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Translation from English into Spanish of a specialised glossary created through a corpus of texts related to Stem Cell and Bone Marrow Transplant

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Resumen

Este trabajo de fin de grado nace con el objetivo de crear una herramienta útil para la consulta de términos y frases relacionados con la técnica médica del trasplante de células madre y médula ósea. A partir de la teoría comunicativa de la terminología de Maria Teresa Cabré, y a través de un corpus formado por diferentes textos en inglés relacionados con el tema, analizamos con el programa Wordsmith Tools las palabras y frases más usadas en este ámbito. Con la ayuda del programa hemos generado un glosario especializado en inglés que luego hemos traducido al español con la ayuda de diccionarios especializados y textos paralelos. Además, también demostramos la importancia de las unidades fraseológicas, en este caso concreto, mediante el análisis cuantitativo de los datos obtenidos.

Palabras clave: trasplante de médula ósea, corpus, lenguaje especializado, glosario, traducción.

Abstract

This final degree project is intended to offer a useful tool to look up terms and phrases related to the medical technique of stem cell and bone marrow transplant. Following Cabré's Communicative Theory of Terminology, and through a corpus crated with different texts in English related to the topic, we analyse with Wordsmith Tools software the most used words and phrases of this field. With this application, we have generated a specialised glossary in English that we have later translated to Spanish with the help of specialised dictionaries and parallel texts. Moreover, we have also showed the importance of phraseological units in this specific case, by quantitatively analysing the obtained data.

Keywords: stem cell transplant, corpus, specialised language, glossary, translation.

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1. Introduction

1.1. Motivation

First of all, I would like to start explaining why I have chosen this topic. Cancer is currently one of the worst and most common diseases around the globe, being more and more diagnosed and treated more frequently every day.

Millions of people die every year because of the different kinds of this illness and the different ways in which it appears, affecting all of us: we all know someone who has suffered it and all of them could tell you how painful it is. This death toll impacts everybody. Children, young people, adults and the elder can suffer it because everybody is inevitably exposed.

But not everything is negative, I would also like to point that there is a place for hope, new treatments and drugs are showing evidence that we can fight and defeat this evil. Research is in its high, and the most important universities together with pharmaceutical companies are focused on improving the situation of all the people affected.

Talking about the different types of cancer, I will speak about blood cancers and its treatment. I will focus specifically in the medical procedure of stem cell and bone marrow transplant, which is quite known for the public, as it is usually explained on TV and social networks because of the need of donors to help with the treatment. To find these donors, massive advertising campaigns, which you will for sure remember, are created.

Considering the professional perspective, I am a qualified nurse as well as a physiotherapist with more than ten years of experience, I have worked for more than five years in cancer units, first as a nurse in haematological cancers like leukaemia and later as a physiotherapist in throat and lung cancer rehabilitation. This gives me a unique view of this world that most translators do not possess; I also command the medical jargon and I believe I can carry out this project with an ideal inside professional view. As I have already said, I have worked for many years with cancer patients and I feel this project could mean a good contribution for health workers and patients.

From my personal point of view, I strongly feel I can now do my best and contribute in a small way to this struggle by helping to create a tool for translation, making a new stem cell and bone marrow transplant glossary and later translating it into Spanish.

1.2. Academic relevance of the topic

Related to Translation Studies, medical translation is a specific kind of translation that needs a big understanding of the medical world and how it works. For the last years the translation of medical texts and information for the patients has grown massively because of globalization. Researchers and health professionals can use a lot of data from other languages if translated.

We have to bear in mind that English is currently the world's global lingua franca, that is, it represents the most used language in the academic and scientific fields so it means that it is often translated to all the other languages, which tells us English is the source language for a lot of translators worldwide.

Furthermore, with current increasing immigration worldwide, patients and their relatives coming from other countries also need to be informed in their own language to properly understand key knowledge related to their illness.

We can observe the importance of the medical translation in the numerous universities that offer related formation. Some examples:

- *Universitat Jaume I,* Medical and healthcare translation master's degree.
- University College London, Translation and Technology (Scientific, Technical and Medical) MSc.
- University of California San Diego, a specialised course Medical Translation for Internal Medicine.
- Simon Fraser University (Canada), Medical translation and interpretations certificate.

1.3. Objectives and hypotheses

The initial hypotheses of this work are related to the potential difficulties translators may encounter when dealing with the terminology and phraseology of medical translation related to blood cancers, and more specifically about stem cell and bone marrow transplant.

1. The first hypothesis I propose related to the project is that it is possible to create a reliable glossary working with a software that analyses a corpus of specialised texts.
2. The second hypothesis I list is that a highly specialised field like blood cancers and stem cell and bone marrow transplant, with its very specific words and phrases, could benefit of the development of new tools to help in translation.
3. The third hypothesis is that texts related to haematology cancers and their treatments contain more phrases than single-word terminology. We could think that the reason behind this is that in medical texts there are plenty of phraseological units: we can observe this in the medical literature and also in the names of the techniques, illnesses and tools used in healthcare (e.g., *bone marrow transplant, blood cells, acute myeloid leukaemia, chronic lymphocytic leukaemia, risk factors, side effects, etc.).*

Thus, with this project I would like to provide a new tool, a glossary, in the field of medical translation and specialised language, with the aim to help professionals of translation and healthcare workers.

Next, I enclose a list of the objectives related to the previous hypothesis:

1. To confirm the value of a corpus-based contrastive methodology for identifying the terminology and phraseology of texts related to blood cancers and stem cell and bone marrow transplant.
2. To elaborate a monolingual specialised corpus that will enable us to extract the source terms and phraseology.
3. To create a bilingual glossary of terminology and phraseology with the intention of giving a solution to the problems translators may encounter while dealing with this kind of very specialised language.
4. To provide a resource with a social impact, by helping patients and their relatives.
5. To check whether there are more phraseological units than single-word units.

On the whole, the aim of this project is to create a specialised bilingual glossary for medical translators, healthcare workers and finally, but not less importantly,

for patients, who are not professionals but can always use a resource of this kind to understand and better cope with the adversities of a cancer diagnose and its treatment. Moreover, as a healthcare professional myself who has lived and worked in different countries, and having the ability to translate and explain to patients first hand, I would like to transmit the importance of this sort of tools to help increase the mood and welfare of patients and their relatives.

I also feel this type of project could promote research into the field of specialised medical translation and give others the chance to create similar resources that could also benefit patients. In brief, I would like to emphasize the social sphere impact this project may have.

1.4. Methodology

Our intention with this work is to test the hypotheses we have previously proposed; therefore, we will follow the next steps:

1.4.1. Collection of necessary texts related to stem cell transplant to create a corpus

For the compilation of a specialised corpus, we are going to use different methods: first, we will check on specialised webs about this topic. Main health and social care government structures usually have their own documents and protocols regarding diagnose and treatment of illnesses. In the case of English-speaking countries, ministries of health care often offer their documents which can be considered reliable with verified sources. Hospitals and main healthcare providers are also a common source for this sort of texts. Another main source of these kind of documents will be foundations and charities related to cancer care. As we have already said in the previous chapters of this project, cancer care has great relevance today in our society, thus counting with numerous organisations to help professionals, patients and relatives.

We will use different texts regarding cancer care, haematological cancers and more specifically stem cell and bone marrow transplant. The main criteria for this selection will be as follows:

- Written in English, United Kingdom sources.

- From online sources: webs of government, hospitals, foundations and other organisations.
- Reliability, they must be scientifically written and verified.
- For varied uses within the main topic, this means that we will use documents for professionals such as medical protocols and research articles, and documents for patients like informative leaflets. Consequently, we will work with three different text genres.

In general, we are going to use search words to identify texts that talk about blood cancers and their treatment with stem cell and bone marrow transplant. This needs a careful selection of the search terms to provide a high-quality corpus and later conclusions. To be able to choose these terms I will use my professional experience as a cancer care nurse, because having worked in a leukaemia and bone marrow transplant ward in the United Kingdom, I know the main terms that will help to find texts related to this topic.

Search terms: cancer care, oncology, haematology, leukaemia, lymphoma, myeloma, stem cell transplant, bone marrow transplant.

On the whole, we will use the previous criteria and search terms to select six documents for each of the three different text genres explained above, having a total of eighteen documents to create a corpus. I consider this a correct number of texts to properly test the hypothesis and help me to create a specialised glossary.

1.4.2. Conversion of all selected texts into plain text format (.txt) and creation of an *ad hoc* corpus

After choosing all the necessary texts for the corpus from the Internet, we will convert all of them into .txt documents using the Notepad application of our computer. Thus, having now our corpus we will move to the next step.

1.4.3. Analysis of the corpus and identification of the terms using Wordsmith Tools

Wordsmith Tools is a software tool that allows us to analyse corpora. It was developed by Mike Scott and released in 1996. It is a toolkit used in the field of

corpus linguistics for searching patterns in language. This program can manage many languages.

It has three different tools or modules:

- **Concord** is used to create concordances in plain text or web text files. In this tool you can select a word and it will seek it in all your selected files. Next, it will show a concordance display and collocates of the word. We will use this tool for phraseology in our corpus.
- **WordList Tool** is intended to help create word lists from one or more plain text or web text files. Then we can see word lists in alphabetical and frequency order. We will use this module for terminology within our corpus.
- **Keywords Tool**. This program allows to find and identify key words in a selected text. It will search for words outstanding in its frequency, these words will be considered as "key" ones and they will be shown in order of repetition. To do this, the tool needs word lists that can be made previously with the other module called Word List. We will not use this tool for our project.

In all three tools, listings can be saved, edited, printed copied to a word-processor and also converted to text files.

The official website is lexically.net/wordsmith. Here you can find all the information you need to work with the program, with software downloads and even links to videos explaining how to use the software.

There are other programs with similar basis, one example is AntConc, a freeware that works similarly as a corpus analysis toolkit for concordance and text analysis.

With Wordsmith tools we are going to qualitatively test our hypotheses by selecting specialised terminology to obtain a monolingual glossary.

1.4.4. Glossary elaboration

With the terminology and phraseology identified with the software, we are going to work in a glossary. It will be made up of the most repeated specialised terms of selected documents. These terms will be specific of the domain of stem cell transplant. We will use Cabré's terminological criteria to identify the terms

following Cabré's Communicative Theory of Terminology, which will be developed further on in this work.

Definitions of terms will be extracted from parallel texts and specialised dictionaries in English, as well as from the documents used for the corpus.

The glossary will contain a definition for each of the terms; these definitions will be as simple as possible, written with the intention to be easily understood by any reader independently of their background. This is because our goal is to make a glossary that can be used by healthcare workers but at the same time it has to be useful for patients and relatives, and other professionals such as translators. Thus, we will try to avoid technical language and jargon if possible.

