BỘ GIÁO DỤC VÀ ĐÀO TẠO TRƯỜNG ĐẠI HỌC DÂN LẬP HẢI PHÒNG



ISO 9001:2008

KHÓA LUẬN TỐT NGHIỆP

NGÀNH: NGOẠI NGỮ

HAIPHONG PRIVATE UNIVERSITY FOREIGN LANGUAGES DEPARTMENT

GRADUATION PAPER

A STUDY ON TERMINOLOGY IN TRANSLATING PHARMACEUTICAL FROM ENGLISH INTO VIETNAMESE

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HAI PHONG - 2012

BỘ GIÁO DỤC VÀ ĐÀO TẠO TRƯỜNG ĐẠI HỌC DÂN LẬP HẢI PHÒNG

Nhiệm vụ đề tài tốt nghiệp

Sinh viên:		Mã số:
Lớp:	Ngành:	
Tên đề tài:	***************************************	
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Nhiệm vụ đề tài

1.	Nội dung và các yêu cầu cần giải quyết trong nhiệm vụ đề tài tốt nghiệp (về lý luận, thực tiễn, các số liệu cần tính toán và các bản vẽ).
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2.	Các số liệu cần thiết để thiết kế, tính toán.
3.	Địa điểm thực tập tốt nghiệp.
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Người hướng dân thứ nhất:	
Họ và tên:	
Học hàm, học vị:	
Cσ quan công tác:	
Nội dung hướng dẫn:	
Người hướng dẫn thứ hai:	
Họ và tên:	
Học hàm, học vị:	
Cσ quan công tác:	
Nội dung hướng dẫn:	
Đề tài tốt nghiệp được giao ngày tháng	năm 2012
Yêu cầu phải hoàn thành xong trước ngày	tháng năm 2012
Đã nhận nhiệm vụ ĐTTN	Đã giao nhiệm vụ ĐTTN
Sinh viên	Người hướng dẫn

Hải Phòng, ngày tháng năm 2012 HIỆU TRƯỞNG GS.TS.NGƯT *Trần Hữu Nghị*

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1.Đánh giá chất lượng đề tài tốt nghiệp v	'ề các mặt thu thập và phân tích tài liệu, số
liệu ban đầu, giá trị lí luận và thực tiễn c	ủa đề tài.
2. Cho điểm của người chấm phản	
biện:	
(Điểm ghi bằng số và chữ)	
	Nacky tháng năm 2012
	Ngày năm 2012
	Người chấm phản biện

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ACKNOWLEDGEMENTS

In the process of completing the studying, I have received a great deal of help, guidance and encouragement from my teachers and friends.

I would like to express my thanks to my supervisor – Mrs.Dao Thi Lan Huong, M.A for helping me through this challenging process. The success I got through last time would be almost impossible without her enthusiastic supports.

I would like to express my special thanks to teachers of Foreign Languages

Department for their supportive lectures that have provided me with good

background to do my research effectively.

Last but not least, I would like to give heartfelt thanks to my family and friends who I have never enough words to express my great gratitude for encouragement, support and help.

Hai Phong, 2012
Student
Tran Tuan Anh

PART I: INTRODUCTION

1. Rationale of the study

No one denies the importance of English language in the present time as a global language. Moreover, English appears in all fields of human life such as: business, education, health-care, culture, economy, e-commerce, medicine and aviation. In addition, it is the language which is used in the pharmaceutical. From a thousand of years ago drugs preparation and treatment had become a necessity of human life; until now it become more and more important . Together with the dramatical development of international pharmaceutical, Viet Nam has obtained remarkable achievements in the past few years. With rich and attractive natural resources, long-existing culture and sustainable economy, Viet Nam has a lot of potentials to develop pharmaceutical. With more than 84 million people, the development of the pharmaceutical industry is an indispensable and worthy of attention in Vietnam. Currently, Vietnam drug market is mainly supplied by two main sources which are domestic and imported drugs from foreign country. In recent years, the pharmaceutical industry in the country has made remarkable progress. According to Drugs Administration Vietnam the growth rate of the industry is 12% per year. Domestic production meets the demand over 50% of people using drugs. The sector strives domestic production to meet 62% of the value of drugs in 2012 and 70% in 2015. However, there is a number of Vietnamese learners encounterring troubles in translating terminology in pharmaceutical; certainly face difficulties in the translation processing due to not only the variety of Vietnamese and English words, the differences of using specific English words but also more and more appearances of new terms in human activities. That is the main reason inspiring me to carry out this study. Importantly, I hope that to some extent my study can offer a thorough understanding about terminology in pharmaceutical as well as helps Vietnamese in translation of the term in this field.

2. Aims of the study

My study aims at:

- Introducing theoretical background of translation, terminology, translation methods.
- Giving some strategies applied in translation of terminology in pharmaceutical.
- Pointing out some difficulties, common mistakes in the translation process made by Vietnamese learners and suggesting some solutions to avoid misunderstanding when translating it.

3. Scope of the study

Pharmaceutical terms are extremely diversified study. Due to the limitation of time, knowledge and experiences, I am not ambitious to study all masters of this theme but only focus on translation theory and give some strategies to apply in translating pharmaceutical terms.

4. Methods of the study

In order to achieve the mentioned aims, in my study process, the following methods are used:

- Data collection: Reading books and reference books about translation, the Pharmacy terminology dictionary and English Pharmaceutical to establish the theoretical background for my study, searching books on the internet and collecting information from foreign websites.
- Data analysis: Selecting related document and classifying information in terms of the aims of the study.

• Comparative and contrastive analysis: Analyzing the above classified information, arranging the information into the parts of the study.

5. Design of the study

My study is divided into three main parts of which the second one is the most important.

- Part I: Introduction gives out rationale, aims, scope, methods and design of the study.
- Part II: Development: mentions the main contents of the study and it is further divided into three chapters as below:
- ➤ Chapter I: Theoretical background _ introduces definition of translation, translation methods.
- ➤ Chapter II: Terminology, some analysis, comparison, contrast, point out some strategies apply in the translation of terminology in Pharmaceutical terms.
- ➤ Chapter III: Implication-points out some problems in translation process and give some suggestions to solve the problems.
 - Part III: Conclusion

Gives main ideas mentioned in previous parts and some suggestions for further study.

PART II: DEVELOPMENT

CHAPTER I: THEORETICAL BACKGROUND

I. Definition of translation

Translation has existed in every corner of our life. It is considered as an indispensable part in the field of not only literature, culture and religion but also commercial advertisement, popular entertainment, public administration, and educationSome of the translation scholars defined their theories as source-oriented theories, others regarded them as the target-oriented theories. Thus, definitions of translation are numerous and a large numbers of writers have written about this subject. In this paper, some various concepts of translation have been collected as follows:

• *Translation* is the comprehension of the meaning of a text and the subsequent production of an equivalent text, likewise called a "translation" that communicates the same message in another language. The text that is translated is called the "source text", and the language that it is translated into is called the "target language". The product is sometimes called the "target text".

http://en.wikipedia.org/wiki/Translation

• *Translation* is the process of changing something that is written or spoken into another language.

