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Kvalifikationer

Molekylær Biologi, PhD, Institut for Biokemi og Molekylær Biologi
Dimissionsdato: 10. jan. 2006

Biomedicin, MSc, Institut for Biokemi og Molekylær Biologi
Dimissionsdato: 10. sep. 2003

Ansættelse

Lektor

KI, Klinisk Fysiologi og Nuklearmedicin
Syddansk Universitet
1. jan. 2015 → 31. dec. 2022

Publikationer

Auger electron therapy of glioblastoma using [¹²⁵I]5-iodo-2'-deoxyuridine and concomitant chemotherapy – Evaluation of a potential treatment strategy

Madsen, K. L., Therkelsen, A. S. N., Langkjær, N., Olsen, B. B. & Thisgaard, H., 1. maj 2021, I: Nuclear Medicine and Biology. 96-97, s. 35-40

Preclinical Evaluation of the Copper-64 Labeled GRPR-Antagonist RM26 in Comparison with the Cobalt-55 Labeled Counterpart for PET-Imaging of Prostate Cancer

Baun, C., Mitran, B., Rinne, S. S., Dam, J. H., Olsen, B. B., Tolmachev, V., Orlova, A. & Thisgaard, H., 18. dec. 2020, I: Molecules. 25, 24

Evaluation of ⁶⁴Cu-labelled GRPR-antagonist RM26 for PET-imaging of prostate cancer in a preclinical model

Rinne, S., Mitran, B., Baun, C., Dam, J. H., Olsen, B. B., Tolmachev, V., Thisgaard, H. & Orlova, A., sep. 2020, I: European Journal of Nuclear Medicine and Molecular Imaging. 47, Suppl. 1, s. 372-373 OP-755.

Improving contrast and detectability - imaging with [⁵⁵Co]Co-DOTATATE in comparison with [⁶⁴Cu]Cu-DOTATATE and [⁶⁸Ga]Ga-DOTATATE

Andersen, T. L., Baun, C., Olsen, B. B., Dam, J. H. & Thisgaard, H., feb. 2020, I: Journal of nuclear medicine : official publication, Society of Nuclear Medicine. 61, 2, s. 228-233

[^{58m}Co]Co-DOTA-hEGF: A novel ligand for targeted Auger electron therapy of glioblastoma using convection-enhanced delivery

Laursen, V., Baun, C., Aaberg Poulsen, C., Olsen, B. B., Dam, J. H., Jensen, A. & Thisgaard, H., maj 2019, I: Journal of Labelled Compounds and Radiopharmaceuticals. 62, S1, s. S511-S512

[^{Co-55}Co-DOTATATE improves PET imaging contrast of somatostatin receptor expressing tumours: Comparison with [^{Cu-64}Cu-DOTATATE and [^{Ga-68}Ga-DOTATATE

Thisgaard, H., Andersen, T. L., Baun, C., Dam, J. H. & Olsen, B. B., maj 2019, I: Journal of Labelled Compounds and Radiopharmaceuticals. 62, S1, s. S454-S455

Preparation and evaluation of [^{F-18}AIF-NOTA-NOC for PET imaging of neuroendocrine tumors

Dam, J. H., Langkjær, N., Baun, C. & Olsen, B. B., maj 2019, I: Journal of Labelled Compounds and Radiopharmaceuticals. 62, S1, s. S416-S417

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Olsen, B. B., Gjedde, A., Vilstrup, M. H., Johnsen, I. B. G., Neumann, G., Torigian, D. A., Alavi, A. & Højlund-Carlsen, P. F., apr. 2019, I: Molecular Imaging and Biology. 21, 2, s. 375-381

Chelation, formulation, encapsulation, retention, and in vivo biodistribution of hydrophobic nanoparticles labelled with ⁵⁷Co-porphyrin: Oleylamine ensures stable chelation of cobalt in nanoparticles that accumulate in tumors

Hervella, P., Dam, J. H., Thisgaard, H., Baun, C., Olsen, B. B., Høilund-Carlsen, P. F. & Needham, D., 10. dec. 2018, I: Journal of Controlled Release. 291, s. 11-25

Effects of insulin and blood glucose on FDG-uptake in a mouse lung tumour model

Baun, C., Nielsen, A. L., Gerke, O., Falch Braas, K., Olsen, B. B., Thisgaard, H. & Høilund-Carlsen, P. F., okt. 2018, I: European Journal of Nuclear Medicine and Molecular Imaging. 45, Suppl. 1, s. S563 1 s., EP-0662.

