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## Research profile

Tommy Kjærgaard Nielsen is a clinical urologist and academic leader with a focus on renal cancer, surgical innovation, and translational research. He serves as Director of Urological Research and is Principal Investigator on several international studies. His research contributions span organ-preserving therapies, robotic surgery, and biomarker development, reflected in more than 40 peer-reviewed publications and active roles in European research consortia. He supervises PhD, master's, and undergraduate research across surgical oncology and patient-centered care, and has chaired multiple PhD assessment committees. He is a steering committee member of the Clinical Cancer Research Center and Aalborg's Comprehensive Cancer Center initiative. An experienced course instructor and invited speaker at Nordic and European conferences, he is also engaged in organizing scientific symposia and advancing interdisciplinary collaboration in cancer care and surgery.

## Employment

### Aalborg University Hospital

The Faculty of Medicine  
1 Apr 2023 → present

### Clinical Associate Professor

Clinical Associate Professor  
Department of Clinical Medicine  
The Faculty of Medicine  
Gistrup, Denmark  
1 May 2023 → 31 Dec 4712

### Clinical Associate Professor

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The Faculty of Medicine  
Gistrup, Denmark  
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### MD

Department of Urology  
The Faculty of Medicine  
1 Apr 2023 → present

## Research outputs

### CT-Guided Percutaneous Cryoablation of Small Renal Masses: General Anesthesia Versus Conscious Sedation with Dexmedetomidine

Junker, T., Stage, N., Thorlund, M. G., Rasmussen, B. S. B., Mussmann, B. R., Nielsen, T. K., Johansen, J. K. & Graumann, O., 6 Jun 2025, (E-pub ahead of print) In: *Cardiovascular and Interventional Radiology*.

**Safety of CT-guided percutaneous cryoablation in patients treated for clinical T1 renal cell carcinoma with the need for pre-procedural ureteral stenting: an international cohort study**

Junker, T., Tivell, L., Rønnegaard, A. E., Duus, L. A., Olesen, T. H., Lund, L., Nielsen, T. K., Dahlman, P., Magnusson, A. & Graumann, O., Mar 2025, In: Clinical radiology. 82, 7 p., 106806.

**Risk Factors for Residual Unablated Tumour Following CT-Guided Percutaneous Renal Cryoablation: Lessons from the EURECA Registry**

King, A. J., Steenkamp, R., Graumann, O., Wah, T. M., Alcorn, D., Nielsen, T. K., de Kerviler, E., Zondervan, P. J., Walkden, M., Lagerveld, B., Van Strijen, M., Keeley Jr., F. X. & Breen, D. J., Feb 2025, In: CardioVascular and Interventional Radiology. 48, 2, p. 196-204 9 p., 802437.

**Accuracy and reproducibility are essential in imaging-based size assessment of renal masses: comment on "Renal mass imaging modalities: does body mass index (BMI) matter?"**

Borgbjerg, J., Leland-Try, M., Graumann, O., Nielsen, T. K. & Müller, S., 16 Oct 2024, (E-pub ahead of print) In: International Urology and Nephrology. 2 p.

**A comparative analysis of fear of cancer recurrence in patients with small renal masses: Active surveillance versus cryoablation**

Bak, R., Junker, T., Jensen, J. B., Pelant, T., Haase, R. N., Zachariae, R. & Nielsen, T. K., 22 Jul 2024, In: Acta Oncologica. 63, 1, p. 573-579 7 p.

**Active Surveillance of Small Renal Masses in a Large Danish Cohort: Assessing Proficiency in Patient Selection**

Bak, R., Jensen, J. B., Pelant, T., Haase, R. N. & Nielsen, T. K., 1 May 2024, In: Journal of kidney cancer and VHL. 11, 1, p. 54-62 9 p.

**Renal Function After CT-Guided Cryoablation of Small Renal Tumours in Patients with Solitary Kidney: An Analysis of European Multinational Prospective EuRECA Registry**

Pietersen, P. I., Stougaard, S., Keeley, F. X., Lagerveld, B., Breen, D., King, A., Nielsen, T., Strijen, M. V., Garnon, J., Alcorn, D., Kerviler, E. D., Zondervan, P., Wah, T. M., Junker, T. & Graumann, O., May 2024, In: Cardiovascular and Interventional Radiology. 47, 5, p. 583-589 7 p.

**KIDNEY-PAGER: analysis of circulating tumor DNA as a biomarker in renal cancer - an observational trial. Study protocol**

lisager, L., Ahrenfeldt, J., Keller, A. K., Nielsen, T. K., Fristrup, N. & Lyskjær, I., 23 Feb 2024, In: Acta Oncologica. 63, 1, p. 51-55 5 p.