_ Advanced Oxford Dictionary_

• *Translation* as the expression in another language (target language) of what has been expressed in one language (source language), preserving semantic and

stylistic equivalencies, *Translation* is the replacement of a representation of a text in one language by a representation of an equivalent text in a second language.

• *Translation* is rendering a written text into another language in a way that the author intended the text.

_Bui Tien Bao_Ha Noi National University_

• *Translation* is the replacement of text material of this language (source language) with text material of another (target language).

• *Translation* is the interpretation of the meaning of a text in one language (the source text) and the production, in another language of a equivalent text (the target text) that communicates the same message

• *Translation* is the process of communication in which the translator is interposed between a transmitter and a receiver who use different languages to carry out code of conversation between them.

• *Translation* will be understood as the final product of problem solving and sign production of a receptor-text (RT) functionally equivalent to a source text (ST) by a human being in a given language for a given group of text receivers.

• *Translation* is a text with qualities of equivalence to a prior text in another language, such that the new text is taken as a substitute for the original.

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_ David Frank (Wordpress.com) _
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• *Translation* is a process of communication whose objective is to import the knowledge of the original to the foreign reader.

• *Translation* is the transformation of a text originally in one language into an equivalent in the content of the message and the formal features and the roles of the original

• *Translation* is made possible by an equivalent of thought that lies behind its different verbal expressions

• *Translation* is to be understood as the process whereby a message expressed in a specific source language is linguistically transformed in order to be understood by readers of the target language"

• *Translation* is an act of communication which attempts to relay, across cultural and linguistic boundaries, another act of communication.

II. Types of translation

II.1 Word to word

This is often demonstrated as interlinear translation, with the TL immediately below the SL words. The SL word-order is preserved and the words translated singly by their most common meaning, out of context.

Source language: I am a student at Hai Phong Private University.

Target language: Tôi là sinh viên trường đại học Dân Lập Hải Phòng.

II.2 Literal translation

The SL grammatical construction is converted to the nearest TL equivalents but the lexical words are again translated singly, out of context.

Source language: After the voyage we were given a one –month's leave Target language: "Sau chuyến đi biển, chúng tôi được nghỉ 1 tháng"

II.3 Faithful translation:

The translation reproduces the exact contextual meaning of the original within the constraints of the grammatical structures of the target language. It transfers cultural words and preserves the degree of grammatical and lexical deviation from SL norms. It attempts to be completely faithful to the intentions and the text-reality of the SL writer.

Source language: All members of my family, almost no exception, extremely friendly to my girlfriend.

Target language: Các thành viên trong gia đình tôi, gần như không có ngoại lệ, đều rất thân thiện với bạn gái tôi.

(Text book for Translation 1_Hai Phong Private University)

II.4 Semantic translation

Semantic translation differs from faithful translation only in as far as it must take more account of the aesthetic value of the SL text, compromising on "meaning" where appropriate so that no assonance, word-play or repetition jars in finished version.

Source language: All members of my family, almost no exception, extremely friendly to my girlfriend.

Target language: Các thành viên trong gia đình tôi, gần như không có ngoại lệ, đều rất thân thiện với bạn gái tôi (Text book for Translation 1_Hai Phong Private University)

II.5 Free translation

Free translation reproduces the matter without the manner, or the content with out of the form of the original. The advantage of this type of translation is that the text in TL sounds more natural. On the contrary, the disadvantage is that translating is too casual to understand the original because of its freedom.

Source language: The scene in Ha Long is poetic

Target language: Phong cảnh Hạ Long thật thơ mộng.

II.6 Adaption

This seems to be the freest way of translation. It's used mainly for plays; poetry in which the themes, characters and plots are usually preserved, the SL culture is converted to the TL culture and text rewritten.

Target language: It would rather the victorious brightness

In an only moment the centenary twinkle

Source language: Thà một phút huy hoàng rồi vụt tắt

Còn hơn buồn le lói suốt trăm năm

(Xuân Diệu)

II.7 Idiomatic translation

Idiomatic translation reproduces the "message" of the original but tends to distort nuances of meaning by preferring colloquialisms and the idiom where these do not exist in the original.

Source language: Where there is a will, there is a way!

Target language: Có chí thì nên

II.8 S ome well-known translation procedures

Procedures and Organizational procedures. The Technical procedures Including: analysis of the source and target languages, a through study of the Source language text before making attempts translate it, making judgments of the semantic and syntactic approximations. The organizational procedures constant reevaluation of the attempt made; contrasting it with the existing available translations of the same text done by other translators, and checking the text's communicative effectiveness by asking the target language readers to evaluate its accuracy and effectiveness and studying their reactions.

Besides, Graedler (2000:3) puts forth some procedures of translating: Making up a new word, explaining the meaning of the SL expression in lieu of translating it, preserving the SL term intact, opting for a word in the TL which seems similar to or has the same "relevance" as the SL term.

On the other hand, according to Newmark, there are 8 procedures:

- *Transference*: The SL word is directly taken into TL text with no translation. The words may be the names of newspaper, geographical names, street names, new technical terms that do not have equivalent in the TL. Eg: FPT, Ipod, ipad etc.
- *Naturalization*: The SL word is transferred or adapted to the TL based on the pronunciation and morphology.

Eg: Nobel -> Nô ben

- *Cultural equivalent*: The SL cultural word or expression is translated by a TL cultural word based on its equivalent in the TL. Because of different

culture, the different idioms and currencies are translated differently.

Eg: Mutton dressed as lamb -> Cura sừng làm nghé

II.9 Communicative translation

Communicative translation attempts to render the exact contextual meaning of the original in such a way that both content and language are readily acceptable and comprehensible to the readership.

Source language: Good morning

Target language: Bác đi đâu đấy a?

III. Equivalence in translation

Baker explores the notion of equivalence at different levels, in relation to the translation process, including all different aspects of translation and hence putting together the linguistic and the communicative approach. She distinguishes:

- Equivalence that can appear at word level and above word level, when translating from one language into another. Baker acknowledges that, in a bottomup approach to translation, equivalence at word level is the first element to be taken into consideration by the translator. In fact, when the translator starts analyzing the ST she looks at the words as single units in order to find a direct 'equivalent' term in the TL. Baker gives a definition of the term word since it should be remembered that a single word can sometimes be assigned different meanings in different languages and might be regarded as being a more complex unit or *morpheme*. This means that the translator should pay attention to a number of factors when considering a single word, such as number, gender and tense.
- **Grammatical equivalence**, when referring to the diversity of grammatical categories across languages. She notes that grammatical rules may vary across languages and this may pose some problems in terms of finding a direct

correspondence in the TL. In fact, she claims that different grammatical structures in the SL and TL may cause remarkable changes in the way the information or message is carried across. These changes may induce the translator either to add or to omit information in the TT because of the lack of particular grammatical devices in the TL itself. Amongst these grammatical devices which might cause problems in translation Baker focuses on number, tense and aspects, voice, person and gender.

