

German treatment centers. MRI was performed on all patients 72 h postoperatively and at regular intervals during follow-up. After a median follow-up of 35.4 months, significantly more patients in the fluorescence-guided surgery group than in the white-light surgery group had complete tumor resection ($P < 0.0001$); of those with residual disease, patients in the former group had significantly smaller tumor volumes ($P < 0.0001$). Progression-free survival at 6 months was also significantly greater in patients whose tumors were resected under fluorescent light ($P = 0.0003$) than in those who underwent white-light surgery. There were no significant long-term differences in neurotoxicity or Karnofsky performance status between the two groups. The authors conclude that patients with malignant glioma derive substantial clinical benefit from fluorescence-guided tumor resection with 5-aminolevulinic acid.

Original article Stummer W *et al.* (2006) Fluorescence-guided surgery with 5-aminolevulinic acid for resection of malignant glioma: a randomised controlled multicentre phase III trial. *Lancet Oncol* 7: 392–401

Rituximab improves the efficacy of CHOP in treatment of diffuse large-B-cell lymphoma

The addition of rituximab to CHOP (cyclophosphamide, doxorubicin, vincristine and prednisone) chemotherapy has been shown to lead to improved survival in patients aged ≥ 60 years with diffuse large-B-cell lymphoma, but it is unclear whether rituximab would benefit younger patients with a good prognosis. An international trial therefore assessed the effect of rituximab plus CHOP or CHOP-like chemotherapy in treating diffuse large-B-cell lymphoma in 824 patients aged 18–60 years, from 18 countries, who had low-risk or low-intermediate-risk disease.

Interim analysis revealed that fifteen-month event-free survival was 84% for patients in the rituximab plus chemotherapy group, compared with 63% in the chemotherapy-alone group. The significance of this difference ($P < 0.0001$) was beyond the critical α -spending level (i.e. the significance level allowed for the analysis; $P = 0.00105$), leading to early termination of the trial. For patients who completed the trial, 3-year event-free survival and overall survival were higher in the rituximab group than in the chemotherapy-alone group (79% vs 59% and 93% vs 84%, respectively).

Analysis of the subgroup of patients who received CHOEP (CHOP plus etoposide) confirmed the superiority of this treatment over CHOP; however, no difference was observed between treatment with CHOEP plus rituximab and CHOP plus rituximab. The authors speculate that the greater hematotoxic effects of CHOEP might reduce the effectiveness of rituximab, and suggest that, because of lower toxicity and greater ease of administration, CHOP plus rituximab might be preferred to CHOEP plus rituximab as treatment for diffuse large-B-cell lymphoma.

Original article Pfreundschuh M *et al.* (2006) CHOP-like chemotherapy plus rituximab versus CHOP-like chemotherapy alone in young patients with good-prognosis diffuse large-B-cell lymphoma: a randomised controlled trial by the MabThera International Trial (MInT) Group. *Lancet Oncol* 7: 379–391

Conjugated equine estrogens have no effect on breast cancer risk

The Women's Health Initiative Estrogen-Alone trial, which evaluated the effects of conjugated equine estrogens (CEE) in postmenopausal women with prior hysterectomy, was halted early because the data indicated an increased incidence of stroke in participants taking CEE compared with placebo, and no benefit as regards risk of heart disease. Although exogenous estrogens have been associated with an increased risk of breast cancer, preliminary analysis of the Estrogen-Alone trial suggested a reduction in breast cancer incidence in the CEE group.

Analysis of the completed trial data, however, has detected no significant difference in breast cancer risk between the CEE and placebo groups after a mean 7.1 years of follow-up, although subgroup analyses revealed a borderline statistically significant reduction in risk of ductal carcinomas ($P = 0.054$) and suggested a protective effect of CEE in participants at low risk of disease. Adherence analysis indicated a reduced risk of invasive breast cancer in participants who adhered to study medications. The incidence of abnormalities requiring follow-up mammograms was substantially higher in the CEE group, although most of the abnormalities were in the category of short-interval follow-up.

In contrast to the Women's Health Initiative Estrogen plus Progestin trial, in which hormone treatment increased the incidence of breast