INTRODUCTION.
Addressing health issues and preventing the proliferation of diseases has become the centerpiece of government programs to improve quality of life and reduce health-related costs since prevention is always cheaper than treatment. However, granting worldwide access to vaccines is a complicated process. Vaccine production worldwide is undertaken by a relatively small number of companies mainly located in developed countries. For new vaccines, the initial research approaches to the final licensing stages may take up to 15 years with associated costs in the order of $100 and $300 million. Because of the consequent high prices, the availability of new vaccines in most cases may be initially exclusive to people in developed countries. Based on recent experience with the A/H1N1/2009 influenza virus pandemic, it is now clear that worldwide vaccine production capacity may be insufficient to cover global demand. With this in mind, it is of great importance to design and establish easy-to-implement and cost-effective vaccine production facilities around the world to aid developing countries in covering, at least partially, their own vaccination needs. Fortunately in this context, the development of DNA-based vaccines may provide a solution to address some of these issues even though the technology is still an emerging one.

CLASSIFICATION OF VACCINES.
Vaccines for viral diseases can be classified into three main groups or generations: live avirulent, killed or subunit viral vaccines (first generation), recombinant vaccines (second generation) and DNA vaccines (third generation), each with their own advantages and disadvantages. Immunophylaxis with inactivated viruses is still the most common approach to preventing viral infections. However, several vaccine production companies around the world are starting to produce fractionated or viral subunit vaccines in wild viruses is still the most common approach to preventing viral infections. However, several vaccine production companies around the world are starting to produce fractionated or viral subunit vaccines in wild type or genetically modified organisms and a great number of prototypes are still in the stage of research and development. Figure 1 presents the main characteristics of each of the vaccine generations.

CONCLUDING REMARKS.
• The introduction of DNA vaccines could present great benefits to those developing countries seeking to provide better health services to their citizens but the main restriction is still the lack of knowledge of the secondary effects that these vaccines could have on humans.
• It is believed that great advances will be made in the following years with the enormous promises that this technology represents to healthcare.
• Great efforts should also be made in finding mechanisms in which the transfer of the intellectual property of DNA vaccine development and production between the owners and the interested governments, institutions and companies is simplified to guarantee access to people around the world regardless of the economical situation of the regions they live in.

REFERENCES.

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