

# THIS WEEK in the JOURNAL

## ORIGINAL ARTICLE

### Prophylactic Levofloxacin in Patients with Chemotherapy-Induced Neutropenia

In 760 patients with cancer in whom chemotherapy-induced neutropenia was expected to last more than seven days, those assigned to levofloxacin (500 mg daily) had a lower incidence of fever (65 percent vs. 85 percent) and clinically documented bacteremias than those assigned to placebo. The benefits of prophylaxis were similar in patients with acute leukemia and those with solid tumors or lymphoma. These data support the prophylactic use of levofloxacin in this high-risk population.

SEE P. 977; EDITORIAL, P. 1052; CME, P. 1083

## ORIGINAL ARTICLE

### Antibacterial Prophylaxis after Chemotherapy for Solid Tumors and Lymphomas

In this trial, 1565 patients who were receiving cyclic chemotherapy for solid tumors or lymphoma and who were at risk for temporary, severe neutropenia received either 500 mg of levofloxacin once daily or placebo for seven days. At least one febrile episode occurred in 15.2 percent of the placebo group and 10.8 percent of the levofloxacin group ( $P=0.01$ ). Hospitalization was required for the treatment of infection in 21.6 percent of the placebo group and 15.7 percent of the levofloxacin group ( $P=0.004$ ). Antimicrobial resistance was not systematically evaluated.

SEE P. 988; EDITORIAL, P. 1052

## ORIGINAL ARTICLE

### Circulating Endothelial Progenitor Cells and Coronary Disease

Circulating endothelial progenitor cells are derived from the bone marrow and are believed to support the integrity of the vascular endothelium. In this study of patients with coronary artery disease, the number of such cells correlated inversely with the risk of adverse cardiovascular outcomes. The level of circulating endothelial progenitor cells thus may be a useful marker of coronary risk.

SEE P. 999; EDITORIAL, P. 1055

## SPECIAL ARTICLE

### Potential Savings from Control of Tuberculosis

Migrants from low-income countries account for a growing proportion of cases of tuberculosis in high-income

countries. Using decision analysis, researchers estimated the potential effects of a \$34.9 million investment by the United States to expand the tuberculosis-control program of directly observed treatment, short course, in Mexico. Over a 20-year period, this approach would result in 2591 fewer cases of tuberculosis, for a net savings in the United States of \$108 million.

SEE P. 1008; EDITORIAL, P. 1057

## CLINICAL PRACTICE

### Initial Treatment of Parkinson's Disease

A 62-year-old man presents with an intermittent tremor in his left hand and some vague discomfort in the left arm. Physical examination shows a minimal rest tremor in the left hand that disappears with use of the limb, mild rigidity at the left wrist and elbow, slowness of finger tapping with the left hand, and decreased arm swing on the left while walking. How should he be evaluated and treated?

SEE P. 1021; CME, P. 1081

## DRUG THERAPY

### Direct Thrombin Inhibitors

Direct thrombin inhibitors (DTIs) are a new class of anticoagulants that bind directly to thrombin and block its interaction with its substrates. Four parenteral DTIs have been approved by the FDA — hirudin and argatroban for heparin-induced thrombocytopenia, bivalirudin as an alternative to heparin in percutaneous coronary intervention, and desirudin as prophylaxis against venous thromboembolism in hip replacement. This article discusses the clinical data on this important new class of medications.

SEE P. 1028; CME, P. 1082

## CASE RECORDS OF THE MASSACHUSETTS GENERAL HOSPITAL

### A Man with Fatigue, Unsteady Gait, and Confusion

An 80-year-old man had an abrupt onset of difficulty concentrating, followed by severe fatigue, insomnia, and unsteadiness. An evaluation revealed no evidence of infection, autoimmune diseases, or exposure to toxins. His cognitive function declined markedly over two months, and myoclonus and fasciculations developed. He became progressively obtunded and died.

SEE P. 1042

## SOUNDING BOARD

### Regulating Academic–Industrial Relationships — Solving Problems or Stifling Progress?

Dr. Thomas Stossel argues for increasing interaction between academic scientists and the companies that manufacture biomedical treatments.

SEE P. 1060