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### **Burden of the Pneumococcal Infection in the Russian Federation**

Pneumococcal disease vaccination with the protein conjugate vaccine which started in the USA 11 years ago is rapidly expanding its area. Having been introduced in the vaccination calendars of most economically developed countries, it has reduced the number of cases of both severe, invasive forms of pneumococcal disease, and less severe forms – pneumoniae and acute otitis media. Community immunity created by the cohort immunization of children favored the pneumococcus circulation reduction among the population and the reduction of morbidity and mortality rates among the whole population, especially the elderly. Several figures of the immunological efficacy are given in the article by N.L. Chernova et al.

The vaccine was successfully tested in the number of developing countries as well, reducing both morbidity and mortality rates of the children. It allowed WHO to recommend its introduction in all countries.

Septivalent conjugate vaccine Prevenar 7 has also been in Russia for three years, experience of its application has been gathered. A 13-valent vaccine Prevenar 13 replacing Prevenar 7 and covering a range of new, epidemiologically important for Russia pneumococcus serotypes (including serotypes 1, 3 and 19-A) is also registered. The Ministry of Health of the Russian Federation is going to introduce it to the vaccination calendar in 2015.

Prevenar 7 and Prevenar 13 vaccines are intended for children's vaccination from 2 months of age – three inoculations with the interval of 4-6 weeks and revaccination at the age of 12-15 months. Vaccines are injected together with other “children's” vaccines prescribed for their age (DPT, IPV, HBV, Hib). Two injections are enough for the 1-2 years old children, for the 2-5 years old – one injection.

The appearance of a new vaccine puts a question on its reactogenicity and safety, especially when the vaccine is polyvalent and is injected together with other vaccines. Although the other countries' data are reassuring in this respect, it is always important to know from one's own experience, moreover, the reaction to the combined introduction of Prevenar and domestic vaccines – first of all, the whole cell DPT – cannot be evaluated anywhere else.

The article being published by N.L. Chernova et al. cites data on low reactogenicity of Prevenar 7 vaccine among 196 high-risk group children older than 1 year of age. We have requested

information from a range of the other regions which have the experience of this vaccine application – the experience is brief due to financial hardship. However, the received information proves the data given in the article. Thus, in Krasnoyarsk, where ca. 3500 high-risk group children (prematurely born, of HIV positive mothers, with a chronic pathology etc.) are vaccinated, including children younger than 1 year of age, there have been no complications or strong reactions. The same data come from Ivanovo, where children with nervous system impairment have been vaccinated. Similar data were received from Novosibirsk, Primorye Territory, Saint Petersburg.

We cannot evaluate the immunological efficacy without any doubt before the cohort immunization introduction in Russia, but the given data show its safety of application together with the vaccines registered in Russia.