

Research Support

- 1 Molecular cytogenetic study of diffuse large B-cell lymphomas and gastric MALT lymphomas
 - 1.1 As the principal investigator in this project, we set up the FISH platform in the Department and used this technique to detect MYC, BCL2 and BCL6 translocations in archival cases as well as in routine practice.
- 2 Assessing the therapeutic effect of a PDGFR inhibitor in a mouse model of extranodal NK/T-cell lymphoma of nasal type: a molecular imaging approach with correlation to gene expression profiling
 - 2.1 This project was the continuing study of my doctoral thesis. We established a xenograft mouse model to evaluate the *in vivo* effect of imatinib mesylate in nasal NK-/T-cell lymphoma.
- 3 Next-generation characterization of novel predictive biomarkers in rectal cancer patients receiving neoadjuvant chemo-radiotherapy
 - 3.1 Rectal cancer is different from the colon cancer not only in the anatomic location, but also the treatment strategy. For the patients with low rectal cancer, they usually receive neoadjuvant chemo-radiotherapy then mesorectal excision to achieve the locoregional control and preserve the anus. Unfortunately, the percentage of those patients with good or complete response varies from 6 to 20% and until now no reliable parameter can predict who can achieve the good/complete response. In this project, we would like to integrate multiple parameters, including molecular imaging and biomarkers, to attempt to identify the patients with rectal cancer who really benefit the neoadjuvant chemo-radiotherapy.
 - 3.2 Being one of the principal investigators in this project, my role is to coordinate different surgeons to collect those precious colonoscopy biopsy samples on-site, then to extract DNA and/or proteins for biomarker analysis.
 - 3.3 This multidisciplinary project has both academic and financial impacts. From this project, we could identify the patients who really benefit from the neoadjuvant chemo-radiotherapy and could economize the health care resources in those who do not have response.