Apart from this, if a term has more than one definition, we will use the one related to the topic of stem cell and bone marrow transplant and blood cancers.

In addition, terms will be put in alphabetical order; this will make it easier for the reader to find exactly what they are looking for.

Once the glossary is elaborated, we will quantitatively analyse the results to test our third hypothesis and check if it contains more phrases than single-word units.

1.4.5. Glossary translation

With this monolingual glossary we will propose a translation into Spanish of all the terms and their meanings.

To help with this translation, we will use reliable parallel texts and specialised dictionaries in the target language. We will use them to compare and check if we are doing a correct translation. We will check not just the terms but also the syntaxis of the new definitions, with the intention of making it as natural as possible for the target language users.

2. State of the art

In this section I am going to talk about the different fields that the project is going to work with, each of these fields having a specific relation with the methodology that we are going to use later. We describe here these fields and their relation to the project and the bibliography that has helped me to create this project.

2.1. Medical translation

Medical translation has been traditionally considered as a subtype of scientific technical translation. Today more and more authors such as translators, teachers and researchers consider this sort of translation a specific field of its own.

It has its own specific features that distinguish it from other fields; as a result of these attributes, medical translation needs a specific kind of formation, taking into account the characteristics of medical discourse and the variety of communicative situations and text genres.

Following the next criteria, it is justified that medical translation is an academic specialty of its own: first, it generates and uses its own research, second, there is a consolidated community of professionals with its own characteristics, and third, it has started to develop its specific teaching as a speciality within translation. (Muñoz-Miquel, 2016, pp. 235-267)

Translation of medical texts has some specific features that distinguish it from other types of translation. First of all, it is conditioned by the ethical codes of biomedical research and health care, this means that medical texts have to be accurate and reliable, moreover, they have to keep confidentiality and sensitivity towards patients. Secondly, to be competent in medical translation you have to be familiar with its peculiarities: conceptual networks, specific terminology, text genres, social contexts and resources. (Montalt, 2011, pp. 79-83)

Another point is that, English is considered the main source language in medical translation because most biomedical research is published originally in this language. Later it is translated and exported to other languages and cultures. In the same way, English is the most important target language because medical researchers from all over the world will need to publish their works in English if they want to make them available for everybody. (Montalt, 2011, pp. 79-83)

On the whole, we can say that medical translation is definitely an essential part of the current civilisation, helping to expand the medical knowledge worldwide and also making it accessible to everybody. And this is why I feel a project like this, with a final translation of a glossary about blood cancers and stem cell and bone marrow transplant could be useful.

2.2. Specialised language

We understand that medical language, which we are going to use to work in a corpus for later creating a glossary, is a specialised language, in which the terminology is defined by the way specialised knowledge concepts are named and structured.

We can find the information in scientific and technical texts encoded in specialised knowledge units; these terms represent access points to more complex knowledge structures. Texts are formed by conceptual domains, sometimes explicit and others implicit, that represent the specialised knowledge encoded. (Faber & López-Rodríguez, 2012, pp. 9-31)

As we have explained in previous parts, to work with specialised texts is essential that translators and technical writers fully know the conceptual domain behind the word and phrases. Translators must be able to read beyond correspondences at the level of individual terms, and be able to establish interlinguistic references to entire knowledge structures. This way they will be able to produce an equivalent text in the target language. (Faber & López-Rodríguez, 2012, pp. 9-31)

Terminological units and their correspondences possess both paradigmatic and syntagmatic structure, they do not just represent specialised concepts but also have syntax and collocational patterns. Therefore, to properly translate a text you need to know more than terminological correspondences, because the insertion of these terms in the context of the target text will also affect all the text levels. (Faber & López-Rodríguez, 2012, pp. 9-31)

In this project the final objective is to translate a specific medical glossary, therefore, we give importance to translation in specialised texts. As we can see in this bibliography, it is imperative for good translators to command both linguistic terminology and specific conceptual entities. Talking about specialised medical

texts, the translator should know both the words and the meaning behind the words.

In the same way, checking on different sources we find the concept of language for specific purposes (LSP). It is the language used in specialised fields of knowledge. Specialised vocabulary is a key part of a language for specific purposes, as well as terminology, which is a discipline that collects and describes the vocabulary of specialised subject fields. (Bowker & Pearson, 2002, pp. 25-28)

It exists also an equivalent concept for English texts, English for Specific Purposes (ESP), which is considered a subset of English as a second or foreign language. As an LSP, it conveys a degree of specialisation with a particular vocabulary and skills the users need. Dudley-Evans, as seen in Defining English for Specific Purposes and the Role of the ESP Practitioner (Laurence, 1998), defined ESP with three absolute characteristics: it is defined to meet specific needs, it makes use of underlying methodology and activities of the discipline, and it is centred on the language appropriate to these activities in terms of grammar, lexis, register, study skills, discourse and genre. This definition contains as well variable characteristics: it may be related to or designed for specific disciplines, it may use a different methodology from that of General English, and it is likely to be designed for adult learners and advanced users, so it is assumed some basic knowledge of the language systems.

Medical texts meet the conditions to be considered an LSP, because they have their own terminology which is not often used on a daily basis for general purposes; we need to know the terminology and its meaning to manage medical language and its translation. This is one of the reasons why it is so important to have a translated glossary with the most used words in highly specific fields like haematological cancers and stem cell and bone marrow transplant. As a result of this kind of tools, communication will be easier and better for healthcare professionals and patients, which is for me the main goal of medical translation.

LSP is not only formed by specialised vocabulary, but also collocations and stylistic features that are used in a specific way when talking about a specialised subject field.

LSP can be used by experts on a field but also by non-experts; for example, translators are often experts who have formation in language and linguistics, but they probably don't have a full knowledge of the specialised context that is found in the texts they have to translate.

Now, we will see the evolution of medicine and its relation to medical language.

We will talk about the foundation of modern medicine, what happened in the eighteenth century during the Enlightenment and with the rise of the natural sciences in the nineteenth century. It represented a massive increase in knowledge which came accompanied by the creation of plenty of new terminology and a specific way of writing and talking between the experts on the several medical fields.

The source of the terminology nowadays used in medicine comes from Latin and Greek. The medical knowledge of the Greeks was later taken over by the Romans, who latinised the vocabulary. Next, in the Middle Ages, Latin was the reference language in academic contexts, new words were named analogically in that language. Furthermore, between the sixteenth and the eighteenth centuries, the national languages of Europe became of main use for scientific communication, adapting their own characteristics in spelling, pronunciation and in their morphological structure, consequently creating their own national medical languages.

In 1895 an international convention was held in Basel to create an international standard on human anatomic terminology, *The Nomina Anatomica*, it included a binding nomenclature between different countries and languages for major terminology. It was periodically updated until 1998 when it was replaced by *Terminologia Anatomica*.

Nowadays, medical terminology is mostly decided by Anglo-American scientific discourse; the most important centres for medical research and technology are found in the USA, since English is considered the lingua franca in this field. On top of that, some of the most prestigious universities and leading databanks are also in the USA. For instance, Pubmed is considered one of the most important databases related to public health research, it is hosted at the U.S. National Library of Medicine (NLM), located at the National Institutes of Health (NIH). It

contains more than 35 million citations and abstracts of biomedical literature. Webpage: https://pubmed.ncbi.nlm.nih.gov/

As another example, Cochrane is an international network with its headquarters in the UK, the Cochrane Database of Systematic Reviews (CDSR) is the leading journal and database for systematic reviews in health care.

Webpage: https://www.cochrane.org/

2.3. Terminology and Phraseology

Terminology as a field of study was created by Wüster in the 1930s and later developed by the Vienna or Austrian School. They proposed The General Theory of Terminology. In this theory the attention was focused on the concepts and oriented to the normalization of the terms. However, new communicative needs and the development of more terminology activity finally made this theory insufficient, because it turned out too ideal and reductionist. For Wüster, terminology is focused on the study of the terms through the concepts they express. The concepts are taken as a starting point with the objective of stablishing clear delimitations between them. This point of view considers the ambits of concepts and their names (terms) independent. Consequently, this theory does not take into account the communicative dimension of terminology and linguistics or discursive elements. As a result of this, the new lines of study are now far from the old perspective and a new theory of terminology has arisen from different theory approaches. Faber and López-Rodríguez (2012) state that there are two main groups: on the one hand, the related to social and communicative approaches, and, on the other hand, the approaches based on cognitive orientation.

Maria Teresa Cabré Castellví is the author that we are going to take as a reference for this part of the project. She formulated The Communicative Theory of Terminology in the 1990s. It is a linguistics theory of terms that combines the cognitive approach with the communicative one, becoming wider than the General Theory of Terminology.

In this theory, terms are considered dynamic units with three dimensions: linguistic, cognitive and sociocommunicative. Terminological units are considered

general lexical units that take a terminological significance depending on the usage situation. Cabré was stablished in Barcelona when she formulated the beginning of this theory; there she founded a group of young students called IULATERM within Pompeu Fabra University. This group helped to later create The Communicative Theory of Terminology.

Following Cabré, we see that terminology represents a set of lexical units with a precise value in the fields of speciality; it is the fundamental resource to represent and communicate the specialised knowledge.

For instance, a specialised discourse is only accepted if it uses the proper and specific terms of that field. Every scientific discipline has its own terminology and we can observe that the more developed the discipline is, more consolidated the terminology becomes. This means that an internationalized discipline will also have a more systematic terminology, allowing it to communicate in the best possible way.

Furthermore, every specialised field has its specific units that name its concepts. These units are the terms, and the set of terms used in a specific discipline constitutes the terminology of this discipline. Specialists of all fields need their terminology, which it is also required for the communicators of specialised discourse. This includes translators and interpreters, teachers, editors and advertising professionals, among others.

In addition, to fully understand the concept of terminology and its importance for languages, it is vital that we see terminology in the light of the following three aspects: as a necessity because it represents a set of needs related to information and communication, as a practice or set of practices like vocabularies and as a field of knowledge being able to be scientifically used, through theory, description and application.

On the whole, we must consider terminology as an interdisciplinary domain with elements from language (like Linguistics), scientific knowledge disciplines like Philosophy and Psychology, and communicative disciplines such as Sociolinguistics and Social Communication. (Cabré, Domènech & Estopà, 2018).

Next, when talking about a specialised language and its analysis, we have to take into account the presence in the texts of syntactic structures, which we can divide in polilexeme units and discourse fragments. In our project we will look for the polilexeme units, which we can separate in two groups: lexical polilexeme units and phraseological units. When referring to a specialised language, we will see terminological polilexeme units and specialised phraseological units.

Consequently, Terminology as a discipline has included phraseology because it allows to better identify terms within their context and it can also help for a better learning and use of terminology by the speakers.