**Management of Renal Cell Carcinoma: Promising Biomarkers and the Challenges to Reach the Clinic**

Lyskjær, I., lisager, L., Axelsen, C. T., Nielsen, T. K., Dyrskjøt, L. & Fristrup, N., 16 Feb 2024, In: Clinical Cancer Research. 30, 4, p. 663-672 10 p.

**Active Surveillance for Small Renal Masses: Living with a potential untreated cancer**

Bak, R., Jensen, J. B., Pelant, T., Haase, R. N., Zachariae, R. & Nielsen, T. K., 13 Aug 2023, In: Scandinavian Journal of Urology. 58, Suppl. 222, p. 28-29 2 p., AS-7.071.

**Dose reduction potential of a vendor-agnostic deep learning CT reconstruction algorithm: an exploratory study of image quality in assessing small renal masses**

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**Salvage cryoablation: are some tumors untreatable with cryoablation?**

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Unenhanced MRI for Surveillance of Small Solid Renal Masses: Additional Evidence Is Needed

Borgbjerg, J., Nilsen, F. S. & Nielsen, T., Oct 2021, In: American Journal of Roentgenology. 217, 4, AJR.21.2606.

Gangrene of the kidney following percutaneous renal cryoablation of a small tumor

Vedel, P. F., Borgbjerg, J. & Nielsen, T., Dec 2020, In: Journal of Endourology. 6, 4, cren.2020.0139.

CT-guided cryoablation of renal cancer: radiation burden and the associated risk of secondary cancer from procedural- and follow-up imaging

Borgbjerg, J., Bylling, T., Andersen, G., Thygesen, J., Mikkelsen, A. & Nielsen, T., Nov 2020, In: Abdominal Radiology. 45 , p. 3581-3588

Renal cryoablation: five- and 10-year survival outcomes in patients with biopsy-proven renal cell carcinoma

Nielsen, T. K., Vedel, P. F., Borgbjerg, J., Andersen, G. & Borre, M., 2 Sept 2020, In: Scandinavian Journal of Urology. 54 , 5, p. 408-412

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Sriprasad, S., Aldiwani, M., Pandian, S., Nielsen, T., Ismail, M., Barber, N. J., Lughezzani, G., Larcher, A., Lagerveld, B. W. & Keeley, F. X., Feb 2020, In: Journal of Endourology. 34, 2, p. 233-239

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Garnon, J., Van Strijen, M. J., Nielsen, T. K., King, A. J., Van Swijndregt, A. D. M., Cazzato, R. L., Auloge, P., Rousseau, C., Dalili, D., Keeley Jr, F. X., Lagerveld, B. W. & Breen, D. J., 15 Apr 2019, In: European Radiology. 29, p. 6293-6299

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Nielsen, T. K. & Jensen, J. B., Jul 2017, In: BMC urology. 17, 59.

Short-term complications for percutaneous ultrasound-guided biopsy of renal masses in adult outpatients  
Rasmussen, L., Loft, M., Nielsen, T., Bjødstrup, J. M., Høyer, S., Hørlyck, A. & Graumann, O., Jul 2017, In: Acta Radiologica. 59, 4, p. 491-496

Oncological outcomes and complication rates after laparoscopic-assisted cryoablation: a European Registry for Renal Cryoablation (EuRECA) multi-institutional study  
Nielsen, T. K., Lagerveld, B., Keeley, F., Lughezzani, G., Sriprasad, S., Barber, N., Hansen, L., Buffi, N., Guazzoni, G., van, D. Z. J., Ismail, M., Farrag, K., Emara, A. M., Lund, L., Østraat, Ø. & Borre, M., 2017, In: B J U International (Print). 119, 3, p. 390-395 6 p.

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Nonboe, L., Nielsen, T., Høyer, S., Graumann, O., Frøkiær, J. & Borre, M., Aug 2016, In: Technology in Cancer Research and Treatment. 16, 4, p. 414-420

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Nielsen, T., Østraat, Ø., Graumann, O., Pedersen, B., Andersen, G., Høyer, S. & Borre, M., Jul 2016, In: Technology in Cancer Research and Treatment. 16, 4, p. 406-413

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Trelborg, K., Nielsen, T., Østraat, E. & Olsen, L., Jun 2016, In: Journal of Pediatric Urology. 12, 6, p. 384.e1-384.e6 6 p.

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Nielsen, T. K., Lagerveld, B. W., Østraat, Ø., Andersen, G., Høyer, S., Van Der Zee, J., Nonboe, L., Graumann, O. & Borre, M., May 2016, In: Journal of Endourology. 30, 5, p. 537 - 543

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Acute renal failure and arterial hypertension due to subcapsular haematoma: is percutaneous drainage a feasible treatment?

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Lykke, M., Nielsen, T., Ebbensgaard, N. & Zieger, K., Mar 2015, In: Scandinavian Journal of Urology. 49, 3, p. 230-236

Does arterial clamping increase central renal cryoablation efficacy?

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