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This issue of *Therapeutics and Clinical Risk Management* contains several excellent review articles which focus on diverse disorders. Nonsmall cell lung cancer (NSCLC) is the most common form of the malignancy accounting for 80% of cases. For the most part these patients present with advanced disease for which tumor resection is not an option. Treatment of advanced disease is therefore aimed at improving survival rates. It is important therefore that the associated side effects of treatment do not impact too heavily on the quality of life of patients. Therapy for NSCLC involves chemotherapy with cisplatin or carboplatin in combination with a third-generation cytotoxic drug: vinorelbine, gemcitabine, paclitaxel, or docetaxel. Felip and Rosell (2008) provide a comprehensive review of the clinical utility and toxicity profile of pemetrexed, a multi-targeted antifolate agent, in the treatment of NSCLC. Until recently, docetaxel was the only approved cytotoxic chemotherapy for second-line NSCLC treatment. The authors first reviewed the effectiveness of pemetrexed as a second-line treatment for advanced NSCLC. They concluded that when administered with folic acid and vitamin B12, pemetrexed had comparable efficacy and a superior toxicity profile relative to docetaxel. They also addressed the use of pemetrexed in combination with cisplatin as a first line treatment for NSCLC and report equivalent responses and overall patient survival compared to a combination of cisplatin with gemcitabine. The authors also addressed the potential role of targeted agents in combination with pemetrexed together with the use of pharmacogenomic approaches to predict chemotherapeutic responses in NSCLC patients.

Chronic infection with hepatitis C virus is the major cause of liver cirrhosis and carcinoma and is responsible for approximately half of the indications for liver transplantation worldwide. Liver transplantation represents an effective treatment option but graft re-infection is virtually inevitable in those patients with detectable serum hepatitis C virus RNA at the time of transplant. In a very interesting review, Toniutto and colleagues (2008) consider the effectiveness of antiviral treatment of hepatitis C-positive patients awaiting liver transplant. Interferon in combination with ribavirin represent the mainstay treatments and in addition to improving graft survival; antiviral treatment may remove the need for a liver transplant thereby saving scarce donated organs. Although this approach appears effective, the authors recommend caution as results obtained to date are from small and uncontrolled clinical studies of less than 300 patients with a relative short period of follow-up. They conclude by stating that in those transplant centres where the time of the operation can be predicted with some degree of accuracy, limited antiviral regimens including novel drugs might prove to be effective in hepatitis C virus-infected patients.

Neff and colleagues (2008) review treatment options for mucous membrane pemphigoid (MMP). This is an autoimmune blistering disorder of mucous membranes characterized by subepithelial bullae involving the oral cavity, conjunctiva, nasopharynx, larynx, esophagus, genitourinary tract, and anus. Skin involvement is observed in approximately one-quarter of patients and is usually limited to the head, neck and upper torso. MMP presents with a spectrum of symptoms; the authors describe diagnostic criteria and clinical features and how these inform the various treatment options for this condition. Three monoclonal tumour necrosis factor- $\alpha$  (TNF- $\alpha$ ) inhibitors are currently

available: etanercept, infliximab, and adalimumab. All have efficacy in the treatment of rheumatoid arthritis and with a more variable response in other granulomatous diseases such as sarcoidosis, Crohn's disease or Wegener's granulomatosis. It is of interest therefore that anti-TNF- $\alpha$  agents also appear effective in MMP that is refractive to treatment with more established therapies. The authors conclude by pointing out that as MMP is a relatively rare disorder there is a lack of well-conducted, large, randomized controlled trials comparing the efficacy of various therapeutic agents and that a

multidisciplinary approach is recommended for identifying the appropriate therapy for each individual patient.

## References

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