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**Clinical Significance of the Expression profiles of P2X7R,
NLRP3 and CXCL16 in Patients with Gouty
Arthritis-Induced Kidney Injury**

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KEYWORDS Arthritis. Diagnosis. Expression. Gout. Kidney

ABSTRACT The researchers aimed to study the clinical significance of the expression profiles of purinergic ligand-gated ion channel 7 receptor (P2X7R), nucleotide-binding oligomerization domain-like receptor protein 3 (NLRP3) and C-X-C motif chemokine receptor 16 (CXCL16) in patients with gouty arthritis (GA)-induced kidney injury (KI). A total of 120 GA patients admitted between January 2020 and January 2022 were enrolled. The P2X7R, NLRP3 mRNA and CXCL16 levels of the KI group had negative correlations with eGFR and positive correlations with Scr and CysC ($P < 0.05$). The areas under the receiver operator characteristic curves of P2X7R, NLRP3 mRNA, and CXCL16 indicated that the three indices had high sensitivity and specificity for the diagnosis of GA-induced KI, and the combined detection was most effective. GA-induced KI patients have elevated levels of P2X7R, NLRP3 mRNA and CXCL16. Hence, these indices are valuable for the early diagnosis of GA-induced KI.