The use of radiocobalt as a label improves imaging of EGFR using DOTA-conjugated Affibody molecule

Garousi, J., Andersson, K. G., Dam, J. H., Olsen, B. B., Mitran, B., Orlova, A., Buijs, J., Ståhl, S., Löfblom, J., Thisgaard, H. & Tolmachev, V., 1. dec. 2017, I: Scientific Reports. 7, 10 s., 5961.

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[^{58m}Co]Co-DOTA-PSMA-617: A novel radioligand for Auger electron therapy of prostate cancer

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[⁵⁵Co]Co-DOTA-PSMA-617 for PET/CT Imaging of Prostate Cancer in Xenograft Mice

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[⁵⁵Co]Co-DOTA-PSMA-617 for PET/CT Imaging of Prostate Cancer in Xenograft Mice

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Evaluation of somatostatin and nucleolin receptors for therapeutic delivery in non-small cell lung cancer stem cells applying the somatostatin-analog DOTATATE and the nucleolin-targeting aptamer AS1411

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Madsen, K. L., Høilund-Carlsen, P. F. & Olsen, B. B., 2017, I: European Journal of Nuclear Medicine and Molecular Imaging. 44, Suppl. 2, s. 812 EP-0892.

Biological mechanisms of FDG uptake in nonsmall cell lung cancer

Christlieb, S. B., Olsen, B. B., Antonsen Segtnan, E., Gerke, O., Olsen, K. E. & Høilund-Carlsen, P. F., 16. okt. 2016.

Radiation-resistant cancer stem cells are sensitive to Auger-electron emission

Olsen, B. B., Høilund-Carlsen, P. F. & Thisgaard, H., 16. okt. 2016.

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Christlieb, S. B., Nørgaard Strandholdt, C., Olsen, B. B., Mylam, K. J., Larsen, T. S., Nielsen, A. L., Rohde, M., Gerke, O., Olsen, K. E., Møller, M. B., Kristensen, B. W., Abildgaard, N., Alavi, A. & Høilund-Carlsen, P. F., sep. 2016, I: European Journal of Nuclear Medicine and Molecular Imaging. 43, 10, s. 1824-1836

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Hansen, P. L., Holmboe, S., Olsen, B. B., Thisgaard, H., Christiansen, H., Schmidt, S., Block, I., Müller, C., Langkjær, N., Jørgensen, P. T., Vogel, S., Wengel, J., Høilund-Carlsen, P. F. & Mollenhauer, J., 27. jun. 2016.

In Vivo Evaluation of a Bombesin Analogue Labeled with Ga-68 and Co-55/57

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Highly Effective Auger-Electron Therapy in an Orthotopic Glioblastoma Xenograft Model using Convection-Enhanced Delivery

Thisgaard, H., Halle, B., Aaberg-Jessen, C., Olsen, B. B., Nautrup Therkelsen, A. S., Dam, J. H., Langkjær, N., Munthe, S., Någren, K., Høilund-Carlsen, P. F. & Kristensen, B. W., 1. jan. 2016, I: *Theranostics*. 6, 12, s. 2278-2291

18F-fluorodeoxymannose (FDM) is a potential new tracer for inflammatory bowel disease

Soltau, S. R., Hess, S., Olsen, B. B., Baun, C., Langkjær, N. & Høilund-Carlsen, P. F., 2016, I: *European Journal of Nuclear Medicine and Molecular Imaging*. 43, suppl. 1, s. S449 1 s., EP585.

18F-Fluorodeoxymannose (FDM) is a Potential New Tracer for Inflammatory Bowel Disease

Christiansen, S. R., Hess, S., Olsen, B. B., Baun, C., Langkjær, N. & Høilund-Carlsen, P. F., 2016.

Biological mechanisms of FDG uptake in nonsmall cell lung cancer

Christlieb, S. B., Olsen, B. B., Antonsen Segtnan, E., Gerke, O., Olsen, K. E. & Høilund-Carlsen, P. F., 2016, I: *European Journal of Nuclear Medicine and Molecular Imaging*. 43, suppl. 1, s. S479 1 s., EP671.

