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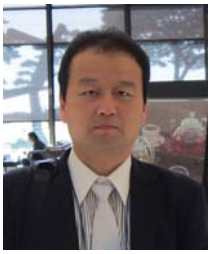

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CURRENT POSITION: **Professor and Chairman for Cardiology and Heart Center**, Yanbian University Hospital, Yanji, Jilin Prov. China (01/2008~)
Associate Prof., Central of Innovation Program, Nagoya University
Associate Prof., Geriatrics, Nagoya University Graduate School of Medicine (~2017.03.31)

BIRTH: Jinlin Prov., CHINA
December 25, 1966

ADJUNCT POSITION: Visiting Prof. of Cardiology, Kyung-Hee University Hospital, Seoul, Korean (04/2010~)
Visiting Prof. of The Forth Affiliated Hospital Harbin Medical University

ACADEMIC LEADERSHIP/EMNTORSHIP ACTIVITIES:

1. 2018/04/05 Cheng XW Invited Speaker: The role of MMP-2 in angiogenesis Gkwangjiu Veterans Heart Symposium. Kyuangjiu, South Korea
2. 2008/04/07 Cheng XW Seminar Speaker: The role of MMP-2 in cardiovascular disease Hyang University Basic Research Meeting on Molecular and Cellular Cardiology, Seoul, Korea.
3. 2010/07/21 Cheng XW Seminar Speaker: Exercise Training Stimulates Ischemia-Induced Neovascularization via PI3K-Akt-Dependet HIF-1α Reactivation I Mice of Advanced Age. Chonnam National University Hospital Heart Center Cardiovascular Research Meeting, Seoul, Korea.
4. 2010/07/27 Cheng XW Seminar Speaker: Association of Diabetes with Myocardial Collagen Accumulation and Relaxation Impairment in Patients with Dilated Cardiomyopathy. EST-West Medical Research Institute Basic Research Meeting, Seoul, Korea.
5. 2010/07/28 Cheng XW Seminar Speaker: Supperoxide-Dependent Cathepsin Activation is Associated with Hypertensive Cardiorenal Remodeling and Represents a Target for ARB and Statins. Institute of Wonkwang Medical Science Cardiovascular Meeting in Wonkwang University College of Medicine, Seoul, Korea
6. 2011/05/27 Cheng XW Invited Speaker:Exercise and Aging on Neovascularization

The 5th Oriental Congress of Cardiology, Shanghai, China

7. 2011/08/20 Cheng XW Invited Speaker: Progress in Atherosclerosis Research: Impact on Exercise and Treatment, 2011 East Asia International Cardiovascular Symposium, Harbin, China.
8. 2011/11/27 heng XW Invited Speaker: Lifestyle Intervention and Vascular Protection in Aged Animal and Human. The 5th China vascular Disease Forum and Update of Preventive Cardiology, Guangzhou, China.
9. 2011/12/08 Cheng XW Invited Speaker: Progress in Atherosclerosis Research: Impact on Treatment and Biomarkers
   Joint meeting of Coronary Revascularization (JCR2011), Busan, Korea
10. 2011/12/09 Cheng XW Invited Speaker: Exercise Rescues Vascular Action Response to Hypoxia in Aged Animals and Humans.
    Joint meeting of Coronary Revascularization (JCR2011), Busan, Korea
11. 2012/03/09 Cheng XW Invited Speaker: Exercise on EPC events in aged animals. Myocardial Ischemia Symposium in Korea 2012 (MIS-Korea). Seoul, Korea.
13. 2012/05/11 Cheng XW Invited Speaker: Characteristics of blood pressure profiles and vascular dysfunction. The Korea Society of Hypertension (KSH 2012). Korean University, Seoul, Korea.
14. 2011/05/11 Cheng XW Invited Speaker: Cathepsins and atherosclerosis. The Korea Society of Hypertension (KSH 2012). Seoul, Korea
15. 2011/05/26 Cheng XW Invited Speaker: Exercise Rescues Vascular Action in Response to Hypoxia in Aged Animal and Humans. 3 rd Gwangju-Boston Cardiology Joint Symposium (GBCS). Gwangju, Korea.
16. 2012/08/01 Cheng XW Invited Speaker: Progression in Cardiovascular Disease Research: Focusing on Cathepsins and Biomarkers. Kyung Hee University Atherosclerosis Sympodium. Kyung University, Korea.
17. 2012/09/22 Cheng XW Invited Speaker: Anti-Vascular Aging: Impact on Exercise and EPCs. The 3rd International Symposium on the Frontiers in Cardiovascular Diseases (3rd ISFC), Xiamen, China..
18. 2012/11/20 Cheng XW Seminar Speaker: The Progress of Cardiovascular Disease Research: Focusing on Anti-Vascular Aging and Cathepsins. Animal Pathological Research Meeting in the Laboratory Animal Center of Xi'an Jaiotong University School of Medicine, Xian, China. Nov 20, 2012.
19. 2013/02/14 Cheng XW Seminar Speaker: Cathepsin K as A New Therapeutic Target and Biomarker for Cardiovascular Disease. 3rd Kyung Hee University Atherosclerosis Symposium: Cardiac Biomarker from bench to beside.
20. 2013/03/28 Cheng XW Invited Speaker: The Progress in Angiogenesis Research: Focusing on Notch1 Activation and Cathepsin K. Myocardial Ischemia Symposium in Korea 2013 (MIS-Korea) March 28, 2013.
21. 2013/07/04 Cheng XW Invited Speaker: Catthepsin K-A Classical Bone Biomarker in Cardiovascular Disease: The heart is not alone anymore. 4th Kyung Hee University Atherosclerosis Symposium. Seoul, Korea.

22. 2013/08/09 Cheng XW Invited Speaker: Catthepsin K-A Classical Bone Biomarker in Cardiovascular Disease: The heart is not alone anymore. The 3rd East Asia Cardiovascular International Cardiovascular Symposium. Harbin, China.
23. 2013/11/07 Cheng XW Seminar Speaker: Cysteine Protease Cathepsins and Atherosclerosis-Based Cardiovascular disease. The 5th Xian Experimental Medicine Symposium, Xi'an Jiangtong University School of Medicine, Xi'an China.
24. 2013/12/05 Cheng XW Seminar Speaker: Exercise on Vascular Aging and Atherosclerosis The 5th Kyung Hee Atherosclerosis Symposium-Exercise and Cardiovascular Medicine: from Bench to Beside, Seoul, Korea.
25. 2014/03/07 Cheng XW Invited Speaker: Regulatory mechanism of cathepsin on cardiac hypertrophy. Myocardial Ischemia Symposium in Korea 2014 (MIS-Korea), Seoul, Korea.
26. 2014/04/19 Cheng XW Invited Speaker: Cathepsin K-Mediated Noich1 Activation Contributes to Neovascularization in Response to Hypoxia. The 5th International Forum of Cardiovascular Target Therapy (CTT2014), Wuhan, China.
27. 2014/05/17 Cheng XW Invited Speaker: Regulatory mechanism of cathepsin on cardiac hypertrophy. The 4th Gwangju-Boston Joint Cadioloy Symposium (GBCS2014), Gwangju, Korea
28. 2014/08/22 Cheng XW Invited Speaker: Cathepsin K-Mediated Notch1 Activation Contributes to Neovascularisation in Response to Hypoxia, The 12th Chinese Vascular Surgery Congress, Shanghai, China
29. 2014/08/22 Cheng XW Invited Speaker: Exploration of Mechanisms of Atherosclerotic Plaque Rupture: From A New and Simple Mouse Model of Plaque Rupture, The 12th Chinese Vascular Surgery Congress, Shanghai, China
30. 2015.03/06 Cheng XW Invited Speaker: Cathepsin K-Mediated Notch1 Activation Contributes to Neovascularisation in Response to Hypoxia. Myocardial Ischemia Symposium in Korea 2015 (MIS-Korea), Seoul, Korea.
31. 2015.06/19 Cheng XW Invited Speaker: Prevention of Muscle Wasting with Aging in SAMP10 Mice by a Combination of Exercise and Intrabone Young Bone Marrow Injection. Kyung Hee Cardiology Meeting, June 19, 2015; Seoul, Korea.
32. 2015.11/28 Cheng XW Invited Speaker: SMC Apoptosis and Proliferation Crosstalk in Restenosis after Angioplasty. 18th Annual Meeting of cardiovascular disease of Yanbian Medical Association- Acute Coronary Syndrome and Heart Failure-National Continuing Education Program, Yanji, Jilin Province, China.
33. 2015.12/12 Cheng XW Invited Speaker: Cathepsin S Activity Controls Injury-Related Vascular Repair in Mice via and PI3K−Akt/p-HDAC6-Dependent Signaling Pathway. The 2015 Joint Meeting of Coronary Revascularization (2015JCR), December 12, 2015; Busan, Korea.
34. 2016.03/06 Cheng XW Invited Speaker: Cathepsin S modulates Injury-Related Vascular Repair in Mice. Myocardial Ischemia Symposium in Korea 2016 (MIS-Korea2016), March 4, 2016; Seoul, Korea.

