

# THIS WEEK in the JOURNAL

## ORIGINAL ARTICLE

### A Biologic Definition of Burkitt's Lymphoma from Transcriptional and Genomic Profiling

Analysis of gene-expression patterns led to the development of a molecular definition of Burkitt's lymphoma that distinguishes it from other types of mature aggressive B-cell lymphoma. Almost all cases defined by the gene-expression signature as Burkitt's lymphoma had the typical Burkitt's *IG-myc* translocation. Patients whose tumors did not have the Burkitt's signature had a poor outcome if the tumor cells had complex chromosomal changes.

SEE P. 2419; EDITORIAL, P. 2495

## ORIGINAL ARTICLE

### Molecular Diagnosis of Burkitt's Lymphoma

A method involving patterns of gene expression was used to distinguish all cases of classic Burkitt's lymphoma from various forms of diffuse large-B-cell lymphoma, which had been verified by an expert panel of hematopathologists. Difficulties in the distinction between Burkitt's lymphoma and diffuse large-B-cell lymphoma may be resolved by the use of gene-expression patterns.

SEE P. 2431; EDITORIAL, P. 2495

## ORIGINAL ARTICLE

### First-Trimester Exposure to ACE Inhibitors and Congenital Malformations

This study, in which a large Medicaid database was used, demonstrated a significantly increased risk of major congenital malformations (including cardiovascular and central nervous system malformations) among children of nondiabetic women exposed to angiotensin-converting-enzyme (ACE) inhibitors in the first trimester (but not among infants with first-trimester exposure to other antihypertensive medications). These data indicate that first-trimester exposure to ACE inhibitors cannot be considered safe.

SEE P. 2443; EDITORIAL, P. 2498; CME, P. 2523

## ORIGINAL ARTICLE

### Single-Dose Azithromycin for the Treatment of Cholera in Adults

In this study, investigators from Bangladesh compared single-dose azithromycin and ciprofloxacin for the treat-

ment of severe cholera in 195 men. Azithromycin was found to be an effective therapy. This study raises questions about whether the current threshold for antimicrobial susceptibility of *Vibrio cholerae* O1 to ciprofloxacin is appropriate.

SEE P. 2452; EDITORIAL, P. 2500

## CURRENT CONCEPTS

### Microarrays and Gene-Expression Profiles of Cancers

Microarray analysis is a tool that can be used to compare the RNA profile of one cancer with that of another and to determine the diagnosis and prognosis of cancer. This article provides a description of the gene-expression microarray — how it works, how the data are analyzed, and the strengths and limitations of this tool.

SEE P. 2463; CME, P. 2521

## MEDICAL PROGRESS

### Assessing Kidney Function — Measured and Estimated Glomerular Filtration Rate

In the coming years, estimates of the glomerular filtration rate (GFR) may replace the measurement of serum creatinine as the primary tool for the assessment of kidney function. Indeed, many clinical laboratories already report estimated GFR values whenever serum creatinine is measured. This review considers current methods of measuring GFR and GFR-estimating equations and their strengths and weaknesses as applied to chronic kidney disease.

SEE P. 2473; CME, P. 2522

## CASE RECORDS OF THE MASSACHUSETTS GENERAL HOSPITAL

### A Man with Cough, Dyspnea, and Cavitory Lung Lesions

A 34-year-old man was admitted because of a three-month history of cough, dyspnea, fever, progressive bilateral cavitory lung lesions, and a lymphohistiocytic infiltrate. He received corticosteroids, but his symptoms persisted. The lung lesions increased in size, and some cavitated, necessitating readmission to the hospital and a diagnostic procedure.

SEE P. 2485

## CLINICAL IMPLICATIONS OF BASIC RESEARCH

### Antitumor Immunity

Cytotoxic drugs may invoke antitumor immunity by inducing the expression of a molecular signature in the dying cancer cell.

SEE P. 2503