

Curriculum Vitae



Personalia

Name: Saskia C.A. de Jager
Email: s.c.a.dejager@umcutrecht.nl
Date of birth: January 24th 1979
Place of birth: Culemborg
Nationality: Dutch

Education:

2017 Base course regulation and organization of clinical research (BROK, Netherlands Federation of University Medical Centers)
2010 SMWBO certified medical-biological researcher Immunology
2004 - 2008 PhD, Leiden Academic Center for Drug Research, Div. of Biopharmaceutics and Therapeutic Gene Modulation. Title thesis: 'Chemokines in atherosclerotic lesion development and stability – from mice to man'. October 23th, 2008
1996-2000 Degree in animal sciences (Hoger Laboratorium Onderwijs, Hogeschool van Utrecht)
1996 Highschool graduation (HAVO, Koninging Wilhelmina College, Culemborg, the Netherlands)

Academic Appointments:

Current Associate professor Laboratory of Experimental Cardiology, and Laboratory for Translational Immunology, University Medical Center, Utrecht, the Netherlands
2014-2019 Assistant professor Laboratory of Experimental Cardiology, and Laboratory for Translational Immunology, University Medical Center, Utrecht, the Netherlands
2013 - 2014 Post-doc Laboratory of Experimental Cardiology and Laboratory for Translational Immunology, University Medical Center, Utrecht, the Netherlands
2008 - 2012 Post-doc Therapeutic Immunomodulation, Leiden Amsterdam Center for Drug Research, Leiden, the Netherlands
2002 - 2004 Research Technician Biopharmaceutics, Leiden Amsterdam Center for Drug Research, Leiden University, the Netherlands
2000 - 2002 Research Technician Pharmacology and Pathophysiology, Utrecht Institute for Pharmaceutical Science; Utrecht University, the Netherlands

Summary of Research Field

Saskia de Jager, associate professor of Experimental Cardiology at the UMC Utrecht, is investigating the role of inflammation patients with chronic heart failure and aims at identifying potential drugs. Saskia started her career at Leiden University, where she used animal models to study inflammatory reactions in blood vessels and atherosclerosis. At the UMC Utrecht, she was able to switch gears to heart failure and translate her research into clinical practice. Saskia is best known for her work on cardiovascular immunology. She and her colleagues found that the two forms of chronic heart failure are characterized by different inflammatory responses. After an infarction, inflammatory cells infiltrate the heart to clean up the damage and in patients with chronic heart failure they never disappear completely. The lingering cells damage the heart muscle cells that are still healthy and the inflammation thereby contributes to the progression of the disease. Saskia's research is designed to find a better tailored therapy for patients with heart failure. She hopes that in time she will be able to make risk assessments for them based on inflammation profiles, who has a higher risk of rapid progression, and who does not?"

Since obtaining her PhD, Dr. de Jager has worked for more than 12 years on the problem of cardiovascular disease, leading to the publication of 90 articles. Her research has been funded by the

European Commission, the Dutch Heart foundation, the initiative CardioVascular Research Netherlands and the Dutch Cardiovascular Alliance.

Honours

- 2018 Referee of the Year Award, Dutch Heart Foundation, 2018 (€1250 travel grant)
- 2016 Nominated for 'Supervisor of the Year' award, initiative of PhD students from the graduate school of life sciences
- 2004 fellowship Dutch Atherosclerosis Society meeting, the Netherlands, in recognition of an outstanding presentation and defense (Adventitial Mast Cell Degranulation Enhances the Incidence of Thrombotic Events in Atherosclerotic Plaques, €2000 travel grant)
- 2004 Young Investigators Award at the 10th Scandinavian Atherosclerosis Conference, Denmark for an outstanding scientific contribution to atherosclerosis research (Adventitial Mast Cell Degranulation Enhances the Incidence of Thrombotic Events in Atherosclerotic Plaques, DKR 1500.-).

