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## Ansættelse

### Klinisk Institut

SDU

Odense M, Danmark

23. feb. 2024 → 1. jul. 2026

### Gæsteforsker

KI, OUH, Forskningsenhed for SDCO - Steno Diabetes Center Odense

SDU

23. feb. 2024 → 1. jul. 2026

## Publikationer

### **Mechanisms of SGLT inhibitor action and physiological mediators: systematic review and protocol for the MOSAIC collaborative meta-analysis**

Kugathasan, L., Nardone, M., Muskiet, M. H., Diaz Martinez, J. P., Lovblom, L. E., Orchanian-Cheff, A., Nielsen, S., Rotbain, V., Kazup, A., Cersosimo, E., Gullaksen, S., Vernstrom, L., van Baar, M. J. B., van Bommel, E., Kannenkeril, D., Scholtes, R., Hesp, A., Mosterd, C., Touw, D. J. & Lambers Heerspink, H. & 24 flere, Krebbe, M., Joles, J., Kvitne, K., Laugesen, E., Mose, F., Mårup, F. H., Nieuwdorp, M., Geist, B., Maruyama, S., Kato, S., Kalambokis, G., Tsiakas, I., Jensen, J., Schou, M., Omar, M., Kistorp, C. M., Perna, A., Ruggenenti, P., Persson, F., Schmieder, R., Singh, S., van Raalte, D. H., Cherney, D. & Srinivasan Sridhar, V., 25. feb. 2026, I: *BMJ Open*. 16, 2, 10 s., e108946.

### **Empagliflozin and functional aerobic capacity in individuals with increased risk of heart failure: The Empire Prevent Cardiac trial**

Larsen, J. H., Andersen, C. F., Jessen, M. M. B., Hansen, M. C., Omar, M., Jensen, J., Antonsen, L., Forman, J. L., Højlund, K., Poulsen, M. K., Brønd, J. C., Schou, M. & Møller, J. E., 2026, (E-pub ahead of print) I: *American Heart Journal*. 107398.

### **Acute Effects of Myeloperoxidase Inhibition on Exercise Hemodynamics in Heart Failure With Preserved Ejection Fraction: A Randomized Clinical Trial**

Popovic, D., Reddy, Y. N. V., Omar, M., Omote, K., Melenovsky, V., Burkhoff, D. & Borlaug, B. A., sep. 2025, I: *Mayo Clinic Proceedings*. 100, 9, s. 1495-1505

### **Effect of empagliflozin on plasma lipids and lipoproteins in type 2 diabetes and heart failure – Empire HF and SIMPLE**

Emanuelsson, F., Jensen, J., Omar, M., Jürgens, M., Kistorp, C., Brandt-Jacobsen, N. H., Møller, J. E., Schou, M., Bechmann, L. E., Larsen, E. L., Nordestgaard, B. G. & Benn, M., 1. mar. 2025, I: *Journal of Clinical Lipidology*. 19, 2, s. 276-285

### **Accelerometer-measured physical activity in patients with heart failure and reduced ejection fraction: Determinants and relationship with patient-reported health status**

Fuchs Andersen, C., Omar, M., Larsen, J. H., Kistorp, C., Tuxen, C., Gustafsson, F., Køber, L., Poulsen, M. K., Brønd, J. C., Møller, J. E., Schou, M. & Jensen, J., dec. 2024, I: *American Heart Journal*. 278, s. 14-23

### **Dapagliflozin and Right Ventricular-Pulmonary Vascular Interaction in Heart Failure with Preserved Ejection Fraction: A Secondary Analysis of a Randomized Clinical Trial**

Reddy, Y. N. V., Carter, R. E., Sorimachi, H., Omar, M., Popovic, D., Alogna, A., Jensen, M. D. & Borlaug, B. A., 1. sep. 2024, I: *JAMA Cardiology*. 9, 9, s. 843-851

**Empagliflozin to elderly and obese patients with increased risk of developing heart failure: Study protocol for the Empire Prevent trial program**

Andersen, C. F., Larsen, J. H., Jensen, J., Omar, M., Nouhravesh, N., Kistorp, C., Tuxen, C., Gustafsson, F., Knop, F. K., Forman, J. L., Davidovski, F. S., Jensen, L. T., Højlund, K., Køber, L., Antonsen, L., Poulsen, M. K., Schou, M. & Møller, J. E., maj 2024, I: American Heart Journal. 271, s. 84-96