35. 2016.09/29 Cheng XW Invited Speaker: Dipeptidyl Peptidase-4 (DPP4) Inhibition for the Treatment of Neovascularization: New and Promising, or Not? Kyung Hee University Hospital Cardiology Meeting, Seoul, Korea.
36. 2016.10/23 Cheng XW Invited Speaker: The Novel Mechanism of Endovascular Therapy-Related Restenosis: The Significance of Cathepsin S and K. The 6th Xian Experimental Medicine Symposium, Xi'an Jiangtong University School of Medicine, Xi'an China.
37. 2016.10/26 Cheng XW Invited Speaker: A new class of antidiabetic drugs-dipeptidyl peptidase-4 (DPP4) inhibitors: from bedside to bench. The 19th Annual Meeting of cardiovascular disease of Yanbian Medical Association- Acute Coronary Syndrome and Heart Failure-National Continuing Education Program, Yanji, Jilin Province, China.
38. 2016.12/09 Cheng XW Invited Speaker: Cathepsin S Activity Controls Injury-Related Vascular Repair in Mice via PI3K/p38-HADC6 Axis. Joint meeting of Coronary Revascularization (JCR2016) in Busan, Korea.
39. 2016.12/10 Cheng XW Invited Speaker: DPP4 Regulates Hematopoietic Stem Cell Activation in Response to Chronic stress. Joint meeting of Coronary Revascularization (JCR2016) in Busan, Korea.
40. 2017.02.11 Cheng XW: Role of Cysteinyl Cathepsins in Atherosclerosis-Based Cardiovascular Disease: Focus on Novel Biology and Mechanisms. Kyudai Oral Bioscience 2017 (KOB2017). Kyushu University Collaboration Station.
41. 2017.03.04 Cheng XW: Elevated Dipeptidyl Peptidase-4 Activity Accelerated Stress-Related Insulin Resistance and Atherosclerotic Plaque Growth. Myocardial Ischemia Symposium in Korea 2017 (MIS-Korea2016), March 4, 2017; Seoul, Korea.
42. 2017.11.04 Cheng XW: Anti-inflammatory Therapy with Molecular Targeting Drugs for Atherosclerotic Cardiovascular Disease: Bench to Bedside. The 19th Annual Meeting of cardiovascular disease of Yanbian Medical Association- Acute Coronary Syndrome. Yanji, Jilin Province, China.

KEYWORD OF THE RESEARCH INTEREST:

1. Atherosclerosis
2. Angiogenesis
3. Experimental hypertension
4. Cardiovascular disease
5. Proteases (including cathepsins and matrix metalloproteinase)
6. Aging
7. Stress/immunity/inflammation

PUBLICATIONS:

(I) MANUSCRIPTS (PUBLISHED OR IN PRESS: ∗ : CORRESPONDING AUTHOR)

201701-

1) ∗ **Cheng XW**. Potential Early Biomarkers of Chronic Psychological Stressor: 'One High Two Low' (review). Psychological Bulletin. 2017 (de novo). Impact factor: **16.950**.

2) Jiang H, Sasaki T, Jin E, Kuzuya M, ＊**Cheng XW**. Inflammatory Cells and Proteases in Abdominal Aortic Aneurysm and its Complications. ***Current Drug Target***. 2017 (acceptance).
3) Hu L, Huang Z, Ishii H, Wu H, Suzuki S, Kim W, Inoue A, Jiang H, Li X, Zhu E, Piao L, Zhao G, Lei Y, Okumura K, Okumura K, Shi GP, Murohara T, Kuzuya M, ＊**Cheng XW**. PF-1 modulates smooth muscle cell proliferation and development of experimental intimal hyperplasia. ***Journal of the American Heart Association***. 2017 (acceptance). Impact factor: **4.863**.
4) ＊**Cheng XW**, Narisawa M, Jin E, Cheng L, Xu, Piao L. Dipeptudyl peptidase-4/glucagon like peptide-1 as potential therapeutic target for chronic stress-related vascular aging and atherosclerosis (Letter to Editor). ***Clinical and Experimental Pharmacology and Physiology***. 2017 (in press). *Impact factor*: **2.01**.
5) Yisireyili M, Uchida Y, Saitama K, Tanaka T, **Cheng XW**, Matsushita T, Nakamura S, Murohara T, Takeshita K. Angiotensin receptor blocker irbesartan reduces stress-induced intestinal inflammation via AT1a signaling and ACE2-dependent mechanism in mice. Brain, Behavior, and Immunity. 2017 (in press). Impact factor: **5.964**.
6) Wu H, Du Q, Dai Q, Ge J, ＊**Cheng XW**. Cysteine Protease Cathepsins in Atherosclerotic Cardiovascular Diseases. ***Journal of Atherosclerosis and Thrombosis***. 2017;24:000-000. Impact factor: **2.442**.
7) Ogasawara S, ＊**Cheng XW**, Inoue A, Hu L, Piao L, Yu C, Goto H, Xu W, Zhao G, Lei Y, Yang G, Kimura K, Umegaki H, Shi GP, Kuzuya M. Cathepsin K Activity Controls Cardiotoxin-Induced Skeletal Muscle Repair in Mice. ***Journal of Cachexia, Sarcopenia and Muscle***. 2017 October 23 (in press). DOI:10.1002/JCSM.12248. Impact factor: **9.697**.
8) ＊**Cheng XW**, Lei Y, Piao L, Inoue A, Kuzuya M. Response to letter "Dose DPP-4 inhibition improve diabetic metabolic memory" (letter to editor) *International Journal of Cardiology*. 2017 Sep 12;242(10)123. *Impact factor*: **6.189**.
9) ＊**Cheng XW**, Narisawa M, Jin E, Liu E. α-Solamine as Potential Therapeutic Target in Pulmonary Artery Hypertension (Editorial commentary). ***Journal of Hypertension***. 2017 Dec;35(12);35:2377-2379. *Impact factor*: **4.085**.
10) Jeong YM, **Cheng XW**, Lee SR, Lee KH, Cho H, Kang JH, Kim W. Preconditioning with far-infrared irradiation enhances proliferation, cell survival, and migration of bone marrow-derived stem cells via CXCR4-ERK pathways. ***Scientific Reports***. 2017 Sep 10;7(1):13718. Impact factor: **4.259**.
11) Piao L, Zhao G, Zhu E, Inoue A, Shibata R, Lei Y, Hu L, Yu C, Yang G, Wu H, Xu W, Okumura K, Ouchi N, Murohara T, Kuzuya M, ＊**Cheng XW**. DPP4 Negatively Modulates Neovascularization in Chronic Stress Mice. ***Journal of the American Heart Association***. 2017 Sep 28;6(10):e006421. Impact factor: **4.863**.
12) Lei Y, Yang G, Hu L, Piao L, Inoue A, Jiang H, Sasaki T, Zhao G, Yisireyili M, Yu C, Xu W, Takeshita K, Okumura K, Kuzuya M, ＊**Cheng XW**. Increased dipeptidyl peptidase-4 accelerates diet-Related vascular aging and atherosclerosis in ApoE-deficient mice under chronic stress. ***International Journal of Cardiology***. 2017 Sep 15;243:413-420. *Impact factor*: **6.189**.
13) Zhu E, Hu L, Wu H, Piao L, Zhao G, Inoue A, Kim W, Yu C, Xu W, Bando YK, Li X, Lei Y, Hao CN, Takeshita K, Kim WS, Okumura K, Murohara T, Kuzuya M, ＊**Cheng XW**. Dipeptidyl Peptidase-4 Regulates Hematopoietic Stem Cell Activation in Response to

Chronic Stress. ***Journal of the American Heart Association***. 2017 July 14;6(7):e006394. Impact factor: **4.863**.

14) Yang G, Lei Y, Inoue A, Piao L, Hu L, Jiang H, Sasaki T, Zhao G, Ogasawara S, Xu W, Yu C, Wu H, Okumura K, Kuzuya M, ∗ **Cheng XW**. Exenatide mitigated diet-induced vascular aging and atherosclerotic plaque growth in apoE-deficient mice under chronic stress. ***Atherosclerosis***. 2017 Jul 13;264:1-10. *Impact factor*: **4.239**.

