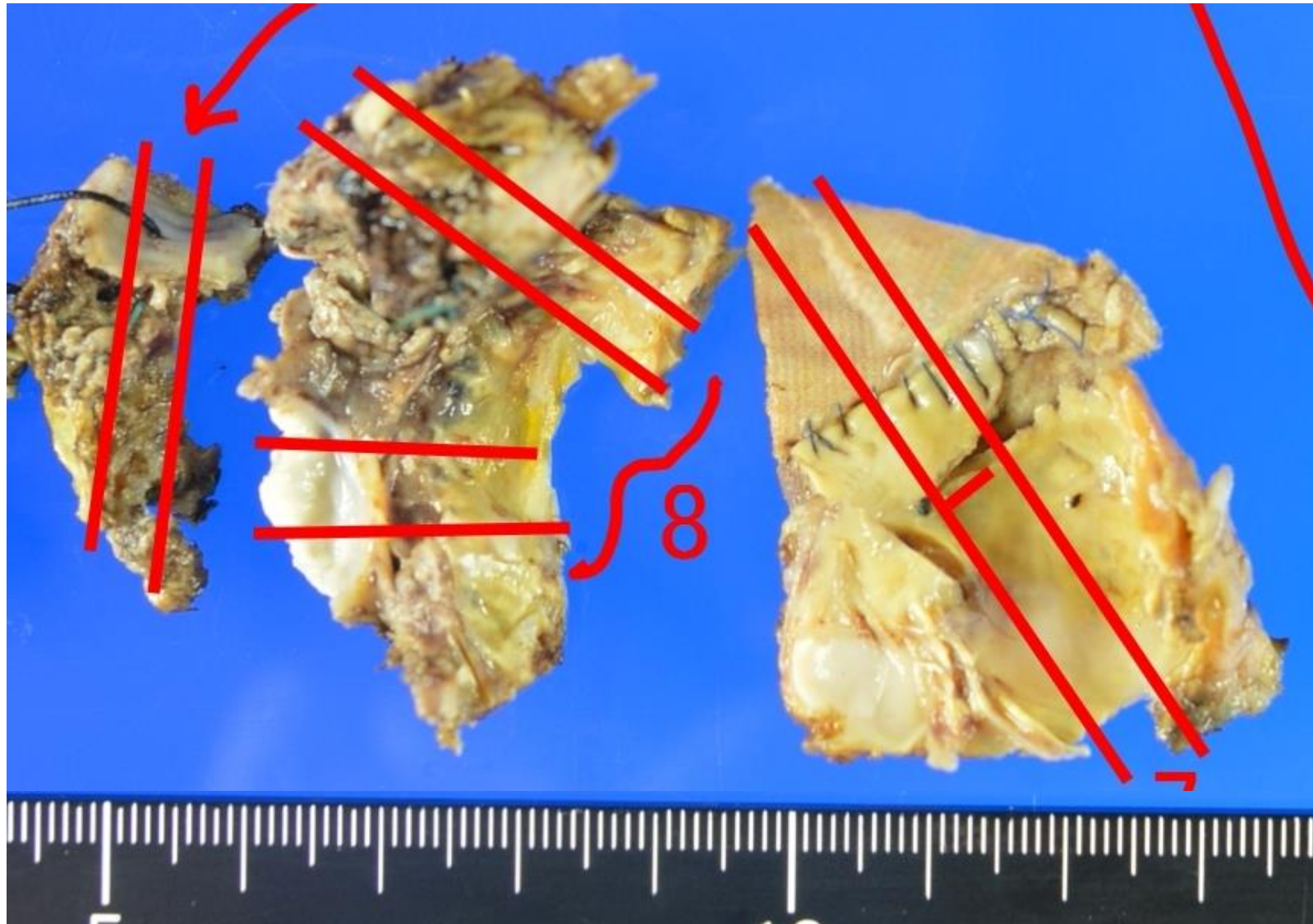


# Tuberculous endocarditis

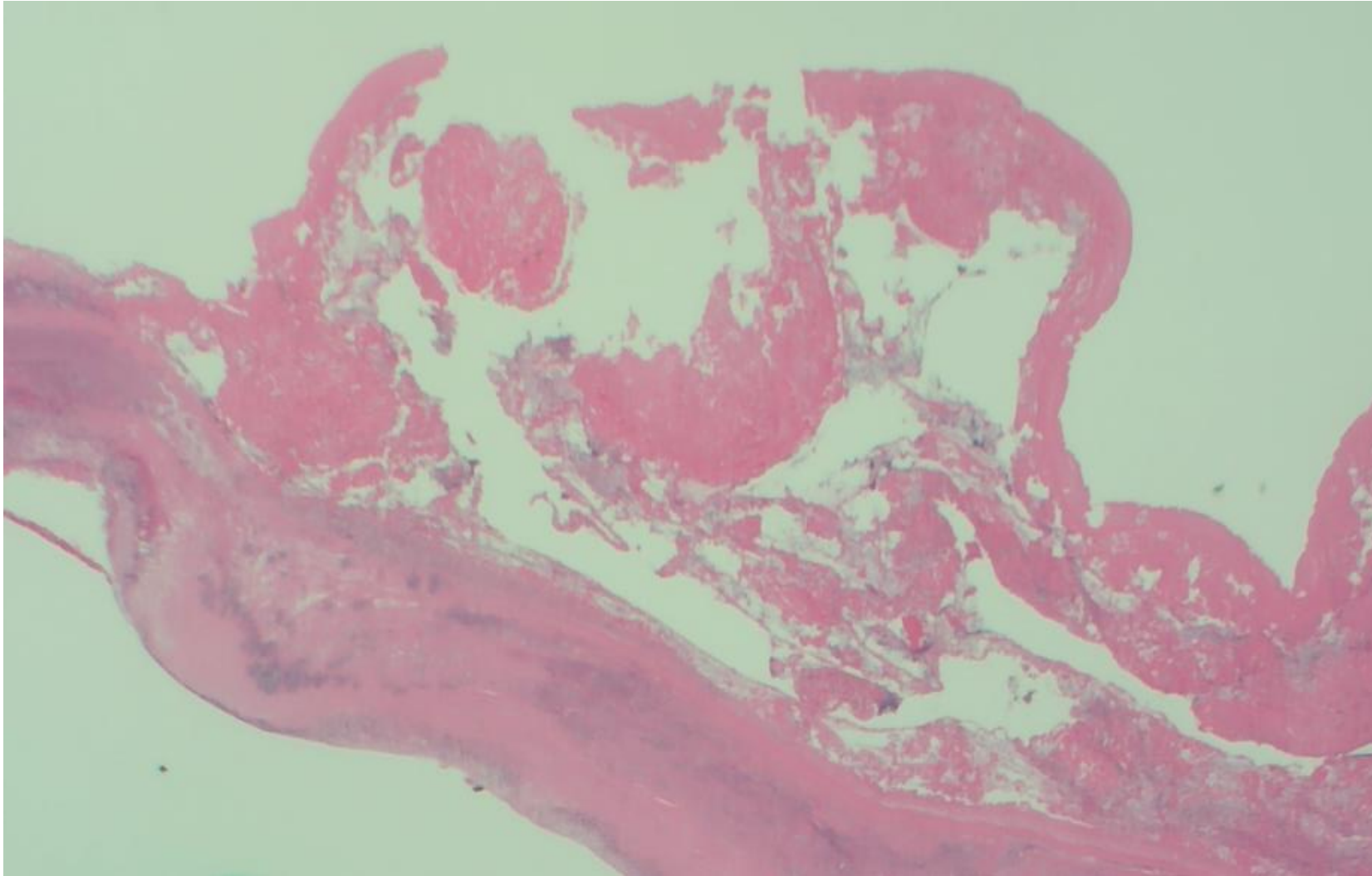
Tuberculous endocarditis usually presents with miliary tuberculosis. Involvement of replaced prosthetic valve is relatively common. A 79-year-old male patient underwent surgery for dissecting aneurysm of the ascending aorta. The aortic valves were replaced by porcine prosthetic valves. Infective endocarditis was clinically suspected and the aortic valves were replaced again. The ulcerated valve microscopically shows numerous bacterial colonies with mild macrophage accumulation. Acid-fast staining is strongly positive in the bacteria, and Auramine-Rhodamine staining is also positive. Microbial culture and PCR analysis are positive for *Mycobacterium tuberculosis*, confirming the diagnosis of tuberculous endocarditis.