**Clinical phenogroup diversity and multiplicity: impact on mechanisms of exercise intolerance in heart failure with preserved ejection fraction**

Larson, K., Omar, M., Sorimachi, H., Omote, K., Alogna, A., Popovic, D., Tada, A., Doi, S., Naser, J., Reddy, Y. N. V., Redfield, M. M. & Borlaug, B. A., mar. 2024, I: European Journal of Heart Failure. 26, 3, s. 564-577

**Biatrial myopathy in heart failure with preserved ejection fraction**

Omote, K., Sorimachi, H., Obokata, M., Verbrugge, F. H., Omar, M., Popovic, D., Reddy, Y. N. V., Pislaru, S. V., Pellikka, P. A. & Borlaug, B. A., feb. 2024, I: European Journal of Heart Failure. 26, 2, s. 288-298

**Cardiac and Metabolic Effects of Dapagliflozin in Heart Failure With Preserved Ejection Fraction: The CAMEO-DAPA Trial**

Borlaug, B. A., Reddy, Y. N. V., Braun, A., Sorimachi, H., Omar, M., Popovic, D., Alogna, A., Jensen, M. D. & Carter, R., 5. sep. 2023, I: Circulation. 148, 10, s. 834-844

**Hypoxaemia in patients with heart failure and preserved ejection fraction**

Omar, M., Omote, K., Sorimachi, H., Popovic, D., Kanwar, A., Alogna, A., Reddy, Y. N. V., Lim, K. G., Shah, S. J. & Borlaug, B. A., sep. 2023, I: European Journal of Heart Failure. 25, 9, s. 1593-1603

**Biventricular cardiac power reserve in heart failure with preserved ejection fraction**

Alogna, A., Omar, M., Popovic, D., Sorimachi, H., Omote, K., Reddy, Y. N. V., Pieske, B. & Borlaug, B. A., jul. 2023, I: European Journal of Heart Failure. 25, 7, s. 956-966

**Ventricular stiffening and chamber contracture in heart failure with higher ejection fraction**

Popovic, D., Alogna, A., Omar, M., Sorimachi, H., Omote, K., Reddy, Y. N. V., Redfield, M. M., Burkhoff, D. & Borlaug, B. A., maj 2023, I: European Journal of Heart Failure. 25, 5, s. 657-668

**Effects of empagliflozin on erythropoiesis in heart failure: data from the Empire HF trial**

Andersen, C. F., Omar, M., Glenthoj, A., El Fassi, D., Møller, H. J., Kurtzhals, J. A. L., Styrihave, B., Kistorp, C., Tuxen, C., Poulsen, M. K., Faber, J., Køber, L., Gustafsson, F., Møller, J. E., Schou, M. & Jensen, J., feb. 2023, I: European Journal of Heart Failure. 25, 2, s. 226-234

**Influence of angiotensin receptor-neprilysin inhibition on the efficacy of Empagliflozin on cardiac structure and function in patients with chronic heart failure and a reduced ejection fraction: The Empire HF trial**

Larsen, J. H., Omar, M., Jensen, J., Andersen, C. F., Kistrup, C. M., Poulsen, M. K., Videbæk, L., Gustafsson, F., Køber, L., Schou, M. & Møller, J. E., feb. 2023, I: American Heart Journal Plus: Cardiology Research and Practice. 26, 7 s., 100264.

**Pressure-flow responses to exercise in aortic stenosis, mitral regurgitation and diastolic dysfunction**

Andersen, M. J., Wolsk, E., Bakkestrøm, R., Christensen, N., Carter-Storch, R., Omar, M., Dahl, J. S., Frederiksen, P. H., Borlaug, B., Gustafsson, F., Hassager, C. & Møller, J. E., 29. aug. 2022, I: Heart. 108, 23, s. 1895-1903

**Effect of Empagliflozin on Multiple Biomarkers in Heart Failure: Insights From the Empire Heart Failure Trial**

Jensen, J., Omar, M., Kistorp, C., Tuxen, C., Poulsen, M. K., Faber, J., Køber, L., Gustafsson, F., Møller, J. E. & Schou, M., 1. aug. 2022, I: Circulation: Heart Failure. 15, 8, s. 799-801

**The effect of empagliflozin on contractile reserve in heart failure: Prespecified sub-study of a randomized, double-blind, and placebo-controlled trial**