15) Lee KH, Kim W, Lee SR, Cho H, Woo JS, Kang JH, Jeong YM, **Cheng XW**, Kim WS. Cardioprotective effects of PKG activation by soluble GC activator, BAY 60-2770, in ischemia-reperfusion-injured rat hearts. ***Plos One***. 2017 Jul 3;12(3):e0180207. Impact factor: **2.806**.

16) Inoue A, ∗ **Cheng XW**, Huang Z, Hu L, Kikuchi R, Jiang H, Piao L, Sasaki T, Itakura K, Wu H, Zhao G, Lei Y, Yang G, Zhu E, Li X, Sato K, Koike T, Kuzuya M. Exercise Restores Muscle Stem Cell Mobilization and Regenerative Capacity and Muscle Metabolic Alterations via Adiponectin/AdipoR1 Activation in SAMP10 mice. ***Journal of Cachexia, Sarcopenia and Muscle***. 2017 June 20;8(3):370-385. Impact factor: **9.697**.

17) Zhao G, ∗ **Cheng XW**. Piao L, Lu L, Lei Y, Yang G, Inoue A, Ogasawara S, Wu H, Hao CN, Okumura K, Kuzuya M. The Soluble VEGF Receptor sFlt-1 Contributes to Impaired Neovascularization in Aged Mice. ***Aging and Disease***. 2017 May 2;8(3):287-300. Impact factor: **4.648**.

18) Lei Y, Hu L, Yang G, Piao L, Jin M, ∗ **Cheng XW**. Dipeptidyl Peptidase-IV Inhibition for the Treatment of Cardiovascular Disease: Recent Insights Focusing on Angiogenesis and Neovascularization. ***Circulation Journal***. 2017May25;81(7):770-776. *Impact factor*: **3.544**.

19) Yisireyili M, Hayashi M, Wu H, Uchida Y, Yamamoto Y, Kikuchi R, Hamrah MS, Nakayama T, **Cheng XW**, Matsushita T, Nakamura S, Niwa T, Murohara T, Takeshita K. Xanthine oxidase inhibition by febuxostat attenuates stress-induced hyperuricemia, glucose dysmetabolism, and prothrombotic state in mice. ***Scientific Reports***. 2017 April 28;7(1):1226. Impact factor: **4.285**.

20) Umegaki H, Makino T, Uemura K, Shimada H, hayashi T, **Cheng XW**, Kuzuya M. The associations among insulin resistance, hyperglycemia, physical performance, diabetes mellitus, and cognitive function in relatively healthy older adults with subtle cognitive dysfunction. ***Frontiers in Aging and Neuroscience***. 2017 March 23;9:72. Impact factor: **4.348**.

21) Lee KH, Cho H, Lee S, Woo JS, Cho BY, Kang JH, Jeong YM, **Cheng XW**, Kim W. Enhanced-autophagy by exenatide mitigates doxorubicin-induced cardiotoxicity. ***International Journal of Cardiology***. 2017April 1;232:40-47. *Impact factor*: **6.189**

22) Jiang H, Zhao G, Li X, Jin H, Yang G, Jin K, Piao L, Zhu E, Rei Y, Fang E, Han X, Wu H, Nan Y, Jin Q, ∗ **Cheng XW**. Association Between Omentin and Cardiac Dysfunction in Patients with Chronic Heart Failure. ***Minerva Cardioangiologica***. 2017Feb;65(1):8-15. Impact factor: **0.695**.

2016/01-12

23) Wang R, Zhang Y, Xu L, Lin Y, Yang X, Bai L, Chen Y, Zhao S, Fan J, **Cheng XW**, Liu E. Protein Inhibitor of Activated STAT3 Suppresses Oxidized LDL-Induced Cell Responses during Atherosclerosis in Apolipoprotein E Deficent Mice. ***Scientific Reports***. 2016;6:36790. Impact factor: **4.259**.

24) Yang G, Li Y, Cui L, Jiag H, Li X, Jin C, Jin D, Zhao G, Jin J, Piao L, Xu W, Fang C, Lei Y,

Yuan K, Xuan C, Ding D, ＊**Cheng XW**. Circulating Soluble CD26 Is Associated Coronary Artery Disease With and Without Diabetes. ***Plos One***. 2016 Sep 21;11(9):e0163027. Impact factor: **2.806**.

25) Yisireyili M, Takeshita K, Hayashi M, Wu H, Uchida Y, Yamamoto K, Kikuchi R, Hao CN, Nakayama T, **Cheng XW**, Matsushita T, Nakamura S, Murohara T. Dipeptidyl peptidase- IV inhibitor alogliptin improves stressinduced insulin resistance and prothrombotic state in a murine model. ***Psychoneuroendocrinology***. 2016Aug3;73:186-195. Impact factor: **4.788**.

26) ＊**Cheng XW**. Elucidating the Pathophysiological Significance of Circulating Omentin Levels: Is Higher Better (editorials)? ***Atherosclerosis***. 2016Aug16;251:522-524. *Impact factor*: **4.239**.

27) Wu H, ＊**Cheng XW**, Hu L, Takeshita K, Chen H, Du Q, Li X, Zhu E, Huang Z, Yisireyili M, Zhao G, Piao L, Inoue A, Jiang H, Lei Y, Zhang X, Liu S, Dai Q, Kuzuya M, Shi GP, and Murohara T. Cathepsin S Activity Controls Injury-Related Vascular Repair in Mice via the p38MAPK and PI3K−Akt/p-HDAC6 Signaling Pathway. ***Arteriosclerosis, Thromobosis, and Vascular Biology***. 2016Aug1;36(8):1549-1557. Impact factor: **6.607**.

28) Moon JY, Seo JW, Lee A, Jeong MY, Kim YG, Kim SY, Lee KH, Woo JS, Lim SJ, **Cheng XW**, Lee SH, Kim W. The dose-dependent organ-specific effects of a DPP-4 inhibitor on cardiovascular complications in a model of type 2 diabetes. ***Plos One***. 2016 Mar 9;11(3):e0150745. Impact factor: 2.807.

29) Izumi Y, Hayashi M, Morimoto R, **Cheng XW**, Wu H, Ishii H, Yasuda Y, Goto M, Matsuo S, Oiso Y, Murohara T. Impact of circulating Cathepsin K on the coronary calcification and the clinical outcome in CKD patients. ***Heart and Vessels***. 2016 Jan;31(1):6-14. *Impact factor*: 3.434.

30) Kozawa E, **Cheng XW**, Urakawa H, Arai E, Yamada Y, Kitamura S, Sato K, Kuzuya M, Ishiguro N, Nishoda Y. Increased expression and activation of cathepsin K in human osteoarthritic cartilage and synovial tissues. ***Journal of Orthopaedic Research***. 2016 Jan;34(1):127-34. Impact factor: 2.692.

2015/01-12

31) Zhao G, Cui L, Li Y, Li X, Jin Z, Han X, Fang E, Gao Y, Zhou D, Jiang H, Jin X, Piao G, Li X, Yang G, Jin J, Zhu En, Piao M, Piao L, Yuan K, Rei Y, Ding D, Jin C, Nan Y, ＊**Cheng XW**. Increased Circulating Cathepsin K in Patients with Chronic Heart Failure. ***PLOS ONE***. 2015 Aug 24;10(8):e0136093. Impact factor: 2.806.

32) Wang J, Sun C, Gerdes, Liu C, Liao M, Liu J, Shi M, He A, Zhang J, Sukhova GK, Chen H, **Cheng XW**, Kuzuya M, Murohara T, Jiang M, Shull GE, Yang CL, Ke Q, Jelen S, Bindels R, Ellison DH, Jarolim P, Libby P, and Shi GP. Interleukin 18 function requires both interleukin 18 receptor and Na-Cl co-transporter. ***Nature Medicine***. 2015 Jul21(7):820-826. Impact factor: **29.886**.

33) Li X, ＊**Cheng XW**, Hu L, Wu HX, Hao CH, Shi GP, Jiang H, Zhu E, Inoue A, Huang Z, Sasaki T, Takeshita K, Okumura K, Murohara T, Kuzuya M. Cathepsin S Activity Controls Ischemia-Induced Neovascularization in Mice. ***International Journal of Cardiology***. 2015Mar15:183:198-208. Impact factor: **6.189**.

34) Hao CH, Shi YQ, Cheng Z, ＊**Cheng XW**. Beyond Autonomic Neuromodulation: Acetylcholinesterase Inhibitor Against Peripheral Artery Disease (*editorial*). ***International Journal of Cardiology***. 2015Jan15;178:253-255. Impact factor: **6.189**.

