

## **Rapid Detection For *lasI* And *lasR* Genes Of *Pseudomonas Aeruginosa* At Deference Iraqi Hospitals By Polymerase Chain Reaction (PCR) Technique.**

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**Abstract:** *Pseudomonas aeruginosa* is Gram-negative, and it is the most important and opportunistic pathogens that cause a high rate of mortality and morbidity in hospitalized patients with compromised immune systems. This study was to estimate the specificity and accuracy of a rapid detection of the bacterium based on a uniplex polymerase chain reaction (PCR) that amplifies the *lasI* and *lasR* genes. Forty of Clinical samples as a wound, burn, and earswabs were collected from deference, and the other forty samples were collected from hospital facilities like operation room, bathrooms, and hospital equipments swabs. The primers were evaluated by specific primers (*lasR/I* genes) with percentage 100%. The results showed that the *lasI* and *lasR* genes were amplified from the genomic DNA of standard *P.aeruginosa*, Clinical Isolates samples by uniplex PCR. The produced amplicons were 600bp, 700bp, for the *lasI* and *lasR* genes, respectively. For all of the samples of *P.aeruginosa*, the PCR results were positive.

**Keyword:** *Pseudomonas aeruginosa*, Polymerase Chain Reaction (PCR), *lasI* and *lasR* Genes, Pathogenic bacteria.