Phraseology has also benefited from the use of technology to create tools that allow the selection of units. The need to incorporate these units to dictionaries and vocabularies has made essential to stablish the criteria for the selection and rendering of phraseology. (Cabré, Estopà & Lorente, 1996)

2.4. Corpora

Corpus linguistics originated in the 1970s. It gave researchers the opportunity to use a new tool for the classification of words; a much better tool through technology that allowed them to process massive amounts of data in a very quick way. Moreover, it allowed to test the structure of language consequently giving lexis and phraseology a more important role. Nowadays, it is considered a fundamental component of work in Applied Linguistics.

> Corpus linguistics is an approach to the study of language that involves collecting large quantities of naturally occurring language and using specialised software that manipulates that language to obtain information about frequencies, co-occurrences and meanings. Hunston, S. (2022). Introduction. In Corpora in Applied Linguistics (Cambridge Applied Linguistics, pp. 1-17). Cambridge University Press.

Corpora work with language that has occurred in natural contexts and it can be spoken, written or signed, and also in different varieties and registers. A corpus is formed by complete or partial texts, therefore, made by pieces of connected discourse.

In addition, corpora are digitalised in a way they make possible for the software to find the patterning of texts. The result of the software application may be lists of items such as words, phrases or classifications, or even quantity records. The

output has to be read in terms of the context that the corpus represents: variety, register and community of the speakers.

There exist many applications of corpus linguistics. Corpora allow an empirical analysis of language that improves its definition and description. Subsequently, corpus linguistics is being applied nowadays in different kinds of disciplines such as language teaching and learning (highly used in second language acquisition), discourse analysis, literary studies, forensic linguistics, sociolinguistics, media discourse and political discourse, among others.

On top of that, and related to the line of our project, corpora are used in translation studies, they serve to compare patterns across languages by comparing source and target texts. Corpora can provide translators the necessary data to properly adjust the terminology and phraseology on the target text, they can significantly help to compare the differences that need to be done between the source and target texts. It does that by analysing the data during the three phases of the translation process:

- Documentation. Through corpora of documents from that specialty, translators can acquire the specific conceptual and terminological knowledge.
- Drafting. Corpora can be used to check if the selected translations represent the most suitable equivalents in the target text.
- Revision. In this phase corpora can also reassure the readability, comprehensibility, coherence, grammaticality and terminological consistency of the target text, among others. (Natalie Kübler & Guy Aston in The Routledge Handbook of Corpus Linguistics, 2010, pp. 501-502)

In this project we are going to set up a corpus to use it as a research tool, we will work with a specialised corpus; this kind contains texts of one particular type, with the goal of analysing a particular topic, register or situation. They can be more or less specialised depending for example on the date of the texts used, groups and subgroups, and the number of sources chosen. Alternatively, general corpus work with a wider range of texts trying to analyse the whole of a language or a variety of it.

3. Case study

3.1. Theoretical framework: Cabré's Communicative Theory of Terminology

Our approach to terminology in the analysis that we are going to carry out in this project is based on Cabré's Communicative Theory of Terminology.

Following her article in *Revue française de linguistique appliquée* in 2009, she explains the work that her research group has been doing since 1996 to implement a new theory covering different propositions of terms. The Communicative Theory of Terminology is a linguistic theory of terminological units, with a cognitive base and a communicative purpose. It follows the next points:

- Terminological units are the central focus of Terminology as a field of study.
- Terminological units are polyhedric (linguistic, cognitive and social-communicative).
- You can access to terminological units through different *doors*: linguistics, cognitive science and sciences of social communication.
- Each of the *doors of entry* requires its own theory, which has to work out adequately with the rest of theories of the other *doors*.

Subsequently, this theory includes a linguistic input that assumes, among other points, that it enters into its description through texts and oral and written linguistic productions of specialists in different communicative situations. In these texts and other productions, terminological units represent prototypical units of specialised knowledge. Moreover, they are denominative and designative units that show variation through polysemy and synonymy. Terminological units share the expression of specialised knowledge with other linguistic units, such as morphological, syntagmatic and syntactic ones.

We can identify these terminological units because they correspond to lexical units that are specifically placed in the conceptual structure of a field; in addition, they represent semantically the minimal independent units of this structure.

Another point is, terminological units in a theory of natural language cannot be conceived as separate units of words, but as specialised *values* of lexical units contained in the speaker's lexicon. A lexical unit acquires a specialised or terminological *value* when pragmatic characteristics of the discourse activate its specialised meaning. Due to this, every lexical unit could potentially become a terminological unit when properly activated.

This specialised meaning that lexical units can contain, that we have described as a *value,* is not a predefined and encapsulated set of information, but a specific selection of semantic characteristics according to the conditions of each situation of use.

Above all, we see that only a linguistic theory with a formal, cognitive and functional base, thus containing semantics and pragmatics, as well as grammar, can properly describe terminological units in their specificity. Furthermore, pragmatics are essential to explain how to activate the terminological value of the lexical units.

Overall, Cabré's Communicative Theory of Terminology brings new elements to the field of Terminology, giving the chance to adequately work with terminological units, which are conceived as the main object of study of Terminology field. Besides, they represent as well linguistic, cognitive and social units. Consequently, this gives us the option to work in a multi-approach and interdisciplinary way that is fundamental to address the complex nature of the field of study. Even if terminology was conceived in its beginning as an interdisciplinary field of study, Cabré's theory is the first to contemplate this multi-approach from different fields.

Linguistics has also opened its sights working with conceptual and social aspects, and also conceiving terminological units as linguistic units. Terminological units are considered, following linguistics, as lexical units of language that activate its specialised value by selecting semantic features, due to pragmatic conditions like theme and situation. As a result of this, we can also see how importantly Pragmatics is related to the field of Terminology, because it is fundamental to activate the specialised value of the lexical units, as a result of specific pragmatics

of each situation of use, semantic and syntactic characteristics will be determined, thus giving to the units their specialised meaning.

3.2. Corpus compilation

We have selected three groups of texts depending on their text genre, each of them will contain six representative texts chosen from specialised webs related to the topic and from reliable sources.

These texts have been selected because they show relevant information related to the procedure of stem cells transplant. They have also been chosen from different sources and for different audiences, with the goal of obtaining a varied corpus, consequently, offering us the chance to correctly obtain all the main terms and phrases used in the specialised language of this medical procedure.

- **Documents for professionals**
  - Medical protocols and guidelines
    - Haematology Cancer Clinical Guidelines. Indications for haemopoietic stem cell transplantation.
    - Pan London Haemato Oncology Clinical Guidelines. Acute Leukaemias and Myeloid Neoplasms Part 2: Acute Myeloid Leukaemia.
    - Chemotherapy Protocol. Haematopoietic Stem Cell Transplant (Autograft). Cyclophosphamide priming.
    - Bone marrow transplant in paediatrics supportive care guidelines.
    - Clinical Commissioning Policy: Haematopoietic Stem Cell Transplantation (HSCT) (All Ages).
    - Clinical Commissioning Policy: Second allogeneic haematopoietic stem cell transplant for relapsed disease (all ages).
  - Research articles
    - Reduced-intensity allogeneic stem cell transplantation for patients aged 50 years or older with B-cell ALL in remission: A retrospective study by the Adult ALL Working Group of the Japan Society for Hematopoietic Cell Transplantation.

        - Hematopoietic Stem Cell Mobilization: Current Collection Approaches, Stem Cell Heterogeneity, and a Proposed New Method for Stem Cell Transplant Conditioning.
        - Maintenance with daratumumab or observation following treatment with bortezomib, thalidomide, and dexamethasone with or without daratumumab and autologous stem-cell transplant in patients with newly diagnosed multiple myeloma (CASSIOPEIA): An open-label, randomised, phase 3 trial.
        - Current practice in nutrition after allogeneic hematopoietic stem cell transplantation. Results from a survey among hematopoietic stem cell transplant centers.
        - Reply to 'Allogeneic hematopoietic cell transplantation for concurrent multiple myeloma and myelodysplastic syndrome'.
        - To transplant or not: A dilemma for treatment of elderly AML patients in the twenty-first century.
- **Documents for patients**
    - Informative leaflets
        - Allogeneic Stem Cell Transplants. A Guide for Patients.
        - Preparing for your autologous stem cell / bone marrow transplant. Information for patients.
        - Blood stem cell and bone marrow transplants: The seven steps.
        - The Seven Steps. The Next Steps. A handbook for long-term recovery after blood stem cell or bone marrow transplant.
        - Your guide to bone marrow transplantation. Information for patients.
        - Allogeneic stem cell transplantation in myeloma. Treatments and tests Infosheet.

3.3. Qualitative analysis of the corpus and results

As we have explained previously in the section of methodology, now, we are going to analyse the corpus using Wordsmith Tools.

The first goal is to identify the specialised terms used in these texts about the specific field of stem cell transplant, with a final objective of creating a specialised

glossary. For this work, we will use Wordlist. For this tool to properly select the words we are looking for, we modify some options of the program:

- First, we apply a *stoplist file*, to avoid the selection of parts of the speech that are definitely not terms, such as adjectives, prepositions, pronouns, etc.
- Second, we apply a minimum frequency of appearance for a word of ten times within all the texts of the corpus, so the words that are less common are not selected for the list.
- Third, we also apply a minimum of five texts in which a word must appear to be selected for the list, if the word appears in less than that number it will not be chosen.

