Out-patient management of post-chemotherapy low risk febrile neutropenia: a pivotal role of an oncology nurse to play.

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Introduction
Febrile neutropenia (FN) is a commonly encountered oncological emergency after cytotoxic chemotherapy. Traditionally, management of these patients involved hospital admission and a full 7-day course of parenteral broad-spectrum antibiotics therapy. This in-patient approach has created substantial burdens not only to acute hospital service, but also a significant psychosocial stress to patients. Recently, risk stratification management approach has been proposed and adopted by international guidelines. Oral antibiotic regimen is now a recommended treatment of choice for low risk FN patients. With this new recommendation of treatment, out-patient management of such low risk FN patients becomes a viable option. Hence we are introducing a new nurse-led protocol-based management program and evaluating its outcomes.

Objectives
To compare the outcomes of low-risk FN patients managed by a protocol-based, nurse-led management program with conventional standard of care.

Methodology
Oncology patients with solid cancers who presented to oncology unit with low-risk FN, defined by Multinational Association of Supportive Care in Cancer (MASCC) score ≥ 21 and no other adverse clinical criteria are eligible for this program. Patients who are consented and suitable for program enrollment will be managed according to a pre-defined, nurse-led management protocol. Clinical outcomes are captured and will be compared to the standard of care from historical data.

Result
Experienced oncology nurses are playing an important role of this nurse-led management program in the following aspects: • First assessment, • Initial observations after first dose of oral antibiotic therapies, • Patient’s education and counseling, • First telephone consultation within 48 hours from presentation, • Subsequent nurse clinic follow-up, • Review of laboratory findings and inform doctors for decision, • Monitoring patient’s compliance, adverse treatment reactions and effectiveness of therapy, • Arrangement of subsequent doctor visit and chemotherapy treatment Preliminary experience showed that this protocol-based nurse-led management program is most welcomed by patient and no adverse outcome was observed. Hospital admissions with long hospital stay are avoided.