

Reference list QAngio CT:

1. **Marquering HA, Dijkstra J, de Koning PJH, Stoel BC, Reiber JHC.**
Towards quantitative analysis of coronary CTA
Intern J Cardiovasc Imaging 2005; 21: 73-84.
2. **Boogers MJ, Schuijf JD, Kitslaar PH, van Werkhoven JM, de Graaf FR, Boersma E, van Velzen JE, Dijkstra J, Adame IM, Kroft LJ, de Roos A, Schreur JHM, Heijnenbrok MW, Jukema JW, Reiber JHC, Bax JJ.**
Automated Quantification of Stenosis Severity on 64-Slice CT: A Comparison With Quantitative Coronary Angiography.
J Am Coll Cardiol Img 2010; 3(7): 699-709.
3. **Yang G, Kitslaar P, Frenay M, Broersen A, Boogers MJ, Bax JJ, Reiber JHC, Dijkstra J.**
Automatic Centerline Extraction of Coronary Arteries in Coronary Computed Tomographic Angiography.
Intern J Cardiovasc Imaging 2012; 28(4): 921-933.
4. **Yang G, Broersen A; Petr R; Kitslaar P; de Graaf M; Reiber JHC, Dijkstra J.**
Automatic Labeling of Coronary Artery Tree in CCTA Datasets.
Computing in Cardiology, 2011.
5. **Boogers MJ, Broersen A, van Velzen JE, de Graaf FR, El-Naggar HM, Kitslaar PH, Dijkstra J, Delgado V, Boersma E, de Roos A, Schuijf JD, Schalijs MJ, Reiber JHC, Bax JJ & Jukema JW.**
Automated quantification of coronary plaque with computed tomography: comparison with intravascular ultrasound using a dedicated registration algorithm for fusion-based quantification
European Heart Journal 2012; 33(8): 1007-1016.
6. **Papadopoulou S, Neefjes LA, Garcia-Garcia HM, Flu W, Rossi A, Dharampal AS, Kitslaar PH, Mollet NR, Veldhof S, Nieman K, Stone GW, Serruys PW, Krestin GP, & de Feyter, PJ.**
Natural History of Coronary Atherosclerosis by Multislice Computed Tomography.
JACC: Cardiovascular Imaging 2012; 5(3): s28-37.
7. **Papadopoulou S-L, Garcia-Garcia HM, Rossi A, Girasis C, Dharampal AS, Kitslaar PH, Krestin GP, Feyter PJ de**
Reproducibility of computed tomography angiography data analysis using semi-automated plaque quantification software: implications for the design of longitudinal studies.
Int J Cardiovasc Imaging 2013; 29: 1095-1104.
8. **Graaf MA de, Broersen A, Kitslaar PH, Roos CJ, Dijkstra J, Lelieveldt BPF, Jukema JW, Schalijs MJ, Delgado V, Bax JJ, Reiber JHC, Scholte AJ**
Automatic quantification and characterization of coronary atherosclerosis with computed tomography coronary angiography: cross-correlation with intravascular ultrasound virtual histology.
Int J Cardiovasc Imaging 2013; 29: 1177-1190
9. **Graaf MA de, El-Naggar HM, Boogers MJ, Veltman CE, Broersen A, Kitslaar PH, Dijkstra J, Kroft LJ, Al Younis I, Reiber JH, Bax JJ, Delgado V, Scholte AJ**
Automated quantitative coronary computed tomography correlates of myocardial ischaemia on gated myocardial perfusion SPECT.
Eur J Nucl Med Mol Imaging 2013; DOI 10.1007/s00259-013-2437-4
10. **Rossi A, Dharampal A, Wragg A, Davies LC, Geuns RJ van, Anagnostopoulos C, Klotz E, Kitslaar P, Broersen A, Mathur A, Nieman K, Hunink MGM, Feyter PJ de, Petersen SE, Pugliese F**

Diagnostic performance of hyperaemic myocardial blood flow index obtained by dynamic computed tomography: does it predict functionally significant coronary lesions?
Eur Heart J – Cardiovasc Imaging 2013; doi: 10.1093/ehjci/jet133

11. Graaf MA de, Jukema JW

High coronary plaque burden: a heavy burden
Eur Heart J 2013 doi:10.1093/eurheartj/eh298

12. Kocsmar I, Karoly M, Kolossvary M, Kitslaar PH, Merkely B, Horvat PM

Plaque quantification in CCTA with minimal training: the effect of iterative reconstruction
Poster C-2220, ECR 2014