Ref.-1: Liu A, et al. Tuberculous endocarditis. Int J Cardiol 2013; 167(3): 640-645. doi: 10.1016/j.ijcard.2012.08.009

Ref.-2: Sultan FAT, et al. Tuberculous endocarditis: valvular and right atrial involvement, Eur J Echocardiogr 2010; 11(4): E13, doi: 10.1093/ejechocard/jep202

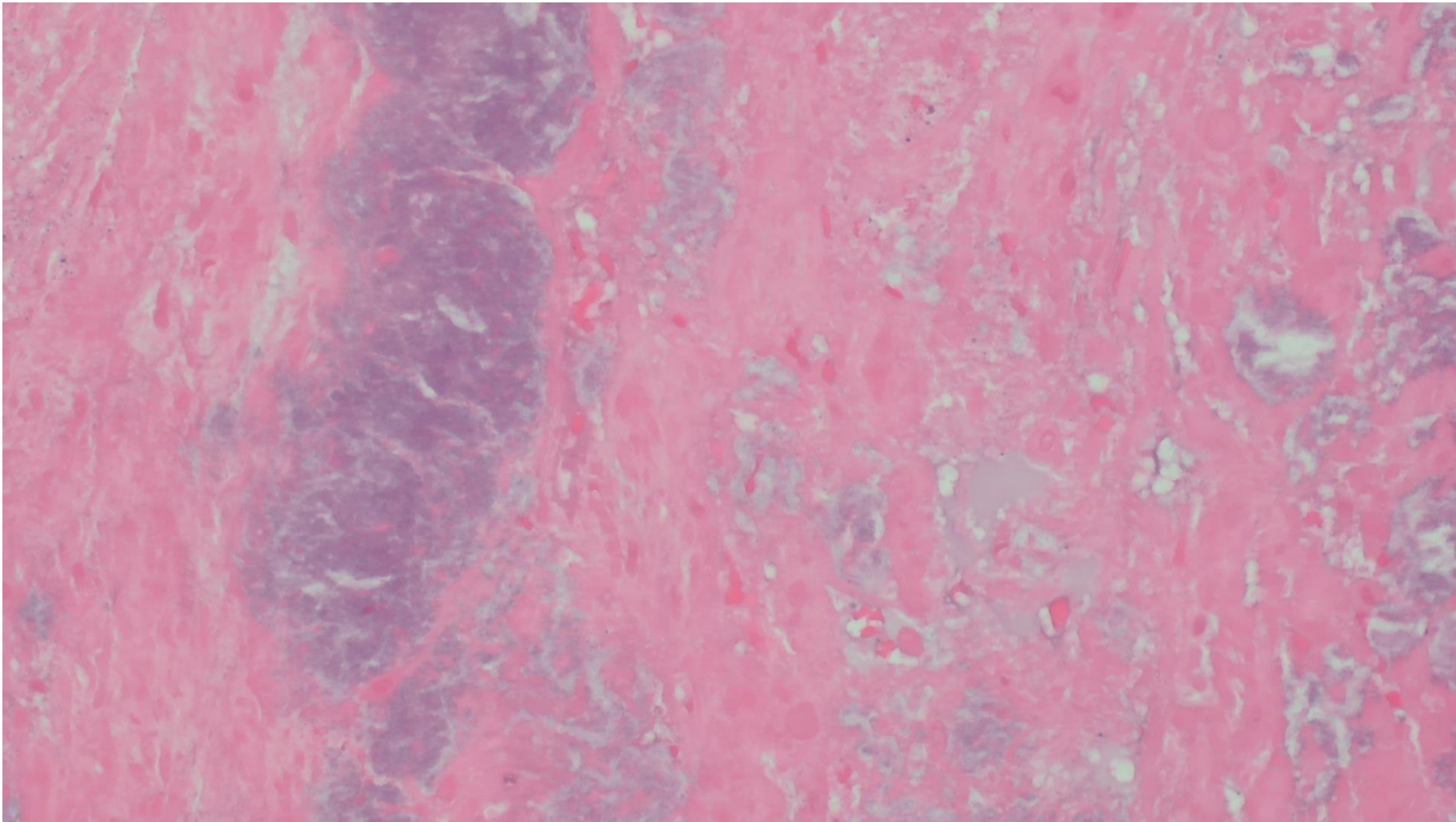


A 79-year-old male patient with tuberculous endocarditis of the aortic valve. Gross appearance of the surgically removed porcine prosthetic valves are shown. Ulcerated and thickened valvular tissue are recognized.