Research Support

- 2013: FP7 Athero-B-Cell - Targeting and exploiting B cell functions for treatment in cardiovascular disease, European Union. PI: (5.9MEur total budget).
- 2013: Queen of Hearts – Improving diagnosis of CVD in women, Dutch heart foundation, WP leader: (2.3MEur total budget).
- 2015: CVON RECONNECT - Renal connection to microvascular disease and heart failure with preserved ejection fraction, PI (5.0MEur total budget).
- 2016: NovaCare – A novel therapeutic antibody and companion diagnostic for non-ischemic cardiac remodeling, Eurostars, WP leader (2.2MEur total budget).
- 2017: More Knowledge with Fewer Animals, ZonMW, main applicant (3 grants, 30kEur total budget).
- 2018: Top-EV - Technology Of Protein delivery through Extracellular Vesicles to target PCSK9, Dutch heart foundation, Public Private Partnership, PI (0.5MEur total budget).
- 2019: CVON RACE-V proof of concept grant - Autoimmunity at the crossroad of coagulation and inflammation in Atrial Fibrillation, main applicant: (50kEur).
- 2020: Dutch PLN foundation – Inflammation in heart failure: is our immune system failing the PLN heart? Main applicant (50kEur).
- 2020: CVON preConnect bridge grant - GDF15 as a key regulator in the renal-cardiac connection: towards therapeutic intervention, main applicant (30kEur).
- 2021: DCVA IMPRESS - national collaborative knowledge platform to impact on sex- and gender sensitive cardiovascular medicine, PI (3MEur total budget)
- 2021: Early HFpEF young talent grant - Monocyte activation and trained Immunity in Heart Failure with preserved Ejection Fraction patients with high inflammatory risk profiles, supervising PI (40kEur)
- 2021: DCVA RECONNECT - Renal connection to microvascular disease and heart failure with preserved ejection fraction: the next phase, PI (3Meur total budget)

Patents

- Future cardiac event biomarkers. Octrooinumber: WO2009034470

Collaborations with private partners:

PEPPERPRINT (Germany), epitope mapping, QVQ (NL), nanobodies, Visualsonics (Canada), high frequency ultrasound, Genesis Pharma (Greece), contract research, EnCare Biotech (NL), Eurostars Novacare, Firalis (France), Eurostars Novacare, Bering Limited (UK), FP7 Athero B Cell, Roche Innovation Center Copenhagen (RICC, Denmark)

Management

Management of small animal facility including all work related to EU animal legislation. Currently supervising one postdoc, five technicians, three PhD students, and several bachelor and master students. Currently seven successfully completed PhD projects.

Extracurricular activities

- Member ESC working group Atherosclerosis and Vascular Biology
- Associate editor Frontiers in Cardiovascular Medicine – Gender in Cardiovascular Medicine
- Member editorial board of Frontiers in Cardiovascular Medicine (section Vascular Medicine), Vascular Pharmacology, Atherosclerosis and Journal of Cardiovascular and Translational Research.
- Expert Reviewer for several scientific journals (i.e. Circulation, Circ Res., Arterioscler Thromb Vasc Biol, Eur Heart J, Cardiovasc Res, Plos, Sci Rep, Eur J Immunol, Vaccine) and research proposals (national and international).
- Member of review committee Animal Welfare body
- Fellow of the supervisory board of the University of Applied Sciences Utrecht

Teaching/Mentoring:

Coordinator of 4 teaching courses: vascular biology (3th year bachelor biomedical sciences), cardiovascular immunology (capita selecta master biomedical sciences), sophisticated lab techniques and animal models (biannual PhD course). Mentor in BMW Academy bachelor Biomedical Sciences UU, UU Examiner for students performing internship abroad, Mentor within the young talent program of CVON Reconnect.