35) Song H, Jiang H, Nan YS, ＊**Cheng XW**. Degesting the Remodeled Cardiovascular Wall:

Role of Cysteinyl Cathepsins in Cardiovascular Disease (*review*). ***Minerva Cardioangiologica***. 2015;63(6):525-31. Impact factor: 0.695.

36) Hong SH, Jang HH, Lee SR, Lee KH, Woo JS, Kim JB, Kim WS, Min BI, Cho KH, Kim KS, **Cheng XW**, Kim W. Impact of Lysophosphatidylcholine on Survival and Function of UEA-1^{+}acLDL^{+} Endothelial Progenitor Cells in Patients with Coronary Artery Disease. ***Heart & Vessels***. 2015Jan;30(1):115-125. *Impact factor*: 3.434.

2014/01-12

37) Jiang H, ✱ **Cheng XW**, Shi GP, Hu L, Inoue A, Yamamura Y, Wu H, Takeshita K, Li X, Huang Z, Song H, Asai M, Hao CN, Unno K, Koike T, Oshida Y, Okumura K, Murohara T, Kuzuya M. Cathepsin K-Mediated Notch1 Activation Contributes to Neovascularisation in Response to Hypoxia. ***Nature Communications.*** 2014Jun4;5:3838. *Impact factor:* **12.192**.

38) Hu L, ✱ **Cheng XW**, Song H, Inoue A, Jiang H, Li X, Shi GP, Kozawa E, Okumura K, Kuzuya M. Cathepsin K Activity Controls Injury-Related Vascular Repair in Mice. ***Hypertension***. 2014Mar;63(3):607-615. Impact factor: **6.857**

39) Hayashi M, Kakeshita K, Uchida Y, Yamamoto K, Kikuchi R, Nomura E, **Cheng XW**, Matsushita T, Nakamura H, Murohara T. Angiotensin II Receptor Blocker Ameliorates Stress-induced Adipose Tissue Inflammation and Insulin Resistance. ***PLoS One***. 2014 Dec 31;9(12):e116163. *Impact factor*: 2.806

40) Wu HX, ✱ **Cheng XW**, Hu L, Hayashi M, Takeshita Y, Hamrah MS, Shi GP, Kuzuya M, Murohara T. Renin Inhibition Reduces Atherosclerotic Plaque Neovessel Formation and Regresses Advanced Atherosclerotic Plaques. ***Atherosclerosis***. 2014Oct30;237(2):739-747. *Impact factor*: **4.239**.

41) ✱ **Cheng XW**, Sasaki T, Kuzuya M. The Role of Cysteinyl Cathepsins in Venous Disorder (*review*). ***Thrombosis and Haemostasis***. 2014Jul3;112 (1):216-218. *Impact factor*: **5.627.**

42) Li X, Li Y, Jin JY, Jin D, Cui L, Li X, Rei Y, Zhao G, Yang G, Zhu E, Nan YS, ✱ **Cheng XW**. Increased Serum Cathepsin K in Patients with Coronary Artery Disease. ***Yonsei Medical Journal***. 2014Jul 1;55(4):912-9. *Impact factor*: **1.537**.

43) Hao C, Huang JJ, Shi YQ, Li HY, Guo XG, **Cheng XW**, Li RL, Lu W, Zhu YZ, Duan J. Pulsed electromagnetic field improves cardiac function in response to myocardial infarction. ***Am J Transl Res***. 2014;6(3):281-290. *Impact factor*: 3.146

44) Hao C, Huang Z, Song S, Shi Y, **Cheng XW**, Murohara T, Lu W, Su D, Duan J. Arterial Baroreflex Dysfunction Impairs Ischemia-Induced Angiogenesis. ***Journal of the American Heart Association***. 2014May15;3(3):e000804. *Impact factor*: 4.863.

45) Kimura K, ✱ **Cheng XW**, Inoue A, Hu L, Koike T, Kuzuya M. *β*-Hydroxy-*β*-methylbutyrate facilitates PI3K/Akt-dependent mammalian target of rapamycin and FoxO1/3a phosphorylations and alleviates tumor necrosis factor *α*/interferon *γ*–induced MuRF-1 expression in C2C12 cells. ***Nutrition Research***. 2014Apr;34(4):368-374. *Impact factor*: 2.737.

46) Wu HX, **Cheng XW**, Hao C, Zhang Z, Yao H, Murohara T, Dai Q. Regulation of Apelin and its Receptor Expression in Adipose Tissues of Obesity Rats with Hypertension and Cultured 3T3-L1 Adipocytes. ***Experimental Animals***. 2014;63(2):257-267. *Impact factor*: 1.374.

47) Kim HS, Woo JS, Kim BY, Jang HH, Hwang SJ, Kwon SJ, Choi EY, Kim JB, **Cheng XW**, Jin E, Kim WS, Kim KS, Kim W. Biochemical and Clinical Correlation of Intraplaque Neovascularization using Contrast-Enhanced Ultrasound of the Carotid Artery. ***Atherosclerosis***. 2014Apr;233(2):579-83. *Impact factor*: 4.239.

48) Song H, Nan YS, ＊**Cheng XW**. Circulating cf-DNA: A Promising, Noninvasive Tool for Assessment of Early Cardio-Metabolic Risk (*commentary*). ***Atherosclerosis***. 2014Mar21;233(1):307-309. *Impact factor*: **4.239**.

49) Ohtake M, Hattori T, Murase T, Takahasi K, Takatsu M, Ohtake M, Miyachi M, Watanabe S, **Cheng XW**, Murohara T, Koike Y, Nagata K. Glucocorticoids Activate Cardiac Mineralocorticoid Receptors in Adrenalectomized Dahl Salt-Sensitive Rats.. ***Nagoya J. Med. Sci***. 2014Feb;76:59-72. *Impact factor*: 0.692.

201301-12

50) Fujita M, ＊**Cheng XW**, Inden Y, Yoshida N, Kitamura K, Shimano M, Yamamoto T, Takeshita K, Kyo S, Taguchi N, Shi GP, Kuzuya M, Okumura K, Murohara T. Mechanisms with Clinical Implications for Atrial Fibrillation-Associated Remodeling: Cathepsin K Expression, Regulation, and Therapeutic Target and Biomarker. ***Journal of the American Heart Association***. 2013Dec16;2(6):e000503. Impact factor: **4.863**.

51) ＊**Cheng X**, Murohara T, Kuzuya M. GLP-1R Agonists for the Prevention of Cardiac Injury in STEMI Patients Undergoing PCI: Something New and Promising, or Not? (*editorial*) ***International Journal of Cardiology Metabolic and Endocrine***. 2013;1:1-3.

52) Di Q, Cheng Z, Kim W, Liu X, Song H, Li X, Nan Y, Wang Q, ＊**Cheng XW**. Impaired Cross-Activation of β3 Integrin and VEGFR-2 on Endothelial Progenitor Cells with Aging Decreases Angiogenesis in Response to Hypoxia. ***International Journal of Cardiology***. 2013Oct 3;168(3):2167-2176. Impact factor: **6.189**.

53) Lee KH, Kim JB, **Cheng XW**, Kim W. Angiopoietin-1 Gene plasmid and Bone Marrow Mononuclear Cell Transfer Accelerates Reendothelialization in Rat Carotid Arteries after Balloon Injury (letter). ***International Journal of Cardiology***. 2013Oct 12;168(5):5085-8. *Impact factor*: **6.189**.

54) Okamoto R, Hirashiki A, **Cheng XW**, Shinoda N, Okumura T, Takeshita K, Bando Y, Murohara T. Usefulness of serum cardiac troponins T and I to predict cardiac molecular changes and cardiac damage in patients with hypertrophic cardiomyopathy. ***International Heart Journal***. 2013;54(4):202-206. *Impact factor*: 2.017.

55) Hara Y, Noda A, Miyata S, Minoshima M, Sugiura M Kojima J, Otake M, Furukawa M, **Cheng XW**, Nagota K, Murohara T. Effect of Aged Garlic Extract on Left Ventricular Diastolic Function and Fibrosis in Rats Model of Hypertension. ***Experimental Animals***. 2013;62(4):305-310. *Impact factor*: 1.374.

56) Okumura T, Hirashiki T, Yamada Y, Funahashi H, Oshima S, Kono Y, **Cheng XW**, Takeshita K, Muroahra T. Left ventricular response to dobutamine reflects peak oxygen consumption in patients with idiopathic dilated cardiomyopathy. ***International Journal of Cardiology***. 2013Jan 20;162(3):234-9. Impact factor: 6.189.

57) Sasaki T, Nakamura K, Sasada K, Okata S, **Cheng XW**, Suzuki S, Murohara T, Sato K, Kuzuya M. Matrix Metalloproteinase-2 deficiency Impairs Aortic Atherosclerotic Calcification in atherosclerotic in ApoE-deficient old mice. ***Atherosclerosis***. 2013Mar;227(1);43-50. *Impact factor*: 4.239.