- **Textual equivalence**, when referring to the equivalence between a SL text and a TL text in terms of information and cohesion. Texture is a very important feature in translation since it provides useful guidelines for the comprehension and analysis of the ST which can help the translator in his or her attempt to produce a cohesive and coherent text for the TC audience in a specific context. It is up to the translator to decide whether or not to maintain the cohesive ties as well as the coherence of the SL text. His or her decision will be guided by three main factors, that is, the target audience, the purpose of the translation and the text type.
- **Pragmatic equivalence**, when referring to implicatures and strategies of avoidance during the translation process. Implicature is not about what is explicitly said but what is implied. Therefore, the translator needs to work out implied meanings in translation in order to get the ST message across. The role of the translator is to recreate the author's intention in another culture in such a way that enables the TC reader to understand it clearly.

IV.ESP in translation

IV.1 Concept

• ESP is the abbreviation for English for Specific Purpose. It is defined in the other ways. Some people described ESP as simply being the teaching of English for any purpose that could be specified. Others, however, were more precise,

describing it as the teaching of English used in academic studies or the teaching of English for vocational or professional purposes.

• Tony Dudley-Evans, co-editor of the ESP Journal gives an extended definition of ESP in terms of 'absolute' and 'variable' characteristics

**Definition of ESP (Dudley-Evans, 1997)

Definition of ESP (Dudley-Evans, 1997)

- Absolute:
- **ESP** is defined to meet specific needs of the learners
- ESP makes use of underlying methodology and activities of the discipline it serves.
- ESP is centered on the language appropriate to these activities in terms of grammar, lexis, register, study skills, discourse and genre.
 - **❖** Variable:
- ESP may be related to or designed for specific disciplines
- ESP may use, in specific teaching situations, a different methodology from that of General English
- ESP is likely to be designed for adult learners, either at a tertiary level institution or in a professional work situation. It could, however, be for learners at secondary school level
- ESP is generally designed for intermediate or advanced students.
- Most ESP courses assume some basic knowledge of the language systems

IV.2 Types of ESP

David Carter (1983) identifies three types of ESP:

- English as a restricted language
- English for Academic and Occupational Purposes

- English with specific topics.
 - English as a restricted language. Mackay and Mountford (1978) clearly illustrate the difference between restricted language and language with this statement: "... the language of international air-traffic control could be regarded as 'special', in the sense that the repertoire required by the controller is strictly limited and can be accurately determined situation, as might be the linguistic needs of a dining-room waiter or air-hostess. However, such restricted repertoires are not languages, just as a tourist phrase book is not grammar. Knowing a restricted 'language' would not allow the speaker to communicate effectively in novel situation, or in contexts outside the vocational environment (pp. 4-5).
- The second type of ESP identified by Carter (1983) is English for Academic and Occupational Purposes. In the 'Tree of ELT' (Hutchinson & Waters, 1987), ESP is broken down into three branches:
- a) English for Science and Technology (EST)
- b) English for Business and Economics (EBE)
- c) English for Social Studies (ESS)

Each of these subject areas is further divided into two branches:

- English for Academic Purposes (EAP)
- * English for Occupational Purposes (EOP).

An example of EOP for the EST branch is 'English for Technicians' whereas an example of EAP for the EST branch is 'English for Medical Studies'.

- The third and final type of ESP identified by Carter (1983) is English with specific topics. Carter notes that it is only here where emphasis shifts from purpose

to topic. This type of ESP is uniquely concerned with anticipated future English needs of, for example, scientists requiring English for postgraduate reading studies, attending conferences or working in foreign institutions.

IV.3 Definition of technical translation

According to Wikipedia, *Technical translation* is a type of specialized translation involving the translation of documents produced by technical writers (owner's manuals, user guides, etc.), or more specifically, texts which relate to technological subject areas or texts which deal with the practical application of scientific and technological information.

In "Approaches to translation" (1981), Newmark differently distinguishes technical translation from institutional translation: "Technical translation is one of the parts of specialized translation; institutional translation, the areas of politics, commerce, finance, government etc... is the other." He goes on to suggest that technical translation is potentially non-cultural and universal because the benefits of technology are not confined to one speech community. The terms in technical translation, therefore should be translated. On the contrary, institutional translation is cultural, so, in principle, the terms are transferred unless they are connected with international organization. Though having different approaches to technical translation, two authors view it as specialized translation with its essential element – "special terms".

V. Terminology and Pharmaceutical characteristics

1. Definition of English terms

Up to now there are various definitions of terminology by many linguists.

• *Terminology* is the study of terms and their use. **Terms** are <u>words</u> and <u>compound words</u> that in specific contexts are given specific meanings, meanings that may deviate from the meaning the same words have in other contexts and in everyday language. The discipline Terminology studies among other things how such terms of art come to be and their interrelationships within a culture. Terminology differs from <u>lexicography</u> in studying concepts, conceptual systems, and their labels (*terms*), whereas lexicography study words and their meanings.

http://en.wikipedia.org/wiki/Terminology

• *Terminology* is the set of technical words or expressions used in a particular subject

_ Advanced Oxford Dictionary

• *Terminology* is the study of and the field of activity concerned with the collection, description, processing and presentations of terms, i.e. lexical items belonging to specialized areas of usage of one or more languages.

_ Dafydd Gibbon, MET DST 1998

• *Terminology* is defined as "a word or a combination of words that denotes the concept precisely and its relationship with other concepts in specific area.

Terminology is a specialized and restricted expression on things, phenomena, characteristics, and the relationship in a specific profession".

Russian Encyclopedia, 1976

• *Terminology* is a section of special lexis of a language. It consists of fixed words and groups of words which are accurate names of concepts and subjects belonging to different specialized fields of human being.

2. Characteristics of terms

As a special unit in the lexical system of language, terminology has its own distinctive features. According to many linguists, terminology should have the following qualities: accurateness, systematism, internationalism, nationalism, popularity.

2.1 Accurateness

The first quality of terminology is accurateness, that is, it expresses a specific concept or definition concretely and precisely so that it can help to avoid the misunderstanding one concept for another. It is necessary for each term in a typical professional scale, denotes only one concept in that system. The meaning of a term is normally the combination of linguistic signals not only the sum of its component's meaning. It is also claimed that each linguistic signal poses one basic nuclear meaning and vice versa a concept also has a typical linguistic signal in a concrete situation. New Mark (1998) also said that concept-words are notorious for their different meanings in various technologies. Therefore, when a term is created in a specific field, it is necessary to take into account its homophone or synonymy which is often seen in linguistic.

2.2 Systematism

It is the second criterion of a scientific term. As a part of language, each term has its own position in the system of concepts and belongs to a terminological system. Each term requires its meaning in the relationship with other terms in its system. Once separated from its system, it's meaning in vague. Therefore, systematism is seen as one of the most important features of terminology. There is

the difference in the viewpoints about the characteristics of terminology among terminologists. Some say the typical characteristic of terminology is the systematic formation, whilst others claim that it is the feature of content. However, it is the combination of both content and expression form. It is impossible to separate a concept from the system to make a term but it determines its position in the system.