Output indicators:

Total publications: 89

H-Index: 26

Publication list:

1. van der Heijden CDCC, Smeets EMM, Aarntzen EHJG, Wesseling M, **de Jager SCA**, Riksen NP. Growth differentiation factor 15 levels are similar in primary aldosteronism and essential hypertension and do not predict arterial inflammation. *J Hypertens.* 2021 Mar 1;39(3):593-596. doi: 10.1097/HJH.0000000000002727.
2. Silvis MJM, Kaffka GenaamD Dengler SE, Odille CA, Mishra M, van der Kaaij NP, Doevedans PA, Sluijter JPG, de Kleijn DPV, **de Jager SCA**, Bosch L, van Hout GPJ. Damage-Associated Molecular Patterns in Myocardial Infarction and Heart Transplantation: The Road to Translational Success. *Front Immunol.* 2020 Dec 8;11:599511. doi: 10.3389/fimmu.2020.599511. eCollection 2020.
3. Martins-Marques T, Ribeiro-Rodrigues T, **de Jager SC**, Zuzarte M, Ferreira C, Cruz P, Reis L, Baptista R, Gonçalves L, Sluijter JP, Girao H. Myocardial infarction affects Cx43 content of extracellular vesicles secreted by cardiomyocytes. *Life Sci Alliance.* 2020 Oct 23;3(12):e202000821. doi: 10.26508/lsa.202000821.
4. Depuydt MA, Prange KH, Slenders L, Örd T, Elbersen D, Boltjes A, **de Jager SC**, Asselbergs FW, de Borst GJ, Aavik E, Lönnberg T, Lutgens E, Glass CK, den Ruijter HM, Kaikkonen MU, Bot I, Slütter B, van der Laan SW, Yla-Herttuala S, Mokry M, Kuiper J, de Winther MP, Pasterkamp G. Microanatomy of the Human Atherosclerotic Plaque by Single-Cell Transcriptomics. *Circ Res.* 2020 Sep 28. doi: 10.1161/CIRCRESAHA.120.316770.

5. **de Jager SCA**, Sluijter JPG. Current Perspectives on Inflammation in Cardiovascular Disease; from Biomarker to Therapy. *J Cardiovasc Transl Res.* 2021 Feb;14(1):1-2. doi: 10.1007/s12265-020-10070-z.
6. Demkes EJ, Rijken S, Szymanski MK, Hoefer IE, Sluijter JPG, **de Jager SCA**. Requirements for Proper Immunosuppressive Regimens to Limit Translational Failure of Cardiac Cell Therapy in Preclinical Large Animal Models. *J Cardiovasc Transl Res.* 2020 May 31. doi: 10.1007/s12265-020-10035-2.
7. Kessler EL, Oerlemans MIFJ, van den Hoogen P, Yap C, Sluijter JPG, **de Jager SCA**. Immunomodulation in Heart Failure with Preserved Ejection Fraction: Current State and Future Perspectives. *J Cardiovasc Transl Res.* 2020 May 22. doi: 10.1007/s12265-020-10026-3.
8. Wesseling M, de Poel JHC, **de Jager SCA**. Growth differentiation factor 15 in adverse cardiac remodeling: from biomarker to causal player. *ESC Heart Fail.* 2020 Aug;7(4):1488-1501. doi: 10.1002/ehf2.12728.
9. Nguyen ITN, Brandt MM, van de Wouw J, van Drie RWA, Wesseling M, Cramer MJ, **de Jager SCA**, Merkus D, Duncker DJ, Cheng C, Joles JA, Verhaar MC. Both male and female obese ZSF1 rats develop cardiac dysfunction in obesity-induced heart failure with preserved ejection fraction. *PLoS One.* 2020 May 6;15(5):e0232399.
10. Bosch L, de Haan JJ, Bastemeijer M, van der Burg J, van der Worp E, Wesseling M, Viola M, Odille C, El Azzouzi H, Pasterkamp G, Sluijter JPG, Wever KE, **de Jager SCA**. The transverse aortic constriction heart failure animal model: a systematic review and meta-analysis. *Heart Fail Rev.* 2020 Apr 25. doi: 10.1007/s10741-020-09960-w.
11. Meeuwsen JAL, de Vries J, Zoet GA, Franx A, Fauser BCJM, Maas AHEM, Velthuis BK, Appelman YE, Visseren FL, Pasterkamp G, Hoefer IE, van Rijn BB, den Ruijter HM, **de Jager SCA**. Circulating Neutrophils Do Not Predict Subclinical Coronary Artery Disease in Women with Former Preeclampsia. *Cells.* 2020 Feb 18;9(2):468. doi: 10.3390/cells9020468.
12. **de Jager SC**, Hoefer IE. Legumain in cardiovascular disease: Culprit or ally? *Atherosclerosis.* 2020 Mar;296:66-67. doi: 10.1016/j.atherosclerosis.2020.01.007.
13. Bosch L, de Haan JJ, Seijkens TTP, van Tiel CM, Brans MAD, Pasterkamp G, Lutgens E, **de Jager SCA**. The therapeutic potential of targeting CD40-TRAF6 pathway in cardiovascular Diseases. *Int J Cardiol.* 2020 Feb 1;300:220. doi: 10.1016/j.ijcard.2019.09.013.
14. van den Hoogen P, **de Jager SCA**, Mol EA, Schoneveld AS, Huibers MMH, Vink A, Doevedans PA, Laman JD, Sluijter JPG. Potential of mesenchymal- and cardiac progenitor cells for therapeutic targeting of B-cells and antibody responses in end-stage heart failure. *PLoS One.* 2019 Dec 31;14(12):e0227283. doi: 10.1371/journal.pone.0227283. eCollection 2019.