58) Hayashi D, Ohshima S, Isobe S, **Cheng XW**, Unno K, Funahashi H, Shinoda N, Okumura T, Hirashiki A, Kato K, Murohara T. Increased ^{99m}Tc-sestamibi washout reflects impaired myocardial contractile and relaxation reserve during dobutamine stress due to mitochondrial dysfunction in dilated cardiomyopathy. ***The Journal of American College and Cardiology***. 2013May14;61(19):2007-2017. *Impact factor*: **19.898**.

59) ∗ **Cheng XW**, Kikuchi R, Ishii H, Yoshikawa D, Hu L, Takahashi R, Shibata R, Ikeda N, Kuzuya M, Okumura K, Murohara T. Circulating Cathepsin K as a Potential Novel Biomarker of Coronary Artery Disease. ***Atherosclerosis***. 2013May;228:211-216. *Impact factor*: **4.239**.

60) Hao CH, Shi YQ, Huang JJ, Li HY, Huang ZH, **Cheng XW**, Lu W, Duan JL. The power combination of blood-pressure parameters to predict the incidence of plaque formation in carotid arteries in elderly. ***International Journal of Clinical and Experimental Medicine***. 2013;6(6):461-469. *Impact factor*: 1.069

61) Yamada T, Hirashiki A, **Cheng XW**, Okumura T, Shimazu S, Okamoto R, Shinoda N, Isobe S, Takeshita K, Shiji N, Kondo T, Murohara T. Relationship between Myocardial Fibrosis and Left Ventricular Function in Nonischemic Dilated Cardiomyopathy: A Comparison Focal and Interstitial Fibrosis. ***Journal of Cardiac Failure***. 2013Agu;19(8):557-564. *Impact factor*: **3.765**.

2012/01-12

62) ∗ **Cheng XW**, Shi GP, Kuzuya M, Okumura K, Murohara T. The Role for Cysteine Protease Cathepsins in Heart Disease: Focus on Biology and Mechanisms for Clinical Implication (*review*). ***Circulation***. 2012Mar27;125(12):1551-1562. Impact factor: **19.309**.

63) Kozawa H, Nishita K, **Cheng XW**, Urakawa H, Arai E, Futamura N, Shi GP, Kuzuya M, Sasaki T, Ishiguro T. Osteoarthritic change was delayed in a cathepsin K knockout mouse model of osteoarthritis Cathepsin K Deficiency Protects Arthritis in Mouse Model. ***Arthritis & Rheumatism.*** 2012 Feb;62(2):454-464. *Impact factor*: **8.995**.

64) Shigeta K, Aoyama M, Bando Y, Monji A, Mitusi T, Taketsu M, **Cheng XW**, Okumura T, Hirashi A, Murohara T. Inhibition of DPP4 Activity Reverses Diastolic Left Ventricular Dysfunction via SDF-1-Dependent and -Independent Actions. ***Circulation***. 2012Oct 9;126(15):1838-1851. *Impact factor*: **19.309**.

65) Ha SJ, Kim W, Woo JS, Kim JB, Kim SJ, Kim WS, Kim MK, **Cheng XW**, Bae JH, Kim KS. Preventive Effects of Excenatide on Endothelial Dysfuction Induced by Ischemia-Reperfusion Injury via K_{ATP} channels. ***Arteriosclerosis, Thrombosis, and Vascular Biology***. 2012 Feb;32(2):474-480. Impact factor: **6.607**.

66) Uchida Y, Takeshita K, Mamamoto K, Kikuchi R, Nakayama T, Nomura M, **Cheng XW**, Egashira K, Matsushita T, Nakamura H, Murohara T. Stress Augments Insulin Resistance and Prothrombotic State-Role of Visceral Adipose-derived Monocyte Chemoattractant Protein-1. ***Diabetes.*** 2012;61(6):1552-1561. Impact factor: **8.684**.

67) **Cheng XW**, Murohara T. Impacts of Combination of Angiotensin II Receptor Blocker and Low-dose Hydrochlothiazide on Patietns with Morning Hypertension (*commentary*). ***Hypertension Research***. 2012April 26;35(7):702-703. *Impact factor*: 3.581.

68) Li X, Liu Z, Cheng Z, ∗ **Cheng XW**. Cysteinyl Cathepsins: Multifunctional Enzymes in Cardiovascular Disease (*review*). ***Chonnam Medical Journal***. 2012Aug26;48(2);77-85. Impact factor: 0.00.

69) Huang DM, Li YL, ∗ **Cheng XW**. Contribution of Lysosomal Cysteine Proteases in Cardiac and Renal Diseases (*editorial*). ***World Journal of Hypertension***. 2012 Jun23;2(3):29-33. Impact factor: 0.00.

70) Okumura K, **Cheng XW**. Blood Pressure Variability and Vascular Dysfunction in Essential Hypertension (*review*). ***Journal of Korean Society of Hypertension***. 2012Sep;18(3):75-87. *Impact factor*: **0.00**.

71) Okumura K, **Cheng XW**. Characteristics of Blood Pressure Profiles and Vascular Dysfunction. ***Hypertension Research*** (*commentary*). 2012Jan;35(1):23-4. *Impact factor*: 3.581.
72) Takahashi R, Taguchi N, Suzuki M, **Cheng XW**, Numaguchi Y, Tsukamoto H, Ikeda N, Murohara T, Okumura K. Cholesterol and Triglyceride Concentrations in Lipoproteins as Related to Carotid Intima-media Thickness. ***International Heart Journal***. 2012;53(1):29-34. Impact factor: 2.017.
73) Shinoda N, Hirashiki A, Okumura T, Akamoto R, **Cheng XW**, Kouno Y, Takeshita K, Yamata S, Murohara T. Prognostic Value of Heart Rate Recovery added to Brain Natriuretic Peptide in Ambulatory Patients with Nonischemic Dilated Cardiomyopathy. ***Annals of Noninvasive Electrocardiology***. 2012;17(4):378-386. *Impact factor*: 1.852.
74) Okumura K, Takahasi R, Taguchi N, Suzuki M, **Cheng XW**, Numaguchi Y, Ikeda N, Murohara T. Small Low-Density Lipoprotein Cholesterol Concentration is a Determinant of Endothelial Dysfunction by Peripheral Artery Tonometry in Men. ***Journal of Atherosclerosis and Thrombosis***. 2012;19:897-903. Impact factor: 2.442.

2011/01-12

75) ＊**Cheng XW**, Huang Z, Kuzuya M, Okumura K, Murohara T. Cysteine Proteases Cathepsins in Atherosclerosis-Based Vascular Disease and Its Complication (*review*). ***Hypertension.*** 2011Dec;58(6):978-86. Impact factor: **6.857**.
76) ＊**Cheng XW**, Song H, Hu L, Inoue A, Bando Y, Shi GP, Kuzuya M, Okumura K, Murohara T. Angiotensin Type 1 Receptor Blocker Reduces Intimal Neovascularization and Plaque Growth in Apolipoprotein E-Deficient Mice. ***Hypertension***. 2011;57:981-989. Impact factor: **6.857**.
77) ＊**Cheng XW**, Kuzuya M, Sasaki T, Inoue A, Song H, Hu L, Hirashiki A, Takeshita K, Takeshita K, Li P, Sato K, Shi GP, Okumura K, Murohara T. Inhibition of Mineralocorticoid Receptor is a Renoprotective Effect of an HMG CoA Reductase Inhibitor Pitavastatin. ***Journal of Hypertension***. 2011;Mar29(3);542-552. Impact factor: **4.085**.
78) Takahashi R, Imamura A, Yoshikane M, Suzuki M, Murakami R, **Cheng XW**, Numaguchi Y, Ikeda N, Murohara T, Okumura K. High Serum Level of Pentosidine, an Advanced Glycation End Product, is Associated with Reduced Ankle-Brachial Index in Apparently Healthy Men. ***Metabolism.*** 2011;60(5):649-654. Impact factor: 5.777.
79) Funahashi H, Izawa H, Hirashiki A, **Cheng XW**, Inden Y, Nomura M, Murohara T. Altered Micro RNA Expression Associated With Reduced Catecholamine Sensitivity in Patients With Chronic Heart Failure. ***Journal of Cardiology.*** 2011May;57(3):338-344. Impact factor: 2.732
80) Kikuchi R, Takeshita K, Kondo M, Aoyam T, **Cheng XW**, Yamamoto K, Takamatsu J, Liao JK, Murohara T. HMG CoA Reductase Inhibitor Activates Endothelial Notch Signaling To Promote Angiogenesis And Arteriogenesis. ***Laboratory Investigation.*** 2011May;91(5):691-703. Impact factor: 4.857.
81) Sakakibara M, Hirashiki A, **Cheng XW**, Bando Y, Ohshima K, Okumura T, Funahashi H, Ohshima S, Izawa H, Murohara T. Diabetes mellitus is Associated with impairment of myocardial relaxation and accumulation of collagen in patients with dilated cardiomyopathy. ***Diabetes Research and Clinical Practice.*** 2011 Jun;92(3):348-55. Impact factor: 3.639.
82) Zhao X, Zhou Y, Song H, Guan L, Jin Z, Shi D, Zheng G, Guo Y, Li Y, Shi GP, ＊**Cheng XW**. Comparison of Bypass Surgery with Drug-Eluting Stents for Diabetic Patients with Left

Main Coronary Artery (LMCA) Stenosis. ***Yonsei Medicla Journal***. 2011Nov1;52(6):923-932. Impact factor: 1.537.

