PRO-C3 predicts response to tocilizumab in RA

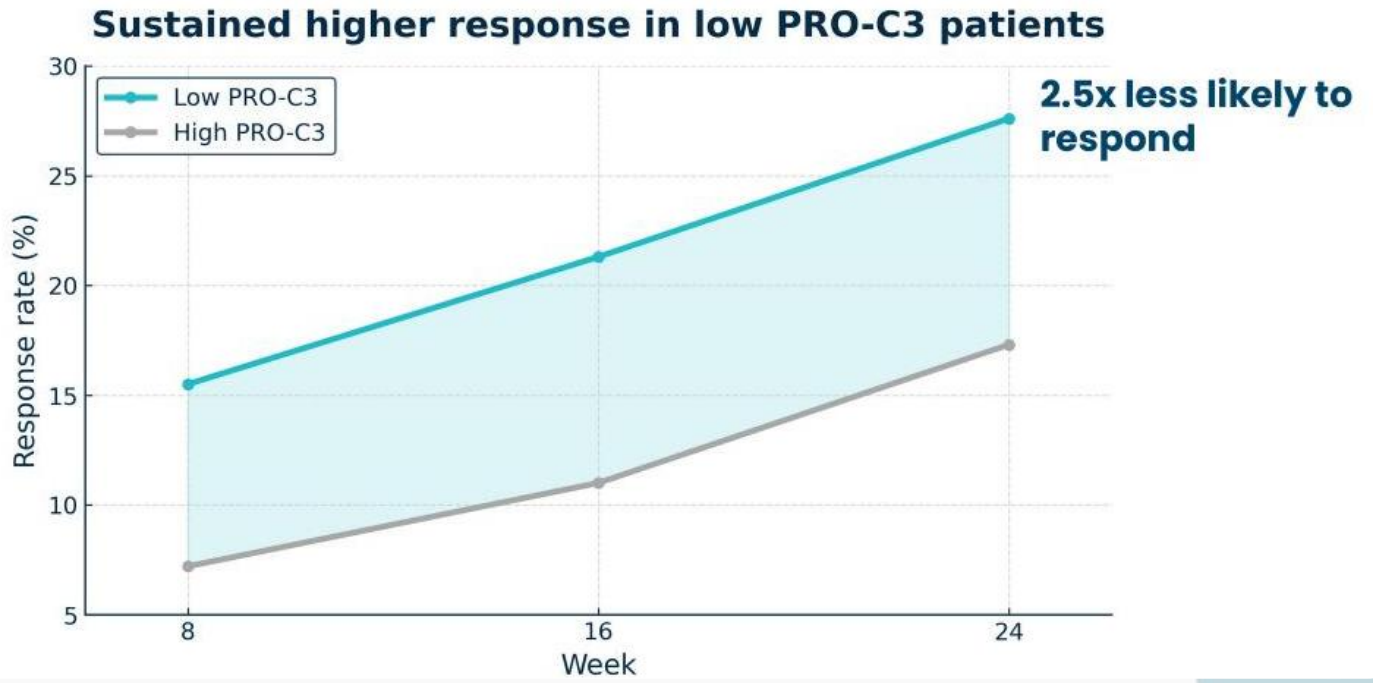
In AMBITION (biologic-naive, n=262) and RADIATE (TNF-IR, n=141), patients with elevated PRO-C3 at first follow-up were 2.5x less likely to achieve DAS28 remission. Standard predictors (age, sex, BMI, DAS28, CRP, ESR) were not significant. PRO-C3 was the differentiator, identifying the fibroid endotype.[4]

Fibrosis markers as predictors of resistance to treatment

Patients with RA exhibiting elevated PRO-C3 levels showed a reduced likelihood of responding to tocilizumab.

AMBITION (bNaive) and RADIATE (TNF-IR)

The odds (OR) for response to anti-IL6R treatment is two-times higher in patients with low PRO-C3 levels



The studies

Disease duration
mean 6.6 & 12.7 years in AMBITION & RADIATE, respectively; p<0.01

HAQ-DI
mean 1.5 & 1.74 in AMBITION & RADIATE, respectively; <0.01

Non-significant predictors
Age, sex, BMI, DAS28, CRP, ESR, SJC, TJC, pain VAS 100mm, PRO-C3 baseline & follow-up levels.

Patients were divided into four groups based on their PRO-C3 levels at the first follow-up (AMBITION at week 8, threshold 9.5 ng/mL; RADIATE at week 16, threshold 9.8 ng/mL) and their responder status (DAS28 ≤2.6 for responders, DAS28 >2.6 for non-responders) at different follow-up times. Only patients receiving active treatment with available DAS28 data were included. In the AMBITION study, 262 patients were assessed at week 8, with 10 lost by week 16 and 9 more by week 24. In the RADIATE study, 141 patients were assessed at week 16, with 39 lost by week 24. Response rates and odds ratios were calculated using Fisher's exact test. Madsen SF 2024 May SciRep.