15. Hartman RJG, Korporaal SJA, Mokry M, **de Jager SCA**, Meeuwsen JAL, van der Laan SW, Lansu NR, Zoet GA, Pasterkamp G, Urbanus RT, Hoefer IE, Franx A, Velthuis BK, van Rijn BB, den Ruijter HM; Queen of Hearts and CREW consortia. Platelet RNA modules point to coronary calcification in asymptomatic women with former preeclampsia. *Atherosclerosis*. 2019 Dec;291:114-121. doi: 10.1016/j.atherosclerosis.2019.10.009.
16. Frodermann V, Rohde D, Courties G, Severe N, Schloss MJ, Amatullah H, McAlpine CS, Cremer S, Hoyer FF, Ji F, van Koeverden ID, Herisson F, Honold L, Masson GS, Zhang S, Grune J, Iwamoto Y, Schmidt SP, Wojtkiewicz GR, Lee IH, Gustafsson K, Pasterkamp G, **de Jager SCA**, Sadreyev RI, MacFadyen J, Libby P, Ridker P, Scadden DT, Naxerova K, Jeffrey KL, Swirski FK, Nahrendorf M. Exercise reduces inflammatory cell production and cardiovascular inflammation via instruction of hematopoietic progenitor cells. *Nat Med*. 2019 Nov;25(11):1761-1771. doi: 10.1038/s41591-019-0633-x.
17. Fontaine MAC, Westra MM, Bot I, Jin H, Franssen AJPM, Bot M, **de Jager SCA**, Dzhagalov I, He YW, van Vlijmen BJM, Gijbels MJJ, Reutelingsperger CP, van Berkel TJC, Sluimer JC, Temmerman L, Biessen EAL. Low human and murine Mcl-1 expression leads to a pro-apoptotic plaque phenotype enriched in giant-cells. *Sci Rep*. 2019 Oct 10;9(1):14547.
18. van den Hoogen P, **de Jager SCA**, Huibers MMH, Schoneveld AH, Puspitasari YM, Valstar GB, Oerlemans MIFJ, de Weger RA, Doevedans PA, den Ruijter HM, Laman JD, Vink A, Sluijter JPG. Increased circulating IgG levels, myocardial immune cells and IgG deposits support a role for an immune response in pre- and end-stage heart failure. *J Cell Mol Med*. 2019 Nov;23(11):7505-7516.
19. **de Jager SCA**, Hoefer IE. Local inflammatory responses take their toll on the heart. *Int J Cardiol*. 2019 Oct 15;293:254-255.
20. Gremmels H, Teraa M, **de Jager SCA**, Pasterkamp G, de Borst GJ, Verhaar MC. A Pro-Inflammatory Biomarker-Profile Predicts Amputation-Free Survival in Patients with Severe Limb Ischemia *Sci Rep*. 2019 Jul 24;9(1):10740.
21. Meeuwsen JAL, de Vries JJ, van Duijvenvoorde A, van der Velden S, van der Laan SW, van Koeverden ID, van de Weg SM, de Borst GJ, de Winther MPJ, Kuiper J, Pasterkamp G, Hoefer IE, **de Jager SCA**; Queen of Hearts Consortium. Circulating CD14+CD16-classical monocytes do not associate with a vulnerable plaque phenotype, and do not predict secondary events in severe atherosclerotic patients. *J Mol Cell Cardiol*. 2019 Feb;127:260-269.
22. Bosch L, de Haan JJ, Seijkens TT, van Tiel CM, Brans MA, Pasterkamp G, Lutgens E, **de Jager SC**. Small molecule-mediated inhibition of CD40-TRAF6 reduces adverse cardiac remodelling in pressure overload induced heart failure. *Int J Cardiol*. 2019 Mar 15;279:141-144.