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Olsen, B. B., Høilund-Carlsen, P. F. & Thisgaard, H., 2016, I: *European Journal of Nuclear Medicine and Molecular Imaging*. 43, suppl. 1, s. S480 1 s., EP674.

Relationship between somatostatin receptor expression, DNA damage and cell survival in cancer cells incubated with a cobalt-labeled octreotide analogue

Olsen, B. B., Dam, J. H., Müller, C., Mollenhauer, J., Høilund-Carlsen, P. F. & Thisgaard, H., 29. maj 2015.

Inverse correlation between hexokinase activity and glucose-6-phosphatase activity in ovarian cancer

Olsen, B. B., Vilstrup, M. H., Johnsen, I. B. G., Neumann, G., Alavi, A. & Høilund-Carlsen, P. F., 2015, I: *European Journal of Nuclear Medicine and Molecular Imaging*. 42, 1 Supplement, s. 456-457 1 s., P241.

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Olsen, B. B., Vilstrup, M. H., Johnsen, I. B. G., Neumann, G., Alavi, A. & Høilund-Carlsen, P. F., 2015.

Novel treatment strategy for glioblastomas using Auger-electron therapy and concomitant chemotherapy: in vitro studies

Therkelsen, A., Olsen, B. B., Halle, B., Høilund-Carlsen, P. F. & Thisgaard, H., 2015, I: *European Journal of Nuclear Medicine and Molecular Imaging*. 42, 1 Supplement, s. 113 1 s., OP275.

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Madsen, K. L., Høilund-Carlsen, P. F. & Olsen, B. B., 2015, I: *European Journal of Nuclear Medicine and Molecular Imaging*. 42, 1 Supplement, s. 162 1 s., OP390.

The use of radiocobalt as a label improves PET imaging of EGFR using DOTA-conjugated affibody molecules

Garousi, J., Anderson, K., Dam, J. H., Olsen, B. B., Orlova, A., Buijs, J., Ståhl, S., Thisgaard, H. & Tolmachev, V., 2015, I: *European Journal of Nuclear Medicine and Molecular Imaging*. 42, 1 Supplement, s. 244 1 s., OP582.

In Vivo Evaluation of a Bombesin Analogue Labelled with 68Ga and 55/57Co

Dam, J. H., Olsen, B. B., Baun, C., Høilund-Carlsen, P. F. & Thisgaard, H., 18. okt. 2014, I: *European Journal of Nuclear Medicine and Molecular Imaging*. 41, 2. Supplement, s. S251 1 s., OP414.

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Thisgaard, H., Olsen, B. B., Dam, J. H., Bollen, P., Mollenhauer, J. & Høilund-Carlsen, P. F., 1. aug. 2014, I: Journal of Nuclear Medicine. 55, 8, s. 1311-1316

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Schnitzler, A., Olsen, B. B., Issinger, O-G. & Niefind, K., 1. maj 2014, I: Journal of Molecular Biology. 426, 9, s. 1871-1882

Convection-enhanced delivery of the Auger-electron-emitter I-125-UdR: A highly efficient therapy in an Orthotopic Glioblastoma Xenograft Model

Halle, B., Thisgaard, H., Aaberg-Jessen, C., Olsen, B. B., Dam, J. H., Langkjaer, N., Munthe, S., Någren, K., Hoilund-Carlsen, P. F. & Kristensen, B. W., 2014, I: Neuro-Oncology. 16, s. 1

The basic principles of FDG-PET/CT imaging

Basu, S., Hess, S., Braad, P-E., Olsen, B. B., Inglev, S. & Høilund-Carlsen, P. F., 2014, I: P E T Clinics. 9, 4, s. 355-370

Biological evaluation of cobalt-labeled octreotide analogues; Novel compounds for PET imaging and Auger-electron-based radionuclide therapy

Thisgaard, H., Olsen, B. B., Dam, J. H. & Høilund-Carlsen, P. F., maj 2013, I: Journal of Labelled Compounds and Radiopharmaceuticals. 56, S1, s. S448 1 s.

