3DGR-CAR: Coronary artery reconstruction from ultra-sparse 2D X-ray views with a 3D Gaussians representation

Supplementary Material

Xueming Fu[1,2], Yingtai Li[1,2], Fenghe Tang[1,2], Jun Li[1,2], Mingyue Zhao[1,2], Gao-Jun Teng[5], and S. Kevin Zhou[1,2,3,4] ✉

[1] School of Biomedical Engineering, Division of Life Sciences and Medicine, University of Science and Technology of China (USTC), Hefei Anhui, 230026, China
[2] Center for Medical Imaging, Robotics, Analytic Computing & Learning (MIRACLE), Suzhou Institute for Advance Research, USTC, Suzhou Jiangsu, 215123, China
[3] Key Laboratory of Precision and Intelligent Chemistry, USTC, Hefei Anhui, 230026, China
[4] Key Laboratory of Intelligent Information Processing of Chinese Academy of Sciences (CAS), Institute of Computing Technology, CAS
[5] Center of Interventional Radiology & Vascular Surgery, Department of Radiology, Medical School, Zhongda Hospital, Southeast University, Nanjing 210009, China

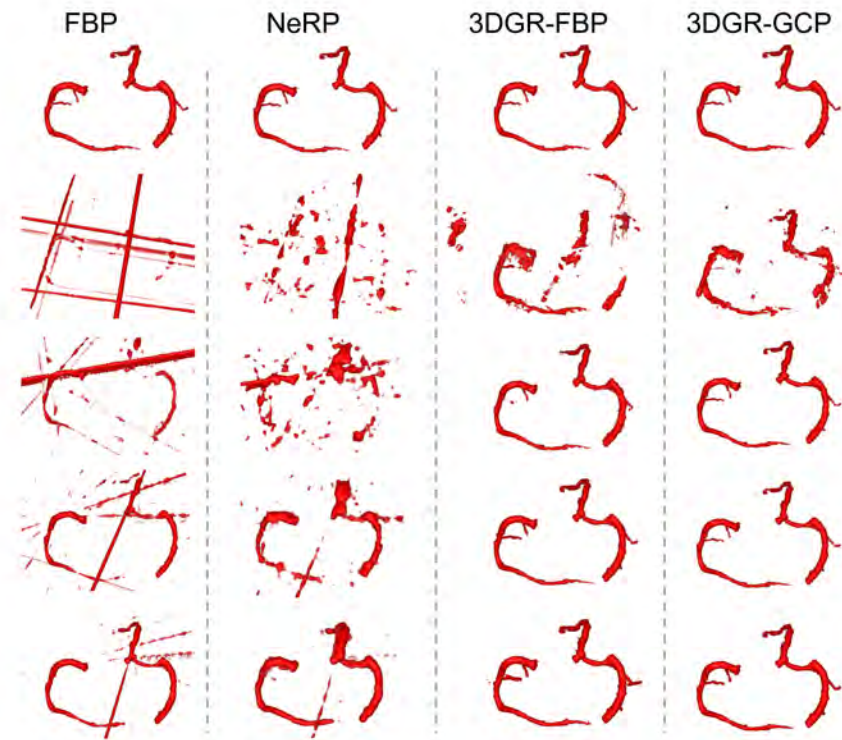## 1 Reconstructed Coronary Artery 3D Visualization

Fig. 1. Comparison of 3D vascular from four different methods. Row1 - Ground Truth, Row2 - Two views results, Row3 - Four views results, Row4 - Eight views results, Row5 - Sixteen views results.

Fig. 2. Comparison of 3D vascular from four different methods. Row1 - Ground Truth, Row2 - Two views results, Row3 - Four views results, Row4 - Ei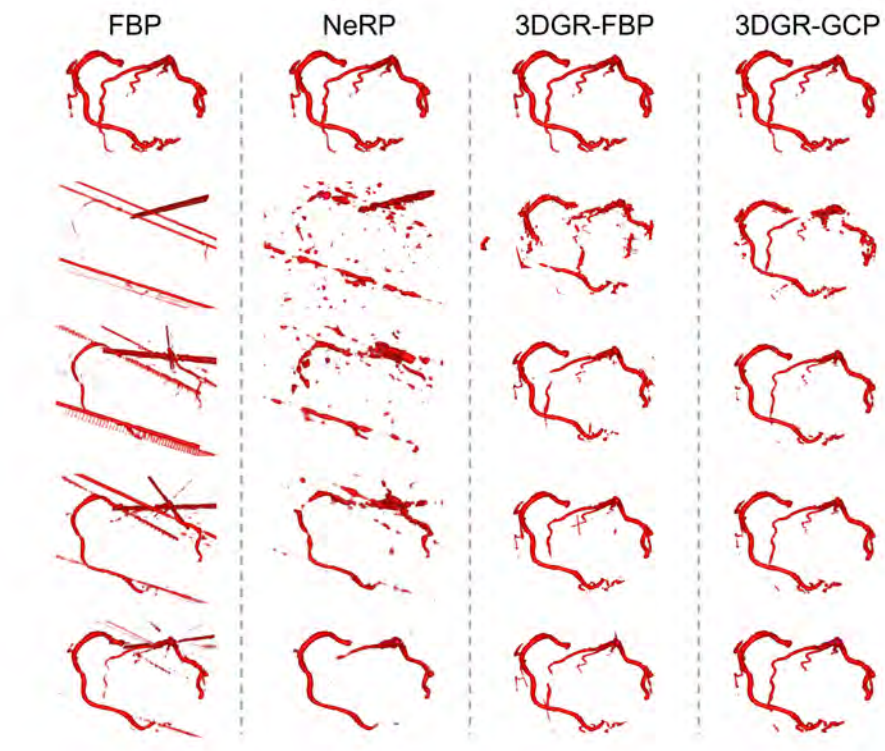ght views results, Row5 - Sixteen views results.