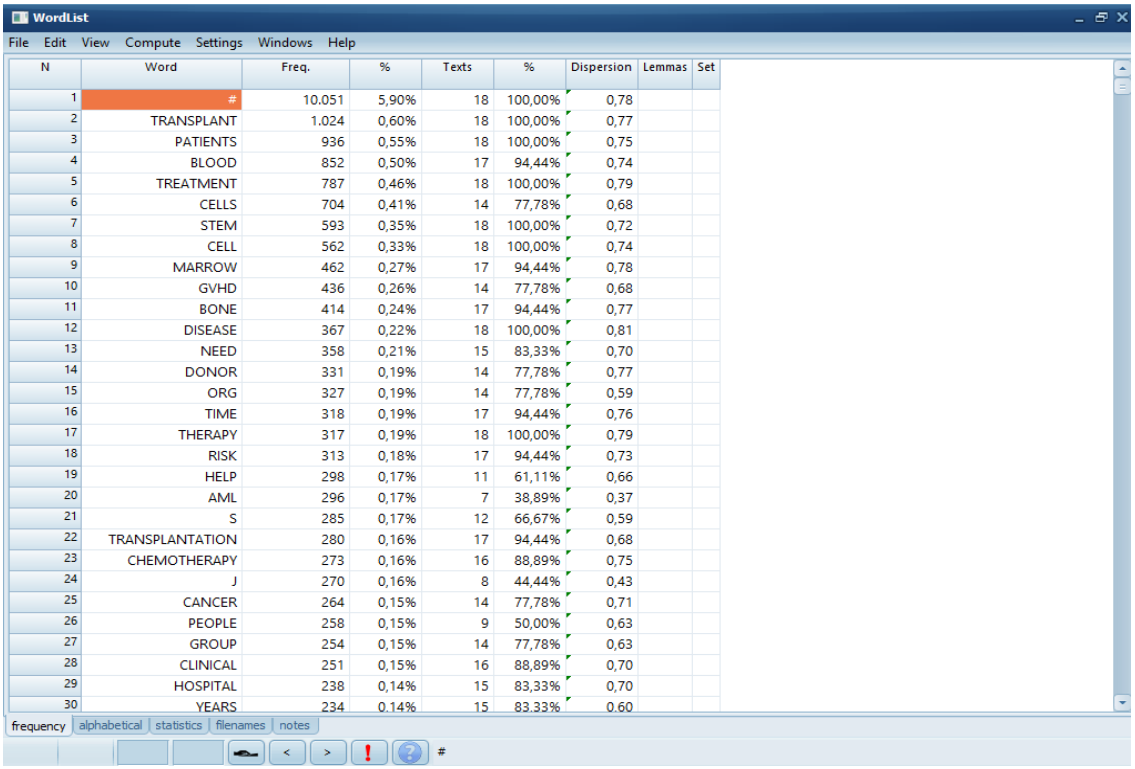
The total of texts forming the corpus contain 170.349 tokens or running words in text. As a result of the forementioned options and adjustments applied to Wordlist Tool, this number has been reduced to 95.194 tokens used for the list. And the final wordlist contains 1.174 words.

Consequently, the list of words has been adequately reduced to make it easier to work with it, thus helping to identify and select the terms related to the specialised field of the corpus.

Once the list has been created by the software, with a result of 1.174 different words, we follow Cabré's terminological criteria and my professional knowledge based in my experience as a cancer care nurse, to proceed and choose the specific terms for the glossary.

Next, we show some examples of how the program works to help us identify the terms.

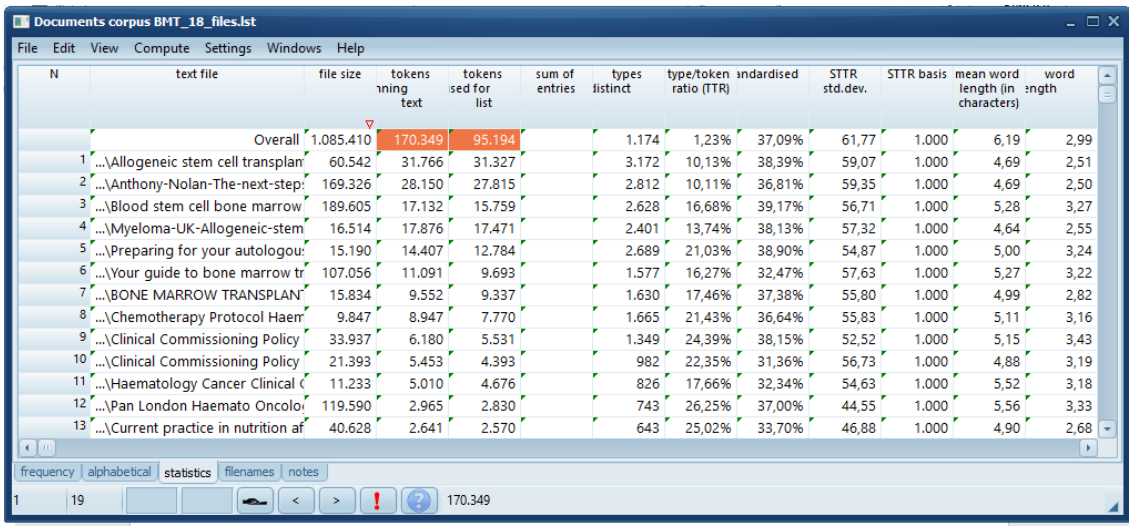
Here, we can observe a Wordlist frequency window. It shows the results of our stem cell transplant corpus once the *stoplist* has been applied. We can see here the most repeated terms in the texts of our corpus. However, we will work with the alphabetical list to help us make the specialised glossary.



N	Word	Freq.	%	Texts	%	Dispersion	Lemmas	Set
1	#	10.051	5,90%	18	100,00%	0,78		
2	TRANSPLANT	1.024	0,60%	18	100,00%	0,77		
3	PATIENTS	936	0,55%	18	100,00%	0,75		
4	BLOOD	852	0,50%	17	94,44%	0,74		
5	TREATMENT	787	0,46%	18	100,00%	0,79		
6	CELLS	704	0,41%	14	77,78%	0,68		
7	STEM	593	0,35%	18	100,00%	0,72		
8	CELL	562	0,33%	18	100,00%	0,74		
9	MARROW	462	0,27%	17	94,44%	0,78		
10	GVHD	436	0,26%	14	77,78%	0,68		
11	BONE	414	0,24%	17	94,44%	0,77		
12	DISEASE	367	0,22%	18	100,00%	0,81		
13	NEED	358	0,21%	15	83,33%	0,70		
14	DONOR	331	0,19%	14	77,78%	0,77		
15	ORG	327	0,19%	14	77,78%	0,59		
16	TIME	318	0,19%	17	94,44%	0,76		
17	THERAPY	317	0,19%	18	100,00%	0,79		
18	RISK	313	0,18%	17	94,44%	0,73		
19	HELP	298	0,17%	11	61,11%	0,66		
20	AML	296	0,17%	7	38,89%	0,37		
21	S	285	0,17%	12	66,67%	0,59		
22	TRANSPLANTATION	280	0,16%	17	94,44%	0,68		
23	CHEMOTHERAPY	273	0,16%	16	88,89%	0,75		
24	J	270	0,16%	8	44,44%	0,43		
25	CANCER	264	0,15%	14	77,78%	0,71		
26	PEOPLE	258	0,15%	9	50,00%	0,63		
27	GROUP	254	0,15%	14	77,78%	0,63		
28	CLINICAL	251	0,15%	16	88,89%	0,70		
29	HOSPITAL	238	0,14%	15	83,33%	0,70		
30	YEARS	234	0,14%	15	83,33%	0,60		

Figure 1: Wordlist frequency window

In the statistics section, we have obtained the number of words from this list.



N	text file	file size	tokens ...ning text	tokens ...sed for list	sum of entries	types ...listinct	type/token ratio (TTR)	...ndardised	STTR std.dev.	STTR basis	mean word length (in characters)	word ...ength
	Overall	1.085.410	170.349	95.194		1.174	1,23%	37,09%	61,77	1.000	6,19	2,99
1	...\Allogeneic stem cell transplan	60.542	31.766	31.327		3.172	10,13%	38,39%	59,07	1.000	4,69	2,51
2	...\Anthony-Nolan-The-next-step	169.326	28.150	27.815		2.812	10,11%	36,81%	59,35	1.000	4,69	2,50
3	...\Blood stem cell bone marrow	189.605	17.132	15.759		2.628	16,68%	39,17%	56,71	1.000	5,28	3,27
4	...\Myeloma-UK-Allogeneic-stem	16.514	17.876	17.471		2.401	13,74%	38,13%	57,32	1.000	4,64	2,55
5	...\Preparing for your autologou	15.190	14.407	12.784		2.689	21,03%	38,90%	54,87	1.000	5,00	3,24
6	...\Your guide to bone marrow tr	107.056	11.091	9.693		1.577	16,27%	32,47%	57,63	1.000	5,27	3,22
7	...\BONE MARROW TRANSPLAN	15.834	9.552	9.337		1.630	17,46%	37,38%	55,80	1.000	4,99	2,82
8	...\Chemotherapy Protocol Haem	9.847	8.947	7.770		1.665	21,43%	36,64%	55,83	1.000	5,11	3,16
9	...\Clinical Commissioning Policy	33.937	6.180	5.531		1.349	24,39%	38,15%	52,52	1.000	5,15	3,43
10	...\Clinical Commissioning Policy	21.393	5.453	4.393		982	22,35%	31,36%	56,73	1.000	4,88	3,19
11	...\Haematology Cancer Clinical (	11.233	5.010	4.676		826	17,66%	32,34%	54,63	1.000	5,52	3,18
12	...\Pan London Haemato Oncolo	119.590	2.965	2.830		743	26,25%	37,00%	44,55	1.000	5,56	3,33
13	...\Current practice in nutrition af	40.628	2.641	2.570		643	25,02%	33,70%	46,88	1.000	4,90	2,68

Figure 2: Statistics

The second goal of this section is to identify phraseology units within the corpus, thus offering us the possibility of adding the specialised phrases to the glossary.

For this part of the project, we are going to use the Concord Tool of the program. Using again Cabré's terminological criteria and my professional skills as an oncology nurse, I will select the key words that are usually found with others forming phraseological units, we will check with the program the concordance

display, collocates and clusters of each key word, therefore, proving or not the repeated use of this phraseological unit in this specialised field and its adequacy within the glossary.

We are going to do it this way, once we have the list created with Wordlist, we use the concordance option when identifying a word in the list, this will give us an idea to proceed or not with Concord tool and check as well the collocates and clusters of this word.

Next, we show an example for the word ‘transplant’ (the most used word of the corpus), we will reduce the span of concord to the three words before the key word and two behind.

