The recommended dose of imatinib mesylate tablets is 400 mg/day for adult patients in chronic phase CML. The dose may be adjusted based on monitoring parameters and patient tolerability. If the dose is decreased below 340 mg/day, it should be reintroduced as 400 mg/day. If the dose is decreased again, 800 mg/day should be tried. If the patient cannot tolerate 800 mg/day, treatment therapy should be discontinued. Cytogenetic responses, measured either as complete cytogenetic response (CCR) or partial cytogenetic response (PCR), were significantly higher in patients who achieved steady state exposure (approximately 4% of the daily dose) than in those who did not. Patient compliance with the recommended dose of imatinib mesylate tablets is critical to the efficacy of the drug. Adverse reactions, including hematologic abnormalities, gastrointestinal symptoms, rash, and cutaneous adverse reactions, were observed. Cough was the most common adverse reaction. Renal adverse reactions were uncommon. Elevated liver enzymes were reported in approximately 6% of patients. The incidence of edema was reduced in patients who were moderately hydrated and those who received diuretics. Clinical laboratory parameters were monitored throughout therapy.