# lnterview Prevenar ... A Vaccine by Wyeth The first and only vaccine to help prevent invasive pneumococcal disease

Pneumococcal disease is a leading cause of serious illness in children and adults throughout the world. Pneumococcal disease is believed to result in 1 million deaths worldwide each year, especially affecting young Dr. Mohamed Samir Dr. Baher Massoud children in developing



countries. Prevenar, discovered and developed by Wyeth Vaccines, is the first and only vaccine to help prevent invasive pneumococcal disease, including meningitis, bacteremia, sepsis and bacteremic pneumonia in Children younger than two years of age. Immunization programmes targeted at preventing pneumococcal infections have led to a dramatic decrease in morbidity and mortality rates and have become one of today's most successful and cost-effective public health strategies.

"Health and Nutrition" magazine met Dr. Baher Massoud and Dr. Mohamed Samir to shed some light on the issue ...

#### Who is the culprit behind pneumococcal diseases?

Pneumococcal disease describes a group of illnesses caused by the bacterium Streptococcus pneumoniae, also known as pnuemococcus. Invasive pneumococcal diseases include bacteremia (bacterial infection of the blood), meningitis (bacterial infection of the lining of the spinal cord and brain), and bacteremic pneumonia (an infection of the lung). Many people, including up to 60% of children, carry pneumococcal bacteria in the nose and throat, which can be easily transmitted through coughing, sneezing and close interaction.

### How does Prevenar help against diseases?

Prevenar helps protect against seven serotypes (strains) of S. pneumoniae: 4, 6B, 9V, 14, 18C, 19F, 23F. In addition, Prevenar may offer protection against up to 80 percent of antibiotic-resistant strains of S. pneumoniae. Thus, most of the antibiotic-resistant strains of S. pneumoniae are included in the seven serotypes in Prevenar.

As conjugate vaccine, α Prevenar provides protection against invasive pneumococcal disease that was previously unavailable to infants and young children by stimulating the immune system and creating immune system memory.

### What about the efficacy of Prevenar?

Prevenar has shown good immunogenicity and efficacy. In a clinical study of more than 37,000 infants, Prevenar showed an efficacy rate of 97.4 percent in preventing serotypespecific invasive pneumococcal infections in infants who were fully vaccinated and a rate of 89.1 percent for all cases of invasive pneumococcal disease, regardless of serogroup, in children who had received one or more doses.

In addition, Prevenar may also have an impact on ear infections, a common cause of illness during the first two years of life. Prevenar reduced vaccine servitype cases of acute otitis media (AOM) by 57 percent and all cases of culture-confirmed pneumococcal AOM by 34 percent.

### When Prevenar should be administered?

Infants under the age of 6 months take three doses, each of 0.5 ml. The first dose is usually given at two months of age, with an interval of at least one month between doses. A fourth dose is recommended in the second year of life, the recommended schedule is 2,4,6, 12-23 months of age.

## Lastly where is it available?

Prevenar is now available in more than 33 countries, including Argentina, Australia, Austria, Barbados, Bermuda, Brazil, Canada, Chile. Columbia, Curacao, Denmark, Dominican Republic, Finland, France, Germany, Greece, Italy, Korea, Mexico, the Netherlands, Peru, Portugal, Spain, Sweden, Switzerland, Qatar, Trinidad/Tobago, the United Arab Emirates, United Kingdom, the United States, Kuwait, Bahrain, Ŏman and Jordan.