2.3 Internationalism

As mentioned above, terms are special words expressing common scientific concepts together with the development, cooperation and scientific, technological exchanges among countries throughout the world, terms are internationalized. The globalization enables terminology to be used more popularity in different languages so as to make the international science develop faster. As a result of this process, there are exits a number of terms being internationalized in different languages namely medicine (names of illness, medicine, physic, telecom...). Based on the criteria of terminology, each language may require other principles in accordance with its culture. Accordingly, terminology in Vietnamese is not an exception; it has its typical characteristics including nationalism and popularity.

2.4 Nationalism

It is undeniable that term is special linguistic unit of a language used in specific profession; it clearly belongs to national language. As a result, terminology in Vietnam should be imbued with Vietnamese culture, and characteristics of Vietnamese language. They should be appropriate to Vietnamese people from the lexicology to grammatical composition.

2.5 Popularity

It is characteristics of terminology which can bring scientific and technological progress to all people. As a component of linguistics, terminology plays an important role in pushing up the development of science, hence it should be comprehensible to all people in its way of reading, writing, speaking and memorizing.

3. The creation of terminology

According to the International Standardization Organization (ISO, 1988), the following factors are of essential consideration in the creation of terminology are:

Firstly, terms must persistently show typical features of the concept they denote so as to bring about the exact reference. In addition, they need to be economical to avoid giving rise to homonymy. Besides, terms should be lexically systematic and conform to the phonological and morphological rules of the language. Furthermore, terms should follow the common rules of word-formation of the language, that is, they should allow composition and derivation where are necessary. Lastly, the meaning of term should be context-free. Term creation including primary and secondary, is under various influences and subject to different motivation. When a new concept appears, primary term formation is created meanwhile secondary term formation appears to name monolingual revision of given terminology or the term in the TL after a process of transferring knowledge from one linguistic community to another.

It is common knowledge that technical terminology is volatile due to the changes and continual development of science and technology. Both primary and secondary term formation in technology is affected by a proliferation of variants

and synonyms which occur to satisfy the need for popular version of scientific term and product differentiation.

4. The distinction between terms and words.

It is necessary to distinguish between terminology and ordinary words. Baker (1998) claims that "terms differ from words in that they are endowed a word with a special form of reference, namely that they refer to discrete conceptual entities, properties, activities or relations which constitute the knowledge space of a particular subject field"

In addition, meanwhile words function in general reference or a variety of subject fields, terms have special reference within a particular discipline and they keep their lives and meaning is only when they serve the system of knowledge that creation them.

Despite the distinction between term and word mentioned above, the boundary between them is not a clear cut, as many terms become ordinary words when they are closed to daily life and used with high frequency and many words become terms when they are used in specialized field.

5. Terms in Pharmaceutical field

5.1 Definition

According to the World Health Organization WHO general pharmaceutical is known as medicine drug called consists of two basic components, western pharmaceuticals and Traditional Medicine. Drugs must preserve safely, effectively and of well-quality specified shelf and using proper doses.

Drugs are products for human used for the prevention and treatment of disease, reduce symptoms, diagnosis and or adjust the physiological functions of the body.

A finished product is a form of drug through all stages of production to circulation, distribution and use.

Drug materials as active substances (active ingredients) or inactive (solvents, excipients) involved in the composition of the product in the production process.

Medicines include:

- + Chemical and biological materials used in medicine
- + Products in chemical and biological

Medication is used as ancient books (literature) were recorded: number of herbs, each unit, method of preparation, dose, and administered medication.

New drug is medication dosage formula with new active ingredients, new drug combination of active ingredients or drugs with new dosage forms, new indication, new routes, new ..."

The meaning of pharmaceutical has not completed yet with many definitions but this is most popular of WHO definition of Pharmaceutical.

5.2 Classification of pharmaceutical (medicine) terms:

5.2.1 Single terms

The single term in Pharmaceutical field can be single word or can be formed by the help of prefixes and suffixes

For example:

1. General single term:

Protocal	Đề cương

Containment	Sự ngăn chặn
Contaminants	Chất tạp nhiễm
Dosage	Liều lượng
Confidentiality	Bảo mật thong tin

After that, I will give some basic form of single term with suffixes and meaning. Translation method is used popular ESP meaning or its meaning. All of samples are nouns.

1. Single term with suffixes

Noun-forming by suffixes: 'er" tion" "or"

Reconciliation	Đối chiếu
Sampler	Người lấy mẫu
Sanitation	Vệ sinh
Specification	Tiêu chuẩn
Sponsor	Nhà tài trợ
Investigator	Nghiên cứu viên
Manufacturer	Nhà sản xuất
Marker	Chất đánh dẫu
Biogenerator	Bình nuôi cấy sinh học

5.2.2 Compound terms

In this part we select all the formed of noun plus noun in Pharmaceuticals field, we choose and translate it all by using recognized translation.

Compound noun formed by N+N

Acceptance criteria	Audit trail
Action limit	Batch certificate
Bulk product	Alert limit
Clean area	Climatic zone
Commitment batches	Constant weight
Container labeling	Contract manufacturer
Control measure	Counterfeit product
Cross contamination	Degradation product
Design qualification	Design condition
Detection limit	Dosage form
Dose regimen	Drug product
Drug substance	Ear preparations
Ethnic factors	Evaluation report
Expiration date	Eye preparations
Flow diagram	Guideline level
Hazard analysis	Herbal medicines
Herbal preparations	Herbal tea
Import authority	Impurity profile

Compound noun formed adj +N

Absolute humidity	Actual yield
Adverse event	Analytical procedure
Biological activity	Biological product
Biological agent	Clinical trial
Clinical Report	Corrective action
Concurrent validation	Critical limit
Critical operation	Critical parameter
Cryogenic vessel	Cytogenetic evaluation
Essential drugs	Final sample
Foreign matter	Generic products
Homogeneous material	Impartial witness
Laminar airflow	Liquefiable gases
Medicinal plant	Minor variation

Compound noun formed by participle + N

Medicated foams	Marketing authorization
Finished product	Coordinating committee
Supporting data	Sampling inspector
Prohibited drugs	Pressurized container
Pooled sample	Packaging material

CHAPTER 2: SOME STRATEGIES APPLIED IN TRANSLATION OF SOME COMMON PHARMACEUTICAL TERMS

As said in previous sections, pharmaceutical terms include single words, compound words. Thus, basing on the theoretical background in the previous chapter, this chapter will analyze in detail some of the most popular strategies used in translation of pharmaceutical terms as well as help readers clearly understand about new concepts of this field.

I. The strategy applied in translation of single terms.

I.1 Recognized translation.

There are many strategies applied to translate single terms. However, due to the limited time and knowledge, this paper just concentrates on one of the most popular strategies. That is **recognized translation**. Recognized translation is applied in translating single terms because terms can be formed by different ways. Therefore the most important things the translators have to do is recognizing how terms are formed, as a result, translators cam translate these terms easily.

A large number of words can be translated basing on original words in general text. Due to the multi-lexical meaning of word and types of translation field, word still carries the original meaning or has slight change in meaning which translators can easily realize this characteristic and find the closest meaning of word in TL. For example, "blister" can be translated as "vi thuốc" basing on

original meaning in general text but "agreement" means "hiệp định" when it is used in ESP.