13. Celeng C, Horvath T, Kolossvary M, Karoly M, Panatjotu A, Kitslaar PH, Merkely B, Horvat PM

Semiautomatic transluminal attenuation gradient assessment in coronary computed tomography angiography
Poster C-2223, ECR 2014

14. Rossi A, Papadopoulou S-L, Pugliese F, Russo B, Dharampal AS, Dedic A, Kitslaar PH, Broersen A, Meijboom B, Geuns R-J van, Wragg A, Ligthart J, Schultz C, Petersen SE, Nieman K, Krestin GP, Feyter PJ de

Quantitative computed tomographic coronary angiography. Does it predict functionally significant coronary stenosis?
Circ Cardiovasc Imaging 2014; 7: 43-51.

15. Maurovich-Horvat P, Jermendy A, Horváth T, Nagy E, Tárnoki A, Tárnoki D, Kitslaar P, Merkely B, Jermendy G

Can we evaluate the effect of genetic and environmental influences on coronary anatomy and plaque characteristics? Initial experience with coronary CT angiography in twin pairs.
Oral presentation ECR 2014

16. Maurovich-Horvat P, Puchner S, Lu M, Ting L, Mayerhofer T, Hoffmann U, Ferencik M

Interobserver agreement of the Quantitative Tomography Assessment of high-risk coronary plaque features in the ROMICAT II trial.
Oral presentation ECR 2014

17. Maurovich-Horvat P, Ferencik M, Voros S, Merkely B, Hoffmann U

Comprehensive plaque assessment by coronary CT angiography
Nature Reviews / Cardiology 2014;

18. Graaf MA de, Broersen A, Ahmed W, Kitslaar PH, Dijkstra J, Kroft LJ, Delgado V, Bax JJ, Reiber JHC, Scholte AJ

Feasibility of an automated quantitative computed tomography angiography-derived risk score for risk stratification of patients with suspected coronary artery disease.
Am J Cardiol 2014; *in press*

19. Matsumoto S, Nakanishi R, Alani A, Fahmy MA, Abraham J, Li D, Dailing C, Flores F, Kitslaar P, Broersen A, Budoff MJ

Reproducibility of transluminal attenuation gradient measurement using semi-automated coronary computed tomography quantification software.
Circulation 2014, *Abstract 17344, AHA 2014*

20. Dedic A, Kurata A, Lubbers M, Meijboom WB, van Dalen B, Snelder S, Korbee R, Moelker A, Ouhous M, van Domburg R, de Feijter PJ, Nieman K.

Prognostic implications of non-culprit plaques in acute coronary syndrome: non-invasive assessment with coronary CT angiography.
Eur Heart J Cardiovasc Imaging 2014; Jun 17 [epub ahead of print]