83) Hayashi M, Takeshita Y, Inden Y, Ishii H, **Cheng XW**, Yamamoto K, Murohara T. Platelet activation and induction of tissue factor in acute and chronic atrial fibrillation: Involvement of mononuclear cell-platelet interaction. ***Thrombosis Research***. 2011Dec;128(6):e113-8. Impact factor: 2.65.

84) Zaima N, Sasaki T, Enomoto H, **Cheng XW**, Tanaka H, Hayasaka T, Goto-Inoue N, Kuzuya M, Setou M. Biomolecules-based histopathologic examination of aortic atherosclerotic plaques in ApoE deficient mice using imaging mass spectrometry. ***Atherosclerosis***. 2011Aug;217(2):427-32. Impact factor: 4.239.

85) Ohshima K, Hirashiki A, **Cheng XW**, Hayashi M, Okumura T, Sakakibara M, Funahashi H, Ohshima S, Murohara T. Impact of mild to moderate renal dysfunction on left ventricular relaxation function and prognosis in ambulatory patients with nonischenlic dilated cardiomyopathy. ***International Heart Journal***. 2011;52(6):366-71. Impact factor: 2.017.

2010/01-12

86) ∗ **Cheng XW**, Kuzuya M, Kim W, Song H, Hu L, Inoue A, Di Q, Nakamura K, Sasaki T, Shi GP, Okumura K, Murohara T. Exercise Training Stimulates Ischemia-induced Neovascularization via PI3K/Akt-dependent HIF-1α Reactivation in Mice of Advanced Age. ***Circulation.*** 2010Aug17;122(7):707-16. Impact factor: **19.309**.

87) Li P, Shibata R, Shimano M, Kihara S, Ouchi N, Nagata K, **Cheng XW**, Murohara T. Pioglitazone Attenuates angiotensin II-induced cardiac hypertrophy and fibrosis through stimulation of adipotectin secretion. ***Hypertension.*** 2010;55 (1):69-75. Impact factor: 6.857.

88) Sasaki T, Kuzuya M, Nakamura K, **Cheng XW**, Hayashi T, Okumura K, Murohara T, Iguchi A, Sato K. AT1 Blockade Attenuates Atherosclerotic Plaque Destabilization Thorough the Suppression of Cathepsin S Activity in ApoE-Deficient Mice. ***Atherosclerosis.*** 2010 Jun:210(2):430-437. Impact factor: 4.239.

89) Nishizawa T, ∗ **Cheng XW**, Obata K, Nagata K, Yamada T, Izawa H, Sasaki T, Hirashiki A, Noda A, Takeshita K, Shi GP, Kuzuya M, Okumura K, Murohara T. Ca2+ channel blocker benedipine promotes coronary angiogenesis and reduces both left ventricular diastolic stiffness and mortality in hypertensive rats. ***Journal of Hypertension.*** 2010jul;28(7):1515-1526. Impact factor: **4.085**.

90) Hirashiki A, Izawa H, **Cheng XW**,Unno K, Ohshima S, Murohara T. Dobutamine-induced mechanical alternans is a marker of poor prognosis in idiopathic dilated cardiomyopathy. ***Clinical and Experimental Pharmacology and Physiology.*** 2010Oct;37(10):1004-1009. Impact factor: 2.01.

91) Imamura A, Murakami R, Takahashi R, **Cheng XW**, Numaguchi Y, Murohara T, Okumura K: Low folate levels may be an atherogenic factor regardless of homocysteine levels in young healthy nonsmokers. ***Metabolism*** 2010May;59(5):728-733. Impact factor: 5.777

92) Okumura K, **Cheng XW**. Endothelial Function for the Evaluation of Antiatherosclerotic Drugs (*commentary*). ***Hypertension Research.*** 2010;33:780-781. Impact factor: 3.581

93) Kimura K, ∗ **Cheng XW**, Nakamura K, Inoue A, Song H, Hu L, Iguchi A, Okumura K, Murohara T, Kuzuya M. Matrix Metalloproteianse-2 (MMP-2) Regulates the Tissue Inhibitor of MMP-2 (TIMP-2) Expression. ***Clinical and Experimental Pharmacology and Physiology.*** 2010Nov;37(11);1196-1201. Impact factor: 2.01

94) Takahashi R, Imamura A, Yoshikane M, Suzuki M, Murakami R, **Cheng XW**, Numaguchi Y,

Ikeda N, Murohara T, Okumura K. Very Small Low-Density Lipoprotein Cholesterol Level is A Determinant of Arterial Stiffness in Men with Impaired Glucose Metabolism. ***Journal of Atherosclerosis and Thrombsois.*** 2010;17:1282-89. Impact factor: 2.442.

95) Muragami R, Takahashi R, Takaoka K, **Cheng XW**, Numaguchi Y, Muroahra T, Okumura K. Unmetabolized fenofibrate, but not fenofibric acid, activates AMPK and inhibits the expression of phosphoenolpyruvate carboxykinase in hepatocytes. ***Life Sciences.*** 2010Oct 9;87(15-16):495-500. Impact factor: 2.936.

2009/01-12

96) * **Cheng XW**, Okumura K, Kuzuya M, Jin Z, Nagata K, Obata K, Inoue A, Hirashiki A, Takeshita K, Unno K, Harada K, Shi GP, Yokota M, Murohara T. Mechanism of Diastolic Stiffening of the Failing Myocardium and Its Prevention by Angiotensin Receptor and Calcium Channel Blockers. ***Journal of Cardiovascular Pharmacology.*** 2009Jul;54(1):47-56. Impact factor: 2.247.

97) Nakamura K, Sasaki T, **Cheng XW**, Iguchi A, Sato K, Kuzuya M. Statin prevents plaque disruption in apolipoprotein E-knockout mouse model through preiotropic effect on acute inflammation. ***Atherosclerosis.*** 2009Oct;206(2):355-61. Impact factor: **4.239**.

98) Unno K, Isobe S, Izawa H, **Cheng XW**, Kobayashi M, Hirashiki A, Yamada T, Harada K, Ohshima S, Noda A, Nagata K, Kato K, Yokota M, Murohara T. Relation of Functional and Morphological Changes in Mitochondria to Myocardial Contractile and Relaxation Reserves in Asymptomatic to Mildly Symptomatic Patients with Hypertrophic Cardiomyopathy. ***European Heart Journal.*** 2009Aug;30(15):1853-62. Impact factor: **19.651**.

99) Takahashi R, Imamura A, Yoshikane M, Suzuki M, **Cheng XW**, Numaguchi Y, Murohara T, Okumura K. Circulating malondiadehyde-modified low-density liporpotein in stronly associated with very small low-density lipoprotein cholesterol concentrations in healthy men. ***Chinica Chimica Atac.*** 2009Jan;399(1-2):74-8. Impact factor: 2.873

100) Yamada T, Nagata K, **Cheng XW**, Obata K, Saka M, Naruse K, Miyachi M, Nishizawa T, Noda A, Izawa H, Kuzuya M, Okumura K, Murohara T, Yokota M. Long-Term Administration of Nifedipine Attenuates Cardiac Remodeling and Diastolic Heart Failure in Hypertensive Rats. ***European Journal of Pharmacology.*** 2009;615(1-3):163-70. Impact factor: 2.896

101) Harata K, Izawa H, Nishizawa T, Hirashiki A, Murase Y, Kobayashi M, Isobe S, **Cheng XW**, Noda A, Nagata K, Yokota M, Murohara T. A randomized, Open-label, Crossover Pilot Study Comparing The Effects of A Loop Diuretic With Antialdosteronergic Properties Versus A Pure Loop Diuretic on Activation of Sympathetic Nerve System In Mildly Symptomatic Patients With Chronic Heart Failure. ***Journal of Cardiovascular Pharmacology.*** 2009Jun;53(6):468-73. Impact factor: 2.247.