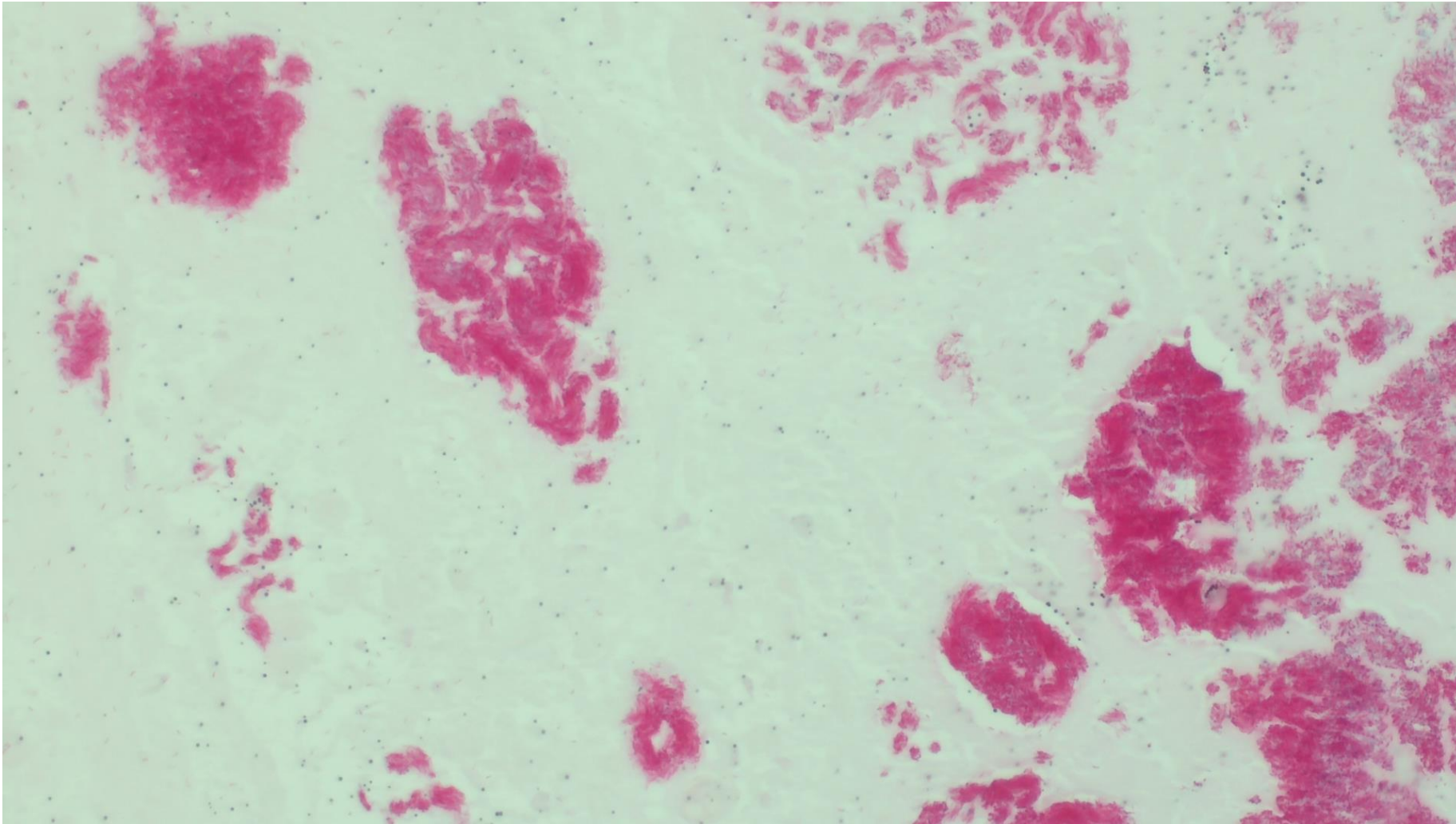


A 79-year-old male patient with tuberculous endocarditis of the aortic valve. Microscopically, ulcerated surface is deposited with fibrin. Bacterial colonies are seen in the fibrously thickened valvular tissue. H&E-1



