

Pharmaceuticals Europe

GSK Oncology building on today's
successes to make a difference tomorrow



Fighting cancer

Cancer is the leading cause of death worldwide. The World Health Organization estimates that of the 58 million deaths last year, 7.6 million were from cancer which is why GSK is researching new cancer treatments to attack the disease on several fronts.

Our commitment

Our commitment is to develop innovative products faster than any other company and to continue finding new ways to help people receive the therapeutic, preventative and supportive care they need for a better and longer life.

Cancer treatments – past and present

For almost a century, chemotherapies have been the mainstay of cancer treatment, and GSK has discovered and developed many of these medicines.

Chemotherapies have played a significant role in improving survival in cancer patients. More recently research has suggested, however, that treatments which specifically target cancer cells (targeted agents) may offer improved efficacy, and the possibility of reduced side-effects.

GSK's product pipeline includes several targeted agents and we are committed to becoming an industry leader for research and development in this area. The future of cancer treatment will undoubtedly involve various types of treatments – and as an emerging leader in oncology research, GSK is focused on bringing effective combinations of these treatments to patients.

Supportive care

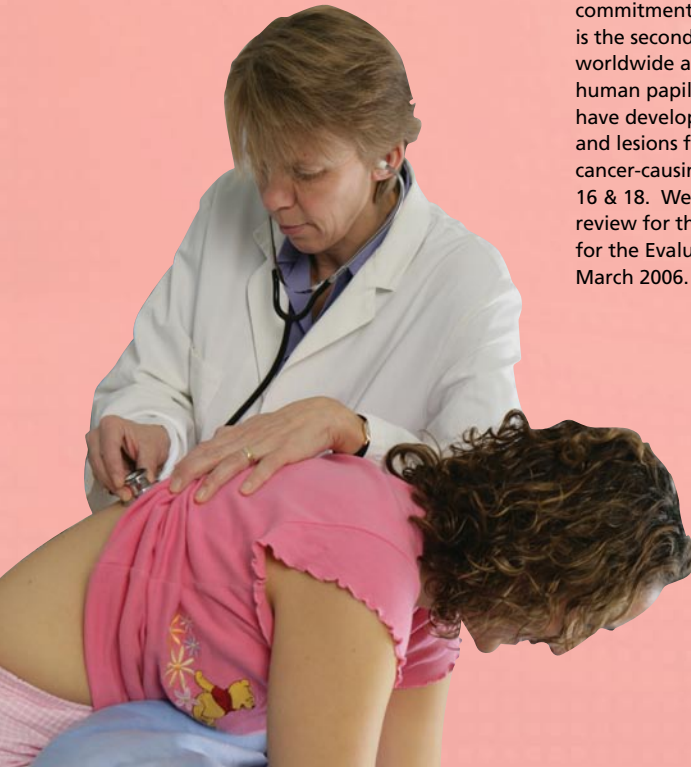
The impact of cancer and its treatment can have unpleasant side-effects on patients. It is therefore equally important to ensure that we research supportive care in oncology so that patients are able to continue treatment. GSK has several agents for supportive care available or in later stages of development, including therapies designed to reduce chemotherapy-induced nausea and vomiting.

Reducing the risk of cancer

Developing medicines that reduce the risk of cancer is one of our greatest defences against the disease. In order to do this GSK is investing in research to discover the underlying causes of certain cancers.

Cervical and prostate cancers

Our most recent research into cervical and prostate cancers demonstrates GSK's long term commitment to fighting cancer. Cervical cancer is the second most common cancer in women worldwide and is caused by certain types of human papillomavirus (HPV). Our researchers have developed a vaccine to prevent infection and lesions from the two most prevalent cancer-causing types of HPV, specifically HPV 16 & 18. We submitted a marketing application review for this vaccine to the European Agency for the Evaluation of Medicinal Products in March 2006.





Research into prostate cancer has shed light on the role that male hormones play in stimulating the growth of benign and malignant prostate cancer cells. With this knowledge, interest has increased in drugs that could lower male hormone levels, particularly DHT (dihydrotestosterone), the main male hormone involved in stimulating prostate growth.

We are applying this knowledge about male hormones to our research in prostate cancer. Studies are being carried out with an existing GSK product – for the treatment of benign prostatic hypertrophy – that could be effective in preventing prostate cancer.

New developments in cancer therapy

A new development in cancer therapy is with drugs that can simultaneously inhibit the actions of two different types of cancer cell receptors. Dual inhibitors, small enough to enter cancer cells, interfere with the receptors from inside the cell and can be combined with chemotherapy. Dual inhibition of the EdbB1 and ErbB2 receptors may lead to longer cancer free intervals. This treatment strategy is also being evaluated in late and early stage cancers in a variety of other cancers.

Tyverb® is a small molecule once-daily oral medication for the treatment of patients with advanced metastatic breast cancer, one of the most aggressive forms of breast cancer. It has been approved in the US and will soon be approved in Europe.

GSK scientists are at the forefront of cancer research and development and aim to understand which patients will respond to various cancer treatment strategies. This illustrates our ongoing commitment to improve outcomes for cancer patients.

Antigens and the immune response

Foreign substances in the body, known as antigens, prompt an immune response. The immune system of the body, however, may not be able to naturally eradicate cancer cells and so researchers have been developing medicines that allow the immune system to discriminate between cancer cells and normal cells. One approach, called antigen-specific cancer immunotherapeutics (ASCIs) may improve targeting of the right tumour antigens. It uses immune stimulants to potentially obtain the most potent immune response. GSK is developing certain ASCIs that may reduce tumours recurring.





Helping lifestyle change

Since 2000, a part of GSK's commitment to improve the quality of human life has been to provide people with 'stop smoking' aids, either as a prescription or non-prescription treatment, to help them control this risk-increasing behaviour.



Key facts

- Our mission is to improve the quality of human life by enabling people to do more, feel better and live longer
- 15,000 employees are actively involved in the discovery of new medicines
- We spend eight million Euros every day on research and development – €435,000 per hour
- We screen about 65 million compounds every year in our search for new medicines.



For more information please see gsk.com/infocus/cancer-treatments