



Thailand 4.0 Smart Medical Hub

One Size will Never Fit for All : Personal Cancer Treatment

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Each cancer patient was unique in term of genetic, epigenetic, micro-environment and immune response. Cancer treatment could cause serious side effects and harmful without cure. Standard treatment, so-called one size for all patient will never be suitable for cancer treatment.

Optimal cancer treatment selection require personal prognostic biomarkers. Various biomarkers with cumbersome analysis, high cost, time consumption and requirment of special facilities have been investigated. However, none of these have been shown to be suitable for practical cancer treatment selection in the clinic.

Recently, we detected the association among variation at DNA sequences, its corresponding plasma protein and systemic circulating immune response cells were associated to treatment induced severe side effects and clinical outcome of cancer patients. These blood-based prognostic biomarkers are cost effective, rapid and can be done with automatic equipment in routine diagnostic laboratory in Thailand.

With goal for Thailand 4.0 and smart medical hub, we proposed the establishing the blood-based prognostic biomarkers for personal cancer treatment, building automatic diagnostic facility in Thailand. The possible visit, collaboration and cancer research education in Sweden for Thailand 4.1 medical hub could be discuss.

Keywords: Cancer, biomarkers, treatment induced severe side effects

Explain the impacts of your work especially to Thailand.

Personal cancer treatment and building the automatic routine diagnostic facility

Explain how your work fit with the ATPER conference theme

Eduducation, improve the diagnostic and treatment facility for cancer patients for medical hub, Thailand 4.0