Introduction to Lung Cancer.

Dr.Hemda Chen

PharmD

Chief Medical Officer at Sivan Innovation

Lung cancer is a relatively common worldwide, as similar to other cancer, normal cells in the lungs change into abnormal cells and grow out of control

Common symptoms of lung cancer can include:

●Cough

●Trouble breathing, or wheezing

●Spitting or coughing up blood

●Chest pain that can be dull, sharp, or stabbing

●Hoarse voice

●Headache and swelling of the face, arms, or neck

Among lung cancers non-small cell lung cancer is the most common type of lung cancer. It does not usually grow as fast as another type of lung cancer called small cell lung cancer.

After diagnosis of the type of lung cancer you have your doctor will also determin its staging

Staging is important in order to decide what is the best treatment and other medical decisions might be impact by staging

●In stage 1, the lung cancer is in either the left or right lung. It has not spread outside the lung or to any lymph nodes. Stage 1 cancers are usually small.

●In stage 2, the cancer has spread to other parts of the lung, such as lymph nodes in the lung or the lining around the lung.

●In stage 3, the cancer might be large. Or it might have spread to lymph nodes in the middle of the chest, between the left and right lungs.

●In stage 4, the cancer has spread to the other lung or to other parts of the body

The right treatment for you will depend, in part, on the stage of your lung cancer. Your treatment will also depend on the type of lung cancer you have, your age, and your other health problems.

Treatment might be consisted of surgery, radiation, chemotherapy, immunotherapy or targeted therapy

the treatment for lung cancer depends upon tumor histology (small cell versus non-small cell), the staging and other individualized factors

Stage I plus stage II disease accounts for approximately 30 percent of patients with Surgery is the standard treatment for most of the patients with clinical stage I and II NSCLC. Then after an adjuvant chemotherapy is often recommended for selected patients. Otherwise, and in cases operation is not an option, radiation therapy could also be considered

Beside this approach, today there is a better understanding of the internal biological process of the cancer and we know to better characterize the cancer itself and if possible to give the best treatment accordingly, for example – there are mutations that for them there are specific treatments that target the mutation and works directly against them

Some other patients have no specific mutation but a high level of programmed death ligand 1 (PD-L1) expression for those immunotherapies is available as first-line treatment.

Eventually the treatment will be determined according to the cancer characteristic and staging and may be a combination of several options as for example: chemotherapy and immunotherapy

During the pathway and the journey of treatment it is important that patient will be in close touch with the medical team in order to supply this need a Patient-reported outcomes tools are crucial to preserve the constant touch with the team and to diagnose any abnormalities on time

Electronic PRO tools have been shown to improve clinical outcomes when paired with oncologic treatments. Moovcare is a web-mediated algorithm where patients enter symptom data through a password-secure web platform. The data is filtered by an algorithm that allows oncologist notification of a symptom score predictive of post cancer recurrence and other related complications. Initial trials of Moovcare in lung cancer population have found

1) earlier detection of recurrent disease in lung cancer patients,

2) improved performance status at time of recurrence,

3) reduction in medical imaging costs, and most importantly,

4) improved overall survival in the patients using the web surveillance program (Denis 2016).

Moovcare was developed and tested in France, where it is now approved for lung cancer patients.

This life saving concept is now offered for any lung cancer patients around the globe

We assume that early detection of complications and noticing them on time will improve patient's QoL, will permit earlier treatment and better outcomes and might even save life in case of life-threatening complication and relapse.