Lung cancer is the most common cause of cancer-related deaths, and the cure rate of lung cancer is still under 20%, therefore, there is urgent need for new treatments. I aim to develop new innovative cancer therapy with a concept “less toxic, more anti-tumor effect”. Along with different approaches from conventional cancer therapies, I have been studying about photo-activated cancer therapy in order to destroy only cancer cells inside body. I would like to develop new technologies that could cause effects only on the cancers with a multidisciplined approach.

(1) Title: Spatially selective depletion of tumor-associated regulatory T cells with near-infrared photoimmunotherapy.  
Author: Sato K, Sato N, Xu B, Nakamura Y, Nagaya T, Choyke  
Published year: 2016 / Journal: Sci Transl Med. / Volume: 2016 Aug 17;8(352) / Pages: 352ra110

(2) Title: Near infrared photoimmunotherapy for lung metastases.  
Author: Sato K, Nagaya T, Mitsunaga M, Choyke PL, Kobayashi  
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(3) Title: Near infrared photoimmunotherapy in the treatment of pleural disseminated NSCLC: preclinical experience.  
Author: Sato K, Nagaya T, Choyke PL, Kobayashi H.  
Published year: 2015 / Journal: Theranostics. / Volume: Mar 19;5(7) / Pages: 698-709