23. Siemelink MA, van der Laan SW, Haitjema S, van Koeverden ID, Schaap J, Wesseling M, **de Jager SCA**, Mokry M, van Iterson M, Dekkers KF, Luijk R, Foroughi Asl H, Michoel T, Björkegren JLM, Aavik E, Ylä-Herttula S, de Borst GJ, Asselbergs FW, El Azzouzi H, den Ruijter HM, Heijmans BT, Pasterkamp G. Smoking is Associated to DNA Methylation in Atherosclerotic Carotid Lesions. *Circ Genom Precis Med.* 2018 Sep;11(9):e002030.
24. Hoefer IE, de Jager SCA. Janus revisited: The intricate role of the immune system in neovascularization. *Int J Cardiol.* 2018 Jun 1;260:193-194.
25. Wesseling M, Sakkers TR, **de Jager SCA**, Pasterkamp G, Goumans MJ. The morphological and molecular mechanisms of epithelial/endothelial-to-mesenchymal transition and its involvement in atherosclerosis. *Vascul Pharmacol.* 2018 Jul;106:1-8.
26. Maracle CX, Agca R, Helder B, Meeuwsen JAL, Niessen HWM, Biessen EAL, de Winther MPJ, **de Jager SCA**, Nurmohamed MT, Tas SW. Noncanonical NF- κ B signaling in microvessels of atherosclerotic lesions is associated with inflammation, atheromatous plaque morphology and myocardial infarction. *Atherosclerosis.* 2018 Mar;270:33-41.
27. van Puijvelde GHM, Foks AC, van Bochove RE, Bot I, Habets KLL, **de Jager SC**, Ter Borg MND, van Osch P, Boon L, Vos M, de Waard V, Kuiper J. CD1d deficiency inhibits the development of abdominal aortic aneurysms in LDL receptor deficient mice. *PLoS One.* 2018 Jan 18;13(1):e0190962.
28. Ellenbroek GHJM, de Haan JJ, van Klarenbosch BR, Brans MAD, van de Weg SM, Smeets MB, de Jong S, Arslan F, Timmers L, Goumans MTH, Hoefer IE, Doevedans PA, Pasterkamp G, Meyaard L, **de Jager SCA**. Leukocyte-Associated Immunoglobulin-like Receptor-1 is regulated in human myocardial infarction but its absence does not affect infarct size in mice. *Sci Rep.* 2017 Dec 21;7(1):18039.
29. de Haan JJ, Bosch L, Borgman A, Bastemeijer M, Brans MAD, van de Weg SM, de Kleijn DPV, Sluijter JPG, El Azzouzi H, **de Jager SCA**. Complement 5a Receptor deficiency does not influence adverse cardiac remodeling after pressure-overload in mice. *Sci Rep.* 2017 Dec 6;7(1):17045.
30. **de Jager SCA**, Hoefer IE. Beyond the matrix: MMP2 as critical regulator of inflammation-mediated vascular dysfunction. *Cardiovasc Res.* 2017 Dec 1;113(14):1705-1707.
31. Wesseling M, van Koeverden ID, van Lammeren GW, van der Laan SW, Haitjema S, de Vries JPM, den Ruijter HM, **de Jager SCA**, Hoefer I, Blankestijn P, Verhaar M, de Kleijn DPV, de Borst GJ, Pasterkamp G. Impaired kidney function is associated with intraplaque hemorrhage in patients undergoing carotid endarterectomy. *Atherosclerosis.* 2017 Nov;266:128-135.