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Olsen, B. B., Fritz, G. & Issinger, O-G., 2012, I: International Journal of Oncology. 40, 2, s. 592-598

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Olsen, B. B., Svenstrup, T. H. & Guerra, B., 2012, I: International Journal of Oncology. 41, s. 1967-1976

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Olsen, B. B., Wang, S-Y., Svenstrup, T. H., Chen, B. P. C. & Guerra, B., 2012, I: B M C Molecular Biology. 13, s. 7-19

Interaction between CK2 α and CK2 β , the Subunits of Protein Kinase CK2: Thermodynamic Contributions of Key Residues on the CK2 α Surface

Raaf, J., Bischoff, N., Klopffleisch, K., Brunstein, E., Olsen, B. B., Vilck, G., Litchfield, D., Issinger, O-G. & Niefind, K., 1. feb. 2011, I: Biochemistry. 50, 4, s. 512-22 11 s.

Enzymatic activity with an incomplete catalytic spine: insights from a comparative structural analysis of human CK2 α and its paralogous isoform CK2 α'

Bischoff, N., Raaf, J., Olsen, B. B., Bretner, M., Issinger, O-G. & Niefind, K., 2011, I: Molecular and Cellular Biochemistry. 356, 1-2, s. 57-65

Lack of the catalytic subunit of DNA-dependent protein kinase (DNA-PKcs) is accompanied by increased CK2 α' levels

Olsen, B. B., Fischer, U., Rasmussen, T. D. L., Montenarh, M., Meese, E., Fritz, G. & Issinger, O-G., 2011, I: Molecular and Cellular Biochemistry. 356, 1-2, s. 139-147

Role of polyamines in determining the cellular response to chemotherapeutic agents: modulation of protein kinase CK2 expression and activity

Kreutzer, J. N., Olsen, B. B., Lech, K., Issinger, O-G. & Guerra, B., 2011, I: Molecular and Cellular Biochemistry. 356, 1-2, s. 149-158

Structure of the Human Protein Kinase CK2 Catalytic Subunit CK2 α' and Interaction Thermodynamics with the Regulatory Subunit CK2 β

Bischoff, N., Olsen, B. B., Raaf, J., Bretner, M., Issinger, O-G. & Niefind, K., 2011, I: Journal of Molecular Biology. 407, 1, s. 1-12

Mapping of the interaction sites between Wee1 kinase and the regulatory β -subunit of protein kinase CK2

Olsen, B. B., Kreutzer, J. N., Watanabe, N., Holm, T. & Guerra, B., 2010, I: *International Journal of Oncology*. 36, s. 1175-1182

Regulation of DNA-dependent protein kinase by protein kinase CK2 in human glioblastoma cells

Olsen, B. B., Issinger, O-G. & Guerra, B., 2010, I: *Oncogene*. 29(45), s. 6016-26

Structural basis of the constitutive activity of protein kinase CK2

Olsen, B. B., Guerra, B., Niefind, K. & Issinger, O-G., 2010, *Methods in Enzymology*. Conn, P. M. (red.). Academic Press, Bind 484. s. 515-529

Selectivity analysis of protein kinase CK2 inhibitors DMAT, TBB and resorufin in cisplatin-induced stress responses

Fritz, G., Issinger, O-G. & Olsen, B. B., 1. nov. 2009, I: *International Journal of Oncology*. 35, 5, s. 1151-1157 6 s.

Resorufin: a lead for a new protein kinase CK2 inhibitor

Sandholt, I. S., Olsen, B. B., Guerra, B. & Issinger, O-G., 1. apr. 2009, I: *Anti-Cancer Drugs*. 20, 4, s. 238-248 10 s.

Exploring the intramolecular phosphorylation sites in human Chk2

Olsen, B. B., Larsen, M. R., Boldyreff, B., Niefind, K. & Issinger, O-G., 10. nov. 2008, I: *Mutation Research - Fundamental and Molecular Mechanisms of Mutagenesis*. 646, 1-2, s. 50-59 9 s.

Ability of CK2beta to selectively regulate cellular protein kinases

Olsen, B. & Guerra, B., 2008, I: *Molecular and Cellular Biochemistry*. 316, 1-2, s. 115-126

Biochemical characterization of CK2alpha and alpha' paralogues and their derived holoenzymes: evidence for the existence of a heterotrimeric CK2alpha'-holoenzyme forming trimeric complexes.