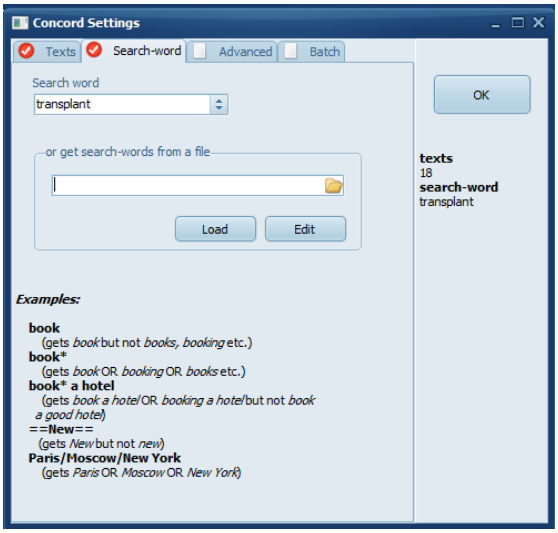


Figure 3: Search Word, Concord settings

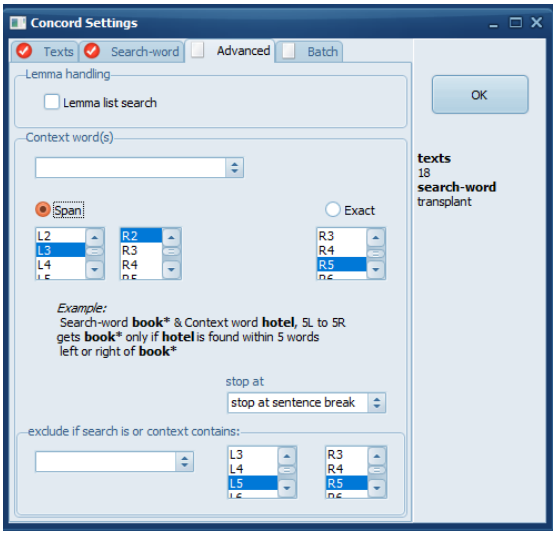
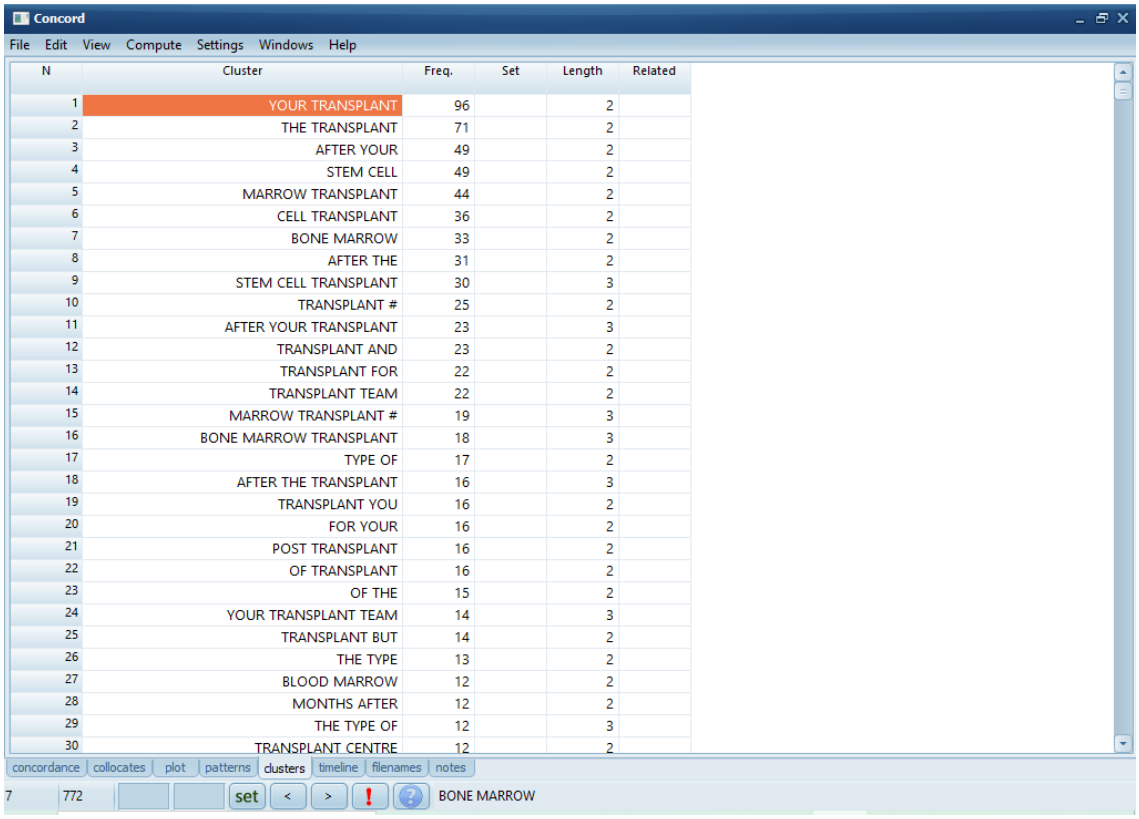


Figure 4: Advanced, Concord settings

We will be looking for clusters with the word we have searched. This will help us to identify repeated patterns of phraseology. Clusters are words which are found repeatedly together in each other's' company, in sequence. They represent a tighter relationship than collocates, more like multi-word units or groups or phrases. (Wordsmith Tools Manual Version 7, 2016).

Once we have identified the specialised phraseological units of our corpus, we will use them to complete our glossary.



N	Cluster	Freq.	Set	Length	Related
1	YOUR TRANSPLANT	96		2	
2	THE TRANSPLANT	71		2	
3	AFTER YOUR	49		2	
4	STEM CELL	49		2	
5	MARROW TRANSPLANT	44		2	
6	CELL TRANSPLANT	36		2	
7	BONE MARROW	33		2	
8	AFTER THE	31		2	
9	STEM CELL TRANSPLANT	30		3	
10	TRANSPLANT #	25		2	
11	AFTER YOUR TRANSPLANT	23		3	
12	TRANSPLANT AND	23		2	
13	TRANSPLANT FOR	22		2	
14	TRANSPLANT TEAM	22		2	
15	MARROW TRANSPLANT #	19		3	
16	BONE MARROW TRANSPLANT	18		3	
17	TYPE OF	17		2	
18	AFTER THE TRANSPLANT	16		3	
19	TRANSPLANT YOU	16		2	
20	FOR YOUR	16		2	
21	POST TRANSPLANT	16		2	
22	OF TRANSPLANT	16		2	
23	OF THE	15		2	
24	YOUR TRANSPLANT TEAM	14		3	
25	TRANSPLANT BUT	14		2	
26	THE TYPE	13		2	
27	BLOOD MARROW	12		2	
28	MONTHS AFTER	12		2	
29	THE TYPE OF	12		3	
30	TRANSPLANT CENTRE	12		2	

Figure 5: Clusters

3.4. Quantitative analysis of the corpus and results

As we have explained previously in the section of methodology, now, we are going to analyse the corpus quantitatively. For that, we will directly use the results of our glossary, to check if there are more phrases that single-word terminology.

Total of terms: 71

Of which:

- Single-word: 25
- Phraseological units: 46

Consequently, we can say that it is obvious that phraseological units are much more present than single-words, moreover, we have observed that many of these single-words also form part of many of the phraseological units.

Our conclusion in this section is that specialised language related to stem cell and bone marrow transplant is mostly formed by phraseological units.

4. Results

Specialised glossary and its translation into Spanish

A glossary is a list that is made to identify and conceptualize the terms that are presumed to be difficult to understand by the reader, its function is to increase reader's knowledge and comprehension, making its reading effective and understandable.

Moreover, a glossary is a dictionary of terms that allows to have all the information about a topic listed in alphabetical order. Therefore, users will be able to search for information looking for the starting letter of the term they are looking for. The main goal of a glossary is that users have easy access to all the terms related to a field, correctly grouped and ordered.

Apart from that, we have to take into consideration that in this glossary, with the help of different tools in the software we have selected and counted together as equal different forms of the same word such as leukaemia and leukemia, we have kept the most used in British English, which for instance is leukaemia.

Besides, together with the main English glossary, we have added a translation into Spanish for each of the terms, this part of the project is made to help Spanish users understand the meaning of specialised terms related to bone marrow and stem cell transplant. We have translated all the English glossary items into Spanish, as well as their meanings and descriptions. For that, we have used specialised dictionaries and parallel texts in Spanish. Moreover, I have used my professional experience as a qualified nurse, and my language skills being a Spanish native speaker to help in the translation.

Next, we show the bilingual English-Spanish glossary that we have created on the field of bone marrow and stem cell transplant medical procedure.

Stem cell and bone marrow transplant glossary

Traducción del inglés al español de un glosario de términos específicos relacionados con la técnica de trasplante de médula ósea y células madre

⇒ **Acute lymphoblastic leukaemia:** a type of blood cancer that starts from young white blood cells called lymphocytes in the bone marrow. It is most often diagnosed in younger people and chemotherapy is the main treatment. Some people need to have a stem cell transplant.

→ **Leucemia linfoblástica aguda:** tipo de cáncer de la sangre que se origina en la médula ósea a partir de glóbulos blancos inmaduros llamados linfocitos. Es más frecuente en personas jóvenes y la quimioterapia es el tratamiento principal. Algunas personas necesitan un trasplante de células madre.

⇒ **Acute myelogenous leukaemia or acute myeloid leukaemia (AML):** is a type of blood cancer that starts from young white blood cells called granulocytes or monocytes in the bone marrow. It is most often diagnosed in older people and chemotherapy is the main treatment. Some people need to have a bone marrow or stem cell transplant.

→ **Leucemia mieloide aguda (LMA):** tipo de cáncer de la sangre que se origina en la médula ósea a partir de glóbulos blancos llamados granulocitos o monocitos. Se diagnostica con mayor frecuencia en personas mayores y la quimioterapia es el tratamiento principal. Algunas personas necesitan un trasplante de médula ósea o de células madre.

⇒ **Acute promyelocytic leukaemia:** is a rare type of acute myeloid leukaemia (AML). It is also called APML or AML M3.

→ **Leucemia promielocítica aguda:** tipo raro de leucemia mieloide aguda (LMA). También conocida como LPA o M3.

⇒ **Allogeneic stem cell transplant or allogeneic hematopoietic stem cell transplant (ALLO-HSCT):** a transplant using another person's stem cells. These cells are usually collected from the donor's bloodstream, but sometimes a collection from their bone marrow is needed.

→ **Trasplante alogénico de células madre o trasplante alogénico de células madre hematopoyéticas:** trasplante en el que se usan

las células madre de otra persona. Estas células se extraen habitualmente del torrente sanguíneo del donante, pero a veces se necesita una extracción a partir de la médula ósea.

⇒ **Allograft:** a tissue graft from a donor.

→ **Aloinjerto:** injerto de un tejido de un donante.

⇒ **Anaemia:** reduction in the quantity of the oxygen-carrying pigment haemoglobin in the blood. The main symptoms are excessive tiredness and fatigability, breathlessness on exertion, pallor, and poor resistance to infection.

→ **Anemia:** reducción de la cantidad de hemoglobina en sangre, el cual es el pigmento responsable de transportar el oxígeno. Los principales síntomas son cansancio y fatigabilidad excesivos, disnea de esfuerzo, palidez y escasa resistencia a las infecciones.

⇒ **Autologous stem cell transplant or autologous hematopoietic stem cell transplant (AUTOLOGOUS-HSCT):** a procedure in which a patient's healthy stem cells are collected from the blood or bone marrow before treatment, stored, and then given back to the patient after treatment.

→ **Trasplante autólogo de células madre o trasplante autólogo de células madre hematopoyéticas:** técnica en la que se recolectan células madre sanas del paciente de la sangre o la médula ósea antes del tratamiento, se almacenan y luego se devuelven al paciente después del tratamiento.

⇒ **Blood cancer:** is a type of cancer that affects the production and function of blood cells. Blood cancer is caused by changes in the DNA within blood cells, this causes the blood cells to start behaving abnormally. Leukaemia, lymphoma and myeloma are the most common types of blood cancer.

