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Questionnaire: Renal Replacement Therapy in Intensive Care

Name and Address of Hospital and doctor completing the questionnaire Who funds acute dialysis? ☐ Government ☐ private insurance company 1. Structural data of the entire Hospital: Number of beds overall: ☐ 201-400 ☐ 401-600 ☐ more than 600 0-200 University Hospital Hospital of maximum medical care ☐ Hospital of basic and standard care Number of disciplines with separate intensive care unit: ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 or more Number of interdisciplinary intensive care units (operated by several medicinal fields): ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 or more Number of intensive care beds in the entire hospital: 2. Structural data for your own Intensive Care unit (please fill in only for your own unit, not for the entire entity!): Form of Intensive Care, Department: Surgery Internal Medicine Interdisciplinary Anaesthesia Other: Please characterise shortly the structure of your ICU: □ <5 □ 6-10 ☐ 11-15 more than 15 Number of beds Artificial ventilation units ☐ <5 ☐ 6-10 ☐ 11-15 more than 15 Number of admissions per month \square <30 \square 31-60 ☐ 60-180 ☐ >180 Primary type of patients:

Trauma Surgery Internal ☐ Interdisciplinary Other (please describe):

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| 3. | Therapy: | | | | | |
|----|---|--|--|--|--|--|
| | Available organ replacement systems in the Intensive Care (except artificial ventilation): | | | | | |
| | Renal replacement therapy | | | | | |
| | ☐ None of the above | | | | | |
| | If renal replacement therapy is available continue the questionnaire | | | | | |
| 4. | Who is usually responsible for the indication of renal replacement therapy: | | | | | |
| | a) Department: (<i>Please name only <u>one</u></i>) ☐ Nephrologist (in house) ☐ from other hospital ☐ medical practitioner* ☐ | | | | | |
| | ☐ Internal specialist* ☐ Surgeon* ☐ Anaesthesiologist* ☐ Other* (please describe): | | | | | |
| | *Is a Nephrologist involved in the diagnosis/selection of therapy? Yes: \[\sum \text{No:} \sum \text{No:} \] | | | | | |
| | b) Qualification: <i>(multiple answers permitted)</i> Registrar | | | | | |
| | Other (please describe) 🗌 : | | | | | |
| | | | | | | |
| 5. | Who chooses usually the renal replacement method: | | | | | |
| | a) Department: (<i>Please name only one</i>) ☐ Nephrologist (in house) ☐ , from other hospital ☐ medical practitioner ☐ | | | | | |
| | ☐ Internal specialist ☐ Surgeon ☐ Anaesthesiologist ☐ Other (please describe) | | | | | |
| | | | | | | |
| | b) Qualification: (multiple answers permitted) Registrar Specialist Senior physician | | | | | |
| | Other (please describe) : | | | | | |
| | | | | | | |

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| 6. Which renal replacement modalit (multiple answers permitted) | ies are availa | able: | | | | |
|--|---|-------------------------|----------|---|---------------------------|-----|
| ☐ CVVH ☐ CVVHD ☐ CVVHDF: ☐ PD | ☐ IHD: ☐ proloi ☐ SCUF ☐ Other | | SLEDD: | | | |
| Is there a standard method, if | yes, which: | | | | | |
| 7. What machines (multiple answers | permitted): | | | | | |
| ☐ Prisma [®] ☐ ☐ Prismaflex [®] ☐ ☐ Octonova [®] ☐ | Multifiltrate [®] Genius [®] Other If | other, which | | uarius [®] 11/25 [®] | | |
| 8. Diagnosis: | | | | | | |
| a) Which criteria determine us replacement therapy? Please evaluate the following statement | | department Applies alv | | - | f renal Applies | |
| | | 1 | 2 | 3 | 4 | 5 |
| We decide based on the clinical assess | ment of the | | | | | |
| patient | | | | | | |
| We use always definite criteria | | | | | | |
| Following RIFLE / AKIN criteria | | | | | | |
| Creatinine > 300umol/L | | | | | | |
| Serum-Urea > 50 mmol/L | | | | | | |
| From a Serum-Urea > 25 mmol/L | | | | | | |
| After ineffective use of diuretics | | | | | | |
| Urine output<500 ml per day | | | | | | |
| Also because of extra renal indications | 5 | | | | | |
| Within 48h of ICU-Admission with AKI | | | | | | |
| Always with septic shock Only with absolute dialysis criteria (the | | | | | | |
| hypokalaema, acidosis, uraemia, volun | | | | | | |
| With highly catecholamine dependent p | | | | | | |
| (Adrenalin > 1mg/h) and anuria as early | | | | | | |
| We do have a SOP | | | | | | |
| We make decisions based upon econo | mic aspects | | | | | |
| With Lactic-acidosis | | | | | | |
| Acute renal failure with Multi Organ Fai | lure (MOF) | | | | | |
| b) Is treatment being delivered without renal failure) | | indication? | (Dialysi | s or hem | nofiltrat | ion |
| With Sepsis | | | | Пν | es 🔲 ı | no |
| With heart insufficiency | | | | | | no |
| Intoxication, hypercalcaemia | | | | | | no |
| Other (f. e. hypothermia, thermo | regulation, p | lease indica | te): | | | no |
| | | | | | | |
| | | | | | | |

