

# Scores developed for risk stratification in inflammatory arthritis

August 1 2023, by Elana Gotkine

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A simple and a comprehensive score has been developed for persons at

risk for inflammatory arthritis, according to a study published online Aug. 1 in the *Annals of Internal Medicine*.

Laurence Duquenne, M.D., from the University of Leeds in the United Kingdom, and colleagues developed scores for predicting inflammatory [arthritis](#) in at-risk persons using multidimensional biomarkers in a prospective observational cohort study. The simple score was developed using [logistic regression](#), while the least absolute shrinkage and selection operator Cox proportional hazards regression was used to develop the comprehensive score.

Overall, 148 of the 455 participants (32.5%) developed inflammatory arthritis and 70 (15.4%) developed it within one year. The researchers found that the simple score identified 249 low-risk participants and 206 high-risk participants, with a false-negative rate of 5% and a false-positive rate of 72%, respectively. Totals of 119 high-risk participants and 336 low-risk participants were identified with the comprehensive score, with a false-positive and false-negative rate of 29% and 19%, respectively. Of the high-risk participants, 40 and 71% developed [inflammatory arthritis](#) within one and five years, respectively.

"The simple score is reproducible, economical, and practical for use in [primary care](#) with good negative predictive value of the low-risk group, who may not require referral. The comprehensive scores identify a high-risk population for intervention studies and for clinical management," the authors write. "These scores should have a positive effect on persons and health care systems."

**More information:** Laurence Duquenne et al, Predicting Inflammatory Arthritis in At-Risk Persons: Development of Scores for Risk Stratification, *Annals of Internal Medicine* (2023). [DOI: 10.7326/M23-0272](#)

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Citation: Scores developed for risk stratification in inflammatory arthritis (2023, August 1)  
retrieved 2 May 2024 from

<https://medicalxpress.com/news/2023-08-scores-stratification-inflammatory-arthritis.html>

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