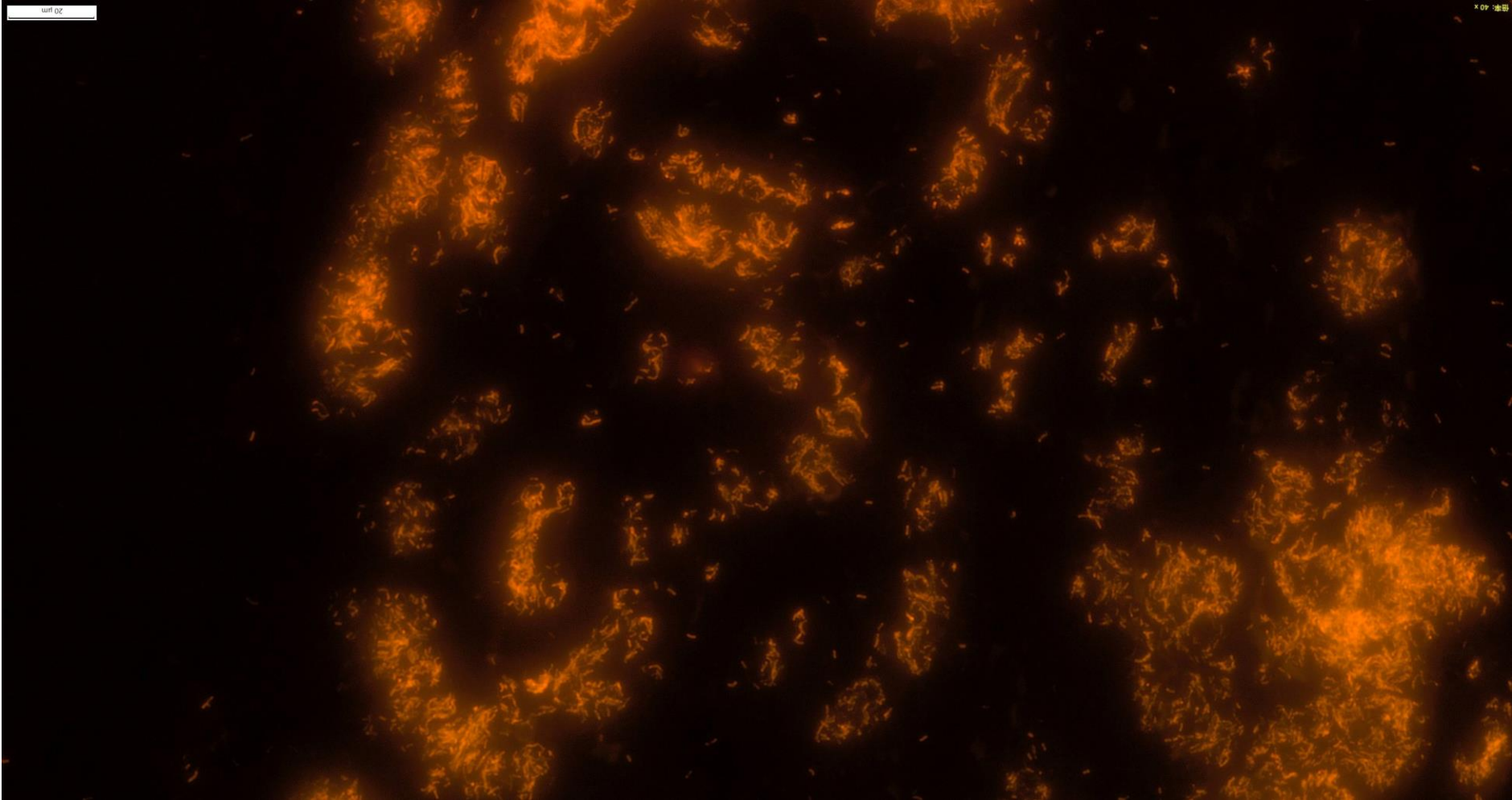


A 79-year-old male patient with tuberculous endocarditis of the aortic valve. Microscopically, bacterial colonies are clustered in the fibrously thickened valvular stroma. Mild reaction of macrophages is associated. H&E-2



A 79-year-old male patient with tuberculous endocarditis of the aortic valve. The bacterial colonies in the fibrously thickened valvular stroma are diffusely positive with Ziehl-Neelsen's acid-fast staining. Ziehl-Neelsen





A 79-year-old male patient with tuberculous endocarditis of the aortic valve. The bacterial colonies in the fibrously thickened valvular stroma are positive with Auramine-Rhodamine staining . Auramine-Rhodamine