32. **de Jager SCA**, Meeuwsen JAL, van Pijpen FM, Zoet GA, Barendrecht AD, Franx A, Pasterkamp G, van Rijn BB, Goumans MJ, den Ruijter HM. Preeclampsia and coronary plaque erosion: Manifestations of endothelial dysfunction resulting in cardiovascular events in women. *Eur J Pharmacol.* 2017 Dec 5;816:129-137.
33. Meeuwsen JAL, van Duijvenvoorde A, Gohar A, Kozma MO, van de Weg SM, Gijsberts CM, Haitjema S, Björkbacka H, Fredrikson GN, de Borst GJ, den Ruijter HM, Pasterkamp G, Binder CJ, Hoefer IE, **de Jager SCA**. High Levels of (Un)Switched Memory B Cells Are Associated With Better Outcome in Patients With Advanced Atherosclerotic Disease. *J Am Heart Assoc.* 2017 Sep 7;6(9). pii: e005747.
34. De Haan JJ, Haitjema S, den Ruijter HM, Pasterkamp G, de Borst GJ, Teraa M, Verhaar MC, Gremmels H, **de Jager SCA**. Growth Differentiation Factor 15 Is Associated With Major Amputation and Mortality in Patients With Peripheral Artery Disease. *J Am Heart Assoc.* 2017 Aug 30;6(9). pii: e006225.
35. Wang JW, Fontes MSC, Wang X, Chong SY, Kessler EL, Zhang YN, de Haan JJ, Arslan F, **de Jager SCA**, Timmers L, van Veen TAB, Lam CSP, Kleijn DPV. Leukocytic Toll-Like Receptor 2 Deficiency Preserves Cardiac Function And Reduces Fibrosis In Sustained Pressure Overload. *Sci Rep.* 2017 Aug 23;7(1):9193.
36. Best MG, Sol N, In 't Veld SGJG, Vancura A, Muller M, Niemeijer AN, Fejes AV, Tjon Kon Fat LA, Huis In 't Veld AE, Leurs C, Le Large TY, Meijer LL, Kooi IE, Rustenburg F, Schellen P, Verschueren H, Post E, Wedekind LE, Bracht J, Esenkbrink M, Wils L, Favaro F, Schoonhoven JD, Tannous J, Meijers-Heijboer H, Kazemier G, Giovannetti E, Reijneveld JC, Idema S, Killestein J, Heger M, **de Jager SC**, Urbanus RT, Hoefer IE, Pasterkamp G, Mannhalter C, Gomez-Arroyo J, Bogaard HJ, Noske DP, Vandertop WP, van den Broek D, Ylstra B, Nilsson RJA, Wesseling P, Karachaliou N, Rosell R, Lee-Lewandrowski E, Lewandrowski KB, Tannous BA, de Langen AJ, Smit EF, van den Heuvel MM, Wurdinger T. Swarm Intelligence-Enhanced Detection of Non-Small-Cell Lung Cancer Using Tumor-Educated Platelets. *Cancer Cell.* 2017 Aug 14;32(2):238-252.e9.
37. Meeuwsen JAL, Wesseling M, Hoefer IE, **de Jager SCA**. Prognostic Value of Circulating Inflammatory Cells in Patients with Stable and Acute Coronary Artery Disease. *Front Cardiovasc Med.* 2017 Jul 14;4:44.
38. Haitjema S, Kofink D, van Setten J, van der Laan SW, Schoneveld AH, Eales J, Tomaszewski M, **de Jager SCA**, Pasterkamp G, Asselbergs FW, den Ruijter HM. Loss of Y Chromosome in Blood Is Associated With Major Cardiovascular Events During Follow-Up in Men After Carotid Endarterectomy. *Circ Cardiovasc Genet.* 2017 Aug;10(4):e001544.

