

## S04-4 **Oncology pharmacy specialist contributes to improvement of therapeutic efficiency and safe management in cancer chemotherapy**

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Cancer chemotherapy has been shifted from inpatients to outpatients during recent years. The roles of pharmacists as the member of oncology team become increasingly important, as the advancement of the technology in cancer therapy. In the Gifu University Hospital, two pharmacists including an oncology pharmacy specialist were newly assigned to be continuously present in outpatient chemotherapy center for the purpose of verification of cancer chemotherapy regimens, provision of pharmaceutical care to patients and drug information to the medical staff, monitoring adverse events, and proposal on supportive care. Time spent in patient education was 76 hrs/month, which led to the reduction of workload of physicians and nurses. Thus, annual number of outpatients increased from 1,537 to 2,193 (1.4-fold). As a result, annual amount (million yen) of medical incomes in the chemotherapy center was elevated from 127 to 255 (2-fold). Moreover, pharmacists offered 166 proposals on supportive care, in which antiemesis and prophylaxis of oxaliplatin-induced peripheral neuropathy (PN) were frequent. The rate of complete inhibition of nausea increased from 50% to 79% in breast cancer patients who received highly emetogenic chemotherapy. In addition, medical cost for antiemesis was reduced by 15%. As concerns PN, the median onset of the symptoms delayed from 10 weeks to 14 weeks ( $P=0.028$ , by log-rank test) in patients with colorectal cancer. Thus, it is evident that oncology pharmacy specialist contributes to the enhancement of therapeutic efficiency, patients' quality of life and improvement of medical economics in cancer chemotherapy.