1. How does ErbB Family signalling work?
Signals from receptors of the ErbB Family tell cells to perform normal cell functions, such as multiply or change.

Ligand binds to one receptor
Two receptors pair up
Signalling pathway activated

Cell membrane
Receptor monomer

 Multiply
Change

Ligand

Activation of ErbB receptors in a normal cell

Dysregulated activation of ErbB signalling in cancer cells
The genes coding for ErbB receptors in cancer cells can mutate and/or amplify which leads to a disruption in the normal signalling process. This results in a higher rate of cell division and tumour growth.

Mutations and/or amplification
Increased number of receptors on cell surface

Continuous signalling
Unregulated cell growth

The ErbB Family of receptors are often dysregulated or mutated in many cancers (including lung, breast, head and neck, and colorectal cancers).

Afatinib blocks the signalling of all ErbB Family receptors, therefore interfering with key pathways involved in cell growth.

2. Afatinib mode of action - targeting the ErbB Family

Afatinib is approved in a number of markets, including the EU, Japan, Taiwan and Canada under the brand name Giotrif®, in the US under the brand name Gilotrif® and in India under the brand name Xovoltib® for use in patients with distinct types of EGFR mutation-positive NSCLC. Afatinib is also approved in Europe, US and other markets for the treatment of patients with advanced squamous cell carcinoma (SqCC) of the lung whose disease has progressed (on or after) treatment with platinum-based chemotherapy.

Afatinib is under regulatory review by health authorities in other countries worldwide.

Afsatinib* is approved for the first-line treatment of patients with EGFR mutation-positive non-small cell lung cancer (NSCLC) (under the brand names: Giotrif®/ Gilotrif®).

The prevalence of EGFR mutations in lung cancer is approximately
40-50% among Asians3-6 and
10-15% among Caucasians7,8

Types of EGFR mutations in lung cancer9,10

Afatinib is also approved in Europe, US and other markets for the treatment of patients with advanced squamous cell carcinoma (SqCC) of the lung whose disease has progressed (on or after) treatment with platinum-based chemotherapy. Afatinib is under regulatory review by health authorities in other countries worldwide.

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2. BI Data on File.