39. Gohar A, Gonçalves I, Vrijenhoek J, Haitjema S, van Koeverden I, Nilsson J, de Borst GJ, de Vries JP, Pasterkamp G, den Ruijter HM, Björkbacka H, **de Jager SC**. Circulating GDF-15 levels predict future secondary manifestations of cardiovascular disease explicitly in women but not men with atherosclerosis. *Int J Cardiol.* 2017 Aug 15;241:430-436.
40. Ellenbroek GHJM, van Hout GPJ, **de Jager SC**, Timmers L, Vink A, Goldschmeding R, van der Kraak P, Pasterkamp G, Hoefer IE, Doevedans PA, Appelman Y. Radiofrequency Ablation of the Atherosclerotic Plaque: a Proof of Concept Study in an Atherosclerotic Model. *J Cardiovasc Transl Res.* 2017 Apr;10(2):221-232.
41. Nossent AY, Bastiaansen AJ, Peters EA, de Vries MR, Aref Z, Welten SM, **de Jager SC**, van der Pouw Kraan TC, Quax PH. CCR7-CCL19/CCL21 Axis is Essential for Effective Arteriogenesis in a Murine Model of Hindlimb Ischemia. *J Am Heart Assoc.* 2017 Mar 8;6(3). pii: e005281.
42. Haitjema S, van Setten J, Eales J, van der Laan SW, Gandin I, de Vries JP, de Borst GJ, Pasterkamp G, Asselbergs FW, Charchar FJ, Wilson JF, **de Jager SC**, Tomaszewski M, den Ruijter HM. Genetic variation within the Y chromosome is not associated with histological characteristics of the atherosclerotic carotid artery or aneurysmal wall. *Atherosclerosis.* 2017 Apr;259:114-119.
43. Ellenbroek GH, van Puijvelde GH, Anas AA, Bot M, Asbach M, Schoneveld A, van Santbrink PJ, Foks AC, Timmers L, Doevedans PA, Pasterkamp G, Hoefer IE, van der Poll T, Kuiper J, **de Jager SC**. Leukocyte TLR5 deficiency inhibits atherosclerosis by reduced macrophage recruitment and defective T-cell responsiveness. *Sci Rep.* 2017 Feb 16;7:42688.
44. Joffre J, Potteaux S, Zeboudj L, Loyer X, Boufenzer A, Laurans L, Esposito B, Vandestienne M, **de Jager SC**, Hénique C, Zlatanova I, Taleb S, Bruneval P, Tedgui A, Mallat Z, Gibot S, Ait-Oufella H. Genetic and Pharmacological Inhibition of TREM-1 Limits the Development of Experimental Atherosclerosis. *J Am Coll Cardiol.* 2016 Dec 27;68(25):2776-2793.
45. van Hout GP, Bosch L, Ellenbroek GH, de Haan JJ, van Solinge WW, Cooper MA, Arslan F, **de Jager SC**, Robertson AA, Pasterkamp G, Hoefer IE. The selective NLRP3-inflammasome inhibitor MCC950 reduces infarct size and preserves cardiac function in a pig model of myocardial infarction. *Eur Heart J.* 2017 Mar 14;38(11):828-836.
46. Pasterkamp G, van der Laan SW, Haitjema S, Foroughi Asl H, Siemelink MA, Bezemer T, van Setten J, Dichgans M, Malik R, Worrall BB, Schunkert H, Samani NJ, de Kleijn DP, Markus HS, Hoefer IE, Michoel T, **de Jager SC**, Björkegren JL, den Ruijter HM, Asselbergs FW. Human Validation of Genes Associated With a Murine Atherosclerotic Phenotype. *Arterioscler Thromb Vasc Biol.* 2016 Jun;36(6):1240-6.