Jensen, J., Omar, M., Ali, M., Frederiksen, P. H., Kistorp, C., Tuxen, C., Andersen, C. F., Larsen, J. H., Ersbøll, M. K., Køber, L., Gustafsson, F., Faber, J., Forman, J. L., Møller, J. E. & Schou, M., aug. 2022, I: American Heart Journal. 250, s. 57-65

**Sodium-glucose co-transporter-2 inhibitors in heart failure with reduced ejection fraction: Current evidence and future perspectives**

Jensen, J., Omar, M., Kistorp, C., Gustafsson, F., Køber, L., Møller, J. E. & Schou, M., jul. 2022, I: Basic & Clinical Pharmacology & Toxicology. 131, 1, s. 5-17

**Intensive blood pressure control in patients with a history of heart failure: The Systolic Blood Pressure Intervention Trial (SPRINT)**

Pareek, M., Vaduganathan, M., Byrne, C., Mikkelsen, A. D., Kristensen, A. M. D., Biering-Sørensen, T., Kragholm, K. H., Omar, M., Olsen, M. H. & Bhatt, D. L., 5. maj 2022, I: European Heart Journal - Cardiovascular Pharmacotherapy. 8, 3, s. E12-E14

**Effect of Empagliflozin on Blood Volume Redistribution in Patients With Chronic Heart Failure and Reduced Ejection Fraction: An Analysis from the Empire HF Randomized Clinical Trial**

Omar, M., Jensen, J., Burkhoff, D., Frederiksen, P. H., Kistorp, C., Videbæk, L., Poulsen, M. K., Gustafsson, F., Køber, L., Borlaug, B. A., Schou, M. & Møller, J. E., mar. 2022, I: Circulation: Heart Failure. 15, 3, e009156.

**The effect of empagliflozin on growth differentiation factor 15 in patients with heart failure: a randomized controlled trial (Empire HF Biomarker)**

Omar, M., Jensen, J., Kistorp, C., Højlund, K., Videbæk, L., Tuxen, C., Larsen, J. H., Andersen, C. F., Gustafsson, F., Køber, L., Schou, M. & Møller, J. E., 27. feb. 2022, I: Cardiovascular Diabetology. 21, 12 s., 34.

**Hemodynamic Determinants of Activity Measured by Accelerometer in Patients With Stable Heart Failure**

Omar, M., Jensen, J., Frederiksen, P. H., Videbæk, L., Poulsen, M. K., Brønd, J. C., Gustafsson, F., Borlaug, B. A., Schou, M. & Møller, J. E., nov. 2021, I: JACC: Heart Failure. 9, 11, s. 824-835

**Cardiovascular autonomic neuropathy in patients with schizophrenia**

Omar, M., Wieben, E. S., Polcwiartek, C., Fleischer, J., Valentin, J. B., Aagaard, J., Jensen, S. E. & Nielsen, R. E., okt. 2021, I: Nordic Journal of Psychiatry. 75, 7, s. 547-552

**Effect of empagliflozin in hfref patients treated with angiotensin receptor neprilysin inhibitor an analysis of EMPIRE HF**

Omar, M., Larsen, J. H., Jensen, J., Kistorp, C., Videbaek, L., Poulsen, M. K., Gustafsson, F., Koeber, L., Schou, M. & Moeller, J. E., okt. 2021, I: European Heart Journal. 42, Suppl. 1, s. 800 1 s.

**Resting and exercise hemodynamic determinants of daily activity measured by accelerometer in stable heart failure patients**

Omar, M., Jensen, J., Frederiksen, P., Videbaek, L., Poulsen, M. K., Broend, J. C., Gustafsson, F., Borlaug, B., Schou, M. & Moeller, J. E., okt. 2021, I: European Heart Journal. 42, Suppl. 1, s. 791 1 s.

**Associations of Empagliflozin with Left Ventricular Volumes, Mass, and Function in Patients with Heart Failure and Reduced Ejection Fraction: A Substudy of the Empire HF Randomized Clinical Trial**

Omar, M., Jensen, J., Ali, M., Frederiksen, P. H., Kistorp, C., Videbæk, L., Poulsen, M. K., Tuxen, C. D., Möller, S., Gustafsson, F., Køber, L., Schou, M. & Møller, J. E., 1. jul. 2021, I: JAMA Cardiology. 6, 7, s. 836-840

**Metabolic effects of empagliflozin in heart failure: A randomized, double-blind, and placebo-controlled trial (Empire HF Metabolic)**

Jensen, J., Omar, M., Kistorp, C., Tuxen, C., Gustafsson, I., Køber, L., Gustafsson, F., Faber, J., Forman, J. L., Møller, J. E. & Schou, M., jun. 2021, I: Circulation. 143, 22, s. 2208-2210

**Response to Patoulias et al. letter regarding article "Twelve weeks of treatment with empagliflozin in patients with heart failure and reduced ejection fraction: A double-blinded, randomized, and placebo-controlled trial"**

Jensen, J., Omar, M., Møller, J. E. & Schou, M., jun. 2021, I: American Heart Journal. 236, s. 106 1 s.

