no / yes	
Chronic lung disease	no / yes	Long term use of bronchodilators or steroids for lung disease
Active endocarditis	no / yes	Patient still on antibiotic treatment for endocarditis at time of surgery
Critical preoperative state	no / yes	- ventricular tachycardia or ventricular fibrillation or aborted sudden death - preoperative cardiac massage - preoperative ventilation before anesthetic room - preoperative inotropes or IABP - preoperative acute renal failure (anuria or oliguria <10ml/hr)
Diabetes on insulin	no / yes	
NYHA	I	
	II	
	III	
	IV	
CCS class 4 angina	no / yes	Angina at rest
LV function	good	LVEF > 50%
	moderate	LVEF 31 – 50%
	poor	LVEF 21 - 30%
	very poor	LVEF 20% or less
Recent MI	no / yes	Myocardial infarction within 90 days
Pulmonary hypertension	no	
	moderate	Systolic pulmonary artery pressure 31-55 mmHg
	severe	Systolic pulmonary artery pressure >55mmHg
Urgency	elective	Routine admission for operation
	urgent	Patients who require intervention or surgery on the current admission for medical reasons.
	emergency	Operation before the beginning of the next working day after decision to operate.
	salvage	Patients requiring cardiopulmonary resuscitation (external cardiac massage) en route to the operating theatre or prior to induction of anesthesia.
Weight of the intervention	isolated CABG	Include major interventions on the heart such as: - CABG - valve repair or replacement - replacement of part of the aorta - repair of a structural defect - maze procedure - resection of a cardiac tumor
	Simple non CABG	
	2 procedures	
	3 procedures	
Surgery on thoracic aorta	no / yes	

3. Criteria defining sepsis and septic shock

- Proven infection (microbiologically verified or clinically assumed infection)
- Proven systemic inflammatory response syndrome (SIRS), i.e. at least 2 of the following SIRS criteria are satisfied:
  - Fever (≥ 38°C) or hypothermia (≤ 36°C) confirmed by rectal or intravascular or intravesical measurement
  - Tachycardia: heart rate ≥ 90 /min
  - Tachypnea (frequency ≥ 20/min) or hyperventilation ($PaCO_2$ ≤ 4.3 kPa/ ≤ 32 mmHg) or mechanical ventilation
  - Leukocytosis (≥ 12000/µl) or leukopenia (≤ 4000/µl) or ≥ 10% immature neutrophils in the differential blood count
- Infection-related organ dysfunction and/or septic shock
  - Acute encephalopathy: reduced vigilance, disorientation, anxiety, delirium, without influence of psychotropic drugs
  - Relative or complete thrombocytopenia: decrease of thrombocytes by more than 30 % within 24 hours or number of thrombocytes ≤ 100.000/µl; thrombocytopenia caused by acute bleeding or due to immunological reasons has to be excluded
  - Arterial hypoxemia: PaO_2 ≤ 10 kPa (≤ 75 mmHg) under indoor air conditions or a PaO_2/FiO_2-ratio of ≤ 33 kPa (≤ 250 mmHg) under oxygen administration. A manifest heart or lung disease as a cause of hypoxemia must be excluded. PaO_2/FiO_2 in pneumonia under 27 kPa (200 mmHg).
  - Arterial hypotension: Systolic blood pressure ≤ 90 mmHg or mean arterial blood pressure ≤ 70 mmHg for at least 1 hour despite adequate volume resuscitation and no concurrent shock causes.
  - Renal dysfunction: diuresis of ≤ 0.5 ml/kg/h for at least one hour despite adequate volume resuscitation and/or increase of the serum creatinine level ≥ 2× above the local standard reference range
  - Metabolic acidosis: base deficit ≥ 5.0 mmol/l or plasma lactate concentration > 1,5× above the local standard reference range
  - Septic shock: systolic arterial blood pressure ≤ 90 mmHg or mean arterial blood pressure ≤ 70 mmHg for at least 2 hours or indicated vasopressor use for maintaining systolic arterial blood pressure ≥ 90 mmHg or mean arterial blood pressure ≥ 70 mmHg. Hypotension remains unchanged despite adequate volume replacement and cannot be explained by other causes.

4. Abbreviations

APACHE	Acute Physiology And Chronic Health Evaluation
ARDS	Acute Respiratory Distress Syndrome
BASG	Bundesamt für Sicherheit im Gesundheitswesen (Austrian Federal Office for Safety in Health Care)
BfArM	Bundesinstitut für Arzneimittel und Medizinprodukte (Federal Institute for Drugs and Medical Devices; Germany)
CNS	Central Nervous System
CPB	Cardio-pulmonary bypass
CRP	C-reactive protein
ECLS	Extracorporeal Life Support
ECMO	Extracorporeal Membrane Oxygenation
EuroSCORE	European System for Cardiac Operative Risk Evaluation
GCI scale	Global Clinical Impression scale
HMG	Heilmittelgesetz (Medical Product Act; Switzerland)
ICU	Intensive Care Unit
IL-6	Interleukin 6
IMC	Intermediate Care Unit
IRB	Institutional Review Board
MARS	Molecular Adsorbents Recirculation System
MepV	Medizinprodukteverordnung der Schweiz (Swiss Medical Device Regulation)
MPG	Medizinproduktgesetz (Medical Device Act)
MPSV	Medizinprodukte-Sicherheitsverordnung (Medical Device Safety Regulation; Germany)
PCT	Procalcitonin
PDE	Phosphodiesterase
RRT	Renal Replacement Therapy
SAPS	Simplified Acute Physiology Score
SIRS	Systemic Inflammatory Response Syndrome
SOFA	Sequential Organ Failure Assessment
ZKS	Zentrum für Klinische Studien (Center for Clinical Studies, University Hospital Jena)