Poster Workshop (PWSF): ‘Febrile neutropenia’

APPROPRIATE USE OF G-CSF IN CANCER TREATMENT: AN EVIDENCE-BASED CLINICAL PRACTICE GUIDELINE-2013

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Purpose: To provide recommendations for appropriate use of granulocyte-colony stimulating factors (G-CSF) for patients with cancer treated by chemotherapy and/or radiotherapy.

Methods: The 2013 Update Working Group (WG) in the Japan Society of Clinical Oncology (JSCO) completed a review and analysis of data published in the both international and domestic journals from 2005 through February 2013. The WG referred guidelines of G-CSF provided by ASCO-2006, EORTC-2010 and NCCN-2012. Guided by these guidelines and Minds in Japan, WG formulated recommendations based on improvement in survival, quality of life, reduction of toxicity and cost-effectiveness related to national insurance system in Japan.

Recommendations: The use of G-CSFs is justified for a. prophylaxis and therapy of febrile neutropenia (FN) during chemotherapy for various malignant diseases, b. mobilization of peripheral-blood progenitor cells for peripheral blood stem cell transplantation, c. supportive therapy for severe neutropenia during treatment of myeloid and lymphoid malignancies, and d. improvement of prolonged neutropenia by radiation therapy. As primary prophylaxis, G-CSF is recommended to use for prevention of FN in patients who receive chemotherapeutic regimen having the risk of FN as 20% or grater, who receive the regimen expected to prolong survival time for maintaining intensity by management of neutropenia with G-CSF such as treatment for acute leukemias and aggressive lymphomas. G-CSF should be considered in patients with FN who are at high-risk for infection-related complications, however G-CSF should not be routinely used as adjunctive treatment for infection. Currently, there are three types of G-CSF (filgrastim, lenograstim, and nartograstim), one pegylated G-CSF (pegfilgrastim) and a few biosimilars of filgrastim for clinically available in Japan. All these G-CSFs have efficacy in management for patients with FN.