The following are popular term with similar form and strategy applied in their translation from English intoVietnamese.

I.1.1 General single terms

Source Language	Target Language
Contaminants	Chất tạp nhiễm
Containment	Sự ngăn chặn
Confidentiality	Sự bảo mật thông tin
Protocol	Đề cương, tài liệu

I.1.2 Single term with suffixes "er" . or", "tion"

Source Language	Target Language
Investigator	Nghiên cứu viên
Sanitation	Vệ sinh
Sampler	Người lấy mẫu
Specification	Tiêu chuẩn
Sponsor	Nhà tài trợ
Reconciliation	Đối chiếu
Manufacturer	Nhà sản xuất
Marker	Chất đánh dấu

I.1.3 Paraphrasing translation

Source Language	Target Language
Biogenerator	Bình nuôi cấy sinh học
Commissioning	Đưa vào vận hành qua công nghệ
Dosage	Liều lượng thuốc cho 1 lần vào cơ thể
Mother liquid	Nước cái
Specification	Nhà sản xuất
Plant preparations	Chế phẩm từ cây thuốc
Parenteral preparations	Thuốc tiêm
Route of administration	Đường dùng

II.Strategies applied in translation of compound terms.

II.1 Shift or transposition translation

The most popular strategy applied to translate compound terms is Shift or transposition translation. A "shift" (in Catford' term) or "transposition" (Vinay & Darbelnet) is a translation procedure involving a change in the grammar from SL to TL, including two sub classification: automatic translation and rank-shift translation.

II.1.1 Automatic translation

That is one type of transposition which has change in the word order, and offers translator no choice.

The following examples will provide readers the features of automatic shift strategy. The compound word "Clean room" is formed by an adjective and a noun. "Clean" means "sach" and "room" means "phòng" in Vietnamese equivalent. And

"Clean room" is translated as "phòng sạch". It is clear that the position between two words has changed in TL. In English the adjective "clean" stands before the noun "room" but this order has changed conversely in Vietnamese TL. The other term, "Conference room" is known as "Phòng hội nghị" in Vietnamese equivalent. There is also change in the order of these words, in English the noun "Conference" stands before the noun "room" however, when it is translated into Vietnamese, the noun "conference" comes after the noun "room". The automatic shift is flexibly applied in translation, and all words in the term are naturally converted from English into Vietnamese without adding any expression.

Compound nouns formed by noun+ noun

Source Languageti	Target Language
Acceptance criteria	Tiêu chí chấp nhận
Audit trail	Hồ sơ chứng cứ kiểm tra
Action limit	Giới hạn hoạt động
Batch certificate	Giấy chứng nhận lô
Bulk product	Sắn phẩm chờ đóng gói
Clean area	Vùng sạch
Climatic zone	Vùng khí hậu
Commitment batches	Lô thuốc có cam kết
Constant weight	Khối lượng không đổi
Container labeling	Nhãn trên bao bì
Contract manufacturer	Nhà sản xuất theo hợp đồng
Control measure	Biện pháp kiểm soát
Counterfeit product	Thuốc giả
Cross contamination	Nhiễm chéo
Degradation product	Sản phẩm phân hủy
Design qualification	Đánh giá thiết kế
Design condition	Điều kiện thiết kế
Detection limit	Giới hạn thiết kế
Dosage form	Dạng(thành phầm) bào chế
Dose regimen	Chế độ liều dung
Drug product	Thuốc
Drug substance	Dược chất (tá dược và hoạt chất)
Ear preparations	Các chế phẩm dùng cho tai

Ethnic factors	Yếu tố chủng tộc (ngoại và nội)
Evaluation report	Báo cáo thẩm định
Expiration date	Hạn dùng
Eye preparations	Các chế phẩm nhãn khoa
Flow diagram	Sơ đồ dòng (Lưu đồ)
Guideline level	Mức quy định theo quy chế
Hazard analysis	Phân tích rủi ro
Herbal medicines	Thảo dược
Herbal preparations	Các chế phẩm thảo được
Herbal tea	Trà thuốc (Trà được thảo)
Import authority	Cơ quan quản lý nhập khẩu
Impurity profile	Mô tả tạp chất
Cell culture	Nuôi cấy tế bào
Alert action	Giới hạn báo động

Compound nouns formed by adj + noun

Source Language	Target Language
Absolute humidity	Độ ẩm tuyệt đối
Actual yield	Sản lượng thực tế
Adverse event	Hiện tượng có hại (khi điều trị bằng
	thuốc)
Analytical procedure	Quy trình phân tích
Biological activity	Hoạt tính sinh học
Biological product	Sản phẩm sinh học
Biological agents	Các tác nhân sinh học

Clinical trial	Thử lâm sàng (từ I đến V)
Clinical Report	Báo cáo lâm sàng
Corrective action	Hành động chấn chỉnh
Concurrent validation	Thẩm định đồng thời
Critical limit	Giới hạn tới hạn
Critical operation	Thao tác trọng yếu
Critical parameter	Thông số tới hạn (nhiệt đô, độ ẩm)
Cryogenic vessel	Bình chứa khí hóa lỏng
Cytogenetic evaluation	Đánh giá di truyền học tế bào
Essential drugs	Thuốc thiết yếu
Final sample	Mẫu thử cuối cùng
Foreign matter	Chất ngoại lai (tạp chất)
Generic products	Thuốc gốc
Homogeneous material	Vật liệu đồng nhất
Impartial witness	Nhân chứng trung lập (1 người độc lập
	với thử nghiệm, không bị ảnh hưởng
	lệch lạc từ thí nghiệm)
Minor variation	Thay đổi thứ yếu (không quan trọng)
Medicinal plant	Cây thuốc(trồng cho mục đích y học)
Liquefiable gases	Khí hóa lỏng
Laminar airflow	Dòng không khí lớp (dòng không khí đã
	được điều chỉnh tốc độ không đổi và các
	lớp gần như song song)
	I

Compound nouns formed participle + N

Source Language	Target Language
Coordinating committee	Ủy ban phối hợp
Finished product	Thành phẩm
Marketing authorization	Giấy phép lưu hành
Medicated foams	Thuốc bọt (thể tích lớn, dạng bọt)
Supporting data	Số liệu hỗ trợ
Sampling inspector	Thanh tra viên lấy mẫu
Prohibited drugs	Thuốc bị cấm
Pressurized container	Bình chứa áp lực
Pooled sample	Mẫu trộn lẫn
Packaging material	Vật liệu đóng gói

II.1.1.2 Rank-shift translation

The other case of "shift translation" called "Rank-shift translation", also involves the change in the grammar from SL to TL; however, the TL is added or omitted word comparing with SL.

Example: Corrective action Hành động chấn chỉnh

Adj + noun Noun + Noun

We can see that in SL, "Corrective action" is composed by Adj and Noun, but Adj "Corrective" becomes Noun when this term is translated into TL. We also can see that there is changing in the grammar of the word from SL to TL.

Example: Laminar airflow Dòng không khí vô hướng (thuộc lớp)

Noun+ Noun+ Adj

In the TL, you can see that it is added word "dòng" comparing with SL. Adding words make readers understand clearer and more exactly about the terms.