102) Aoyama T, Takeshita K, Kikuchi R, Yamamoto K, **Cheng XW**, Liao JK, Murohara T. γ-Secretase Inhibitor Reduces Diet-induced Atherosclerosis in Apolipoprotein E-Deficient Mice. ***Biochemistry and Biophysical Research Communications.*** 2009May;383(2):216-21. Impact factor: 2.466.

103) Okumura K, Imamura A, Murakami R, Takahashi R, **Cheng XW**, Numaguchi Y, Murohara T. Microsomal triglyceride transfer protein gene polymorphism strongly influences circulatin. malondialdehyde-modified low-density lipoprotein. ***Metabolism.*** 2009Sep;58(9):1306-11. Impact factor: 5.777

104) Nakamura K, Sasaki T, **Cheng XW**, Kuzuya M. A response to the letter regarding the

pleiotropic effects of fluvastatin on acute inflammatory response and the role of MMP-9 in plaque destabilization and intraplaque hemorrhage (*letter to editor*). ***Atherosclerosis.*** 2009;206(2):351-2. Impact factor: 4.239.

2008/01-12

105) ∗ **Cheng XW**, Murohara T, Kuzuya M, Izawa H, Sasaki T, Obata K, Nagata K, Nishizawa T, Kobayashi M, Yamada T, Kim W, Sato K, Shi GP, Okumura K, Yokota M. Superoxide-Dependent Activation of Cysteine Protease Cathepsin System is Associated with Hypertensive Myocardial Remodeling and Represents a Target for Angiotesin II Type 1 Receptor Blocker Therapy. ***American Journal of Pathology.*** 2008Agu;173(2);358-69. Impact factor: **4.057**.

106) Kobayashi M, Izawa H, **Cheng XW**, Asano H, Hirashiki A, Unno K, Ohshima S, Yamada T, Murase Y, Kato T, Obata K, Noda A, Nishizawa T, Isobe S, Nagata K, Matsubara T, Murohara T, Yokota M. Dobutamine Stress Testing as a Diagnostic Tool for Evaluation of Myocardial Contractile Reserve in Mildly Symptomatic Patients with Dilated Cardiomyopathy. ***Journal of the American College of CardiologyCardiovasc Imaging.*** 2008Nov;1(6):718-26. Impact factor: **10.189**

107) Imamura A, Takahashi R, Murokami R, Kataoka H, **Cheng XW**, Numaguchi Y, Murohara T, Okumura K. The effects of endothelial nitric oxide synthase gene polymorphisms on endothelial function and metabolic risk factors in healthy subjects: the significance of plasma adiponectin levels. ***European Journal of endocrinology.*** 2008Feb;158(2):189-95. Impact factor: 4.101.

108) Kato Y, Shibata R, Obata K, Miyachi M, Yazawa H, Tsuboi K, Yamada T, Nishizawa T, Noda A, **Cheng XW**, Murata K, Koike Y, Murohara T, Yokota M, Nagata K. Pioglitazone attenuates cardiac hypertrophy in rats with salt-sensitive hypertension: role of activation of AMP-activated protein kinase and inhibition of Akt. ***Journal of Hypertension.*** 2008Agu;26(8):1669-76. Impact factor: 4.085.

2006/01-2007/12

109) ∗ **Cheng XW**, Obata K, Kuzuya M, Izawa H, Nakamura K, Asahi E, Saka M, Kimata T, Nagasaka T, Noda A, Nagata K, Jin H, Shi GP, Iguchi A, Murohara T, Yokota M. A Elastolytic Cathepsin Induction/Activation System Exists in the Rat and Human Myocardium and is Upregulated in Hypertensive Heart Failure. ***Hypertension.*** 2006Nov;48(5):979-87. Impact factor: **6.857**.

110) ∗ **Cheng XW**, Kuzuya M, Nakamura K, Maeda K, Tsuzuki M, Kim W, Sasaki T, Liu Z, Kondo T, Jin H, Numaguchi Y, Okumura K, Yokota T, Iguchi A, Murohara T.Mechanisms underlying the impairment of ischemia-induced neovascularization in MMP-2-deficient mice. ***Circulation Research.*** 2007Mar;100(6):904-13. Impact factor: **13.963**.

111) ∗ **Cheng XW**, Kuzuya M, Nakamura K, Di Q, Liu Z, Sasaki T, Murohara T, Yokota M, Iguchi A. Cathepsin S on the Plasma Membrane by Association with Integrin αvβ3 is Central Contributor for Invasion of Cultured Vascular Smooth Muscle Cells. ***American Journal of Pathology***. 2006Feb;168(2):685-94. Impact factor: **4.057**

112) Torigoe M, Matsui H, Ogawa Y, Murakami H, Murakami R, **Cheng XW**, Numaguchi Y, Murohara T, and Okumura K. Impact of High-Molecular Weight Form of Adiponectin on Endothelial Function in Healthy Young Men. ***Clinical Endocrinology***. 2007Agu;67(2):276-81. Impact factor: 3.327.

113) Ai S, **Cheng XW**, Inoue A, Nakmura K, Okumura K, Iguchi A, Murohara T, Kuzuya M. Angiogenic activity of bFGF and VEGF suppressed by proteolytic cleavage by neutrophil elastase. ***Biochemistry and Biophysical Research Communications*****.** 2007Dec;364(2): 395-401. Impact factor: 2.466.

114) Sasaki T, Kuzuya M, Nakamura K, **Cheng XW**, Sato K, Iguchi A. A novel Model of Plaque Rupture Formation in Apo-E Knockout mice. ***Arteriosclerosis, Thrombosis, and Vascular Biology*****.** 2006Jun;26(6):1304-09. Impact factor: **6.607**

115) Kuzuya M, Nakamura K, Sasaki T, **Cheng XW**, Shigeyoshi Itohara, Iguchi A. Effect of MMP-2 deficiency on atherosclerotic lesion formation in ApoE-deficient Mice. ***Arteriosclerosis, Thrombosis, and Vascular Biology*****.** 2006May;26(5):1120-25. Impact factor: 6.607.

116) Kuzuya M, Masuda Y, Hirakawa Y, Iwata M, Enoki H, Hasegawa Y, **Cheng XW**, Iguchi A. Underuse of Medications for Chronic Diseases in the Oldest of Community-Dwelling Older Frail Japanese. ***Journal of American Geriatrics Society*****.** 2006Apr;54(4):598-605. Impact factor: 4.388.

117) Saka M, Obata K, Ichihara S, **Cheng XW**, Kimata H, Takao Nishizawa, Noda K, Izawa H, Nagata K, Murohara T, Yokota M. Pitavastatin improves cardiac function and survival in association with suppression of the myocardial endothelin system in a rat model of hypertensive heart failure. ***Journal of Cardiovascular Pharmacology*****.** 2006Jun;47(6):770-79. Impact factor: 2.247.

118) Saka M, Obata K, Ichihara S, **Cheng XW**, Kimata H, Noda K, Nagata K, Yokota M. Attenuation of ventricular hypertrophy and fibrosis in rats by pitavastatin: potential role of the RhoA-ERK-SRF signaling pathway. ***Clinical and Experimental Pharmacology and Physiology*****.** 2006Dec;33(12):1164-71. Impact factor: 2.01.

119) Kim W, Jeong MH, Cho SH, Yun HY, Chae HJ, Ahn YK, Lee MC, **Cheng XW**, Kondo T, Murohara T, Kang JC. Effect of Green Tea Consumption on Endothelial Function and Circulating Endothelial Progenitor Cells in Chronic Smokers. ***Circulation Journal*****.** 2006Agu;70(8):1052-57. Impact factor: 3.544.

2004/01-2005/12

120) **Cheng XW**, Kuzuya M, Nakamura K, Di Q, Liu Z, Hasegawa J, Iwata M, Murohara T, Yokota M, Iguchi A. Mechanisms of the Inhibitory Effect of Epigallocatechin-3-gallate on Cultured Human Vascular Smooth Muscle Cell Invasion. ***Arteriosclerosis, Thrombosis, and Vascular Biology*****.** 2005Sep;25(9):1864-70. Impact factor: **6.607**.

121) **Cheng XW**, Kuzuya M, Sasaki T, Kanda S, Tamaya-Mori N, Koike T, Maeda K, Nishitani E, Iguchi A. Green Tea Catechins Upregulate Tissue Inhibitor of Metalloproteinase-2 and Inhibit Neointimal Hyperplasia in a Rat Carotid Artery Balloon-Injury. ***Cardiovascular Research*****.** 2004Jun;62(3):594-602. Impact factor: **5.878**.