- 21. Ferencik M, Puchner SB, Lu MT, Maurovich-Horvat P, Mayrhofer T, Liu T, Ghemigian K, Kitslaar P, Broersen, Hoffmann U**
Quantitative coronary plaque analysis on coronary computed tomography can detect high-risk plaque characteristics associated with acute coronary syndrome-result from the ROMICAT II Trial.
Abstract 13300, AHA 2014
- 22. Park H-B, Heo R, Hartaigh B ó, Cho I, Gransar H, Nakazato R, Leipsic J, Mancini GBJ, Koo B-K, Otake H, Budoff MJ, Berman DS, Erglis A, Chang H-J, Min JK**
Atherosclerotic plaque characteristics by CT angiography identify coronary lesions that cause ischemia. A direct comparison to Fractional Flow Reserve.
J Am Coll Cardiol Img 2015; 8: 1-10
- 23. Ahmed W, Graaf MA de, Broersen A, Kitslaar PH, Oost E, Dijkstra J, Bax JJ, Reiber JHC, Scholte AJ**
Automatic detection and quantification of the Agatston coronary artery calcium score on contrast computed tomography angiography.
Int J Cardiovasc Imaging 2015; 31: 151-161
- 24. Salahuddin T, Natarajan B, Selwaness M, Sadek A, Playford M, Doveikis J, Bluemke D, Mehta NN**
Reduced high-density lipoprotein efflux in psoriasis relates to increased coronary plaque burden by quantitative CT angiography.
Abstract P212, AHA, 2014.
- 25. Nakanishi R, Matsumoto S, Alani A, Li D, Kitslaar PH, Broersen A, Koo B-K, Min JK, Budoff MJ**
Diagnostic performance of transluminal attenuation gradient and fractional flow reserve by coronary computed tomographic angiography (FFRCT) compared to invasive FFR: a sub-group analysis from the DISCOVER-FLOW and DeFACTO studies.
Int J Cardiovasc Imaging 2015; 31: 1251-1259
- 26. Park H-B, Lee B-K, Shin S, Heo R, Arsanjani R, Kitslaar PH, Broersen A, Dijkstra J, Ahn SG, Min JK, Chang H-J, Hong M-K, Jang Y, Chung N**
Clinical feasibility of 3D automated coronary atherosclerotic plaque quantification algorithm on coronary computed tomography angiography: comparison with intravascular ultrasound.
Eur Radiol 2015; doi: 10.1007/s00330-015-3698-z
- 27. Rodriguez K, Kwan AC, Lai S, Lima JAC, Vigneault D, Sandfort V, Pattnayak P, Ahlman MA, Mallek M, Sibley CT, Bluemke DA**
Coronary plaque burden at coronary CT angiography in asymptomatic men and women.
Radiology 2015; 277(1): 73-80
- 28. Ahmed W, Graaf MA de, Broersen A, Kitslaar PH, Oost E, Dijkstra J, Bax JJ, Reiber JHC, Scholte AJ**
Automatic detection and quantification of the Agatston coronary artery calcium score on contrast computed tomography angiography
Int J Cardiovasc Imaging 2015; 31: 151-161
- 29. Auscher S, Heinsen L, Nieman K, Høeg Vinther K, Løgstrup B, Møller JE, Broersen A, Kitslaar P, Lambrechtsen J, Egstrup K.**
Effects of intensive lipid-lowering therapy on coronary plaques composition in patients with acute myocardial infarction: assessment with serial coronary CT angiography.
Atherosclerosis 2015; 241: 579-587.
- 30. Ferencik M, Mayrhofer T, Puchner SB, Lu MT, Maurovich-Horvat P, Liu T, Ghemigian K, Kitslaar P, Broersen A, Bamberg F, Truong QA, Schlett CL, Hoffmann U**

Computed tomography-based high-risk coronary plaque score to predict acute coronary syndrome among patients with acute chest pain – Results from the ROMICAT II trial.
J Cardiovasc Comp Tomogr 2015; doi: 10.1016/j.jcct.2015.07.0003

- 31. Salahuddin T, Natarajan B, Playford MP, Joshi AA, Teague H, Masmoudi Y, Selwaness M, Chen MY, Bluemke DA, Mehta NN**
Cholesterol efflux capacity in humans with psoriasis is inversely related to non-calcified burden of coronary atherosclerosis
Eur Heart J 2015; 36: 2662-2665
- 32. Heo R, Park H-B, Cho I, Cho I-J, Nakazato R, Leipsic J, Mancini J, Koo B-K, Otake H, Budoff MJ, Berman DS, Erglis A, Min JK, Chang H-J**
Impact of coronary artery calcium score on total plaque volume difference between IVUS and CCTA
J Cardiovasc Comp Tomogr 2015; 9(4): S25
- 33. Park H-B, Cho Y-H, Cho I, Kim I-C, Chang H-J**
Optimal boundary detection method and window settings for coronary atherosclerotic plaque volume analysis in coronary computed tomography angiography: comparison with intravascular ultrasound.
J Cardiovasc Comp Tomogr 2015; 9(4): S67
- 34. Deseive S, Straub R, Kupke M, Hadamitzky M, Kitslaar P, Broersen A, Massberg S, Hausleiter J**
Semiautomatic plaque volume quantification in coronary CT angiography predicts all-cause death and myocardial infarction in 1577 patients with 5.6 years follow-up
J Cardiovasc Comp Tomogr 2015; 9(4): S67
- 35. Campos CM, Garcia-Garcia HM, Muramatsu T, De Araujo Gonçalves P, Onuma Y, Dudek D, Christiansen EH, Webster MWI, Kitslaar P, Veldhof S, Reiber JHC, Nieman K, Ormiston JA, Serruys PW**
Impact of everolimus-eluting bioresorbable scaffold in coronary atherosclerosis.
Revista Espanola de Cardiologia 2015 (accepted)
- 36. Szilveszter B, Celeng C, Maurovich-Horvat P**
Plaque assessment by coronary CT
Int J Cardiovasc Imaging 2015; doi:10.1007/s10554-015-0741-8
- 37. Asami M, Aoki J, Serruys PW, Abizaid A, Saito S, Onuma Y, Kimura T, Simonton CA, Tanabe K**
Feasibility of 320-row multi-detector computed tomography angiography to assess bio-absorbable everolimus-eluting vascular scaffolds
Cardiovasc Interv and Ther 2015; doi:10.1007/s12928-015-0353-1
- 38. Maurovich-Horvat P, Tárnoki D, Tárnoki AD, Horváth T, Jermendy AL, Kolossváry M, Szilvester B, Voros V, Kovács A, Molnár AA, Littvay L, Lamb HJ, Voros S, Jermendy G, Merkely B**
Rationale, design and methodological aspects of the BUDAPEST-GLOBAL Study (Burden of Atherosclerotic Plaques Study in Twins – Genetic loci and the burden of Atherosclerotic lesions).
Clin Cardiol 2015; doi:10.1002/clc.22482
- 39. Sandfort V, Lima JAC, Bluemke DA**
Noninvasive imaging of atherosclerotic plaque progression: status of coronary computed tomography angiography.
Circulation Cardiovasc Imaging 2015; doi:10.1161/CIRCIMAGING.115.003316
- 40. Yeh V, Nakanishi R, Budoff MJ**
Coronary artery disease progression: insights from cardiac CT
Curr Cardiovasc Imaging Rep 2015; 8: 24; doi:10.1007/s12410-015-9341-1