II.1.1.3. Translation by omission

This strategy is often used to translate phrases by omitting words that are not essential to the meaning or impact of the text in order to avoid redundancy in translation text.

For instance, SL "Certificate of analysis", the word "Certificate" means "giấy chứng nhận hoặc phiếú" in Vietnamese equivalent. And we can easily get the translation text by word to word strategy as "Phiếu kiểm nghiệm". However, we should translate by omitting the word "of" to avoid the boringness in the translation text and it is after translated as "hậu sảnh". Another example, after omitting the preposition "of" in "Country of origin", it means "Nơi xuất xứ". In this these translation we can see the faithful translation

With this strategy, the content of SL is not changed, and translators can gain a better and more natural Vietnamese TL.

Source Language	Target language
Country of origin	Nới xuất xứ
Qualification of equipment	Đánh giá thiết bị
Calibration of equipment	Chuẩn định thiết bị
Specification of material	Tiêu chuẩn vật liệu
Certificate of analysis	Phiếu kiểm nghiệm
Verification of methods	Thẩm tra phương pháp
Validation of analytical procedure	Thẩm định quy trình

Summary of product characteristics	Tóm tắt đặc điểm sản phẩm

II.1.1.4 Translation by paraphrase using related words

This strategy can be used when we translate an English word or concept that all meanings conveyed by the English term for the same concept. For example, the term "Plant preparations" is known as "chuẩn bị cây trồng", but when we pharmaceutical term, it means that "chế phẩm từ cây thuốc". If this term is transferred word by word from English into Vietnamese, translation result may become more redundant. In order to avoid improper translation version, paraphrase is the best strategy. For example we can see in this template: specification ~ manufacturer: nhà sản xuất.

Source language	Target language
Plant preparations	Chế phẩm từ cây thuốc
Pre-approval batches	Lô thuốc trước khi phê duyệt
Parenteral preparations	Thuốc tiêm
Package- inserts	Tờ hướng dẫn sử dụng
Mother liquid	Nước cái

II.1.1.5 Translation of abbreviation by using loan words

Loan words have increased in the process of human working and studying and occupied a large amount of vocabulary to enrich the human language. In the recent decades, Vietnamese language has added more new loan words originating from English such as chat (nói chuyện), copy (sao chép), marketing (tiếp thị), menu (danh sách), list (danh sách), ect. And in the procurement field, loan words are mainly the cases of abbreviation. In term of this study about loan words we have 2 kinds of loan words: loan word with plus explaination (explicit) and loan word with no explaination

For example: X-ray ~ X quang it has explaination in its meaning.

Vaccine ~ vắcxin it means 1 kind of drugs

Package-insert: means instruction paper for using drug

And example for no explaination: batch no— số lô

Stress~ xì trét

HIV-AIDS= bệnh suy giảm miễn dịch do virus.

Cylinder~ ống tiêm xilanh

An abbreviation is a shortened form of a word or phrase. Usually, but not always, it consists of a letter or group of letters taken from the word or phrase. For example, the word *abbreviation* can itself be represented by the abbreviation "*abbr*" or "*abbrev*". Normally, name of organizations are written in form of abbreviations such as ATC Bank, WTO, ATECH, ASEAN, AMT, WHO. Abbreviations of this field are also classified into the most common type: acronyms

Acronyms are the words built from the initial of several words. An acronym is a shortened form of a word or phrase. Usually, but not always, it consists of a letter or group of letters taken from the word or phrase.

Almost acronyms are formed by the initialism that is group of initial letters used for a name or expression, each letter being pronounced separately, such as RD (Reference dose) or IQ (Installation qualification). QA mean Quality Assurance with an acronym, translators can make terms to be shortened to avoid the redundancy while the readers still get them.

Abbreviation	Full of form	Vietnamese
ARD	Acute Reference Dose	ARD :Liều đối chứng cấp
ADR	Adverse Drug Reaction	ADR: Phản ứng có hại của thuốc
ACTD	ASEAN common technical	ACTD Hồ sơ kĩ thuật chung
	dossier	ASEAN
СРР	Certificate of	CPP: Giấy chứng nhận sản phẩm
	pharmaceutical product	dược
ССР	Critical control point	CCP: Điểm kiểm soát tới hạn
FIFO	First In/ First Out principle	FIFO: Khái niệm về nguyên tắc
	concept	nhập trước, xuất trước
GEP	Good engineering practice	GEP: hành tốt công nghệ
НАССР	Harzard analysis critical	HACCP: Kế hoạch phân tích rủi
	control point plan	ro và kiểm điểm
GPP	Good pharmacy practice	GPP: Thực hàng tốt hiệu thuốc
IEC	Independent ethics	IEC :Ủy ban độc lập về đạo đức
	committee	
IQ	Installation qualification	IQ: Đánh giá lắp đặt
IRB	Institutional review board	IRB: Ban thẩm định pháp lí

MRL	Maximum residue limit	MRL: Giới hạn tồn dư tối đa
QA	Quality assurance	QA: Bảo đảm chất lượng
RD	Reference dose	RD: Liều đối chứng
SOP	Standard operating procedure	SOP :Quy trình thao tác chuẩn

The following attached reference table is illustrations in order that readers can closely approach with this strategy:

CHAPTER III: IMPLICATION

I. Some problems in translation process

1.1 Misunderstanding

This is a common situation in translation. Words in general English can carry different meanings and express new concepts in specific English. It is a cause leading to misunderstanding in translation process.

The translators often misunderstand the meaning of word between general English and specific English or among fields. In specific cases, each word express different meaning.

For example, the word "specification" in general English means" sự ghi rỗ", but in specific English, like "specification" in technical known as " đặc điểm kĩ thuật", but in pharmaceutical field it means "nhà sản xuất"

Surely, translators will have conclusion how to use exactly and flexibly Vietnamese equivalent to avoid misunderstanding.

1.2 Difficulties

In each specific field, there are a lot of terms; especially terms are formed by many ways. Due to limitation of knowledge about the specific field, translators certainly meet difficulties in translating terms.

Some terms express new concept or new ideas which are formed in the working process of each field or formed by using habits or slangs such as "Shelf - life" (tuổi thọ), "over-the-counter drugs" (thuốc bán không cần đơn).

In fact, there are a lot of terms which the meaning is easily guessed basing on the meaning of each word or via shift translation. For instance, the term "finished product", we can easily get its meaning through the word "finished" and "room". Or the term "quality control", we can easily translate it as kiểm nghiệm, quản lí chất lượng" by looking up the word "quality" and "control" in dictionary. On the contrary, there are a lot of terms or phrase which can translate individual words but it is difficult to guess the meaning of whole term or focus on a word or expression in Vietnamese equivalent. In this case, if we apply word to word strategy in translation, it is possible to cause a misunderstanding or restriction. For example, "Package insert" means "tò hướng dẫn sử dụng", or "preparation" is known as "chế phẩm liên quan" and "Batch" means "lô thuốc" or may be spectification has same meaning with manufacturer.

