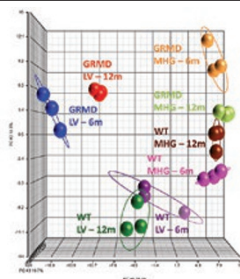


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## Noonan syndrome in the Japanese population

Noonan syndrome (NS) is a clinically and genetically heterogeneous syndrome characterized by distinctive facial features, short stature, congenital heart diseases, and other comorbidities. NS-specific growth charts are essential to management of the disorder, but currently there are no such charts for Asian populations. Using data for 356 individuals clinically diagnosed with NS from 20 hospitals in Japan, Isojima and coauthors established growth standards for Japanese NS patients. [See page 543](#)

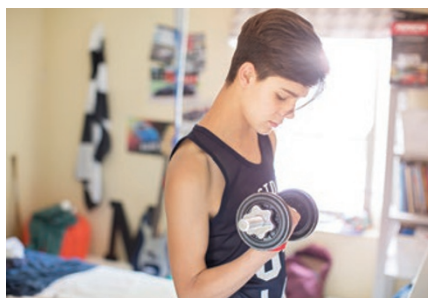
## Muscular dystrophy



In Duchenne muscular dystrophy (DMD), abnormal cardiac function is typically preceded by a decade of skeletal muscle disease. Galindo and colleagues analyzed cardiac and skeletal muscle microarrays from normal and golden retriever muscular dystrophy dogs to gain insight into muscle dysfunction and to identify putative DMD biomarkers. These biomarkers were then measured using human DMD blood samples. The results highlight gene expression patterns that could account for differences in cardiac and skeletal disease. [See page 629](#)

## Exercise and inflammation

One of the most commonly measured markers of inflammation is C-reactive protein (CRP). This meta-analysis by García-Hermoso *et al.* examines the



evidence of the effectiveness of physical exercise interventions in modifying serum CRP levels in overweight children and adolescents. Nine randomized controlled trials met the inclusion criteria ( $N = 427$  youths). The findings suggest that exercise programs in children and adolescents do not mitigate the inflammatory effects of excess weight, although there was a trend toward reduction. [See page 522](#)

## Henoch–Schönlein purpura



Some allergic inflammation-associated mediators have been reported in the acute stage of Henoch–Schönlein purpura (HSP). However, the association between allergic disease and subsequent risk of HSP and HSP nephritis remains unknown. This study by Chen *et al.* included 2,240 children with HSP along with 8,960 non-HSP controls matched for age, sex, and level of urbanization. Atopic children had an increased subsequent risk of HSP but not of HSP nephritis. [See page 559](#)

## Laser measurements of pulmonary oxygen

Pulmonary radiography is part of the clinical routine for diagnosis of



respiratory distress syndrome in newborns. Svanberg and colleagues investigated a novel noninvasive technique for rapid, nonradiographic bedside detection of oxygen gas in the lungs of full-term newborn infants. Laser spectroscopy was used to measure oxygen gas and water vapor in the lungs of 29 healthy newborn full-term infants. The skin above the lungs was illuminated using two low-power diode lasers, and diffusely emerging light was detected with a photodiode. The results suggest that, with further development, this method might be implemented in clinical practice for lung monitoring in neonatal intensive care. [See page 621](#)

## 2014 Pediatric Clinical Trials Forum



In November 2014, the American Academy of Pediatrics convened key stakeholders to discuss the feasibility of accelerating medical advances by creating an independent global Pediatric Clinical Trials Network. Such a network would facilitate the development and availability of innovative, high-quality therapies to extend and enhance the lives of neonates, infants, children, adolescents, and young adults. The participants developed a consensus statement expressing their shared vision for the network. [See page 662](#)