122) **Cheng XW**, Kuzuya M, Sasaki T, Arakawa K, Kanda S, Sumi D, Koike T, Maeda K, Tamaya-Mori N, Shi GP, Saito N, Iguchi A. Increased expression of elastolytic cysteine protease, cathepsin S and K, in the neointima of balloon-injured carotid arteries. ***The American Journal of Pathology*****.** 2004Jan;167(1):243-51. Impact factor: **4.206**.

123) Kuzuya M, **Cheng XW**, Sasaki T, Maeda K, Kanda S, Koike T, Tamaya-Mori N, Iguchi A. Pitavastatin, a 3-hydroxy-3-methylglutaryl-coenzyme, a reductase inhibitor, blocks vascular smooth muscle cell populated-collagen lattice contraction. ***Journal of Cardiovascular Pharmacology*****.** 2004Jun;43(6):808-14. Impact factor: 2.247.

124) Sasaki T, Kuzuya M, **Cheng XW**, Tamaya-Mori N, Maeda K, Kanda S, Koike T, Sato K, Iguchi A. A novel model of occlusive thrombus formation in mice. ***Laboratory Investigation*.**2004Nov;85(11):1526-32. Impact factor: 4.857.

2000/01-2003/12

125) Shi GP, Sukhova GK, Kuzuya M, Ye Q, Du J, Zhang Y, Pan JH, Lu ML, **Cheng XW**, Iguchi A, Perrey S, Lee AM, Chapman HA, Libby P. Deficiency of the cysteine protease cathepsin S impairs microvessel growth. ***Circulation Research*.** 2003Jan;92(5):493-500. Impact factor: **13.963**.

126) Maeda K, Kuzuya M, **Cheng XW**, Asai T, Kanda S, Tamaya-Mori N, Sasaki T, Shibata T, Iguchi A. Green tea catechins inhibit the cultured smooth muscle cells invasion through the basement barrier. ***Atherosclerosis*.** 2003Mar;166(1):23-30. Impact factor: 4.239.

127) Kuzuya M, Kanda S, Sasaki T, Tamaya-Mori N, **Cheng XW**, Itoh T, Itohara S, Iguchi A. Deficiency of gelatinase A suppresses smooth muscle cell invasion and development of experimental intimal hyperplasia. ***Circulation*.** 2003Sep;108(11):1375-81. Impact factor: **19.309**.

128) **Cheng XW**, Kuzuya M, Kanda S, Maeda K, Sasaki T, Wang QL, Tamaya-Mori N, Shibata T, Iguchi A. Epigallocatechin-3-gallate binding to MMP-2 inhibits gelatinolytic activity without influencing the attachment to extracellular matrix proteins but enhances MMP-2 binding to TIMP-2. ***Archives Biochemistry and Biophysics*.** 2003Jun;415(1):126-32. Impact factor: 3.164.

129) Kuzuya M, Asai T, Kanda S, Maeda K, **Cheng XW**, Iguchi A. Glycation cross-links inhibit matrix metalloproteinase-2 activation in vascular smooth muscle cells cultured on collagen lattice. ***Diabetologia*.** 2001Apr;44(4):433-6. Impact factor: 6.08.

130) Koike T, Kuzuya M, Asai T, Kanda S, **Cheng XW**, Watanabe K, Banno Y, Nozawa Y, Iguchi A. Activation of MMP-2 by Clostridium difficile toxin B in bovine smooth muscle cells. ***Biochemistry and Biophysical Research Communications*.** 2000Oct;227(1):43-6. Impact factor: 2.466.

(II) Published in Japanese Journal (non-peer reviewed scientific publications)
著書(和文)

(1) 成 憲武、室原　豊明
MMP-2 と血管新生
医学歩み（TOPICS：医歯薬出版株式会社）2007;223(2):188-189

(2) 成 憲武、室原　豊明
血管新生における MMP の役割（総説）
医学歩み（特集：医歯薬出版株式会社）2007;223(13):1007-1014

(3) 小林　正和、井澤　英夫、成 憲武、浅野　展行、平敷　安希博、山田　高資、原田　憲、海野一雅、舟橋　栄人、西澤　孝夫、磯部　智、永田　浩三、室原　豊明、横田　充弘.
拡張型心筋症におけるドブタミン負荷による心筋収縮特性応答低下の分子病態生理学的機序の解明
心臓　2007；40：16-18（Suppl 2）

(4) **佐々木健、葛谷雅文、成 憲武、中村香江、鈴木直美、川端弥生、佐藤康二.**
マウス粥状動脈硬化病変における脂肪染色 en face 解析後のパラフィン切片作成と組織学的解析　−本法による動脈硬化病変形成における MMP−2 の関与の検討
生理学･生物学技研報 22, 71-74 (2011)

(5) 成 憲武、室原　豊明
血管新生におけるインテグリンの役割
血管新生研究の最先端（株式会社　医薬ジャーナル社）p 226－233（2013 年 2 月 10 日初版発行：佐藤靖史、高倉伸幸編）

(6) 井上愛子、成 憲武、葛谷雅文
サルコペニア･フレイルバイオのマーカー
医薬ジャーナル特集：高齢者社会医療におけるサルコペニア･フレイル対策（医薬ジャーナル社）2015；51（9）：p2111-2115(2015 年 9 月)

(7) 成 憲武、井上愛子
冠動脈硬化の新たしい分子機序−炎症･免疫からみた最新の知見
医学歩み（特集：医歯薬出版株式会社）(2015 年 11 月)

(8) 成 憲武
サルコペニアの分子メカニズム（老年医学の展望）
日老医誌。2018；５５：1－12.

(III) Published in Chinese Journal (peer reviewed publications)

1) 狄群, 葛谷雅文, 成宪武. 血小板来源生长因子介导的组织蛋白酶 K 在巨噬细胞的表达. 中华医学研究杂志(论著).2004;4 (9):769-71.
2) 黄达明, 成宪武, 杨军, 顾水明. 原发性扩张型心肌病 76 的临床治疗研究(论著)。临床与实验医学杂志. 2007;6:12-4.
3) 成宪武, 宋辉，杨光，赵萧萧，秦孝智，井上爱子，南勇善，关立克，金海，葛谷雅文，室原豊明，奥村键二. 组织蛋白酶 K 与高血压性心脏病心室肌重塑及纤维化关系的初步探讨(论著). 中国臨床医学. 2008;15(4):449-53.
4) 成宪武, 张杰，宋辉，杨光，秦孝智，关立克，金海，奥村键二，室原豊明.。高血压性心脏病左心室重构进展中的组织蛋白酶 S 基因表达及其活性动态变化的临床意义(论著).中华心血管病杂志.2008;36 (1):51-6.
5) 成宪武, 宋海珍， 宋辉， 葛谷雅文, 奥村键二, 室原 豊明。基质金属蛋白酶在血管新生过程中的研究进展(综述)。中华心血管病杂志. 2009; 37(7):203-05.
6) 李香,，类延娜, 成宪武（审校）. 组织蛋白酶在心血管疾病的研究进展(综述). 中国心血管病研究. 2014Oct;12(9):856-859.
7) 朱恩波，赵光贤, 成宪武（审校）. PCI 术前后 GLP-1 受体激动剂治疗对 ST 段抬高心肌梗死心肌保护作用(综述).。中国心血管病研究. 2014;12(12)1133-1135.
8) 赵光贤，朴丽梅，成宪武（审校）. 基质金属蛋白酶-2 在血管新生过程中的研究进展(综述)。中国心血管病研究. 2015;13(3):198-201.
9) 类延娜，朴丽梅，成宪武（审校）. 二肽基肽酶-IV 抑制与血管再生益处及机制(综述)。中国动脉硬化杂志. 2017；25（3）:304-308.
10) 杨光，类延娜，成宪武（审校）. 二肽基肽酶-4 抑制剂非降糖依赖多效性及其机制探讨(综述)。中国循环杂志. 2017；32（3）:297-300.
11) 杨光，李青松，成宪武（审校）. 胰高血糖素样肽-1 非降糖依赖抗动脉粥样硬化作用及其机制的初步探讨(综述).中国全科医学. 2017；20（8）:1009-1014.
12) 赵光贤，金春子，类延娜，高立建，成宪武（审校）. 组织蛋白酶 K 在心脏重构过程中的发病机制研究进展(综述).中国循环杂志（acceptance）.
13) 姜海英，成宪武（审校）.冠状动脉粥样硬化新的分子机制—谈炎症·免疫方面的最新成果(综述)。中华心血管病杂志（acceptance）.

(II) MEETING ABSTRACTS:
(not included)