



ADVERSE DRUG REACTIONS, INCLUDING SJS, TEN

THE CHANCE STUDY: PERSISTENT SKIN AND NAIL DISORDER-RELATED QUALITY OF LIFE IN WOMEN WITH NON-METASTATIC BREAST CANCER

G Phillips⁽¹⁾ - A Freitas-martinez⁽¹⁾ - S Patil⁽²⁾ - A Samuels⁽¹⁾ - J Shapiro⁽³⁾ - O Kukoyi⁽¹⁾ - S Goldfarb⁽⁴⁾ - M Lacouture⁽⁵⁾

Memorial Sloan Kettering Cancer Center, Dermatology Service, New York, United States⁽¹⁾ - Memorial Sloan Kettering Cancer Center, Department Of Biostatistics, New York, United States⁽²⁾ - New York University School Of Medicine, The Ronald O. Perelman Department Of Dermatology, New York, United States⁽³⁾ - Memorial Sloan Kettering Cancer Center, Breast Cancer Medicine Service, New York, United States⁽⁴⁾ - Memorial Sloan Kettering Cancer Center, Dermatology, New York, United States⁽⁵⁾

Introduction: Permanent skin and nail disorders resulting from cytotoxic or endocrine agents used in early stages of breast cancer such as facial skin aging and nail changes (including nail ridging, discoloration, and onycholysis) develop in 3% and 78% of patients, respectively, however their impact on quality of life (QoL) has not been reported.

Objective: The CHANCE study is a prospective, longitudinal study of chemotherapy- and endocrine therapy-induced hair, skin, and nail changes in women with non-metastatic breast cancer. This preliminary analysis intends to evaluate the impact of permanent skin and nail sequelae of adjuvant breast cancer therapies on patients' QoL.

Materials and Methods: A target of 500 patients in 5 treatment cohorts will be followed for 3 years using standardized clinical images and objective skin biometrics. Patient-reported outcomes are assessed through QoL questionnaires at baseline, 6 months after chemotherapy completion, or one year after initiation of endocrine therapy: Skin QoL Questionnaire (SQQ) and Nail-specific QoL Questionnaire (NQQ). Higher scores correspond to worse QoL.

Results: Questionnaires were completed at both baseline and follow-up by 85 of 327 enrolled patients at the time of analysis. Overall worsening of QoL was found (baseline vs. follow-up: SQQ 2.89 vs. 3.19, $p=.03$; NQQ fingernail module 1.08 vs. 1.33, $p=.003$; NQQ toenail module 1.22 vs. 1.57, $p=0.008$). The greatest impact on skin-related QoL occurred in patients receiving cyclophosphamide+methotrexate+5-fluorouracil and on nail-related QoL occurred in patients receiving newer combination chemotherapy regimens (e.g. taxane+trastuzumab). The greatest change in NQQ subscale score occurred in fingernail





emotional and toenail symptoms subscales (baseline vs. follow-up: fingernail 1.08 vs. 1.36, $p=.002$; toenail 1.21 vs. 1.57, $p=.002$).

Conclusions: Adjuvant therapy used in non-metastatic breast cancer result in persistent skin and nail changes that cause a negative impact on patients' QoL. Longer-term effects of anticancer therapy on QoL will be assessed with subsequent analyses.

