Understanding genetics crucial for precision medicine, personalized cancer treatment

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion and analysis.

Ben Gilmer chokes up when talking about walking his daughter down the aisle last May. He wasn't sure he'd be alive to make that stroll after hearing in 2014 he had stage IV non-small cell lung cancer.

"My wife, Donna, and I were stunned, because I've never smoked and I've always been active," says Ben, who turned 72 in November. "I owe my life to the experimental drug I'm taking."

"Ben and I were adamant about wanting the very latest treatments, even if they were experimental," Donna says. "Patients and caregivers need to feel empowered to be part of their care."

Experts estimate humans have 19,000 genes. Scientists are learning as much as they can about genes and genetic abnormalities.

"With advances in genomic testing, we know there are a vast number of genetic abnormalities, but we've learned not all abnormalities are equal. Some cause problems. Others don't appear to," Meric-Bernstam explains.

It's not uncommon for cancer patients to have several abnormalities.

"Patients can get genomic testing that shows a list of genetic abnormalities, but that's only helpful if something can be done with that information," Meric-Bernstam says.

An oncologist with a list of a patient's genetic alterations has a starting point.

Read full, original post: Genetics expertise helps make precision medicine a reality