→ **Cáncer de la sangre o hematológico:** es un tipo de cáncer que afecta a la producción y función de las células sanguíneas. El cáncer de la sangre lo causan cambios en el ADN de estas células, esto provoca que se comporten de manera anormal. Leucemia, linfoma y mieloma son los tipos más comunes de cánceres hematológicos.

⇒ **Blood or haematological disorders:** blood cell cancers, haematologic diseases including rare genetic disorders, anaemia, conditions related to HIV, sickle cell disease, and complications from chemotherapy or transfusions. They can be malignant or non-malignant.

→ **Trastornos sanguíneos o hematológicos:** cánceres de las células sanguíneas, enfermedades hematológicas tales como trastornos genéticos raros, anemia, afecciones relacionadas con el VIH, anemia de células falciformes y complicaciones de la quimioterapia o las transfusiones. Pueden ser malignos o no malignos.

⇒ **Blood transfusion:** the injection of a volume of blood obtained from a healthy person (the donor) into the circulation of a patient (the recipient) whose blood is deficient in quantity or quality, through accident or disease.

→ **Transfusión sanguínea:** la inyección de sangre obtenida de una persona sana (donante), en la circulación de un paciente (recipiente), la sangre del cual es deficiente en cantidad o calidad por culpa de algún accidente o enfermedad.

⇒ **Bone marrow:** the spongy tissue contained within the internal cavities of the bones. At birth, these cavities are filled entirely with blood-forming myeloid tissue (red marrow) but in later life the marrow in the limb bones is replaced by fat (yellow marrow). It is sometimes referred as **marrow**.

→ **Médula ósea:** tejido esponjoso que se encuentra en las cavidades internas de los huesos. Al nacer, estas cavidades están ocupadas completamente por tejido mieloide encargado de generar la sangre (médula roja), pero más adelante la médula de los huesos de las extremidades se sustituye por grasa (médula amarilla). A veces se la denomina simplemente **médula.**

⇒ **Bone marrow test:** there are two parts to your bone marrow test. You'll have a **bone marrow aspirate**, which is where a sample of bone marrow is sucked out from your hip bone using a fine needle. Sometimes this is followed by taking a core of the marrow, using a different type of needle. The sample is also taken from the back of the hip. This test is known as a **bone marrow trephine**. With both parts of the test**,** we can find out if there

are any cancer cells, it serves as well to check their type. It can also be done to check whether treatment is working.

- → **Test o prueba de médula ósea:** hay dos partes en el test de médula ósea. Primero se realizará una **aspiración de médula ósea**, en la cual se extraerá una muestra de médula del hueso de la cadera con una aguja fina. Algunas veces también es necesario extraer el centro de la médula usando otro tipo de aguja. Esta muestra también se toma de la parte trasera de la cadera. Este test es conocido como **biopsia de médula ósea.** Con las dos partes de la prueba realizadas, podremos saber si hay células cancerígenas y de qué tipo son. También se puede obtener información de si el tratamiento está funcionando o no.

⇒ **Bone marrow blast count:** the percentage of blasts (abnormal immature white blood cells) in the bone marrow. In normal bone marrow, the blast count is 5% or less. Elevated levels of blasts, at least 20%, are required for a leukaemia diagnosis.

- → **Recuento de blastos en la médula ósea:** porcentaje de blastos (glóbulos blancos anormales e inmaduros) en la médula ósea. En una médula normal, el recuento debe ser 5% o menos. Para un diagnóstico de leucemia se requieren niveles elevados blastos de al menos el 20%.

⇒ **Bone marrow harvesting:** is the process of collecting bone marrow cells. This procedure takes place in theatre using a general anaesthetic. The doctor puts a needle through the skin into the hipbone (pelvis) to remove bone marrow. The extracted bone marrow is later frozen and stored until transplant day.

- → **Obtención de médula ósea:** es el proceso de recolección de células de la médula ósea. Esta técnica se realiza en quirófano bajo anestesia general. El médico introduce una aguja a través de la piel hasta el hueso de la cadera para así recoger médula ósea. Posteriormente, la médula ósea extraída es congelada y guardada hasta el día del trasplante.

⇒ **Bone marrow stem cells:** are undifferentiated cells produced by bone marrow that can turn into different types of blood cells. The 3 main types of blood cell they can become are:

- **Red blood cells or erythrocytes**, which carry oxygen around the body.
- **White blood cells or leucocytes**, which help fight infection.
- **Platelets**, which help stop bleeding.

→ **Células madre de la médula ósea:** son células indiferenciadas producidas por la médula ósea que pueden convertirse en diferentes tipos de células sanguíneas. Los 3 tipos principales de células de la sangre en los que se pueden convertir son:

- **Glóbulos rojos o eritrocitos**, que transportan oxígeno por todo el cuerpo.
- **Glóbulos blancos o leucocitos**, que ayudan a combatir las infecciones.
- **Plaquetas**, que ayudan a detener el sangrado.

⇒ **Bone marrow transplantation (BMT):** a procedure that replaces damaged blood cells with healthy ones. It can be used to treat conditions in which the bone marrow is damaged and is no longer able to produce healthy blood cells. Transplants can also be carried out to replace blood cells that are damaged or destroyed as a result of intensive cancer treatment. Conditions that stem cell transplants can be used to treat include: leukaemia, lymphoma, myeloma, myelodysplastic syndromes (MDS) and other blood disorders.

→ **Trasplante de médula ósea:** procedimiento para remplazar células sanguíneas dañadas por sanas. Se usa para tratar situaciones en las cuales la médula ósea está dañada y no puede producir células sanguíneas sanas. Los trasplantes también se pueden llevar a cabo para remplazar células sanguíneas dañadas o destruidas a causa del tratamiento intensivo de cáncer. Las enfermedades en las que se puede usar el trasplante de células madre son las siguientes: leucemia, linfoma, mieloma, síndromes mielodisplásicos (SMD) y otros trastornos de la sangre.

***Bone marrow vs stem cell transplant.** Despite the fact that both terms are most of the times used interchangeably, differences exist between them.

Stem cell transplants are the most common type of transplant because cells are easier to collect from bloodstream, where the amount is also higher.

Bone marrow transplants are not used as much because they are harder and consequently have a more difficult recovery. They are used if collecting stem cells has been difficult.

***¿Trasplante de médula ósea o de células madre?** A pesar de que ambos términos se utilizan de manera intercambiable, si existen diferencias entre ellos.

El trasplante de células madre es el tipo de trasplante que se realiza más habitualmente, ya que las células son más fáciles de obtener del torrente sanguíneo, donde además la cantidad de éstas es superior.

Por otro lado, el trasplante de médula ósea no se usa de forma tan habitual porque es más difícil de realizar y tiene una recuperación más complicada. Este tipo de trasplante se usa si la recolección de células madre no ha sido satisfactoria.

⇒ **Central line:** is a long, thin, hollow tube that can be used to give chemotherapy or other treatments. Central lines are also called skin-tunnelled central venous catheters. Or you may hear them called by brand names, such as **Hickman**. One end of the line goes into a large vein just above the heart, while the other end comes out of the chest.
Sometimes, the central line is made up of 2 or 3 fine tubes, these are called **lumens**. This allows you to have different treatments at the same time.

→ **Catéter venoso central o vía central:** es un tubo hueco, largo y fino que se puede usar para la administración de quimioterapia u otros tratamientos. Algunas veces también son conocidas por su marca comercial, como es el caso de las **vías centrales Hickman.** Un extremo del catéter entra en una vena grande justo por encima del corazón, mientras que el otro extremo sale por el tórax. Hay veces que la vía central está formada por 2 o 3 tubos finos, estos

se denominan **lúmenes**, y con ellos podemos administrar diferentes tratamientos a la vez.

⇒ **Chemotherapy:** is a kind of anti-cancer drug treatment. These drugs work by killing cancer cells, that is why they are also called cytotoxic. They work throughout the body and are called a systemic treatment. Cytotoxic chemotherapy drugs disrupt the way cancer cells grow and divide. But they also affect some of the healthy cells in your body. These healthy cells can usually recover from damage caused by chemotherapy. But cancer cells cannot recover, and they eventually die.

Examples of cytotoxic drugs in our corpus: cyclophosphamide, melphalan.

→ **Quimioterapia:** es un tipo de fármaco para el tratamiento del cáncer. Estos productos funcionan matando las células cancerígenas y por este motivo también se les denomina citotóxicos. Como funcionan por todo el cuerpo también son consideradas como un tratamiento sistémico. Los fármacos citotóxicos de la quimioterapia interrumpen la forma en que las células cancerosas crecen y se dividen, pero también afectan a algunas de las células sanas del organismo. Estas células sanas normalmente se recuperarán del daño causado por la quimioterapia, pero las células cancerígenas no podrán recuperarse y finalmente morirán. Ejemplos de fármacos citotóxicos en nuestro corpus: ciclofosfamida y melphalan.

⇒ **Chronic lymphocytic leukaemia (CLL):** is a rare type of cancer that affects the blood and bone marrow. It affects the white blood cells called lymphocytes. It tends to develop very slowly. It is more common in older people and is rare in people younger than 40. It cannot usually be cured but it can be managed with treatment.

→ **Leucemia linfocítica crónica o linfática crónica (LLC):** es un tipo raro de cáncer que afecta a la sangre y la médula ósea. Afecta a los glóbulos blancos llamados linfocitos y normalmente se desarrolla de manera lenta. Es más habitual en gente mayor y es rara en gente de menos de 40 años. Normalmente no se puede curar, pero se puede controlar con tratamiento.

⇒ **Chronic myeloid leukaemia (CML):** is a type of cancer that affects the white blood cells and tends to progress slowly over many years. It can occur at any age, but is most common in older adults around 60-65 years of age. In CML, the spongy material inside some bones (bone marrow) produces too many myeloid cells – immature white blood cells that are not fully developed and do not work properly.

→ **Leucemia mieloide crónica (LMC):** es un tipo de cáncer que afecta a los glóbulos blancos y con tendencia a progresar lentamente durante años. Se puede diagnosticar a cualquier edad, pero es más común en gente mayor de 60-65 años. En la LMC, el material esponjoso del interior de los huesos (la médula ósea), produce demasiada cantidad de células mieloides, las cuales son glóbulos blancos inmaduros que no están totalmente desarrollados y por lo tanto no funcionan correctamente.

⇒ **Conditioning therapy or regimen:** treatment given prior to bone marrow transplant with the aim to eradicate the host immune response, to minimise graft rejection, kill leukaemia cells, and eradicate existing bone marrow in order to provide space for engraftment of transplanted stem cells. It is generally given during the week before your transplant. Conditioning treatment may last up to a week and you may need to remain in hospital while receiving the treatment. It can be myeloablative (full intensity conditioning) or non-myeloablative (reduced intensity conditioning).