Sometimes, translators also meet difficulties in translating of abbreviation because abbreviation is formed by a variety of methods, if translator have limitation of knowledge about what they stand for, they can fail to find convert meaning of word in dictionary.

II. Some suggestions for translation

The most difficult to translate ESP is terminology which is often translated practically and exactly in requirement. Generally, the best translation should be performed according to some following steps:

✓ The translators should try to understand new terms in the whole content and intention of the text which they are translating. The principal way to reach it is reading all sentences or the text completed to give the idea that we want to say in the TL because the most important characteristic of this technique is translating the message as clearly and naturally as possible. By this way, translators can get the

meaning of word in the detailed content. Most of terms are created from original word in general English.

- ✓ Secondly, the translators should search the knowledge about the translation matter in order to, at least understand the concept of terms and use them correctly and decrease all the difficulties stated above. By doing this, translators can choose the best equivalence in Vietnamese and avoid the misunderstanding.
- ✓ Thirdly, the translators should avoid the tendency to translate word by word because that will destroy the meaning of original word and ruin the beauty of the expression. Basically, most of the terms are translated by using general word. However, sometimes, it is necessary to translate an English word by a long phrase or even a whole sentence to help reader understandable.

PART III: CONCLUSION

Nowadays, English is considered an international language; therefore, it becomes an obligatory subject in schools and universities. The important role of English is illustrated in every field of human life such as: economy, science, and politics, medical, etc. Therefore, translation of English terms for specific purposes plays a pressing role.

My graduation paper is divided into three parts: the rationale, aims, methods, scope and design of the study are mentioned in part one with the aim that the readers could have an overview of my study. Part II is the most important in this study including three chapters. Based on the theoretical background of translation and translation methods in chapter I, chapter II gives some strategies applied in translation of some common pharmaceutical terms such as recognized translation, shift translation, translation by omission, and translation by paraphrase using related words, translation by using a loan word. Then, some difficulties in translation process and some suggestions are given in chapter III. Part III summarizes main ideas mentioned in previous parts and gives some suggestions for further research.

Hopefully, my study will be really helpful for all caring about pharmaceutical term knowledge, especially English terms relating to medical field. It can suggest the useful ideas for the further studies to readers.

Surely, mistakes and shortcomings in this graduation paper are unavoidable due to my limitation of time and knowledge. Therefore, I am always willing to receive the contributions, advices and sympathies from teachers and readers to make my graduation paper much better.

REFERENCES

- 1. Baker, M. (1992), A Course book on translation(London Routledge)
- **2.** Bell R. T. (1991) *Translation and translating : Theory and Practice*

(Applied Linguistic and Language Study), London: Longman Group Ltd

- **3.** Catford J.C, (1996) A *linguistic theory of translation* (London Oxford University Press).
- **4.** Hutchinson, T & Water, A (1987) *English for Specific Purposes : A learning* concreted approach (Cambridge University Press)
- 5. Jakobson R (1959) Linguistic aspects of translation Longman Group Ltd
- **6.** Perter Newmark (1988) *A text book of translation: theorical and practical implications* "Oxford: Pergamon press"
- 7. Tony Dudley Evans and Maggie Jo St John (1998) Developments in English for Specific purpose: A multi-disciplinary approach (Cambridge University Press).
- 8. Do Huu Chau (1998) Co so ngu nghia hoc tu vung. NXB Giao Duc
- **9.** Roger, T. Bell (1991) *Translation and Translating : Theory and Practice*, New York: Longman Inc.
- 10. Nguyễn Thiện Giáp Dẫn luận ngôn ngữ NXB GD 2001Some jounals
- 11. WHO Quality Assurance of Pharmaceuticals, Vol. 2, 1999.
- **12.**ASEAN Good Manufacturing Practice Guidelines, 3rd Ed. 1997, Nha xuat ban y hoc, Hanoi, 1997.
- **13.**WHO Research Guidelines for Evaluting the Safety and Efficacy of Herbal Medicines, Manilla, 1993.

APPENDIX

A template of Package- Insert:

The First is name of Drugs eg: Cerebrolysin (thuốc tiêm chữa rối loạn chức năng

não)

The second is Compsition (Dang bào chế): Cerebrolysin is a peptide preparation

produced by the biotechnology standardized enzymatic breakdown of purified

porcine brai proteins. The solution, ready for injection or infusion, is free of

proteins, lipids and antigenic properties. 1ml of Cerebrolysin contains 215.2mg of

a porcine brain-derived peptide preparation (Cerebrolysin concentrate) in aqueous

solution.

Translation: Dang bào chế: Cể là dang peptid san xuất bằng phương pháp cắt

đoạn bởi enzyme dựa trên cơ sở công nghệ sinh học đã được chuẩn hóa. Cere

được sản xuất từ protein não lợn được tinh chế. Dạng dung dịch của Cere dùng để

tiêm hoặc truyền, không chứa protein, các hợp chất có tính kháng nguyên.

The Third: Route of administration: (Đường dùng)

Solution for intramuscular and intravenous injection or intravenous infusion.

Trans: Đường dùng: Tiêm bắp, tiêm tĩnh mạch hoặc truyền tĩnh mạch.

The Fourth: Pharmacodynamics: (Duoc luc hoc)

The efficacy of Cerebrolysin is proven in numerous animal experiments and

clinical trials. Cerebrolysin is a brain -specific peptidergic nootropic and

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neutrotrophic drug able to affect the central nervous system un a multimodal way. This multimodal action of Cere. Express it as:

- 1) Regulation and improvement of the neuronal metalbolism which prevents lactasidoses in hypoxix or ischaemic epicsodes,
- 2) Modulation of the synaptic plasticity which corresponds to an improvement of behaviour and learning capacity, and
- 3.) A completely unique neurotrophic effect, including neuronal differentiation, guaranteeing full neuronal function and protection against different types of ischaemic and neurotoxic lesions.

In controlled clinical trials Cere. Treatment leads to an improvement In the cognitive performance and mood of patients suffering from Alzheimer's disease. Therefore, the amount of care needed by these suffers decrease. In these patients marked improvement is observed in 61,7% of the Cere. –treated group (as assessed by Clinical Global Impressions Scale abb: CGI). Another clinical trial in patients with vascular dementia demonstratives enhancement of noticed in this illness. A further study involving patients from nine different disease entities establishes the effectiveness of Cere through the use of 11 psychological tests subjected to a variance analysis. After stroke and craniocerebreal trauma treatment with Cere lead to ab accelerated recovery)

Literature on Cerebrolysin is available upon request.

Trans: Dược lục học Hiệu quả của Cerere được chứng minh qua 1 số thư nghiệm trên súc vật và trên lâm sang. Cere có bản chất là petid não có tác dụng dinh dưỡng thần kinh rất đặc hiệu, tác động lên não và hệ thần kinh trung ương theo nhiều cơ chế. Cơ chế tác động đa năng của Cere được giải thích như sau:

- 1. Tăng cường và cải thiện chuyển hóa của tế bào thần kinh, do đó ngăn chặn được hiện tượng nhiễm acid lactic, thiếu oxy não hoặc thiếu máu não.
- 2. Điều chỉnh lại dẫn truyền synap thần kinh từ đó cải thiện được hành vi và khả năng học tập.
- 3. Có hiệu quả dinh dưỡng thần kinh độc đáo, bao gồm tăng biệt hóa tế bào thần kinh, đảm bảo chức năng thần kinh và bảo vệ tế bào não khỏi các tổn thương do thiếu máu não và nhiễm độc gây nên.

