group than in the control group (+70%; 95% CI 15%–151%; $P=0.007$). At the follow-up examination, a significantly lower number of CIN3+ lesions were detected in the intervention group than in the control group ($P=0.001$).

The authors suggest that HPV DNA testing leads to early detection of clinically relevant CIN3+ lesions and that if this test were included in routine cervical screening the length of time between screenings could be increased.

Original article Bulkmans NWJ *et al.* (2007) Human papillomavirus DNA testing for the detection of cervical intraepithelial neoplasia grade 3 and cancer: 5-year follow-up of a randomised controlled implementation trial. *Lancet* **370**: 1764–1772

Biochemotherapy improves response rates but not survival in metastatic melanoma

For patients with metastatic melanoma, chemotherapy is the standard of care. Interferon (IFN) and interleukin 2 (IL-2) immunotherapy is active in malignant melanoma, and clinical trial data suggest that combined chemotherapy and immunotherapy (i.e. biochemotherapy) increases response rates; however, the results of these trials have not been consistent. A recent meta-analysis has assessed the effect of biochemotherapy in metastatic melanoma.

The meta-analysis included 18 trials (11 trials of chemotherapy ± IFN and 7 trials of chemotherapy ± IFN and IL-2) involving 2,621 patients. Overall, 2,039 deaths and 555 responses were reported. Biochemotherapy clearly improved partial response (odds ratio [OR] 0.66; $P=0.0001$), complete response (OR 0.50; $P=0.0003$), and overall response (OR 0.59; $P<0.00001$) rates. Overall response was increased significantly in both IFN (OR 0.60; $P=0.0002$) and IFN plus IL-2 (OR 0.58; $P=0.0001$) immunotherapy subgroups. Data from seven trials showed that biochemotherapy delayed the time to disease progression (OR 0.80; $P=0.0001$), and there was no evidence of heterogeneity between the groups treated with the different types of immunotherapy ($P=0.5$) or between different trials ($P=0.4$). By contrast, biochemotherapy did not increase overall survival (OR 0.99; $P=0.9$). There was, however, heterogeneity in the treatment effect between the different trials ($P=0.006$), but not between the two immunotherapy subgroups ($P=1.0$).

These data show that biochemotherapy improves responses rates, but not overall survival, in patients with metastatic melanoma.

Original article Ives NJ *et al.* (2007) Chemotherapy compared with biochemotherapy for the treatment of metastatic melanoma: a meta-analysis of 18 trials involving 2,621 patients. *J Clin Oncol* **25:** 5426–5434

Adjuvant chemotherapy provides a slight survival advantage in low-risk colorectal cancer

Adjuvant chemotherapy with fluorouracil and folinic acid is commonly given to patients with stage III colon cancer to reduce the risk of recurrence; however, the benefit of this treatment in colorectal cancer patients with a low risk of recurrence is unclear. As part of an international, 150-center study, the QUick And Simple And Reliable (QUASAR) Collaborative Group evaluated this therapy in patients who had undergone apparently curative resections of colorectal cancer and who had an uncertain indication for chemotherapy.

A total of 3,239 patients (71% with colon cancer, 91% with stage II disease) were enrolled from May 1994 to December 2003 and randomized to chemotherapy or observation. Until October 1997, chemotherapy treatment consisted of fluorouracil and high-dose or low-dose folinic acid, plus either levamisole or placebo. After this time, patients were given only fluorouracil plus low-dose folinic acid.

During the study period, significantly lower rates of recurrence were seen in the chemotherapy group than in the observation group (293 vs 359; relative risk [RR] 0.78; $P=0.001$) Similarly, the risk of all-cause death was lower in the chemotherapy group than the observation group (RR 0.82; $P=0.008$), as was the risk of dying from colorectal cancer (RR 0.81). In the first 2 years after randomization, the risk of recurrence was significantly lower in the chemotherapy group than in the observation group (149 vs 227 recurrences; RR 0.64; $P<0.0001$). The authors note the small but probably real improvement in survival with adjuvant chemotherapy for patients with stage II colorectal cancer.

Original article QUASAR Collaborative Group (2007) Adjuvant chemotherapy versus observation in patients with colorectal cancer: a randomised study. *Lancet* **370**: 2020–2029