doi:10.1038/pr.2016.12

# Tumor vaccines for pediatric sarcomas



Significant progress has been made in the field of tumor vaccines that target established tumor antigens. While tumor vaccines have demonstrated safety and improved survival rates, they are inadequate in mediating the regression of established tumor masses and metastases. Nowicki *et al*. review the current state of tumor vaccines targeting pediatric sarcomas. **See page 371** 

#### **Bilirubin clearance**



Memon *et al.* review the molecular mechanisms and clinical manifestations of conditions resulting in reduced hepatic bilirubin clearance. Current approaches to diagnosis and therapy are also discussed. **See page 378** 

### Osteogenesis imperfecta and growth

There is limited information on linear growth and weight in the various

types of osteogenesis imperfecta (OI). Germain-Lee and coauthors report cross-sectional anthropometric data from 343 subjects with different OI types. Growth velocities of children with type I OI were found to taper off near puberty; those of children with type III OI decelerate before 5 years of age. The linear growth patterns, in addition to the marked increase in weight over time, indicate a need for lifestyle modifications early in childhood. **See page 489** 

### Next-generation sequencing for DRTA



Primary distal renal tubular acidosis (DRTA) is a rare disease caused by loss-of-function mutations in at least three genes involved in urinary distal acidification. Next-generation sequencing (NGS) facilitates the search for mutations in DRTA patients and helps characterize the genetic and clinical spectra of the disease. Gómez and colleagues sequenced exons of the three genes by ultrasequencing for 10 DRTA patients and found a total of 13 mutations. This study shows that NGS is cost-effective for the analysis of DRTA genes. **See page 496** 

#### Long-term evaluation after neonatal kidney injury

The neonatal acute kidney injury workshop sponsored by the National Institutes of Health in April 2013 provided a platform for discussing our understanding of the long-term renal consequences of chronic kidney disease (CKD) in newborns. This special article by Askenazi and coauthors examines the feasibility of conducting large multicenter studies of CKD. See page 502

## Genetics of human hematopoiesis



In the review that won the 2015 Young Investigator Award, Wakabayashi and Sankaran observe that the majority of studies on hematopoiesis have been conducted primarily in animal models, but significant divergence between species is increasingly recognized at the genomic level. The authors discuss studies of humans and human variation that provide additional insight into blood production and disorders, and look to advancements in therapies. **See page 366**