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**Background.** Geriatric oncology services are not routinely available in Singapore and most cancer physicians have little access to it. The management of elderly patients with cancer is often suboptimal with no standardised methods for decision making.

**Methods.** We surveyed practising cancer physicians in Singapore about their attitudes towards the treatment decision-making process for geriatric patients with cancer and compared their pattern of disclosure of the cancer diagnosis to older versus younger patients.

**Findings.** Fifty-seven cancer physicians participated—69% medical oncologists, 17% radiation oncologists, and 14% haematologists. Most physicians (52.6%) listed performance status (PS) as the top single factor affecting their treatment decision, followed by cancer type (23%) and the patient's decision (11%). When asked to list the top five factors, they included PS (94.7%), comorbidities (75.4%), cancer stage (75.4%), cancer type (75.4%), patient's decision (52.6%), and age (51%). Seventy-two per cent of physicians indicated a general lower inclination to treat an older patient aggressively, even if the patient was physically fit with minimal comorbidities; 52.6% and 89.5% opted for less intensive treatments for older patients in two hypothetical clinical scenarios of high-grade lymphoma and early breast cancer, respectively. Fifty-four per cent of physicians chose to disclose cancer diagnosis to family members instead of the older patient compared with the preference to disclose cancer diagnosis directly to the younger patient, citing family preference as the main reason. Most participants (61%) have never engaged a geriatrician's help in treatment decisions, although 90% would welcome the introduction of a geriatric oncology programme.

**Interpretation.** Older age of the patient has a significant impact on the cancer physician's treatment decision-making process. Many cancer physicians in Singapore still practice non-disclosure of cancer diagnosis to the older patient at the family's request. Having a formal geriatric oncology programme in Singapore could help to optimise the management of the geriatric patient with cancer.

The authors declared no conflicts of interest.

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#### AOS25 PREVALENCE OF PTEN LOSS IN TRIPLE NEGATIVE BREAST CANCER IN THE THAI POPULATION

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**Background.** Triple negative breast cancer (TNBC) is worse and more aggressive and rapidly relapsing than is hormone-receptor-positive breast cancer. PTEN, one of the important pathways in TNBC, could significantly worsen the disease progression. Primary outcome was the prevalence of PTEN loss in Thai patients with TNBC. Secondary outcome was the relation between PTEN loss and the progression of disease.

**Methods.** Female patients were diagnosed with TNBC and treated at King Chulalongkorn Memorial Hospital where PTEN was detected by use of immunohistochemistry (28H6 antibody) during June 2006 to December 31, 2011. Micro-array FISH was used to confirm those tumour samples that were HER2 positive.

**Findings.** Twenty-four (29.3) of 82 TNBC samples were PTEN negative. The average age of the patients with PTEN loss was 50.3 years and the women were mainly premenopausal (53.7%). The

PTEN-negative disease was characterised by a tumour larger than 2 cm compared with PTEN-positive tumours (80% versus 68.8%), but not related to the severity of disease, lymphovascular invasion, and lymph node involvement. Although, the average disease recurrence time was worse in the PTEN-negative group than in the PTEN-positive group (17 months versus 24 months, hazard ratio 1.31, 95% confidence interval (CI) 11.13–22.87;  $p = 0.05$ ), the survival rate was not different.

**Interpretation.** The PTEN loss reported in the patients with TNBC in Thailand is less than that reported in other studies. Although it is not prognostic for disease progression, we suggest that a longer follow-up to ascertain the survival rate of patients with the disease. Our study is the first report of PTEN loss in TNBC in Thailand.

The authors declared no conflicts of interest.

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#### AOS26 BEVACIZUMAB-INDUCED HYPERTENSION AND USE OF ANTI-HYPERTENSIVE DRUGS IS ASSOCIATED WITH IMPROVED OUTCOME IN PATIENTS WITH SOLID ORGAN TUMOURS TREATED WITH BEVACIZUMAB

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**Background.** Bevacizumab has been effective in the treatment of various solid organ tumours in several phase III trials. Hypertension is a common side-effect with bevacizumab because of it has anti-VEGF (vascular endothelial growth factor) activity. There are conflicting results about the role of hypertension as a marker for prediction of clinical efficacy. We reviewed the correlation between bevacizumab-induced hypertension and treatment response rate, progression free survival, and overall survival in patients with solid organ tumours.

**Methods.** We undertook a retrospective review of case records of patients who had histologically proven advanced or metastatic solid organ tumours and had received bevacizumab as part of their cancer treatment between 1st January 2006 and 31st December 2010 in a single cancer institute at a tertiary hospital.

**Findings.** One hundred and fifty-four of 171 patients had complete records that were available for review. Eighty patients (51.9%) developed grade 2 or greater hypertension with bevacizumab. Thirty-five (43.8%) of these were treated with anti-hypertensive drugs; 29 patients received only one anti-hypertensive drug and the remaining patients received two anti-hypertensive drugs. Median objective response rate was higher in patients who developed bevacizumab-induced hypertension than in those who did not (43.8% versus 16.2%,  $p < 0.0001$ ). Patients who required anti-hypertensive medications during bevacizumab therapy had significantly longer progression-free survival than did those who did not (10.0 months versus 5.2 months,  $p = 0.036$ ), and showed a trend towards improved overall survival (29.4 months versus 18.3 months,  $p = 0.058$ ).

**Interpretation.** Initiation of anti-hypertensive drugs to control bevacizumab-induced hypertension is associated with better survival and warrants confirmation in prospective trials.

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#### AOS27 EXTENSIVE JUVENILE NASOPHARYNGEAL ANGIO-FIBROMA: A LONG-TERM STUDY OF 40 PATIENTS SUCCESSFULLY TREATED WITH RADIOTHERAPY