

THIS WEEK in the JOURNAL

ORIGINAL ARTICLE

Raltegravir with Optimized Background Therapy for Resistant HIV Infection

For patients infected with multidrug-resistant human immunodeficiency virus type 1 (HIV-1), therapeutic options are limited. Raltegravir is a new molecule that inhibits HIV integrase. In two phase 3 studies, raltegravir was found to be superior to placebo, in the context of optimized background antiviral therapy, in suppressing HIV viral load at 48 weeks (62.1% vs. 32.9%).

SEE P. 339; EDITORIAL, P. 416; CME, P. 442

ORIGINAL ARTICLE

Raltegravir Therapy for Resistant HIV Infection — Subanalyses

In subgroups of two phase 3 studies, patients with high-risk features for failure of antiretroviral therapy, such as a low CD4 count, high base-line level of human immunodeficiency virus (HIV) type 1 RNA, or unfavorable genotypic or phenotypic sensitivity score, raltegravir was superior to placebo in terms of a virologic response at 48 weeks. However, among these patients, in whom antiretroviral therapy had been used previously, 23% of raltegravir recipients had virologic failure by 48 weeks.

SEE P. 355; EDITORIAL, P. 416

ORIGINAL ARTICLE

Detection of Mutations in *EGFR* in Circulating Lung-Cancer Cells

This study describes a method for capturing circulating tumor cells in patients with non-small-cell lung cancer with the use of antibody tethered to microposts. The isolated cells were of sufficient quantity and purity to genotype and thus could feasibly be used to guide genotype-specific treatment.

SEE P. 366; EDITORIAL, P. 418

ORIGINAL ARTICLE

Sorafenib in Advanced Hepatocellular Carcinoma

No effective therapy is available for advanced hepatocellular carcinoma. In this randomized trial involving 602 patients with advanced hepatocellular carcinoma, sorafenib, a multikinase inhibitor of Raf, vascular endothelial growth factor receptor, and platelet-derived growth factor receptor, improved median survival by 3 months, as compared with placebo (10.7 vs. 7.9 months, $P < 0.001$). Adverse events, including diarrhea and weight loss, were more frequent in patients receiving sorafenib.

SEE P. 378; EDITORIAL, P. 420

CLINICAL PRACTICE

Hypoparathyroidism

A 58-year-old man is found on laboratory testing to have a serum calcium level of 6.0 mg per deciliter (normal range, 8.5 to 10.5), an albumin level of 3.9 g per deciliter, and a phosphorus level of 6.0 mg per deciliter (normal range, 2.5 to 4.5). His medical history is notable only for long-standing hearing difficulties. He reports no history of neck surgery and is asymptomatic. His ionized calcium level is 0.75 mmol per liter (normal range, 1.10 to 1.32). How should his case be further evaluated and treated?

SEE P. 391; CME, P. 441

CASE RECORDS OF THE MASSACHUSETTS GENERAL HOSPITAL

A Man with Back Pain and a Mass in the Lung

A 26-year-old man experienced the sudden onset of back pain. Magnetic resonance imaging disclosed a pathologic fracture of the T9 vertebral body. A chest radiograph and computed tomography of the chest showed a mass in the upper lobe of the left lung, with involvement of the hilar and mediastinal structures. Diagnostic testing was performed, and a management decision was made.

SEE P. 405; CME, P. 443