浙江省科学技术奖公示信息表（单位提名）

提名奖项：科学技术进步奖

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| 成果名称 | 基于内皮功能和平滑肌去分化探索动脉粥样硬化发病机制及干预措施 |
| 提名等级 | 二等奖 |
| 提名书  相关内容 | [1] Ni T., Gao F., Zhang J., Lin H., Luo H., Chi J., Guo H. Impaired autophagy mediates hyperhomocysteinemia-induced HA-VSMC phenotypic switching[J]. J Mol Histol, 2019,50(4):305-314.  [2] Luo H., Zhou C., Chi J., Pan S., Lin H., Gao F., Ni T., Meng L., Zhang J., Jiang C., Ji Z., Lv H., Guo H. The Role of Tauroursodeoxycholic Acid on Dedifferentiation of Vascular Smooth Muscle Cells by Modulation of Endoplasmic Reticulum Stress and as an Oral Drug Inhibiting In-Stent Restenosis[J]. Cardiovasc Drugs Ther, 2019,33(1):25-33.  [3] Lin H., Ni T., Zhang J., Meng L., Gao F., Pan S., Luo H., Xu F., Ru G., Chi J., Guo H. Knockdown of Herp alleviates hyperhomocysteinemia mediated atherosclerosis through the inhibition of vascular smooth muscle cell phenotype switching[J]. Int J Cardiol, 2018,269242-249.  [4] Lin H., Pan S., Meng L., Zhou C., Jiang C., Ji Z., Chi J., Guo H. MicroRNA-384-mediated Herpud1 upregulation promotes angiotensin II-induced endothelial cell apoptosis[J]. Biochem Biophys Res Commun, 2017,488(3):453-460.  [5] Meng L., Liu L., Zhou C., Pan S., Zhai X., Jiang C., Guo Y., Ji Z., Chi J., Peng F., Guo H. Polyphenols and Polypeptides in Chinese Rice Wine Inhibit Homocysteine-induced Proliferation and Migration of Vascular Smooth Muscle Cells[J]. J Cardiovasc Pharmacol, 2016,67(6):482-490.  [6] Gao F., Zhang J., Ni T., Lin N., Lin H., Luo H., Guo H., Chi J. Herpud1 deficiency could reduce amyloid-β40 expression and thereby suppress homocysteine-induced atherosclerosis by blocking the JNK/AP1 pathway[J]. J Physiol Biochem, 2020,76(3):383-391.  [7] Zhang J., Gao F., Ni T., Lu W., Lin N., Zhang C., Sun Z., Guo H., Chi J. Linc-POU3F3 is overexpressed in in-stent restenosis patients and induces VSMC phenotypic transformation via POU3F3/miR-449a/KLF4 signaling pathway[J]. Am J Transl Res, 2019,11(7):4481-4490.  [8] Pan S., Lin H., Luo H., Gao F., Meng L., Zhou C., Jiang C., Guo Y., Ji Z., Chi J., Guo H. Folic acid inhibits dedifferentiation of PDGF-BB-induced vascular smooth muscle cells by suppressing mTOR/P70S6K signaling[J]. Am J Transl Res, 2017,9(3):1307-1316.  [9] Pan S., Liu H., Gao F., Luo H., Lin H., Meng L., Jiang C., Guo Y., Chi J., Guo H. Folic acid delays development of atherosclerosis in low-density lipoprotein receptor-deficient mice[J]. J Cell Mol Med, 2018,22(6):3183-3191.  [10] Liu L., Meng L., Zhang P., Lin H., Chi J., Peng F., Guo H. Angiotensin II inhibits the protein expression of ZO‑1 in vascular endothelial cells by downregulating VE‑cadherin[J]. Mol Med Rep, 2018,18(1):429-434. |
| 主要完成人 | 池菊芳，排名1，主任医师，绍兴市人民医院  郭航远，排名2，主任医师，绍兴文理学院医学院  林辉，排名3，医师，绍兴市人民医院  孟立平，排名4，主治医师，绍兴市人民医院  张杰，排名5，医师，绍兴市人民医院  许富康，排名6，副主任医师，绍兴市人民医院  翟小亚，排名7，主治医师，绍兴市人民医院 |
| 主要完成单位 | 1.绍兴市人民医院  2.绍兴文理学院医学院 |
| 提名单位 | 绍兴市人民政府 |
| 提名意见 | 该项目围绕“基于内皮细胞损伤和平滑肌细胞去分化探索动脉粥样硬化发病新机制及干预措施”这一主题，通过随机对照试验明确叶酸对同型半胱氨酸水平和内皮细胞功能的影响；通过构建高同型半胱氨酸血症相关动脉粥样硬化动物模型和同型半胱氨酸诱导的平滑肌去分化和内皮损伤细胞模型，揭示内皮细胞损伤和平滑肌细胞去分化的新机制及干预措施，在一定程度上丰富了动脉粥样硬化发病机制，发表相关论文27篇，多篇论文被Nature Reviews Cardiology（影响因子=32.42）等心血管专科期刊正面引用，成果在省内多家三甲医院进行推广，取得较好的效果，为开发高效的用于动脉粥样硬化防治药物提供实验基础和理论依据，具有积极的社会意义。 |