Radiotherapy in breast conserving surgery
Prof Elie Nasr

Several randomized clinical trials have shown equivalent results after BCT and mastectomy in stage I and II breast cancer. The meta-analysis of the Early Breast Cancer Trialists' Collaborative Group confirmed the equivalence of those two approaches with survival as endpoint and the need for radiotherapy following lumpectomy to reduce the 5-year local recurrence rate from 26% to 7%. The potential impact on local control and treatment complications of giving a higher dose to the primary tumor bed with a boost was investigated in two prospective randomized trials. Both demonstrated that delivering a boost dose to the tumor bed after 50 Gy to the whole breast significantly reduces the local recurrence rate .The cosmetic results were scored as excellent to good in 86% of the patients receiving no boost and in 71% of the patients receiving a boost.

Treatment for elderly patients with cancer is a matter of debate in several disease sites. In a series of 636 patients, Hughes et al. compared tamoxifen to tamoxifen and whole breast irradiation for patients 70 years of age or older with early stage oestrogen receptor positive breast cancer. The 5 year locoregional recurrence rate was 4% and 1%, respectively ($p < 0.001$). In a similar randomized trial accruing 769 patients of 50 years of age or older, Fyles et al. obtained 5 year locoregional recurrence rates of 7.7 versus 0.6%, respectively ($p < 0.001$) The standard approach for elderly patients should remain to offer optimal local treatment.