A novel combination regimen for the treatment of multiple myeloma

The standard treatment regimen for patients with multiple myeloma (MM) comprises thalidomide and dexamethasone. Although this combination yields high response rates, it is associated with a number of serious adverse effects. In a recent paper, Niesvizky *et al.* reported promising results in patients with MM with a combination regimen that comprised clarithromycin, lenalidomide and dexamethasone (BiRD).

In total, 72 patients (mean age 63 years) received BiRD in 28-day cycles as first-line therapy. Specifically, each patient received oral dexamethasone 40 mg weekly, oral clarithromycin 500 mg twice daily, and oral lenalidomide 25 mg on days 1–21. The mean duration of therapy was 368 days. Overall, 65 (90.3%) patients achieved at least a partial response. Among these patients, 6 (8.3%) achieved a complete response (CR) and 22 (30.6%) achieved a stringent CR (complete absence of M protein and negative marrow biopsy findings by immunohistochemistry). A greater than 90% reduction in M protein was observed in 73.6% of patients. Mean time to first response (defined as a >50% reduction in M protein) was 53.9 days and mean time to maximum response was 209 days. Treatment with BiRD did not impede stem-cell mobilization or harvest. As of 30 June 2007, 18 patients from this study group had undergone stem-cell transplantation. The 52 patients who did not undergo transplantation continued to receive BiRD, achieving a CR rate of 37%. A majority of BiRD-related adverse events were manageable. The most common grade 3 or higher adverse events were thrombocytopenia (22.2% incidence) and neutropenia (19.4% incidence). The authors conclude that BiRD is a safe, effective treatment for newly diagnosed MM.

Original article Niesvizky R *et al.* (2008) BiRD (Biaxin [clarithromycin]/Revlimid [lenalidomide]/dexamethasone) combination therapy results in high complete- and overall-response rates in treatment-naive symptomatic multiple myeloma. *Blood* **111:** 1101–1109

Myelodysplastic syndromes can be effectively treated with lenalidomide

Lenalidomide is approved in the US for the treatment of transfusion-dependent anemia in patients who have low-risk or intermediate-1-risk myelodysplastic syndromes (MDS) with a chromosome 5q interstitial deletion. A multicenter phase II study has now shown that lenalidomide is effective in treating patients who have MDS with normal karyotypes or cytogenetic abnormalities other than 5q deletion.

The study included 214 patients, predominantly with low-risk or intermediate-1-risk MDS without deletion 5q, who had transfusion-dependent anemia. The patients initially received lenalidomide either at 10 mg daily for 21 days of a 28-day cycle or at 10 mg daily ($n = 114$ and $n = 100$, respectively). Sustained improvement for at least eight consecutive weeks was seen in 93 patients; 56 patients achieved transfusion independence together with a ≥10 g/l (1 g/dl) peak rise in hemoglobin level (median rise in hemoglobin at maximal improvement 32 g/l [3.2 g/dl]), and 37 patients had a ≥50% reduction in transfusions. The median time to transfusion independence was 4.8 weeks (range 1–39 weeks), and transfusion independence lasted for a median of 41 weeks (range 8–136 weeks).

On the basis of these results, the authors conclude that patients with low-risk or intermediate-1-risk MDS who lack the deletion 5q anomaly and have a poor response to erythropoiesis-stimulating agents might benefit from lenalidomide treatment. They recommend, however, that alternative treatments are considered if a patient does not respond to lenalidomide within 4 months.

Original article Raza A *et al.* (2008) Phase 2 study of lenalidomide in transfusion-dependent, low-risk, and intermediate-1 risk myelodysplastic syndromes with karyotypes other than deletion 5q. *Blood* **111:** 86–93

Oral contraceptives confer a lasting reduction in the risk of ovarian cancer

Oral contraceptives are associated with a reduced risk of ovarian cancer, but their public-health benefit depends on how long this protection lasts after contraceptive use ceases. In a meta-analysis, the UK-based Collaborative Group on Epidemiological Studies of Ovarian Cancer assessed the long-term effects of oral contraceptive use on the risk of ovarian cancer, pooling data from 45 epidemiological studies carried out in 21 countries.