RESEARCH HIGHLIGHTS

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IN BRIEF

SYSTEMIC LUPUS ERYTHEMATOSUS

New GWAS loci and insights into ancestry

Data from single-ancestry cohorts suggest that there are population-specific differences in the genetic loci associated with systemic lupus erythematosus (SLE), but a transancestral meta-analysis of published genome-wide association studies (GWAS) from European (4.036 cases and 6.959 controls) and Chinese (1,659 cases and 3,398 controls) cohorts has now revealed that these populations share more than half of known SLE-associated genetic loci. Interestingly, although SLE-associated loci were associated with the same extent of risk in both populations, they were present at a significantly higher frequency among Chinese control subjects than among European controls (P = 0.02), suggesting that the increased prevalence of SLE in Chinese populations might have a genetic basis. A combined analysis of the 3 main GWAS and 3 replication studies (11,381 cases and 24,463 controls in total) also identified 10 new SLE-associated genetic loci, bringing the total to 62.

ORIGINAL ARTICLE Morris, D. L. et al. Genome-wide association meta-analysis in Chinese and European individuals identifies ten new loci associated with systemic lupus erythematosus. *Nat. Genet.* <u>http://dx.doi.org/10.1038/ng.3603</u> (2016)

DIAGNOSIS

Defining sarcopenia and refining its measurement

Sarcopenia can severely impair quality of life and represents an important public health issue, yet no consensus exists regarding how to best define and measure the condition. In a study of 418 community-dwelling older adults aged 74-94 years, the discriminative ability of four skeletal-mass-based measures of sarcopenia varied substantially such that the proportion of patients classified as 'sarcopenic' ranged from 14-73%. The predictive ability of the measures for functional and health outcomes (such as balance, mobility and falls) was also mixed; these outcomes were most effectively predicted by a simple knee-extension-strength assessment, which is faster and cheaper to perform than skeletal-mass-based measures. These data support previous calls for caution in using definitions of sarcopenia that focus on declining muscle mass, instead highlighting the importance of muscle strength and demonstrating a simple and reliable technique that could be used to assess this parameter in the clinic.

ORIGINAL ARTICLE Menant, J. C. et al. Strength measures are better than muscle mass measures in predicting health-related outcomes in older people: time to abandon the term sarcopenia? Osteoporos. Int. <u>http://dx.doi.org/10.1007/s00198-016-3691-7</u> (2016)

RHEUMATOID ARTHRITIS

Tocilizumab and the risk of intestinal perforation

Analysis of data from a German registry of patients with rheumatoid arthritis (RA; n = 13,310) identifies tocilizumab use as a risk factor associated with lower intestinal perforation (LIP), which has been reported as a rare but serious complication in clinical trials of this drug. The incidence of LIP was significantly higher in patients receiving tocilizumab (2.7 events per 1,000 person-years) than in those receiving conventional or biologic DMARDs (0.2–0.6 events per 1,000 person-years). Some patients with tocilizumab-induced LIP displayed only minor symptoms and most did not show elevation of C-reactive protein levels. Notably, the 30-day mortality rate among patients with LIP was 46%, emphasizing the importance of closely monitoring patients receiving tocilizumab for gastrointestinal events.

ORIGINAL ARTICLE Strangfeld, A. et al. Risk for lower intestinal perforations in patients with rheumatoid arthritis treated with tocilizumab in comparison to treatment with other biologic or conventional synthetic DMARDs. Ann. Rheum. Dis. <u>http://dx.doi.org/10.1136/annrheumdis-2016-209773</u> (2016)