**Fluid volume regulation in patients with heart failure – Authors' reply**

Jensen, J., Omar, M., Møller, J. E. & Schou, M., maj 2021, I: The Lancet Diabetes and Endocrinology. 9, 5, s. 258 1 s.

**Effects of empagliflozin on estimated extracellular volume, estimated plasma volume, and measured glomerular filtration rate in patients with heart failure (Empire HF Renal): a prespecified substudy of a double-blind, randomised, placebo-controlled trial**

Jensen, J., Omar, M., Kistorp, C., Tuxen, C., Gustafsson, I., Køber, L., Gustafsson, F., Faber, J., Malik, M. E., Fosbøl, E. L., Bruun, N. E., Forman, J. L., Jensen, L. T., Møller, J. E. & Schou, M., feb. 2021, I: The Lancet Diabetes and Endocrinology. 9, 2, s. 106-116

**Effect of Empagliflozin on Hemodynamics in Patients With Heart Failure and Reduced Ejection Fraction**

Omar, M., Jensen, J., Frederiksen, P. H., Kistorp, C., Videbæk, L., Poulsen, M. K., Möller, S., Ali, M., Gustafsson, F., Køber, L., Borlaug, B. A., Schou, M. & Møller, J. E., 8. dec. 2020, I: Journal of the American College of Cardiology. 76, 23, s. 2740-2751

**Twelve weeks of treatment with empagliflozin in patients with heart failure and reduced ejection fraction: A double-blinded, randomized, and placebo-controlled trial**

Jensen, J., Omar, M., Kistorp, C., Poulsen, M. K., Tuxen, C., Gustafsson, I., Køber, L., Gustafsson, F., Faber, J., Fosbøl, E. L., Bruun, N. E., Brønd, J. C., Forman, J. L., Videbæk, L., Møller, J. E. & Schou, M., okt. 2020, I: American Heart Journal. 228, s. 47-56

**Association between severity of mitral regurgitation and right ventricular function in patients with moderate to severe mitral regurgitation assessed by invasive hemodynamics measurements**

Omar, M., 17. jan. 2020, I: European Heart Journal - Cardiovascular Imaging. 21, Suppl. 1, s. i899 1 s., jez319.854.

**Empagliflozin in heart failure patients with reduced ejection fraction: A randomized clinical trial (Empire HF)**

Jensen, J., Omar, M., Kistorp, C., Poulsen, M. K., Tuxen, C., Gustafsson, I., Køber, L., Gustafsson, F., Fosbøl, E., Bruun, N. E., Videbæk, L., Frederiksen, P. H., Møller, J. E. & Schou, M., 21. jun. 2019, I: Trials. 20, 8 s., 374.

**Cardiovascular autonomic neuropathy is present in individuals with schizophrenia**

Omar, M., Fleischer, J., Valentin, J., Aagaard, J. & Jensen, S., 1. aug. 2018, I: European Heart Journal. 39, Suppl. 1, s. 890 1 s.

## Projekter

**Empire HF: Effekten af empagliflozin på venstre ventrikels funktion og hæmodynamik i hvile og under arbejde hos patienter med hjertesvigt og nedsat pumpefunktion: Et Rasdomiseret klinisk forsøg**

Omar, M. (Projektdeltager)

01/02/2018 → 01/02/2021

## Kliniske færdigheder

Ekkokardiografi: Lavet mere end 800 ekkokardiografier

Højresidig hjertekateterisation: Udført 145 kateteriseringer uden gennemlysning procedure

Andre færdigheder: Transøsofageal ekkokardiografi (omkring 20), Ultralyd af lungerne ved mistanke om lungepunktation, Plueardræn ansættelse, lumbal punktur.