Olsen, B., Rasmussen, T., Niefind, K. & Issinger, O-G., 2008, I: *Molecular and Cellular Biochemistry*. 316, 1-2, s. 37-47

The regulatory beta-subunit of protein kinase CK2 regulates cell-cycle progression at the onset of mitosis

Yde, C. W., Olsen, B. B., Meek, D., Watanabe, N. & Guerra, B., 2008, I: *Oncogene*. 27, 37, s. 4986-4997

UV light blocks EGFR signalling in human cancer cell lines

Olsen, BB., Neves-Petersen, M. T., Klitgaard, S., Issinger, OG. & Petersen, S. B., 1. jan. 2007, I: *International Journal of Oncology*. 30, 1, s. 181-185 4 s.

Emodin negatively affects the phosphoinositide 3-kinase/AKT signalling pathway: a study on its mechanism of action

Olsen, B. B., Bjørning-Poulsen, M. & Guerra, B., 2007, I: *International Journal of Biochemistry & Cell Biology*. 39, 1, s. 227-237 10 s.

Inter- and Supramolecular Interactions of Protein Kinase CK2 and their Relevance for Genome Integrity

Olsen, B. B., Niefind, K. & Issinger, O-G., 2007, *Genome Dynamics & Stability: Genome Integrity*. Lankenau, D-H. (red.). 1 udg. Springer Science+Business Media, Bind 1. s. 315-342 28 s.

BID, an interaction partner of protein kinase CK2alpha

Olsen, B. B., Petersen, J. & Issinger, O-G., 2006, I: *Biological Chemistry*. 387, 4, s. 441-449

Purification and characterization of the CK2alpha' -based holoenzyme, an isozyme of CK2alpha: A comparative analysis

Olsen, B. B., Boldyreff, B., Niefind, K. & Issinger, O-G., 2006, I: *Protein Expression and Purification*. 47, 2, s. 651-661

Protein kinase CK2 phosphorylates the Fas-associated factor FAF1 in vivo and influences its transport into the nucleus.

Olsen, B. B., Jessen, V., Højrup, P., Issinger, O-G. & Boldyreff, B., 10. jul. 2003, I: *FEBS Letters*. 546, 2-3, s. 218-22 4 s.

Disruption of the regulatory beta subunit of protein kinase CK2 in mice leads to a cell-autonomous defect and early embryonic lethality

Buchou, T., Vernet, M., Blond, O., Jensen, H. H., Pointu, H., Olsen, B. B., Cochet, C., Issinger, O-G. & Boldyreff, B., 2003, I: Molecular and Cellular Biology. 23, 3, s. 908-915 7 s.

Aktiviteter

Effects of insulin and blood glucose on FDG-uptake in a mouse lung tumour model

Christina Baun (Forfatter), Anne Lerberg Nielsen (Medforfatter), Oke Gerke (Medforfatter), Helge Thisgaard (Medforfatter), Kirsten Falch Braas (Medforfatter), Poul Flemming Højlund-Carlsen (Medforfatter) & Birgitte Brinkmann Olsen (Medforfatter)

13. okt. 2018 → 17. okt. 2018

2nd Odense Spring Meeting

Birgitte Brinkmann Olsen (Oplægsholder)

12. apr. 2016

EANM

Birgitte Brinkmann Olsen (Deltager)

10. okt. 2015 → 14. okt. 2015

15th international congress on radiation research

Birgitte Brinkmann Olsen (Deltager)

25. maj 2015 → 29. maj 2015

Protein Kinase CK2 – et centralt protein i kræft

Birgitte Brinkmann Olsen (Foredragsholder)

3. nov. 2010

1st European Duolink User Meeting

Birgitte Brinkmann Olsen (Deltager)

18. okt. 2010 → 19. okt. 2010

Lack of the Catalytic Subunit of DNA-Dependent Protein Kinase (DNA-PKc) is accompanied by increased CK2alpha' levels

Birgitte Brinkmann Olsen (Foredragsholder)

7. sep. 2010 → 10. sep. 2010

23. Årsmøde i Dansk Selskab for Cancerforskning

Birgitte Brinkmann Olsen (Deltager)

7. maj 2010

6th international conference on Inhibitors of Protein kinases

Birgitte Brinkmann Olsen (Deltager)

27. jun. 2009 → 1. jul. 2009