# **The Southampton Press**

February 11, 2021

# CANCER JOURNEYS

A Twice-a-month column from Fighting Chance Novel Attack on Lung Cancer



#### Diagnosis Emotional Impact

Treatment/Side Effects

Survivorship

**Patient Stories** 

## The AMGEN Breakthrough

About 140,000 Americans died of lung cancer last year, accounting for 25% of all cancer-related deaths. At Fighting Chance we have counseled many lung cancer patients over the past 18 years and they often have asked: "When will there be a breakthrough in treatment of the disease?

Within the last week, the drug company AMGEN sounded a note of extraordinary hope with the announcement of its new drug, Sotorasib.

Like many new drugs, Sotorasib is only effective on a subset of patients--namely the 13% of lung cancer patients who carry a genetic defect known as KRAS G12C.

AMGEN also announced completion of a Phase 2 clinical trial with 129 participants, in which 60% of them saw tumor shrinkage even though everyone in the trial already had been treated (unsuccessfully) with chemo and/or an immunotherapy.

#### The KRAS Target

The AMGEN announcement also is important because their new drug attacks the KRAS protein which emerges from the mutated KRAS gene. The rogue protein hijacks an important "on/off" cellular switch --sending a signal to the cell triggering unstoppable and uncontrolled growth. Before long there is a massive cell proliferation--a hallmark of cancer.

#### The "Undruggable"

Science has fixated on attacking KRAS for 40 years, because it is present, in one way or another, in about 40% of all cancer cases.



But an attack on most cancer-causing complexes requires that scientists find a "binding site"--a niche into which their anti-cancer drug can be inserted. The challenge is akin to a climber searching for a toehold on a smooth rock surface.

Simply stated, KRAS was considered "undruggable" until AMGEN found a niche for Sotorasib, which proved lethal to the cancer causing agent.

## Sotorasib is Available on the East End

The final step before Sotorasib can be FDA approved for widespread public use is completion of further trials involving hundreds of patients. If genetic testing says you are among the 13% of lung cancer patients, for whom the drug could have efficacy--then consider joining a trial. One is being conducted on the East End (at NY Cancer & Blood) and another further up Island at a Northwell facility.

As one of the senior executives of AMGEN recently said:

"Targeting KRAS has been a <u>40 year quest</u> by scientists . . . and we are extremely proud that "Sotorasib has successfully demonstrated rapid, deep and durable responses."

Fighting Chance has offices in Sag Harbor and at the Phillips Family Cancer Center in Southampton.

For more details, or information please call 631 725 4646. Visit our website at www.fightingchance.org