

Department of Urology

Shin Egawa, *Professor*

Isaho Ikemoto, *Associate Professor*

Hiroshi Kiyota, *Associate Professor*

Nozomu Furuta, *Assistant Professor*

Takashi Hatano, *Assistant Professor*

Shoichi Onodera, *Professor*

Koichi Kishimoto, *Associate Professor*

Koji Asano, *Associate Professor*

Yasuyuki Suzuki, *Assistant Professor*

Kenta Miki, *Assistant Professor*

General Summary

We performed research in the following areas: urologic oncology, urinary tract infection and sexual transmitted diseases, urodynamics and erectile dysfunction, kidney and adrenal gland, endourology, and extracorporeal shockwave lithotripsy.

Research Activities

Urologic oncology

1. Basic research: We performed several research studies to clarify the biology of urological malignancies and develop new therapeutic tools. The results of most studies were reported at the annual meetings of the Japanese Urological Association and the American Urological Association. The studies were as follows:

- 1) Proteomic analysis of a new biomarker for prostate cancer and urothelial cancer
- 2) Establishment and biological analysis of a new prostate cancer model derived from Japanese patients
- 3) Research on prostate cancer stem cells
- 4) Research on antisense therapy for prostate cancer

2. Clinical research: Several clinical studies are in progress at our institution. Some results have already been reported at the annual meeting of the Japanese Urological Association.

- 1) Study of seeds and hormones for intermediate-risk prostate cancer
- 2) Clinical study of high dose rate brachytherapy with external beam radiation therapy for high-risk prostate cancer
- 3) Histopathological study of specimens from radical prostatectomy
- 4) Study of deep venous thrombosis after urological surgery
- 5) Study of the incidence of latent prostate cancer
- 6) Evaluation of the early detection with computed tomography of bone metastasis from renal cell carcinoma (RCC)
- 7) Study of small-incision surgery for RCC
- 8) Study of cryosurgery for small RCC

Neurourology and Urodynamics

1. Epidemiological study of dysuria
2. Study of quality of life in benign prostatic hypertrophy

Publications

Kishimoto K, Hatano T, Furuta N, Suzuki Y, Miki K, Egawa S, et al. Comparison of the outcomes of magnetic resonance imaging-guided percutaneous cryoablation of renal tumors with those of partial nephrectomy. *Low Temp Med* 2009; **35**: 23-28.

Furuta N, Sasaki H, Koide H, Miki J, Kimura T, Egawa S. A comparison of laparoscopic adrenalectomy for adrenal tumor with open surgery. (in Japanese). *Rinsho Hinyokika* 2009; **63**: 157-63.

Furuta N, Koide H, Sasaki H, Miki J, Kimura T, Egawa S. Clinical study on postoperative steroid hormone replacement for preclinical cushing's syndrome. (in Japanese) *Jpn J Urol* 2009; **100**: 479-85.

Kuruma H, Kamata Y, Takahashi H, Igarashi K, Kimura T, Miki K, et al. Staphylococcal nuclease domain-containing protein 1 as a potential tissue marker for prostate cancer. *Am J Pathol* 2009; **174**: 2044-50.

Furuta A, Asano K, Egawa S, de Groat WC, Chancellor MB, Yoshimura N. Role of alpha2-adrenoceptors and glutamate mechanisms in the external urethral sphincter continence reflex in rats. *J Urol* 2009; **181**: 1467-73.

Furuta A, Naruoka T, Suzuki Y, Egawa S, Erickson VL, Chancellor MB, et al. alpha2-Adrenoceptor as a new target for stress urinary incontinence. *LUTS* 2009; **1**: S26-9.

Kimura T, Kiyota H, Nakata D, Masaki T, Kusaka M, Egawa S. A novel androgen-dependent prostate cancer xenograft model derived from skin metastasis of a Japanese patient. *Prostate* 2009; **69**: 1660-7.

Shimomura T, Ohtsuka N, Yamada H, Miki J, Hayashi N, Kimura T et al. Patterns of failure and influence of potential prognostic factors after surgery in transitional cell carcinoma of the upper urinary tract. *Int J Clin Oncology* 2009; **14**: 213-8.

Yamada H, Kathryn L.Penney, Takahashi H, Kimura T, Kuruma H, Egawa S, et al. Replication of Prostate Cancer Risk Loci in a Japanese Case-Control Association Study. *JNCI* 2009; **101**: 1330-6.

Sasaki H, Miki J, Kimura T, Sanuki K, Miki K, Egawa S, et al. Lateral view dissection of the prostate-urethral junction to reduce positive apical margin in laparoscopic radical prostatectomy. *Int J Urol* 2009; **16**: 664-9.