47. **De Jager SC**, Pasterkamp G. Atheroprotective properties of human Omentin-1 in experimental atherosclerosis. *Cardiovasc Res.* 2016 May 1;110(1):1-3.
48. Frodermann V, van Duijn J, van Puijvelde GH, van Santbrink PJ, Lagraauw HM, de Vries MR, Quax PH, Bot I, Foks AC, **de Jager SC**, Kuiper J. Heat-killed *Staphylococcus aureus* reduces atherosclerosis by inducing anti-inflammatory macrophages. *J Intern Med.* 2016 Jun;279(6):592-605..
49. Frodermann V, van Duijn J, van Pel M, van Santbrink PJ, Bot I, Kuiper J, **de Jager SC**. Mesenchymal Stem Cells Reduce Murine Atherosclerosis Development. *Sci Rep.* 2015 Oct 22;5:15559.
50. van Hout GP, van Solinge WW, Gijsberts CM, Teuben MP, Leliefeld PH, Heeres M, Nijhoff F, de Jong S, Bosch L, **de Jager SC**, Huisman A, Stella PR, Pasterkamp G, Koenderman LJ, Hoefer IE. Elevated mean neutrophil volume represents altered neutrophil composition and reflects damage after myocardial infarction. *Basic Res Cardiol.* 2015 Nov;110(6):58.
51. de Hoog VC, Bovens SM, **de Jager SC**, van Middelaar BJ, van Duijvenvoorde A, Doevedans PA, Pasterkamp G, de Kleijn DP, Timmers L. BLT1 antagonist LSN2792613 reduces infarct size in a mouse model of myocardial ischaemia-reperfusion injury. *Cardiovasc Res.* 2015 Dec 1;108(3):367-76.
52. van Hout GP, Teuben MP, Heeres M, de Maat S, de Jong R, Maas C, Kouwenberg LH, Koenderman L, van Solinge WW, **de Jager SC**, Pasterkamp G, Hoefer IE. Invasive surgery reduces infarct size and preserves cardiac function in a porcine model of myocardial infarction. *J Cell Mol Med.* 2015 Nov;19(11):2655-63.
53. Wezel A, Lagraauw HM, van der Velden D, **de Jager SC**, Quax PH, Kuiper J, Bot I. Mast cells mediate neutrophil recruitment during atherosclerotic plaque progression. *Atherosclerosis.* 2015 Aug;241(2):289-96.
54. Frodermann V, van Puijvelde GH, Wiers L, Lagraauw HM, Foks AC, van Santbrink PJ, Bot I, Kuiper J, **de Jager SC**. Oxidized low-density lipoprotein-induced apoptotic dendritic cells as a novel therapy for atherosclerosis. *J Immunol.* 2015 Mar 1;194(5):2208-18.
55. den Ruijter HM, Pasterkamp G, **de Jager SC**. Adiponectin regulation in cardiovascular disease: is diseased fat showing its true color? *Arterioscler Thromb Vasc Biol.* 2014 Oct;34(10):2180-1.
56. De Hoog VC, Timmers L, Van Duijvenvoorde A, **De Jager SC**, Van Middelaar BJ, Smeets MB, Woodruff TM, Doevedans PA, Pasterkamp G, Hack CE, De Kleijn DP. Leucocyte expression of

complement C5a receptors exacerbates infarct size after myocardial reperfusion injury. *Cardiovasc Res.* 2014 Sep 1;103(4):521-9.

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