→ **Tratamiento de preparación o acondicionamiento:** es el tratamiento que se administra antes del trasplante de médula ósea con el objetivo de eliminar la respuesta inmune del receptor, reducir el rechazo del injerto, matar las células cancerígenas y eliminar la médula ósea existente para proporcionar espacio para el injerto de las células madre trasplantadas. Por lo general, se administra durante la semana anterior al trasplante. El tratamiento de acondicionamiento puede durar hasta una semana y es posible que el paciente deba permanecer en el hospital mientras recibe el tratamiento. Puede ser mieloablativo (acondicionamiento de

intensidad total o altas dosis) o no mieloablativo (acondicionamiento de intensidad reducida).

⇒ **Count:** in the context of the corpus, it refers to the number of certain cells in blood. For example: white blood cell count, neutrophil count, platelet count, marrow blast count.

→ **Recuento:** en el contexto del corpus hace referencia al número de ciertas células en la sangre. Por ejemplo: recuento de glóbulos blancos, recuento de neutrófilos, recuento de plaquetas, recuento de blastos de la médula.

⇒ **Donor:** a person who makes his own tissues or organs available for use by someone else. In our corpus this is a capital term and it is often related to other terms forming clusters such as:

- **A donor transplant (ALLO)**
- **Donor stem cells**
- **Marrow donor**
- **Matched or mismatched donor**
- **Related or unrelated donor**

→ **Donante:** la persona que pone a disposición de otra sus tejidos u órganos para un trasplante. En el corpus este es un término fundamental y está habitualmente relacionado con otros formando los siguientes grupos de palabras:

- A donor transplant (ALLO): **donante para un trasplante**
- Donor stem cells: **células madre del donante**
- Marrow donor: **médula del donante**
- Matched or mismatched donor: **donante compatible o incompatible**
- Related or unrelated donor: **donante familiar o no familiar**

⇒ **Engraftment:** is the recovery of blood cells after transplant. It is when the stem cells you received on transplant day start to grow and make healthy blood cells.

→ **Aceptación del injerto:** recuperación de las células sanguíneas tras el trasplante. En el contexto del corpus, un injerto funciona

cuando las células madre recibidas en el trasplante empiezan a crecer y producen células sanguíneas sanas.

⇒ **Granulocyte colony stimulating factor (GCS-F):** injections of a growth factor the patient receives before stem collection or harvest. **Growth factors** are natural proteins that help the bone to make blood cells. They make bone marrow produce more stem cells so they spill out into the blood.

→ **Factor estimulante de colonias de granulocitos:** inyecciones de un factor de crecimiento que el paciente recibe antes de la recolección de las células madre. Los **factores de crecimiento** son proteínas naturales que ayudan al hueso a producir células sanguíneas, son responsables de que la médula ósea produzca más células madre y pasen a la sangre.

⇒ **Gene therapy:** is a medical approach that treats or prevents disease by correcting the underlying genetic problem. Cancer genomics involves studying the genetic changes in cancer cells, allowing a greater insight into prevention, early detection, treatment, prognosis and recurrence.

→ **Terapia o tratamiento genético:** es un enfoque médico que trata o previene la enfermedad al corregir el problema genético subyacente. El estudio genómico del cáncer implica la revisión de los cambios genéticos en las células cancerosas, permitiendo una mayor comprensión de la prevención, detección temprana, tratamiento, pronóstico y recurrencia.

⇒ **Graft:** any organ, tissue, or object used for transplantation to replace a faulty part of the body.

→ **Injerto:** cualquier órgano, tejido u objeto usado para el trasplante con el fin de remplazar una parte defectuosa del cuerpo.

⇒ **Graft-versus-host disease (GvHD):** when the graft reacts against the host. The marrow or stem cells from the donor react against the host cells. GvHD happens when particular types of white blood cell (T cells) in the donated stem cells or bone marrow attack the body cells of the host. This is because the donated cells see these body cells as foreign and attack them. Normally T cells don’t attack our own body cells, because they

recognise proteins on the cells called HLA (human leukocyte antigens). It can be acute or chronic.

- → **Enfermedad injerto contra receptor (EICR):** cuando el injerto reacciona contra el receptor. La médula o las células madre del donante reaccionan contra las células del recipiente o receptor. La EICR ocurre cuando células T, que son un tipo específico de glóbulos blancos, atacan a las células del receptor. Las células del donante reconocen estas células como extrañas y las atacan, en una situación normal las células T no atacarían las células del propio cuerpo, porque reconocerían proteínas en las células llamadas HLA (acrónimo inglés de antígenos leucocitarios humanos). La EICR puede ser aguda o crónica.

⇒ **Graft-versus-leukaemia (GVL):** describes the effect of allografted stem cells in attacking leukaemia cells. If graft-versus-host disease is present but not severe, it may be beneficial in helping to kill off leukaemia cells. If all the T-lymphocytes are removed from an allogeneic stem cell transplant it minimises the risk of graft-versus-host disease but increases the risk of relapse.

- → **Enfermedad injerto contra leucemia:** describe el efecto de las células madre trasplantadas de un donante para atacar las células leucémicas. Si la enfermedad de injerto contra receptor está presente pero no es grave, puede ser beneficiosa para ayudar a eliminar las células leucémicas. Si se extraen todos los linfocitos T de un trasplante de células madre de un donante (**trasplante alogénico**), se minimiza el riesgo de enfermedad de injerto contra receptor, pero aumenta el riesgo de recaída.

⇒ **Haematology:** the study of blood and blood-forming tissues and the disorders associated with them.

- → **Hematología:** el estudio de la sangre y los tejidos hematopoyéticos y sus trastornos asociados.

⇒ **Haematopoietic:** related to haematopoiesis or haemopoiesis, which is the process of production of blood cells and platelets which continues

throughout life, replacing aged cells (which are removed from circulation). In healthy adults it is confined to the bone marrow.

→ **Hematopoyético:** relacionado con la hematopoyesis o hemopoyesis, que es el proceso de la producción de células sanguíneas y plaquetas que ocurre a lo largo de la vida, con el fin de remplazar células viejas (las cuales son eliminadas de la circulación). En adultos sanos este proceso se circunscribe a la médula ósea.

⇒ **Haematopoietic stem cells or stem cells:** blood cells at the earliest stage of development. All our blood cells develop from stem cells in the bone marrow. When the blood cells are fully developed, they go into the bloodstream. Stem cells stay inside the bone marrow.

→ **Células madre hematopoyéticas o células madre:** células sanguíneas que se encuentran en la etapa más temprana de desarrollo. Todas nuestras células sanguíneas se desarrollan a partir de células madre en la médula ósea. Cuando las células sanguíneas están completamente desarrolladas, pasan al torrente sanguíneo. Las células madre permanecen dentro de la médula ósea.

⇒ **Hickman line or catheter:** a specific kind of central line frequently used in bone marrow transplant and long-term chemotherapy, it is a fine plastic cannula inserted into the subclavian vein in the neck to allow administration of drugs and repeated blood samples. The catheter is tunnelled for several centimetres beneath the skin to prevent infection entering the bloodstream. It usually has more than one **lumen**.

→ **Catéter Hickman:** es un tipo específico de vía central que se usa habitualmente para el trasplante de médula ósea y quimioterapia de larga duración. Se trata de un tubo fino de plástico que se inserta en el cuello a través de la vena subclavia y que permite la administración de medicamentos y la extracción de muestras sanguíneas. El catéter permanece tunelizado durante varios centímetros debajo de la piel para prevenir de esta manera la

infección a través del torrente sanguíneo. Habitualmente posee más de un **lumen o luz**.

⇒ **Haematopoietic stem cell or stem cell harvesting:** stem cells collection from the bloodstream.

→ **Recolección de células madre o células madre hematopoyéticas:** recolección de células madre del torrente sanguíneo.

⇒ **Haematopoietic stem cell transplant (HSCT):** this is also called a peripheral blood stem cell transplant. Stem cell transplants are the most common type of transplant because cells are easier to collect from bloodstream, where the amount is also higher. See **Bone marrow transplantation (BMT)** and ***Bone marrow vs stem cell transplant**.

→ **Trasplante de progenitores hematopoyéticos (TPH):** a este procedimiento también se le conoce como trasplante de células madre de sangre periférica. Los trasplantes de células madre son el tipo de trasplante más común porque las células son más fáciles de recolectar del torrente sanguíneo, donde además la cantidad de estas es mayor. Vea **Trasplante de médula ósea (TMO)** y ***Trasplante de médula ósea o trasplante de células madre.**

⇒ **Hormone replacement therapy (HRT):** is a treatment that can reduce symptoms of menopause by changing hormone levels in the body. Hormones are chemical messengers. They can affect things like growth, fertility, and mood. After transplant, many women who have not been through the menopause will experience an early menopause. They may require HRT.

→ **Terapia hormonal de reemplazo o sustitutiva** es un tratamiento para reducir los síntomas de la menopausia cambiando los niveles hormonales en el cuerpo. Las hormonas son mensajeros químicos que pueden afectar al crecimiento, la fertilidad y el estado de ánimo. Después del trasplante, muchas mujeres que no han pasado por la menopausia, experimentarán una menopausia temprana, con lo que podrían necesitar TRH.

⇒ **Human leucocyte antigen (HLA):** are proteins, or markers, found on most cells in the body. The immune system uses these markers to recognise which cells belong in the body and which do not. If the bone marrow HLA markers of the donor are very similar to the recipient, there is less chance that the immune system will reject their blood cells. We inherit our HLA from our parents. Apart from identical twins, HLA is unique to each person.

→ **Sistema del antígeno leucocitario humano (HLA):** son proteínas que funcionan como marcadores y se encuentran en la mayoría de las células del cuerpo. El sistema inmunitario utiliza estos marcadores para reconocer qué células pertenecen al cuerpo y cuáles no. Si los marcadores HLA de la médula ósea del donante son muy similares a los del receptor, hay menos posibilidades de que el sistema inmunitario rechace sus células sanguíneas. Heredamos nuestro HLA de nuestros padres y solo los gemelos idénticos comparten el mismo HLA, para el resto es único para cada persona.

⇒ **Immune system:** the organs responsible for **immunity**. The primary lymphoid organs are the thymus and the bone marrow; the secondary lymphoid organs are the lymph nodes and lymphoid aggregates (spleen, tonsils, gastrointestinal lymph tissue, and Peyer's patches).

→ **Sistema inmunitario:** está formado por los órganos responsables de la **inmunidad**. Los órganos linfáticos primarios son el timo y la médula ósea, los secundarios son los nódulos linfáticos y el conjunto de órganos asociados formador por bazo, amígdalas, tejido linfático gastrointestinal y las Placas de Peyer.

⇒ **Immunity:** the body's ability to resist infection, afforded by the presence of circulating antibodies and white blood cells.

