

## ***Introduction***

Asthma, from the Greek Ἀσθμα (ásthma), meaning gasp, is a common chronic inflammatory disease of the airways characterized by variable and recurring symptoms, reversible airflow obstruction, and bronchospasm.( *NHLBI , 2007*).

Bronchial asthma is prevalent worldwide, especially in developed countries where its prevalence is increasing to epidemic proportions (*Chen and Shi, 2006*).

The prevalence of asthma has increased significantly since the 1970s., as of 2009, 300 million people were affected worldwide., In 2009 asthma caused 250,000 deaths, although generally with treatment, prognosis is good.(*GINA , 2009*).

Total prevalence is estimated to be 7.2% of the world's population (6% in adults, 10% in children). There can be, however, wide variation between the prevalence of asthma in different countries and even within different areas of a country (*Drazen et al, 2006*).

In the United States of America, as an example, about 22 million persons have asthma; nearly 6 millions of them are children (*NIH/NHLBI, 2008*).

In Egypt, 23.2 % of wheezy infants were proved to be real asthmatics. Asthma prevalence among school children aged 5-15 years

was found to be 8.2%, half of which are graded as moderate and severe (*El Lawindi , et al., 2003*).

Asthma is sometimes diagnosed based on the history and physical examination , Recurrent episodes of coughing or wheezing are suggestive, especially if they follow exposure to asthma triggers and respond to asthma medication, pulmonary function tests can confirm the diagnosis if necessary (*Draten, 2000*) .

The treatment of pediatric asthma require balancing the efficacy and safety of various asthma medication, facilitating patient and family education, and developing a supportive treatment network to allow the affected child and his family to have life style as normal as possible (*Dagoye et al , 2003*).

**CD20** is a non-glycosylated phosphoprotein expressed on the surface of all mature B-cells.(**Bona, et al,1995**).

CD20 Structure Facilitates B-Cell Targeting and Destruction by Monoclonal Antibodies (**Cragg, et al,2005**).

Removal of pathogenic B lymphocytes by depletion with monoclonal antibodies (mAbs) or deprivation of B-cell survival factors has demonstrated clinical benefit in both oncologic and immunologicdiseases. (**Lin et al., 2007**).