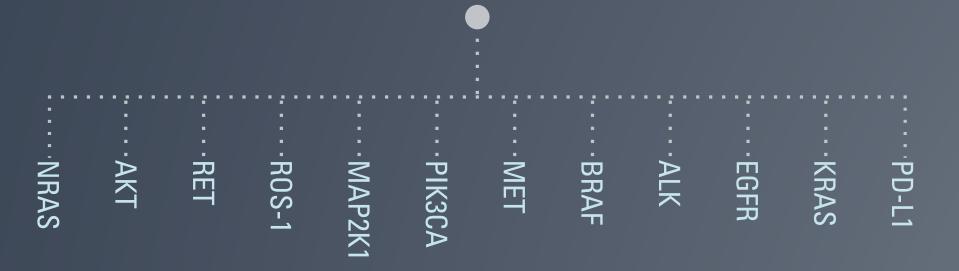
## SCIENCE HAS ADVANCED<sup>1</sup>

Scientific discoveries have identified several types of lung cancer, many of which can be identified using biomarkers

LUNG CANCER BIOMARKERS

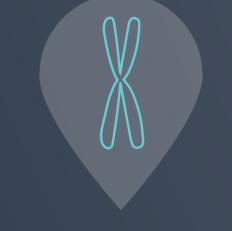


4

# BIOMARKERS CAN BE MEASURED<sup>4</sup>

There are three main biomarker tests:

### CHROMOSOME



Identify
abnormal
changes within
chromosomes

## GENETIC



Search for extra gene copies, missing genes, or incorrectly placed genes



**BIOCHEMICAL** 

Determine if there are too many abnormal proteins or if they are overactive

## BIOMARKERS MATTER<sup>3</sup>

They can help doctors:



DETECT & DIAGNOSE



INFORM on prognosis



 PREDICT which treatments may work best for a patient



MONITOR response to treatment in some cancers

5 IMPORTANT
FACTS ABOUT
LUNG CANCER
BIOMARKERS

# DIFFERENT PEOPLE'S TUMORS HAVE DIFFERENT BIOMARKERS<sup>1,2,3</sup>

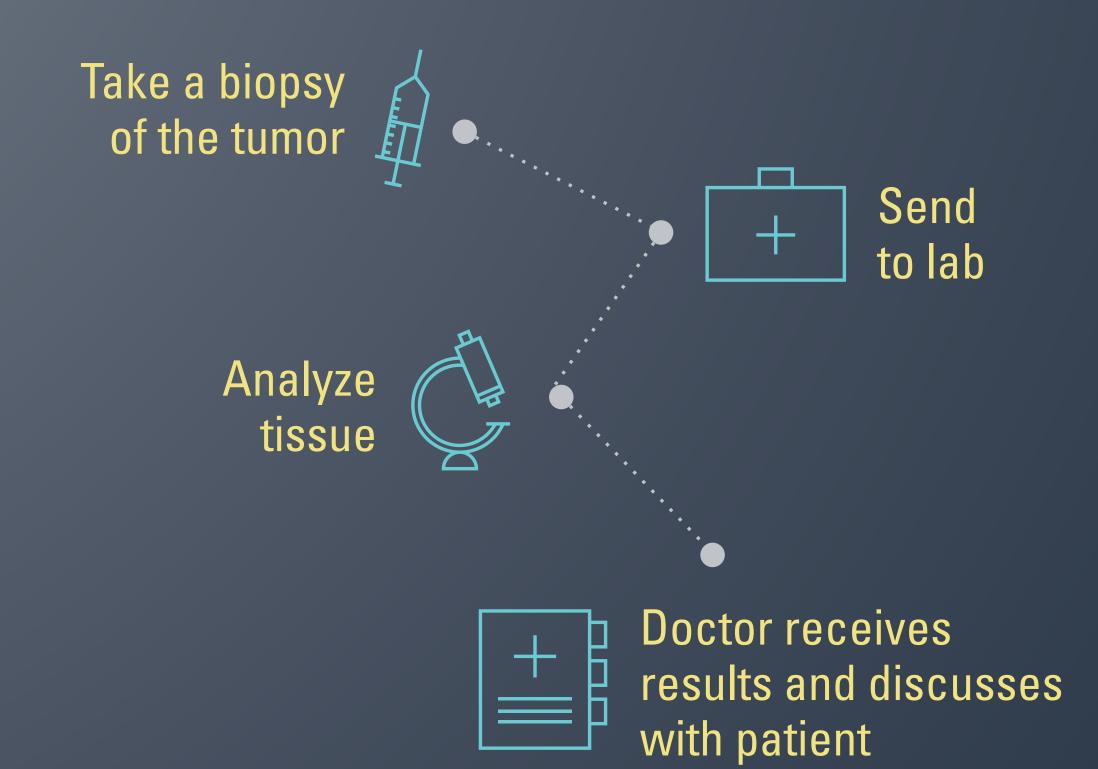
Biomarkers commonly found in non-small cell lung cancer:

ALK EGFR

KRAS PD-L1

5

# THERE ARE FOUR KEY STEPS WHEN TESTING FOR BIOMARKERS<sup>3</sup>



### **References:**

- 1. Korpanty, G.I., & al. 2014. Frontiers in oncology. Biomarkers that currently affect clinical practice in lung cancer: EGFR, ALK, MET, ROS-1, and KRAS.
- 2. Garon, Edward B. & al. N Engl J Med 2015. Pembrolizumab for the treatment of non-small-cell lung cancer; 372:2018-2028
- 3. National Cancer Institute, 2015. Tumor Markers. What are tumor markers? Available online: http://www.cancer.gov/about-cancer/diagnosis-staging/diagnosis/tumor-markers-fact-sheet#q1 (Accessed March 2016)
- 4. National Comprehensive Cancer Network. Patients and caregivers resources: Biomarker testing. Available online: http://www.nccn.org/patients/resources/life\_with\_cancer/treatment/biomarker\_testing.aspx (Accessed March 2016)
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