

Data on 23,257 women with ovarian cancer (cases) and 87,303 women without ovarian cancer (controls) were analyzed. In total, 7,308 (31%) cases and 32,717 (37%) controls had used oral contraceptives, for an average duration of 4.4 years and 5.0 years, respectively. The reduction in the risk of ovarian cancer increased as the duration of oral contraceptive use increased ($P < 0.0001$). The overall relative risk of ovarian cancer declined by 20% for each 5 years of oral contraceptive use; women who had used oral contraceptives for around 15 years had approximately half the risk of developing ovarian cancer seen in nonusers. Compared with nonusers, users of oral contraceptives still had a substantially reduced risk of ovarian cancer >30 years after they had ceased to take these drugs, although the protective effect of oral contraceptives did decline with increasing time since last use.

The authors comment that up to 200,000 cases of ovarian cancer and 100,000 deaths from this disease have already been prevented by oral contraceptives, and that about 30,000 cancer cases per year will be prevented in the next few decades.

Original article Collaborative Group on Epidemiological Studies of Ovarian Cancer (2008) Ovarian cancer and oral contraceptives: collaborative reanalysis of data from 45 epidemiological studies including 23,257 women with ovarian cancer and 87,303 controls. *Lancet* 371: 303–314

Chemokines mediate preferential metastasis of cutaneous melanoma to the small intestine

Evidence is accumulating to indicate that chemokines might have a role in tumor-cell trafficking. Recent studies have shown that CCL25—which mediates the chemotaxis of CCR9⁺ cells—is an important chemokine involved in cellular homing to the small intestine. On the basis of these data, Amersi *et al.* hypothesized that chemokine-mediated homing via the CCR9–CCL25 axis might be the primary mechanism by which cutaneous melanomas preferentially metastasize to the small intestine.

The quantification of CCR9 mRNA levels in 23 metastatic melanoma lines reinforced the evidence for a specific role of the CCR9–CCL25 axis in tumor-cell migration to the small intestine: of the 23 metastatic lines tested, only the 8 lines derived from small intestinal metastases

expressed CCR9. The expression of CCR9 was then examined in specimens from 198 patients who had undergone resection of metastatic melanoma. Among the 102 specimens from small intestinal metastases, 86% expressed CCR9. None of the specimens from patients who had undergone resection for cutaneous melanoma metastasis to organs other than the small intestine expressed CCR9. Furthermore, no notable immunohistochemical staining for CCR9 was seen in melanoma metastases to organs other than the small intestine. Cell-migration and cell-invasion assays revealed that CCL25 could induce the migration of four CCR9⁺ melanoma cell lines; CCR9[−] cells did not respond to CCL25, and pretreatment of CCR9⁺ lines with an anti-CCR9 antibody prevented migration.

The authors conclude that tumor-cell migration along the CCR9–CCL25 axis might explain the distinct pattern of metastasis to the small intestine observed with cutaneous melanoma.

Original article Amersi FF *et al.* (2008) Activation of CCR9/CCL25 in cutaneous melanoma mediates preferential metastasis to the small intestine. *Clin Cancer Res* 14: 638–645

Preoperative serum C-reactive-protein level might predict prognosis in ovarian cancer

Levels of circulating C-reactive protein (CRP) have been shown to reflect inflammation-related carcinogenesis. Hefler *et al.* investigated the prognostic value of serum CRP levels in patients with ovarian cancer.

Preoperative serum CRP levels were measured in patients with epithelial ovarian cancer who then underwent surgical treatment (hysterectomy, bilateral salpingo-oophorectomy, pelvic and/or para-aortic lymphadenectomy, appendectomy, or omentectomy). Patients also underwent platinum-based chemotherapy if they had stage Ic–III tumors or clear cell carcinoma. All participants were followed up at 3-month intervals.

The mean preoperative serum CRP level was 3.6 ± 4.8 mg/dl in the 623 patients who completed follow-up (mean duration 25.5 ± 24.1 months). In multivariate analysis, elevated serum CRP level (>1 mg/dl) was significantly associated with high International Federation of Gynecologists and Obstetricians tumor stage ($P < 0.0001$), postoperative residual