In search of simpler ways to identify a cancer

IN 10 YEARS, a blood test may be all that is needed to find out the kind of cancer a patient has and the drug that would work best for him.

It is far less invasive than undergoing a biopsy, in which a sample of the tumour is surgically removed and sent for tests.

National University of Singapore (NUS) doctors have tied up with drug giant Bayer Schering Pharma to do studies on the nature of gene mutations in the blood and tumours of cancer patients, out of which a blood test and drugs formulated for Asians may be developed down the road.

The partnership, lasting two years in the first instance, will set doctors from NUS' Yong Loo Lin School of Medicine on three projects.

The first two aim to find out how often two specific molecules in cells mutate in the tumours and blood of breast, liver, lung and stomach cancers most common among Asians.

Scientists have found that mutations in genes send signals to cells to behave abnormally - a hallmark of the disease.

Understanding these mutations will therefore enable drug companies such as Bayer Schering to design better drugs.

The only blood test now used as standard practice to detect such mutations is the one used to diagnose colon cancer, another common Asian cancer, said Dr Richie Soong, 35, the projects' lead researcher.

These projects are the first part of a $20 million investment that Bayer is making in Singapore over the next six years.

Drug companies are starting to see the potential in the Asian market, which now has half the world's cancer cases.

One impetus for this has been the chance discovery of a drug for lung cancer which works only on Asians.

Dr Soong said it had initially been tested and found ineffective among Caucasians. Had it not been next tested on Asians, the drug companies would have just abandoned its production.