thromboembolism (PTE) in 3 (3.8%) patients. Also, out of all, 43 (53.8%) patients belonged to the low risk category of Khorana score, while 37 (46.2%) patients were in the intermediate category. There was no significant association between Khorana scores obtained and VTE (fisher exact test, p-value = 0.171).

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Conclusions: The incidence of VTE in primary primary brain tumour patients receiving bevacizumab therapy is low. Low and intermediate risk Khorana scores are unable to predict the risk of VTE in our population.

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346P Occurrence and risk factors of chemotherapy-induced neutropenia in patients with breast cancer: A hospital-based assessment in Indonesia

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Background: Chemotherapy-induced neutropenia (CIN) is a main side effect in chemotherapy of breast cancer (BC) patients. It may lead to febrile neutropenia that requires hospitalization and antibiotic treatment resulting in increased cost and unfavourable outcome. Little is known about the incidence of CIN in Indonesia despite the fact that BC is the most prevalent malignancy. This study investigates the occurrence of severe CIN and identify its associated risk factors.

Methods: We considered 123 newly-diagnosed BC patients without terminal conditions and multiple comorbidities from July 2018 to July 2019. All patients received a three-weekly adjuvant, neo-adjuvant, or palliative chemotherapy without primary prophylaxis of GCSF. We defined severe CIN as the condition where absolute neutrophil count <0.5x10^9/L during any chemotherapy cycle. We evaluated the association of clinical, pathological, and treatment factors with the risk of CIN in a logistic regression methodology, adjusted for patients’ demographics.

Results: In this cohort, 73% patients had experienced severe CIN at least once during their chemotherapy. The risk of severe CIN in the 2nd, 3rd, and 4th cycle did not differ from the 1st cycle. However, after the 5th cycle, the risk significantly increased (p values ≤ 0.001 up to the 8th cycle). Higher age, poor ECOG index, lower pre-treatment monocyte count, and palliative intention were associated with the increased risk of severe CIN, while diabetes comorbidity was associated with the decreased risk (p = 0.049, <0.001, 0.022, 0.037, and 0.017, respectively).

Conclusions: We have identified some risk factors for increasing the risk of severe CIN. These factors can serve as a guidance to support care and recognize those at high risk.

Legal entity responsible for the study: The authors.

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Disclosure: All authors have declared no conflicts of interest.

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347P Histamine blockade with loradatine for prevention of granulocyte-colony stimulating factor (G-CSF)-associated bone pain: A meta-analysis

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Background: Chemotherapy remains to be one of the cornerstones of cancer management. Due to the inherent ability of chemotherapy to act on rapidly dividing cells, myelosuppression is one of the noted side effects. Febrile neutropenia (FN), an oncologic emergency, may be prevented with administration of granulocyte-colony stimulating factor (G-CSF) in patients who are at risk for neutropenia based on type and number of myelosuppressive chemotherapy agents used, the type of cancer and patient-related factors. Most common adverse events are injection site and bone pain. Recent studies showed promising results on prevention of G-CSF induced bone pain using histamine blockade.

Methods: A systematic search of Pubmed, Cochrane, Clinical trials databases and hand search were done to identify randomized controlled trials (RCTs) investigating the use of Loradatine for prevention of G-CSF bone pain. Studies were appraised using the Cochrane Collaboration tool. Using the random effects model, pooled Odds ratios (ORs) with 95% confidence intervals (CI), results were analyzed.

Results: Two RCTs were included (N=814). Patients in the Loradatine group reported lesser bone pain as compared to the control group, 57% and 60% respectively (OR 0.95, CI [0.81, 1.10]). However, the result was not statistically significant (P=0.52).

Conclusions: Histamine blockade with Loradatine in the prevention of bone pain induced by G-CSF did not show statistically significant advantage over placebo or no prophylaxis.

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Disclosure: All authors have declared no conflicts of interest.

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348P Anti-VEGF inhibitors and renal safety in onco-nephrology consortium: Urinary protein/creatinine ratio (VERSION UP study)

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Background: Anti-angiogenic agents are indispensable in the treatment of gastric cancer and colorectal cancer cases with urine protein qualitative test (UPCR) levels and the single dose of bevacizumab (p = 0.018).

Methods: Results: Among 71 cases enrolled, the proportion of Low UPCR in QV 2+ cases (n=53) was 66% (n=35). In a comparison between Low (n=36) and High UPCR cases (n=24), High UPCR tended to occur in cases of heavy body weight, and its cut-off value was 52.45 kg (OR 4.25, 95%CI 1.30-13.86, p = 0.017). A significant correlation was also observed between UPCR levels and the single dose of bevacizumab (r = 0.033) or ramucirumab (r = 0.018).