Thử nghiệm lâm sang có thể kiểm soát thấy Cere cải thiện được tri thức và tâm trạng của người bênh Alzheimer, bởi vậy làm giảm số bệnh nhân cần chăm sóc. Tổng hợp bệnh nhân được cải thiện tình trạng lâm sang là 61,7 % trên toàn bộ bệnh nhân được điều trị với Cere(đánh được dựa trên tiêu chuẩn CGI . Một thử nghiệm lâm sàng khác trên bệnh nhân bị sa sút trí tuệ do bệnh bạch máu cầu đại não. Một nghiên cứu khác trên bệnh nhân bị mắc bệnh thần kinh khác nhau đã xác nhận hiệu quả của Cerebrolysin qua việc dùng 11 thử nghiệm tâm lý khác nhau để phân tích. Người bệnh bị đột quy hoặc trấn thương sọ não được điều trị của Cere đã được công bố,

Pharmacokinetics: Cerebrolysin passes through the blood-brain barrier. Up to eight hours after iv administration of Cere neurotrophic activity can be detected in the human serum. Indicating long-lasting effects even after a single iv administration.

Trans: Dược động học: Cere vượt qua được hàng rào máu não. 8 giờ sau khi tiêm tĩnh mạch Cere hoạt tính dinh dưỡng cho thần kinh cơ thể được phát hiện trong huyết thanh người, chứng tỏ hiệu quả kéo dài, ngảy chỉ sau một lần dùng duy nhât.

Toxiccological properties

Cerebrolysin is generally well tolerat and posseses an extremely high margin of safety. In human therapeautic dosage s this drugs produces almost no toxic symtoms. The toxicological data are listed below.

Acute toxicity

Chronic toxicity multiple dose over six months

Reproductive toxicity

Muta-genicity, sensitizing effect and carcinogencity:

Trans Độc tính: Cere dung nạp tốt, có tính an toàn cao. Ở người với liều điều trị thì thuốc này không gây ra bất kỳ triệu chứng nhiễm độc nào. Những số liệu độc tính như sau:

Độc tính cấp:

Độc tính mạn

Độc tính trên chức năng sinh sản:

Đột biến gen, nhạy cảm và khả năng gây ung thư

Indications:

(Chỉ định điều trị)

Contraindications:

(Chống chỉ định)

Side effects

(Tác dụng phụ hay tác dụng không mong muốn)

Warnings and precautionary measures (chú ý)

Interaction (Tương tác thuốc)

Dosage and administration (liều dùng và cách dùng)

Storage: Bảo quản

Shelf-life: hạn dùng

Some name of basic medicine

Tên chính	Tên Latin hay tên Khoa học
Aconit(rễ và bột rễ)	Aconit (radix et pulvis radicis)
Aconitin và các muối	Aconitinum et salia
Adrenalin (Epinephrin)	Adrenalin
Ajmarin	Âmlium
Apomocphin và các loại muỗi	Apomorphinnum et salia
Arecolin và các loại muối	Arecolinum et salia
Asenial (các loại)	Arsenias
Asen trioxyl (thạch tín)	Arseni tryoxydum
Atropin và các muối	Atropinnum et salia
Ba đậu (hạt)	Crotonis liglii (semen)
Benladon (cao, lá, bột lá)	Belladonnac (extractum, folium, pelvis
	foliorum)
Busunfan (Mileran)	Busufanum

Cacbachol Carbacholini chloridum

Cara, cararin và các chất tổng hợp: Turbocurarinum

Galamin trilodotylal

Dầu ba đậu Oleum crotonis

Datura Dalurae metel (fructus, folium, pulvis

(quả, lá, bột, lá, cao) foliorum, extractum)

Dieun Dicainum

Digitalis (cao , lá , bột, bột lá)

Digitalis (extractum, folium, pulvis

Digitulin và các glucozit khác cùng loại | folirum)

Dionin (hay Codetylin) Digitalinum (Digiloxinum)

Ecgotamin và các ancaloit khác cùng Dioninum (Ethylmorphini hyro

loại chloridum)

Endoxan Ecgolaminum

Fluol-uraxin Cyclophosphamidum

Galantamin Fluoro- uraxilum

Hoàng não Galanthaminum

Homatropin và các muối Strychni wallichianac (cortex)

Mã tiền (cao, bột, hạt) | Homatropinum et salia

Strychni nucis vomiene (etractum,

Mecapolopurin pulvis, semen)

Metholrexal Merecaplopurinum

Neriolin Metholtraxatum

Nitroglyxrin Nerlolinum

Nor-adrelanin Nitroglicerlinum

Noc rắn Nor-adrelaninum

Papaverin và các muôis Venenum serpentis

Sừng dê hạt Thiềm tô Strophamlinum Divaricati (semen) Thủy ngân diclorua Secretio bufonis Hydrargirum dicloratum Thủy ngân oxit Thủy ngân oxyxlanua ----- oxydatum Thủy ngân xianua ----- oxycyaunum ----cyanatum Nhóm thuốc gây nghiện Addicted drugs Coca (lá cao, bột lá) Erythroxylic cocae 9folium, extrac-tum, Cocain và các muối pulvis folirum) Heroin (diaxetyl mocphin Cocainum et salia Methadon Heroinum (diaxetyl mocphinum) Mocphin và các muối Methadoni cliloridum Opi (bột, cao) Morphinum et salia Nước cất hanh nhân Opii (pulvis, extractum) Thủy ngân và các muối hữu cơ có chứa Aqua amygdalarum amrorum thủy ngân (trừ thuốc đỏ) Hydrargyrum et hydrargyriorga-nien Tinh dầu giun salia Vitamin D các loai Aetheroleum chenopodii Nhóm axit Vitaminum D Axit clohydric ----nitric Acid groups ----photphoric Acidum hydrochloricum ----crysophanic, cryzarobin ---- nitricum

	phosphoricum
Nhóm thuốc tê tổng hợp	chrysonphanicum, chrysarobi-
Lindocain	num
Mesocain	
Novocain (procain)	
	Lidocainum
Nhóm thuốc tâm thần, ngủ, mê	Mesocainum
Clodiazopoxit	Novocainum(procainum)
Ketamin	
Cloran Hydrat	
	Clodiazopoxydum
Thuôc nội tiết tố	Kentaminum
Các tuyến giáp trạng và dẫn chất	Cloralum hydralum
Progesteron	
Ínulin	Extractum glandulae thyroldae
Teslosteron các dẫn chất và các muối	Thyreoidinum, Thyroxinum
	Progesteronum
Nhóm Đông dược	Insulinum
Thần sa, chu sa	Tesloteronum
Thủy ngân	
Khinh phấn	
	Cinmanaris (có chứa HgS và Hgse)
	Hydragyrum
	Hydrargyi subchloridum mile