# New ways to socialize knowledge about a product: School of advanced studies of Heberprot-P



🗷 Sonia Negrín, Raúl A Valdés, Wilfredo Días, Miriela Gil, Ernesto López Mola

Center de Ingeniería Genética y Biotecnología (CIGB) Avenue 31 / 158 y 190, P.O. Box 6162, Cubanacán, Playa, La Havana 10600, Cuba E-mail:sonia.negrin@ciqb.edu.cu

## School products: Heberprot-P

At present, the biggest pharmaceutical industries worldwide invest extraordinary sums not only creating and developing cognitive elements related to obtaining and selling products [1-3]; but also searching for different ways and forms of structuring this knowledge to guarantee that clients, producers, traders, and salesmen have a close and deep knowledge about the product basic features, its modes and mechanisms of action, studies achieved, benefits, adverse effects, marketing projects, niches and others; to allow incorporating working steps, its use, as well as improving and influencing in the public perception.

In the global pharmaceutical industry, different specialists have been created on behalf of the enterprises to work with specific products to ensure its knowledge and marketing. According to their different names, they achieve particular interest and specific points about the developing or to be developed product in the centers. They have different names depending on the country or region, for example among the most known are the following:

- Medical representative or Sales representative and/or medical visitor (Venezuela)
- Pharmaceutical sales representative and/or medical visitor(Argentina and Uruguay)
  - Sanitary technical reporter (Europe)
  - Medical Repre (Mexico)
  - Medical Scout (USA) [4, 5]

According to the Cuban biotechnological product, Heberprot-P taken as the object of this approach, there is, as in every product of human creativity, an enormous wealth of knowledge particularly expressed in the obtained medication and its application, in which the organizational intelligence, intellectual abilities and all processes are involved intangible for its development; which represents knowledge, the result of joining the financial and intellectual resources of the Cuban biotechnology.

This integration aims at producing knowledge from the integral society needs which involve the products that cover the unmet human needs, as in the case of Heberprot-P [6], a product obtained in the center for Genetic Engineering and Biotechnology that contains the recombinant human epithermal growth factor which action consists in stimulating the proliferation of fibroblasts, keratinocytes and endothelial cells of blood vessels in ulcers formed in the diabetic foot because of the destruction of cell death and tissue necrosis.

Heberprot-P is aimed at healing deep and complex ulcers so stimulation is an essential el ement, as well as understanding mechanisms that enable this product to stimulate tissue granu lation and epithelization accelerated in these ulcers. Its application by parenteral administration through intra and perilesional routes constitutes a basis for its use; as well as its therapeutic properties and niche indications which are unique in the world; consequently makes this product an item of great interest and need for cognitive interest and promotion and marketing of their properties and prospects not only for medical and paramedic staff but also traders, merchants, students and the whole population.

The cognitive interest has been identified in five main ways: the medical and paramedical personnel, the medical students and other related specialties, product promoters, the public perception in the population, and the school about the product. The structure of a scientific school about a product is in itself a way of particular importance and relevance, which is based on strengths and novelty of the product, for example the School of Advanced Studies about Heberprot P.

Therefore, different programs become established based on training, reassess, marketing, promotion and spread out to enable in a flexible way, the cognitive objectives about a product and its use. Taking this into account, modular teaching is an important methodology item for structuring knowledge to reinforce modules according to particular interests of the receivers of knowledge.

According to the way related to medical and paramedical staff and students of medicine and related careers, it is feasible to conduct the socialization of knowledge through specific cycles of lectures with modular teaching of theoretical and practical classes, which has become into a repository combining from the most basic and molecular knowledge of the product to the most commercial ones referred to advantages and benefits of the it; not only endorsed by a particular company but also for the scientific and technical knowledge supported by researches, development and production of the medication based on quality system, its support in casuistry and the main indicators for its impact on use [8-10].

The way of promoters that can be grouped by technicians and professionals from different specialties, in such a way to make them multipliers of a product in different scenes, from the cognitive point of view, match up with the modular teaching adaptation of objectives which has been worked joining this practical teaching of the spread out by delivering lectures and the direct link to the treatment of patients in the most social aspects of it together with the doctor and the

The way of public perception aims at preparing the population to receive a product that directly affects their health indicators. Thus; it is feasible to use different platforms, among them, the television.