- 41. Liu L, Yang W, Nagahara Y, Li Y, Lamooki SR, Muramatsu T, Kitslaar P, Sarai M, Ozaki Y, Barlis P, Yan F, Reiber JHC, Tu S**
The impact of image resolution on computation of fractional flow reserve: coronary computed tomography angiography versus 3-dimensional quantitative coronary angiography.
Int J Cardiovasc Imaging 2015; doi: 10.1007/s10554-015-0797-5
- 42. Heo R, Park H-B, Lee BK, Shin S, Arsanjani R, Min JK, Chang H-J**
Optimal boundary detection method and window settings for coronary atherosclerotic plaque volume analysis in coronary computed tomography angiography: comparison with intravascular ultrasound.
Eur Radiol 2015; doi 10.1007/s00330-015-4121-5
- 43. Caixeta A, Génèreux P, de Siqueira MEM, Baruzzi A, Abizaid A, Stone GW**
MSCT identification of vulnerable plaque
J Am Coll Cardiol Img 2016: doi.org/10.1016/j.jcmg.2015.01.027
- 44. Ferencik M, Mayrhofer Th, Puchner SB, Lu MT, Maurovich-Horvat P, Liu T, Chemigian K, Kitslaar P, Broersen A, Bamberg F, Truong QA, Schlett CL, Hoffmann U.**
Computed tomography-based high-risk coronary plaque score to predict acute coronary syndrome among patients with acute chest pain – results from the ROMICAT II trial.
J Cardiovasc Comp Tomogr 2015; 9: 538-545.
- 45. Matsumoto S, Nakanishi R, Li D, Alani A, Rezaeian P, Prabhu S, Abraham J, Fahmy MA, Dailing C, Flores F, Hamal S, Broersen A, Kitslaar P, Budoff MJ**
Aged garlic extract reduces low attenuation plaque in coronary arteries of patients with metabolic syndrome in a prospective randomized double-blind study.
J Nutr, 2015: doi:10.3945/jn.114.202424
- 46. Kishi S, Magalhaes TA, Cerci RJ, Matheson MB, Vavere A, Tanami Y, Kistlaar PH, George RT, Brinker J, Miller JM, Clouse ME, Lemos PA, Niinuma H, Reiber JHC, Rochitte CE, Rybicki FJ, Di Carli MF, Cox C, Lima JAC, Arbab-Zadeh A**
Total coronary atherosclerotic plaque burden assessment by CT angiography for detecting obstructive coronary plaque burden for coronary artery disease evaluation.
J Cardiovasc Comp Tomography 2016: doi.org/10.1016/j.jcct.2016.01.005
- 47. Broersen A, Graaf MA de, Eggermont J, Wolterbeek R, Kitslaar PH, Dijkstra J, Bax JJ, Reiber JHC, Scholte AJ**
Enhanced characterization of calcified areas in intravascular ultrasound virtual histology images by quantification of the acoustic shadow: validation against computed tomography coronary angiography.
Int J Cardiovasc Imaging 2016; 32: 543-552.
- 48. Asami M, Aoki J, Serruys PW, Abizaid A, Saito S, Onuma Y, Kimura T, Simonton CA, Tanabe K**
Feasibility of 320-row multi-detector computed tomography angiography to assess bio-absorbable everolimus-eluting vascular scaffolds.
Cardiovasc Interv and Ther 2016; 31:96–100; doi 10.1007/s12928-015-0353-1
- 49. Sakellarios A, Bourantas CV, Papadopoulou S-L, Tsirka Z, Vries T de, Kitslaar P, Girasis C, Naka KK, Fotiadis DI, Veldhof S, Stone GW, Reiber JHC, Michalis LK, Serruys PW, Feyter PJ de, Garcia-Garcia HM**
Prediction of atherosclerotic disease progression using LDL transport modelling: a serial computed tomographic coronary angiographic study.
Eur Heart J- Cardiovasc Imaging 2016; doi:10.1039/ehjci/ew035
- 50. Gao X, Kitslaar PH, Budde RPJ, Tu S, Graaf MA de, Xu L, Xu B, Scholte AJHA, Dijkstra J, Reiber JHC**