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9. Which criteria determine the length of therapy?

| Please evaluate the following statements: | Applies alv | Applies always | | Applies never | | |
|--|-------------|----------------|---|---------------|---|--|
| | 1 | 2 | 3 | 4 | 5 | |
| We decide based on the clinical assessment of the | | | | | | |
| patient | | | | | | |
| We always use definite criteria | | | | | | |
| Following RIFLE / AKIN criteria | | | | | | |
| Decrease of creatinine down to the starting value | | | | | | |
| Decrease of urea down to the starting value | | | | | | |
| From a diuresis larger than 2000 ml per day | | | | | | |
| From a diuresis > 1000ml/d | | | | | | |
| From a diuresis > 1000ml/d trial of discontinuation as | S | | | | | |
| long as serum-urea < 25 mmol/L and no absolute | | | | | | |
| indication | | | | | | |
| When clinical situation of patient improves | | | | | | |
| We have a SOP | | | | | | |
| We make decisions based upon economic aspects | | | | | | |
| If despite renal replacement therapy a lactic acidosis | ; | | | | | |
| continues | | | | | | |

10. Which patients receive <u>predominantly what kind of therapy</u> with acute renal failure?

| Please check only one per line: | Pred | ominantly | y interm | littent oi | contin | uousiy |
|-----------------------------------|------|-----------|----------|------------|--------|--------|
| | | 1 | 2 | 3 | 4 | 5 |
| With isolated AKI | | | | | | |
| With MOF | | | | | | |
| With Sepsis | | | | | | |
| With instable haemodynamics | | | | | | |
| All patients are treated the same | | | | | | |
| Other (please describe): | | | | | | |
| | | | | | | |
| | | | | | | |

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11. Following which criteria is therapy predominantly monitored? (Please name only one) Efficiency criteria, Kt/V □ clinical CEU 🗌 a) With CVVH Filtrate volume/Dialysate volume: All Patients same: 1l/h 1,5l/h 1 2l/h 🗌 other 🗌 Differentiated: Ideal body weight ☐ Volume in ml per kg body weight ☐ Prescribed Dosage: 20 ml/kg/h: 25 ml/kg/h: 35 ml/kg/h: 🔲 No: □ Do you check the actual given dosage? Yes: ☐ / estimated ☐ / ideal ☐ / actual ☐ Patient weight: daily \(\square\) / only in the beginning \(\square\) How often: Other (please describe) b) With IHD or prolonged IHD / SLEDD: How often is therapy applied? Daily Every other day Individual decision on a daily basis? Other [(please describe): 12. Used buffering substance with CVVH/CVVHD/CVVHDF Lactate Lactate and Bicarbonate Bicarbonate Citrate 13. Used anticoagulation: Yes Fractionated Heparin Unfractionated Heparin Argatroban Citrate Heparin/Citrate No anticoagulant Other Which: Most often used Anticoagulation: _ 14. Do you use regional Citrate Anticoagulation yes 🗌 no 🗌 Rev6 translation into ENGL 3.9.10

6/7 If yes, in approx. what percentage of your treatments 15. Execution: a) CVVH with pre-dilution/post-dilution If applicable Predominantly pre-dilution Predominantly post-dilution No difference Do you correct pre-dilution when dose is adjusted yes \(\square\) no \(\square\) b) With assignment of CVVHDF what is the substitute/dialysate ratio: 1:1 Substitute more than Dialysate Substitute less than Dialysate 16. Who performs the therapy hands-on? (multiple answers permitted, with explanation if needed) a) With CVVH / CVVHD / CVVHDF: -Physician -Nursing staff intensive -Nursing staff dialysis -Technologist b) With intermittent Treatments: -Physician -Nursing staff intensive -Nursing staff dialysis Technologist 17. Number of patients in intensive care with acute renal replacement therapy per year? 10-50 □50-100 □101-200 □>200

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18. Percentage frequency of renal replacement therapy

| Г | All 3 below listed renal replacement therapies total per year = 100%) | |
|--------|---|--|
| | ntermittent treatments:0 | |
| | Continuous treatments: ☐0 ☐10 ☐20 ☐30 ☐40 ☐50 ☐60 ☐70 ☐80 ☐90 ☐100% | |
| | rolonged IHD treatments: ☐0 ☐10 ☐20 ☐30 ☐40 ☐50 ☐60 ☐70 ☐80 ☐90 ☐100% | |
| | PD: | |
| | ontinuous: Number of therapy days per CRRT setup per year: | |
| | ntermittent: Number of treatments per year: | |
| | rolonged IHD: Number of treatments per year: | |
| | D: Number of treatments per year | |
| 19. Wr | ten down therapy standards? | |
| | es 🗌 no 🗌 | |
| | Comment: | |
| | | |
| 20. Qu | stionnaire filled in by (name): | |
| | ducation background: | |
| | pecialist | |
| | specialist with focus on intensive care nternal, surgical intensive care) | |
| | unction: Senior Physician Head Physician | |
| | Comments: | |
| Thank | rou very much for your participation and patience. | |
| | | |

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