Conclusions: The relationship between UPCR levels and body weight or single dose was shown, but there is a possibility that physical disparity and the amount of creatinine excretion may have an effect.

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Disclosure: M. Nakamura: Honoraria (self): Daiichi Sankyo; Honoraria (self): Lilly; Honoraria (self): Chugai; Honoraria (self): Medice; Honoraria (self): Bristol Myers; SQubi; Honoraria (self): Taiho. T. Funakoshi: Research grant/Funding (institution); TF belongs to an endowed department sponsored partly by Chugai Pharmaceutical Co., Ltd. - Chugai. E. Baba: Honoraria (self): Lilly; Research grant/Funding (institution): Chugai Y. Mishra: Honoraria (self): Chugai, M. Muto: Honoraria (self); Research grant/Funding (institution); MM belongs to an endowed department

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Proteinuria in patients treated with ramcuribum increases the risk of renal dysfunction

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Background: It is unknown whether proteinuria caused by ramcuribum (RAM) induces renal dysfunction. Thus, this study assessed the relationship between proteinuria and other factors with RAM therapy, and compared estimated glomerular filtration rate (eGFR) with or without proteinuria in long-term treatment.

Methods: Medical records were retrospectively reviewed for 156 patients treated with chemotherapy that included RAM between April 1, 2015 and May 31, 2019 at Kure Medical Center. Forty-eight patients with a performance status of 3 or 4, or not measured for proteinuria among those treated with RAM, or has detected proteinuria before first commencing RAM administration were excluded. Proteinuria and eGFR were measured before treatment with RAM, and compared to minimum eGFR with or without proteinuria after treatment with RAM. The proteinuria group was defined as proteinuria detected at more than 1+ at least once.

Results: Overall, a total of 108 patients were included in this analysis. Thirty-nine patients were classified into the proteinuria group and the remaining 69 patients were classified into the non-proteinuria group. Age, sex, and eGFR before treatment with RAM did not significantly differ between the proteinuria group and non-proteinuria group. There were significant decreases in proteinuria group mean eGFR(-26.7±5.6 ml/min/1.73 m3), which was greater than the non-proteinuria group mean eGFR(-15.0±4.2 ml/min/1.73 m3), compared to eGFR before treatment (p<0.05). The incidence of grade 3 or 4 chronic kidney disease (CKD) was observed in 8 patients (20.5%) in the proteinuria group, but in only 3 patients (4.5%) in the non-proteinuria group (p<0.05). Patients treated over 200 days with RAM had a significant incidence of proteinuria, and in the proteinuria group, the appearance of proteinuria within 28 days from first administration decreased eGFR more than after 28 days.

Conclusions: Proteinuria caused by RAM might be decreased in eGFR, particularly in cases that immediately detected. Renal dysfunction can affect subsequent chemotherapy, and as such, it is important to regularly check proteinuria during treatment with RAM. It is necessary to take particular care for cases in which proteinuria is detected and renal function has already declined.

Legal entity responsible for the study: The authors.

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Disclosure: All authors have declared no conflicts of interest.

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Valvular heart diseases in patients treated for breast cancer

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Background: Aortic stenosis is the most common valvular complication of mediastinal radiotherapy. In 2016 was shown that not only radiotherapy but chemotherapy with anthracyclines alone may provoke the development of valvular heart diseases (VHD). But there are still not clear time frames of VHD development.

Methods: We present a single-center retrospective analysis of a cohort with breast cancer history who were treated in cardiology departments. Total 91 patients were included in this study. ECHO data and time till first symptoms and surgical treatment were assessed in all patients.

Results: Different VHD were revealed in 48.35% (n=44) of patients. Among them 54.5% (n=24) had aortic stenosis, 34.1% (n=15) — mitral regurgitation, 4.5% (n=2) — mitral stenosis with regurgitation, 2.3% (n=1) — isolated aortic regurgitation and the same number of isolated mitral stenosis. During 15 months 25 patients were undergoing surgical treatment. In 2 of them VHD was first diagnosed before cancer treatment, but they were not included in the subsequent analysis. The oncological age in operated patients was 60 (42; 68) years. The time till first signs of VHD was 8 [4; 16] years. In all patients dyspnea was presented, 39% of patients had angina and only in 21.7% had presyncope and syncope. The median time from oncological age till surgery was 11 [7; 22] years. We also revealed correlation between oncological age and time till first VHD signs and surgical treatment (r = -0.76 and r = -0.71 respectively).

Conclusions: Given the widespread prevalence of degenerative aortic stenosis in older age patients, it is advisable to assess valves condition not only before radiation and chemotherapy but also recommend more frequent echocardiographic monitoring after, as well as use of new visualization techniques, such as CT (calcium score) and 18F-NaF PET-CT (as marker of calcification).

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