## Why is this study important?



Some people with non-small cell lung cancer (NSCLC) have tumors that can be removed surgically. However, the cancer often comes back, ultimately leading to death



Taking chemotherapy (chemo) before or after surgery can reduce the risk of cancer returning and help people live longer after surgery. However, this only works in some people



Nivolumab (NIVO) is an immunotherapy; it works by helping a person's immune system attack cancer cells



The goal of the CheckMate 816 study was to find out if NIVO plus chemo works better than chemo alone when taken before surgery for NSCLC

179 people NIVO plus chemo group

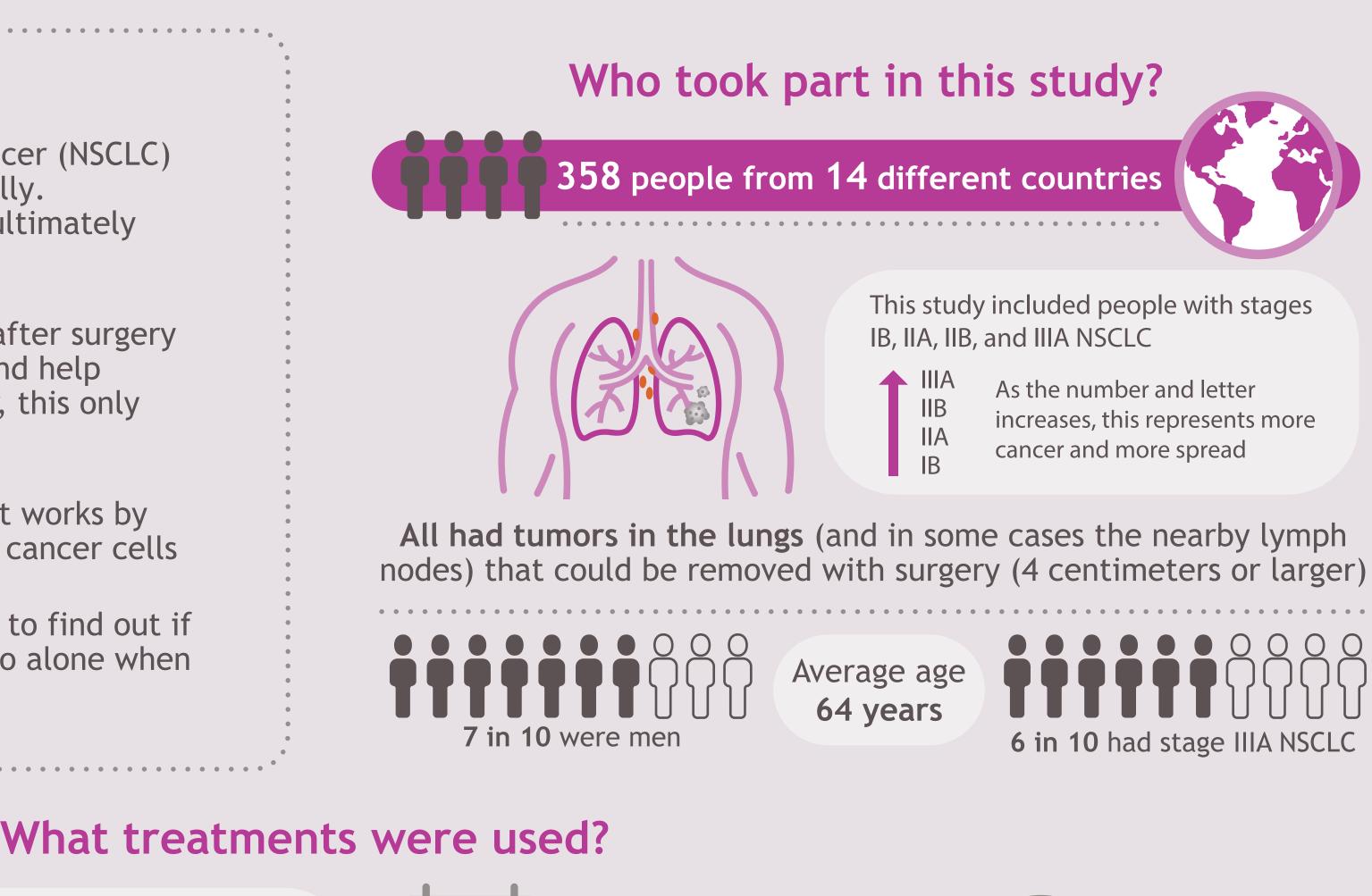


The researchers created 2 groups



179 people chemo alone group

## CheckMate 816 study: nivolumab plus chemotherapy given before surgery for non-small cell lung cancer





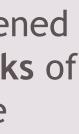
Each treatment was taken once every 3 weeks for a total of **3 times** 



Surgery happened within 6 weeks of the third dose







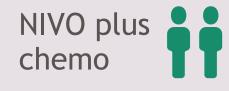
## CheckMate 816 study: nivolumab plus chemotherapy given before surgery for non-small cell lung cancer



Event-free survival (EFS) How long did each person live without the cancer coming back?

Pathological complete response (pCR) After surgery, were there any cancer cells remaining in the tissue samples from the lungs and lymph nodes?

Most people went on to have surgery in both the NIVO plus chemo and chemo groups





Chemo

7-8 in 10

People who took NIVO plus chemo lived longer without the cancer coming back (EFS)

People who were alive at 2 years without the cancer coming back

..... NIVO plus Chemo chemo 4-5 in 10 Median event-free survival months months People with stage IIIA NSCLC had the greatest Men and women had benefit from NIVO plus chemo similar results