Automatic detection of aorta-femoral vessel trajectory from whole-body computed tomography angiographic data sets.

Int J Cardiovasc Imaging 2016; 32: 1311-1322

51. **Symons R, Morris JZ, Wu CO, Pourmorteza A, Ahlman MA, Lima JAC, Chen MY, Mallek M, Sandfort V, Bluemke DA**
Coronary CT angiography: variability of CT scanners and readers in measurement of plaque volume
Radiology 2017; 281(3): 737-748
52. **Nakanishi R, Ceponiene I, Osawa K, Luo Y, Kanisawa M, Megowan N, Nezarat N, Rahmani S, Broersen A, Kitslaar PH, Dailing C, Budoff MJ**
Plaque progression assessed by a novel semi-automated quantitative plaque software on coronary computed tomography angiography between diabetes and non-diabetes patients: A propensity-score matching study.
Atherosclerosis 2016 Nov 3; 255: 73-79.
53. **Huang D, Muramatsu T, Li Y, Yang W, Nagahara Y, Chu M, Kitslaar P, Sarai M, Ozaki Y, Chatzizisis Y, Yan F, Reiber JHC, Wu R, Pu J, Tu S.**
Assessment of endothelial shear stress in patients with mild or intermediate coronary stenoses using coronary computed tomography angiography: comparison with invasive coronary angiography.
Int J Cardiovasc Imaging 2016: doi: 10.1007/s10554-016-1003-0
54. **Budoff MJ, Ellenberg SS, Lewis CE, Mohler III ER, Wenger NK, Bhasin S, Barrett-Connor E, Swerdloff RS, Stephens-Shields A, Cauley JA, Crandall JP, Cunningham GR, Ensrud KE, Gill ThM, Matsumoto AM, Molitch ME, Nakanishi R, Nezarat N, Matsumoto S, Hou X, Basaria S, Diem SJ, Wang C, Cifelli D, Snyder PJ**
Testosterone treatment and coronary artery plaque volume in older men with low testosterone.
JAMA 2017; 317(7): 708-716
55. **Symons R, Morris JZ, Wu CO, Pourmorteza A, Ahlman MA, Lima JAC, Chen MY, Mallek M, Sandfort V, Bluemke DA**
Coronary CT angiography: variability of CT scanners and readers in measurement of plaque volume
Radiology 2016; 281(3): 737-748
56. **Nezarat N, Budoff MJ, Luo Y, Darabian S, Nakanishi R, Li D, Sheidaee N, Kim M, Alani A, Matsumoto S, Rahmani S, Kanisawa M, Ceponiene I, Osawa K, Qi H, Hamal S, Kitslaar P, Broersen A, Flores F, Ipp E, Khazai B**
Presence, characteristics, and volumes of coronary plaque determined by computed tomography angiography in young Type 2 diabetes mellitus
Am J Cardiol 2017; doi.org/10.1016/j.amjcard.2017.02.023
57. **Sandfort V, Bluemke DA, Vargas J, Brinker JA, Gerstenblith G, Kickler T, Zheng G, Li J, Chen S, Lai H, Fishman EK, Lai S**
Coronary plaque progression and regression in asymptomatic African American chronic cocaine users with obstructive coronary stenoses: a preliminary study.
J Addict Med 2017, 11(2): 126-137
58. **Collet C, Onuma Y, Grundeken MJ, Miyazaki Y, Bittercourt M, Kitslaar P, Motoyama S, Ozaki Y, Asano T, Wentzel JJ, Streekstra GJ, Serruys PW, Winter RJ de, Planken PN**
In vitro validation of coronary CT angiography for the evaluation of complex lesions.
EuroIntervention 2017.