Occasional acid reflux occurs frequently in the general population but gastroesophageal reflux disease (GERD), a chronic disease that affects millions of adults and children, is diagnosed if persistent reflux occurs more than twice a week. The development of proton pump inhibitors (PPIs) dramatically improved the treatment of GERD; however, the treatment of patients with refractory GERD remains a challenge. Dexlansoprazole (TAK-390MR, Kapidex), a pure enantiomer of lansoprazole, is a PPI that, with a novel dual delayed release formulation, provides prolonged inhibition of gastric acid secretion resulting in marked improvements in symptoms of GERD with high maintenance rates and good tolerability. Dexlansoprazole recently received Food and Drug Administration approval for the once-daily oral treatment of heartburn associated with symptomatic nonerosive GERD, the healing of erosive esophagitis (EE) and the maintenance of healed EE.