What did the researchers look at?



**Overall survival** How long did each person live after starting treatment?

What side effects did people have?

## What were the main results?

More people who took NIVO plus chemo had no remaining cancer cells in tissue samples from the lungs and lymph nodes after surgery (pCR) compared with those who took chemo alone

```
NIVO plus
chemo
         2-3 in 10
```

8 in 10

Chemo

Chemo

0000Fewer than 1 in 10

7 in 10

People who took NIVO plus chemo and had a pCR after surgery lived longer without the cancer coming back

Overall, more people who took NIVO plus chemo were alive 2 years after starting treatment compared with those who took chemo alone

NIVO plus 💄 💄 💄 chemo









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# CheckMate 816 study: nivolumab plus chemotherapy given before surgery for non-small cell lung cancer



Most side effects from treatment were mild or moderate



About 1 in 10 people in each group had a serious side effect from treatment

A serious side effect is one that is life-threatening, requires going to the hospital, or results in death

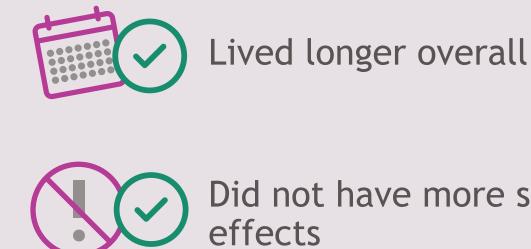
In CheckMate 816, people who took NIVO plus chemo instead of chemo alone before their surgery:



Lived longer without the cancer coming back



Were more likely to have lungs and lymph nodes clear of cancer cells



What were the side effects?



Some people had typical side effects from surgery, mostly mild or moderate

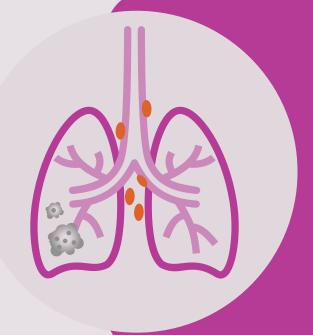
Chemo

Few people had severe or life-threatening side effects from surgery

NIVO plus chemo

What do these findings mean?

Did not have more side



NIVO plus chemo is now approved in the United States as a treatment for adults with NSCLC whose tumors are 4 centimeters or larger or have cancer cells inside nearby lymph nodes