## Teaching/Communicator

2018:Teaching medical students in ECG interpretation, and heart auscultation

2018:Teaching medical students in heart failure, ACS and ECG cases

2018:Objective Structured Clinical Examination (OSCE) for medical faculty

2018:Teaching medical student in clinical cardiology cases

2017-18:Teacher in simulation of doctors and nurses employed at FAM, Odense University Hospital and KBU at Åbenrå Hospital.

2016:Teacher of KBU doctors in acute 1 and 2 and in HLR, Aalborg University Hospital.

2016:Teacher, 12th Semester medical students in acute medicine, in their chosen acute week in the subjects of acute medicine, acute endocrinology and acute geriatrics

2016:Teacher of 12th Semester medical students in acute medicine during acute week, this included anaesthesia, acute medicine, acute endocrinology and acute geriatrics.

2015:Teacher in simulation of doctors and nurses employed at FAM, Åbenrå Hospital.

2015:Teacher of master's degree medical students in Communication, Aarhus University.  
2015:Teacher of advanced heart lung resuscitation at the medical teaching centre, Hospital of Southern Jutland, Åbenrå.

## Organisational work/Cooperation

2019:Member of the committee of "Research strategy at Odense University hospital"2019:Member of the committee of (Free Research Funds from the Odense University Hospital) Research fund, as a young countersigning.2018:Managing seminars through FYC for young cardiologists2017:Board member of the committee of education through FYC.  
2016:Member of EACVI (European Association of Cardiovascular Imaging) through ESC.2015:Joint alternate union representative for Department of Cardiology, Åbenrå.2015:Member of KBU committee in the Region of Southern Denmark.2015:Member of ESC (European Society of Cardiology).2015:Member of FYC & DCS.2015:Member of the working group Acute Cardiology through DCS.2015:Member of the University of Copenhagen's Cardiology Group through DCS (Danish Society of Cardiologists).2012-2014:Member of management board in the voluntary association Team Success – an association that helps support young people with training and achieving their dream.2009-2011:Member of IMCC (International Medical Cooperation Committee).

## Health Advocacy

2016:Voluntary work in Ilulissat, Greenland. Taught cardiac arrest and resuscitation to all hospital employees. Additional echocardiography of patients with suspected cardiac dysfunction in connection with selected patients for further treatment in Nuuk.  
2015-16:Doctor at Asylcenter Syd in Ribe in acute care and health advocacy.

## Courses

Related to research:

Introduction to Health Research (22/5 2018) – 0.7 ECTS  
How to structure your presentation (27/06/2018) – 0.6 ECT  
Systematic critical literature review (23/5 2018) – 0.7 ECTS  
Literature search strategies (27/8 2018) – 0.7 ECTS  
How to write an abstract (10/12/2018) – 0.8 ECTS  
Biostatistics I (6/9 – 10/10 2018) – 2.6 ECTS  
Biostatistics II (11/10 – 17/12 2018) – 6.4 ECTS  
Writing Retreat (18-22/06/2018) – 4.5  
Clinical epidemiology of cardiovascular diseases, type 2 diabetes and obesity) – 2.1 ECTS  
Poster at ESC 2018 with poster – 2.0  
Poster at AHA 2018 – 2.0  
Poster at ESC Wien – 2.0  
The talented researcher (25/2 2020) – 3.0 ECTS  
English Grammar in context (14/05/2020) – 2.0 ECTS  
European Educational Programme in Epidemiology (15/06/2020) – 9.0 ECTS  
Responsible conduct of research (21/04/2020) – 2.0 ECTS  
Clinical Trialists three days Summer School for young heart failure investigators.  
Managing cardiovascular disease in diabetic patients, Dubai

Related to teaching:

Simulation instructor course, Midtsim, Skejby, Århus.

Related to clinical skills:

Basic echocardiography course, Danish Society of Cardiology, Herning Hospital.  
DCS Hands-on Advanced Echocardiography course – tissue Doppler and speckle tracking.  
ALS (advanced life support) Provider Course, European Resuscitation Council  
Novel treatment options in pulmonary embolism, Skejby.  
Cardiogenic shock  
Scientific cardio meeting, Copenhagen.  
DCS autumn meeting.  
ECG review, Skejby.  
ECG – a clinical approach, Vejle Sygehus.  
Basic electrophysiology.  
Acute cardiology, Aalborg Sygehus.  
The Approach to the Cardiac Patient, Skejby Hospital.  
Acute cardiology, Domus Medica, Copenhagen.  
Acute heart failure and treatment.