

Department of Blood Purification

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(1) Education

The Department of Blood Purification has been engaged in such educational activities as follows.

- 1) Clinical clerkship of 5th and 6th year students of Medical School
- 2) Clinical lectures of 4th year students of Medical School
- 3) Lectures of postgraduate master course students of Medical School
- 4) Clinical lectures of 2nd year students of School of Health Sciences
- 5) Hospital training of postgraduate master course students of Medical School (54 students)
- 6) Hospital training of dialysis therapy (4 trainees)
- 7) Hospital training of clinical engineering technologists (6 trainees)

(2) Research

The Department of Blood Purification has been engaged in such research activities as follows.

- 1) Pathophysiology and treatment of chronic renal failure
- 2) Pathophysiology and treatment of acute renal failure
- 3) New techniques in blood purification

(3) Clinical Services

The achievements of clinical services of The Department of Blood Purification in 2009 are as follows.

- 1) Hemodialysis (HD)

Number of newly started HD patients	102
Number of maintenance HD patients	474
Total number of HD sessions	4318
- 2) Plasma exchange (PE)

Number of PE sessions	77
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- 4) Blood absorption

Number of sessions	48
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- 5) Acute renal failure

Number of patients	31
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- 6) Multiple organ failure

Number of patients	7
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- 7) Number of clinical departments involved in blood purification 23

(4) Publications

Original Articles

1. Ohta A, Rai T, Yui N, Chiga M, Yang SS, Lin SH, Sohara E, Sasaki S, Uchida S. Targeted disruption of the *Wnk4* gene decreases phosphorylation of Na-Cl cotransporter, increases Na excretion and lowers blood pressure. *Hum. Mol. Genet.* 18:3978-86, 2009.
2. Ohta E, Itoh T, Nemoto T, Kumagai J, Ko SB, Ishibashi K, Ohno M, Uchida K, Ohta A, Sohara E, Uchida S, Sasaki S, Rai T. Pancreas-specific aquaporin 12 null mice showed increased susceptibility to caerulein-induced acute pancreatitis. *Am. J. Physiol. Cell Physiol.* 297:1368-78, 2009.
3. Sasaki S. Preface: evidence-based practice guideline for the treatment of chronic kidney disease. *Clin. Exp. Nephrol.* 13: 533, 2009.
4. Yui N, Okutsu R, Sohara E, Rai T, Ohta A, Noda Y, Sasaki S, Uchida S. FAPP2 is required for aquaporin-2 apical sorting at trans-Golgi network in polarized MDCK cells. *Am. J. Physiol. Cell Physiol.* 297:1389-1396, 2009.