- 1. Web del visitador médico. http://www.apmcampus.com.ar Consultada: 16 de agosto 2009.
- 2. La revista digital del visitador médico. Disponible en: http://www.visitadormedico.com (consultado: 7 de septiembre de 2009).
- 3. El visitador médico Información. http://www.elvisitadormedico.com.ar (consultado: 24 de septiembre de 2009).
- 4. Confederación Española de Asociaciones Profesionales de Visitadores Médicos. Disponible en: http://www.ceatimef.com (consultado: 4 de julio de 2010).
- 5. Obra Social y Sindicato de Visitadores Médicos de la República Argentina. http:// www.aapmcapital.com.ar (consultado: 24 septiembre de 2009).
- 6. Herrera L, Negrín S, Valdés RA. El Polo Científico: una red de conocimiento. Nueva Empresa 2009;6:195-208.
- 7. Negrín S, Ayala M, Raíces MR, Cremata JR, Quintana M, Pérez GL, et al. Universidad para todos. Curso de introducción a la Biotecnología. Editorial Juventud Rebelde. La Habana, Cuba, 2003. 32 p.
- 8. Negrín S, Ayala M, Sosa A, Diosdado E, Herrera L, Berovides V, et al. Universidad para todos. Historia y repercusión de un descubrimiento. La estructura espacial de la molécula de ADN. Editorial Academia. La Habana, Cuba, 2003. 32 p.
- 9. Negrín S, Sosa A, Ayala M, Castellanos LR, Padrón GR, Fernández JR, et al. Universidad para Todos curso: Proyecto Genoma Humano. Editorial Academia. La Habana, Cuba, 2005. 32 p.
- 10. Negrín S, Sosa A, Ayala M, Fernández JR, Pujols M, González LJ, et al. Universidad para Todos: Biotecnología y adulto mayor. Editorial Academia. La Habana, Cuba, 2008. 32 p.

If the "method of the near" to the receiver is used, our linking items to socialize knowledge are diabetes, diabetic foot and biotechnology. The design of a deep and pleasant course combining lectures and all the emerging electronic media that is, audiovisuals, graphics and videos, allowing from the conceptual point of view of Biotechnology and identifying diabetes as a serious health problem for the world's population, to explain the molecular bases of this illness, its genetic and environmental factors that be identified, incidence of age structure; adding the development of biotechnology, its link to diabetes and the new generation products like Heberprot P, its characteristics and projects for future research on this field.

The way of the School of Advanced Studies about Heberprot-P provides its feasibility to be done in 4 times a year, is designed in a modular and face to face instruction, from 12 to 20 hours. It has a national and international nature in different languages Spanish, French and English.

The main objectives are directed about the characteristics of Heberprot-P according to:

- 1. To teach the personnel on issues related to Molecular Biology of its active ingredient
  - 2. To discuss the key features of the product
- 3. To analyze the pharmacological and toxicological results of its application.
- 4. To analyze clinical trials and study of different cases
- 5. Learn the techniques and principles for implementation the application of Heberprot-P

## Modules of the sas Heberprot-P

#### Module 1

Diabetes. Characteristics of this illness. Global Incidence of Diabetes. Heredity and Environment in Diabetes. The human epidermal growth factor EGF. Discovery of molecular features FCE FCE. Their

uses. Production technologies of recombinant EGF. Characteristics.

Heberprot-P. Molecular characteristics of P. Heberprot P Heberprot as biotech product. P. Heberprot Benefits Formulation and packaging. Presentation. Paradigm shift in the amputation with the use of P. Heberprot.

#### Module 2: preclinical and clinical trials.

- Preclinical trials with P. Heberprot Protocols. Toxicology and pharmacology studies.
- Clinical trials with P. Heberprot-P. Protocols of clinical trials. criteria of patient inclusion. Testing Phase I, II and III. Post-marketing trials
  - Case studies (analysis).

#### Module 3: Treatment with Heberprot-P

Heberprot-P: application in diabetic patients. Procedures of the treatment. Principles and Techniques used. Theoretical and practical demonstration about the application of the product. Analysis and discussion of results of the development of treatments and applications.

# Module 4: Displaying educational, interactive and informative videos about Heberprot P

Discuss and view multimedia, 3D simulation analysis, see video demonstrations of surgical operations in patients with different stages of evolution of the disease

The ways to socialize knowledge about this product allow not only to know it, increase sales and demands, influence in the research of its development, increase awareness and culture of the population, but also and mainly draw on knowledge in the context of the society and make the results of science and technology essential in raising life's quality of the population, a key objective of the Cuban biotechnology.

Received in August, 2010. Accepted for publication in September, 2010.