

Mr. Sajjad Alam ✓  
Deputy Director EM  
AMTI, Abbottabad.

Subject: Specifications for Dialysis Machine and Dialysis Chairs

In response to the letter ATH/EME/956-58-2023 dated 11-04-2023, dialysis machines and chairs with following fundamental specifications are required for up gradation of the Dialysis Unit, ATH. We also need mandatory backup servicing and maintenance facility (including weekly preventive maintenance) for minimum 5 years (warranty) guaranteed by the company interested.

Dialysis Machine Specifications:

1. LCD touchscreen display
2. Monitoring window, Full ultrafiltration display
3. Digital and Graphical Monitoring
4. Online dialysis dose/ clearance monitoring
5. BP monitoring
6. Dialysis fluid filter to generate ultra pure dialysis fluid
7. Single needle or double needle system with single pump
8. Isolated ultrafiltration program
9. Ultrafiltration and sodium profiling
10. Volumetrically controlled ultrafiltration
11. Central concentrate delivery system
12. Arterial pressure monitoring
13. Venous pressure monitoring
14. Transmembrane pressure monitoring
15. High or low Pressure alarm systems
16. Arterial blood pump flow range (15-600ml/min)
17. Air bubble detector (ultrasonic/optical)
18. Blood leak detector ( $\leq 0.5$  ml blood/min at 800ml/min flow)
19. Heparin pump with bolus function
20. Dialysate flow (0-800ml/min)
21. Adapted flow option
22. Temperature range (35-39C)
23. Adjustable mixing ratio for acid component
24. Adjustable bicarbonate component (-8 to +8 mmol/L)
25. Dry bicarbonate concentrate
26. UF rate: 0 to 4 litres

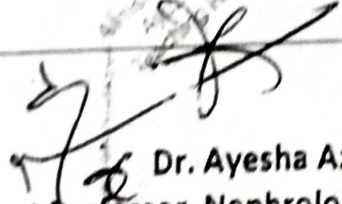
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27. Integrated Hot rinse (85-95C)
28. Battery backup (minimum half hour)
29. Real time bicarbonate and Conductivity monitoring and alarm system
30. Conductivity (12.8 – 16 ms/cm)
31. Chemical and heat disinfection
32. Bi-cart holder assembly
33. Dialysate filter holding
34. Automatic powder backup

Dialysis Chair Specifications:

1. Adjustable back, legs, height, foot rest
2. One touch position for height, back, and other adjustment
3. One touch emergency position
4. Safety back rest
5. Easy clean, dust proof, water proof
6. Reduce the risk of crush injuries
7. Lumbar and lateral support
8. Easy side transfer
9. Weight capacity 200kg
10. Central braking system

DR. AYESHA AZIZ  
Assistant Professor, Nephrology  
In charge Dialysis Unit, ATH



Dr. Ayesha Aziz  
Assistant Professor, Nephrology  
In charge Dialysis Unit, ATH

Copy to:

Hospital Director, AMTI, Abbottabad