Gene databases help in prescribing therapies to cancer patients

A major California university hospital is exploring ways to gather and use genetic information gathered from cancer patients, hoping to break new ground in a fledgling field of genomic medicine.

The University of California San Francisco said in an interview it is working on a new project with Silicon Valley start-up Syapse. Using Syapse's technology, it wants to build a store of genetic data about various metastatic cancer cases with patients' consent, theoretically sharpening treatment or even coming up with new therapies.

The application of genomics to cancer care is a rapidly developing field. Companies such as Foundation Medicine Inc are taking specimens from tumor cells to find changes or vulnerabilities that can inform care.

But UCSF hopes its use of data analytics can set it apart: Few hospitals are setting aside resources for a database of genetic and medical information that a panel of experts can analyze as part of routine care.

What is unique about UCSF's methods is that its medical school is sequencing DNA from tumors and taking blood samples to assess overall cancer risk, said Robert Nussbaum, the medical geneticist leading the project. Nussbaum said he hopes to use the data to identify patients for targeted therapy as opposed to the usual chemotherapy.

Read full original article: California hospital explores genetics-aided cancer treatment