

## **ABSTRACT**

*This study aims to evaluate the quality of mammography images from the Senographe Pristina device using the American College of Radiology (ACR) Phantom at the Radiology Installation of Rumah Sakit Umum Pusat (RSUP) dr. Kariadi Semarang. The evaluation was carried out to ensure that the quality of the resulting image meets the tolerance limits in accordance with Badan Pengawas Tenaga Nuklir (BAPETEN) Regulation Number 2 of 2022, and to assess the consistency of image quality during October 2024. The data used were the results of daily quality control tests using the ACR phantom at 34 kV exposure settings with a combination of Rh/Ag filters/targets. Image quality assessment was carried out based on three main parameters according to the ACR standard, namely the number of visible fibers, the number of microcalcifications, and the number of masses detected in mammography images. The results showed that all image quality parameters met the tolerance limits set by BAPETEN, namely a minimum of 4 fibers, a minimum of 3 microcalcifications, and a minimum of 3 masses. The average value for each parameter was above the threshold and showed consistent results.*

**Keyword:** *image quality, mammography, ACR phantom*