WHAT IS ERBITUX?

Erbitux® (cetuximab) is an epidermal growth factor receptor (EGFR) monoclonal antibody (mAb) approved to treat two different types of cancer: RAS wild-type metastatic colorectal cancer (mCRC) and squamous cell cancer of the head and neck (SCCHN).¹

PROGNOSIS

The active substance in Erbitux, cetuximab, is a monoclonal antibody. A monoclonal antibody is a type of protein that has been designed to recognize and attach to a specific structure (called an antigen) in the body. Erbitux has been designed to attach to the EGFR, which can be found on the surface of some tumor cells.¹ One of the mechanisms of action is considered to be antibody-dependent cell-mediated cytotoxicity (ADCC).¹

The EGFR receptor is one of the most important pathways that regulate the growth, survival and increase of cells. Abnormal activity of the EGFR has been shown to play a key role in the development and growth of tumor cells (Figure 1).²

The EGFR is involved in switching on genes called RAS that are involved in the growth of cells; Erbitux works by binding to the EGFR. As a result of this binding, the cancer cell can no longer receive the messages it needs for growth, progression and metastasis (Figure 2).¹

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ERBITUX IN mCRC

To date, around 740,000 patients have been treated with Erbitux around the world; 480,000 patients with mCRC.

DISEASE BACKGROUND
Colorectal cancer (CRC) is a disease in which healthy cells in the lining of the colon or rectum change and grow uncontrollably, forming a mass called a tumor.

Advanced-stage disease (Stage IV) is known as metastatic CRC (mCRC), where the cancer has spread (metastasized) beyond the colon or rectum to other parts of the body, such as the liver or lungs, via the bloodstream and lymph nodes in the colon.

RAS STATUS AND BIOMARKER TESTING
A RAS biomarker test is required to identify RAS tumor status prior to initiating treatment with Erbitux in mCRC.

INDICATION
In the EU, Erbitux is indicated for the treatment of patients with EGFR-expressing, RAS wild-type mCRC:
- in combination with irinotecan-based chemotherapy
- in first-line therapy in combination with FOLFOX
- as a single agent in patients who have failed oxaliplatin- and irinotecan-based therapy and who are intolerant to irinotecan

The combination of Erbitux with oxaliplatin-containing chemotherapy is contraindicated for patients with mutant RAS mCRC or for those patients where RAS status is unknown.

ADMINISTRATION/DURATION OF TREATMENT
In mCRC, Erbitux is usually given as an intravenous infusion once a week. The initial dose is 400 mg Erbitux per m² body surface area. All subsequent weekly doses are 250 mg Erbitux per m² each. It is recommended that Erbitux treatment be continued until progression of the underlying disease.

SAFETY AND TOLERABILITY
The most characteristic adverse events are skin reactions, which occur in more than 80% of patients, hypomagnesemia, which occurs in more than 10% of patients and infusion-related reactions, which occur with mild to moderate symptoms in more than 10% of patients and with severe symptoms in more than 1% of patients.
DISEASE BACKGROUND

Head and neck (H&N) cancer is a disease that occurs in the cells that line tissues or organs in the head and neck region. This can include the oral cavity, throat (pharynx), voice box (larynx), nasal cavity and salivary glands. More than 90% of H&N cancers begin in the flat squamous cells that line surfaces such as the mouth, nose and throat. This is called squamous cell carcinoma of the head and neck (SCCHN).

RAS STATUS AND BIOMARKER TESTING

Biomarker testing is not used in SCCHN as RAS mutations are rare (found in <5% of SCCHN patients).[^8]

ADMINISTRATION/ DURATION OF TREATMENT

In SCCHN, Erbitux is usually given as an intravenous infusion once a week. In locally advanced disease, Erbitux is given in combination with radiation therapy from one week before the start of therapy until the end of the radiotherapy period. The initial dose is 400 mg Erbitux per m² body surface area. All subsequent weekly doses are 250 mg Erbitux per m² each. In recurrent and/or metastatic disease, it is recommended that Erbitux treatment is continued until progression of the underlying disease.[^1]

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