**Project ID:** GM06910  
**Project Title:** Image Cytometry in Determining the Ploidy Status of the Tissues  
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**Synopsis:** In this study, the effectiveness of Bio-X, a nanopolymer coated with palm products against human malignant melanoma cell line was investigated. Bio-X could significantly inhibit the growth of MeWo cells in a concentration and time dependent manner but is ineffective in human normal skin cells CRL-2072. Moreover, Bio-X induces S-phase arrest and apoptosis which involves activation of caspase-3/7 and DNA fragmentation. Additionally, the release of lactate dehydrogenase enzyme suggests possible necrosis. In conclusion, Bio-X possesses the ability to suppress the proliferation of human malignant melanoma cells and this is at least partly attributed to the initiation of the S-phase arrest, apoptosis and possible necrosis.

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**Project ID:** GM07010  
**Project Title:** Development of a Health-Related Quality of Life Instrument for Malaysian Oral Cancer Patients  
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**Co-Researcher/s:** W. Murray Thomson, Bernadette Drummond, Prof. Dr. Raja Latifah Binti Raja Jallaludin  
**Synopsis:** The aim of this study was to develop a health-related quality of life instrument for diagnostic use among Malaysian oral cancer patients to measure their HRQOL. The Functional Assessment of Cancer Therapy (FACT-HN) version 4.0 was selected and cross-culturally adapted for use in Malaysia with a set of Malaysian questions appended to it (FACTHN-MAQ). The FACTHN-MAQ demonstrated good internal consistency, cross-sectional construct validity and longitudinal construct validity. The appended set of Malaysian questions (MAQ) improved the internal consistency and the discriminant validity of the FACT-HN. The FACTHN-MAQ proved appropriate for further use as a diagnostic instrument to assess health-related quality of life among oral cancer patients in Malaysia.