Atherosclerosis has become a major cause of cardiovascular diseases’ mortality and morbidity. And the decisive factor lead to thrombosis is proved to be the rupture of vulnerable plaques. PET imaging are able to provide more accurate diagnosing values for atherosclerotic plaques, based on various pathophysiologic biomarkers. Nowadays, we had a increasing understanding of the utilization of different clinical radiotracers including 18F-FDG of the utilization of different clinical radiotracers including 18F-FDG. Or the utilization of different clinical radiotracers including 18F-FDG indicating for glucose metabolism in macrophage, 68Ga-DOTATATE binding somatostatin receptor on macrophage, 68Ga-Pentixafor affinity to CXC chemokine receptor type 4 (CXCR-4) in immune cells and 18F-NaF binding active arterial calcification; which are related to the different pathological process of atherosclerosis.

**Key Words:** PET imaging, Biomarkers, Atherosclerosis, Plaques

**REFERENCES**


