

Risk Information Sheet			
Risk ID: S10-12-16	Date: 12-06-2023	Prob: 67%	Impact: High
Description: Employing image processing techniques for kidney stone detection introduces the possibility of erroneous outcomes, encompassing both false positives and false negatives. The reliability of the results is contingent on various factors, prominently including the quality of the input medical images and the precision of the employed algorithms.			
Refinement/Context: The accuracy of kidney stone detection is critical for patient well-being and treatment decisions. Algorithm precision plays a pivotal role in distinguishing between kidney stones and other structures, making it essential to monitor and refine the algorithm continually.			
Mitigation/Monitoring: 1. Rigorously validate the image processing algorithm through extensive testing and verification against a diverse dataset of medical images. 2. Implement robust preprocessing techniques to enhance image quality, reducing the likelihood of false results due to poor image conditions. 3. Continuously monitor the algorithm's performance during the project's development and deployment phases.			
Management/Contingency plan/trigger: Kidney stone detection using image processing requires collaboration with healthcare professionals as it is crucial to navigate these risks effectively and accurately. Continuously monitor the accuracy of the image processing algorithm during development and deployment phases using predefined performance metrics. Triggers include sustained deviations from predefined accuracy thresholds, detected during routine algorithm validation			
Current Status: 01-06-2023: Process initiated (collecting and analyzing images and data) 04-06-2023: Preprocessing Kidney Scans 11-06-2023: Analysis			
Originator: Prof. Pankaj Deshmukh		Assigned: Arish Manasia, Rishikesh Giridhar, Tanushree Hajare	