→ **Inmunidad:** la capacidad del cuerpo humano para resistir a la infección mediante la presencia en la circulación de anticuerpos y glóbulos blancos.

⇒ **Immunosuppressive treatment:** drug, such as cyclosporin or tacrolimus, that reduces the body's resistance to infection and other foreign bodies by

suppressing the immune system. Immunosuppressants are used to maintain the survival of organ and tissue transplants and to treat various autoimmune diseases.

- → **Tratamiento inmunosupresor:** medicamentos responsables de reducir la resistencia del cuerpo a la infección y otros cuerpos extraños mediante la supresión del sistema inmune. Los inmunosupresores, tales como ciclosporina y tacrolimus, se utilizan para mantener la supervivencia de un trasplante de órgano o tejido y también para tratar diferentes enfermedades autoinmunes.

⇒ **Leukaemia:** any of a group of malignant diseases in which the bone marrow and other blood-forming organs produce increased numbers of certain types of white blood cells (leucocytes). Overproduction of these white cells, which are immature or abnormal forms, suppresses the production of normal white cells, red cells and platelets. This leads to increased susceptibility to infection, anaemia and bleeding.

- → **Leucemia:** grupo de enfermedades malignas en las que la médula ósea y otros órganos hematopoyéticos producen un aumento en la cantidad de ciertos tipos de glóbulos blancos (leucocitos). La sobreproducción de estos glóbulos blancos, que son formas inmaduras o anormales, suprime la producción normal de glóbulos blancos, glóbulos rojos y plaquetas. Esto conduce a una mayor susceptibilidad a la infección, la anemia y el sangrado.

⇒ **Lymphocyte:** a variety of white blood cell (leucocyte), present also in the lymph nodes, spleen, thymus gland, gut wall and bone marrow.

- → **Linfocito:** variedad de glóbulo blanco (leucocito), presente en los nódulos linfáticos, el bazo, el timo, la pared intestinal y la médula ósea.

⇒ **Lymphoma:** is a cancer of the lymphatic system. There are two main types of lymphoma that develop and are treated in different ways. For diagnosis a blood test is done, if it contains a type of cell called Reed-Sternberg cells, the lymphoma is usually Hodgkin lymphoma. If there are no Reed-Sternberg cells, it is non-Hodgkin lymphoma. There are many different types of NHL.

- **Hodgkin lymphoma:** it can begin in almost any part of the body. But it usually starts in the lymph nodes. The most common area is the lymph nodes in the neck. Different areas of lymph nodes around the body may be affected.
- **Non-Hodgkin lymphoma (NHL):** it usually starts in the lymph nodes. Different areas of lymph nodes around the body may be affected. Some types of NHL grow very slowly and may not need treatment for months or years. Other types grow quickly and need treatment soon after diagnosis.
    - **Burkitt lymphoma (BL)** is a rare type of fast-growing non-Hodgkin lymphoma (NHL). It develops when B-cells (also called B-lymphocytes) become abnormal. B-cells are white blood cells that fight infection. There are different types of BL.
    - **Lymphoblastic lymphoma (LL)**: is a rare type of fast-growing non-Hodgkin lymphoma (NHL). It develops when the body makes abnormal lymphocytes. It can develop from both B-cell and T-cell lymphocytes. The abnormal lymphocytes (lymphoma cells) usually build up in lymph nodes but can affect other parts of the body.

→ **Linfoma:** es un cáncer del sistema linfático. Hay dos tipos de linfoma que se desarrollan y se tratan de distinta manera. Para el diagnóstico se realiza un análisis de sangre y si contiene un tipo de células conocidas como Reed-Sternberg el linfoma es de tipo Hodgkin (LH). Si no hay este tipo de células se considerará linfoma no Hodgkin (LNH). Hay muchos tipos diferentes de LNH.

- **Linfoma Hodgkin (LH):** se puede originar en cualquier parte del cuerpo, pero habitualmente se genera en los nódulos linfáticos. La zona más habitual son los ganglios linfáticos del cuello. También pueden verse afectados diferentes nódulos linfáticos a lo largo del cuerpo.
- **Linfoma no Hodgkin (LNH):** habitualmente se origina en los nódulos linfáticos y pueden verse afectados varios de ellos a lo largo del cuerpo. Algunos tipos de LNH crecen muy lentamente

y pueden no necesitar tratamiento durante meses o años. Otros tipos crecen rápidamente y necesitan tratamiento inmediatamente después del diagnóstico.

- **Linfoma de Burkitt:** es un tipo raro de linfoma no Hodgkin de crecimiento acelerado. Se desarrolla cuando las células B (también conocidos como linfocitos B) se vuelven anormales. Estas células B son glóbulos blancos que luchan contra la infección. Hay diferentes tipos de linfoma de Burkitt.
- **Linfoma linfoblástico:** es un tipo raro de linfoma no Hodgkin de crecimiento acelerado. Se desarrolla cuando el cuerpo genera linfocitos anormales, se puede desarrollar a partir de células B y T. Los linfocitos anormales (células del linfoma) se acumulan generalmente en los ganglios linfáticos, pero pueden afectar otras partes del cuerpo.

⇒ **Maintenance therapy:** last phase of some cancer treatments. It helps to keep the disease away (in remission). For instance, low-dose chemotherapy taken as a tablet.

→ **Terapia de mantenimiento:** última fase de tratamiento de algunos cánceres. Ayuda a mantener alejada la enfermedad (en **remisión**). Por ejemplo, quimioterapia de baja dosis administrada en pastillas.

⇒ **Malignancies (primaries or secondaries):** a primary cancer or malignancy is where a cancer starts. Sometimes cancer cells can break away from the primary cancer and settle and grow in another part of the body. This new cancer growth is called secondary cancer or malignancy. Secondary cancers are also called metastases.

→ **Malignidad (primaria o secundaria):** una malignidad o cáncer primario es donde se origina el cáncer. En algunas ocasiones células cancerígenas pueden escapar del cáncer primario, asentándose y creciendo en otra parte del cuerpo. Este nuevo cáncer es conocido como cáncer o malignidad secundaria, y también se les llama metástasis.

⇒ **Matched donor:** a donor with stem cells that match the person he or she is donating to. To find this out, a blood test to look at human leucocyte antigen (HLA) typing or tissue typing is required. The result of this test shows how good the HLA match is between the donor and the person who needs the cells. If the donor and the recipient are relatives, it is called **matched related donor (MRD)**.

→ **Donante compatible:** donante con células madre compatibles con la persona a la que se las está donando. Para averiguarlo, se requiere un análisis de sangre para observar el tipo de antígeno leucocitario humano (HLA) o el tipo de tejido. El resultado de esta prueba muestra cuanta compatibilidad existe entre el HLA del donante y de la persona que recibe las células. Si el donante y el recipiente son familiares, se denomina **donante familiar compatible**.

⇒ **Mucositis:** inflammation of the mouth and throat that may be caused by anti-cancer drugs. It is a common side effect of some blood cancer treatments.

→ **Mucositis:** inflamación de la boca y la garganta que puede ser causada por la administración de medicamentos contra el cáncer. Es un efecto secundario común en el tratamiento de algunos cánceres hematológicos.

⇒ **Myelodysplastic syndromes (MDS):** are a group of blood cancers. With these syndromes, the bone marrow doesn't work properly and makes abnormal blood cells. Some people with MDS do not need treatment for many years, but some other people with MDS go on to develop **acute myeloid leukaemia (AML)**.

→ **Síndromes mielodisplásicos (SMD):** son un grupo de cánceres de la sangre. En estos síndromes la médula ósea no funciona correctamente y genera células sanguíneas anormales. Alguna gente con SMD no necesita tratamiento durante años, pero otra gente con SMD desarrolla **leucemia mieloide aguda (LMA)**.

⇒ **Myeloma:** is a type of blood cancer that develops from abnormal (cancerous) plasma cells. These myeloma cells fill up the bone marrow

which makes it harder for the bone marrow to make enough other normal blood cells. This causes some of the symptoms of myeloma, including difficulty fighting infection.

- → **Mieloma:** es un tipo de cáncer de la sangre que se desarrolla a partir de células plasmáticas anormales (cancerígenas). Las células del mieloma llenan la médula ósea y dificultan la generación de las demás células sanas de la sangre. Esto provoca algunos de los síntomas del mieloma, como la dificultad para luchar contra la infección.

⇒ **Neutropenia:** is a condition where you have a low number of white blood cells called neutrophils in your blood. The immune system is weakened, making it harder for your body to fight infection. Neutropenia can be caused by blood cancer. It can also happen during or after cancer treatments, such as chemotherapy, a stem cell transplant, or medications which suppress your immune system.

- → **Neutropenia:** condición en la que existe en la sangre un número bajo de glóbulos blancos llamados neutrófilos. El sistema inmune está debilitado, lo cual complica que el cuerpo luche contra a infección. La neutropenia puede estar causada por cáncer de la sangre, también puede ocurrir durante tratamientos contra el cáncer, tales como quimioterapia, trasplante de células madre o medicaciones que suprimen el sistema inmune.

⇒ **Neutropenic diet**: food hygiene, rules and recommended changes in the diet during the neutropenic phase, with the goal of reducing the risk of infection from the bacteria in food.

- → **Dieta neutropénica**: higiene relacionada con la comida, normas y cambios recomendados en la dieta durante la fase neutropénica. Tiene el objetivo de reducir el riesgo de infección por las bacterias que se encuentran en la comida.

⇒ **Neutrophils**: are a type of white blood cell that are very important for fighting infection. They can move to areas of infection in the body, stick to the invading bacteria, viruses or fungi. They can also swallow up the

bacteria, viruses or fungi and kill them with chemicals. When **neutrophils count** is low, you are neutropenic.

→ **Neutrófilos:** son un tipo de glóbulos blancos que son muy importantes para combatir la infección. Se pueden desplazar a áreas infectadas en el cuerpo, adherirse a las bacterias, virus u hongos invasores. También pueden engullir las bacterias, virus u hongos y matarlos con productos químicos. Cuando el **recuento de neutrófilos** es bajo, el paciente es neutropénico.

⇒ **Plasma cells**: are part of the immune system. Normal plasma cells make proteins called antibodies. These antibodies are also called immunoglobulins. Antibodies attack and help to kill bacteria and viruses and so protect us from infections.

→ **Células plasmáticas:** forman parte del sistema inmune. Las células plasmáticas normales producen proteínas llamadas anticuerpos. Los anticuerpos, también conocidos como inmunoglobulinas, atacan y ayudan a matar bacterias y virus, protegiendo de las infecciones.

⇒ **Platelets:** are the smallest cells of blood, also called thrombocytes. They have several functions, all relating to the arrest of bleeding. Platelets are formed in the bone marrow.

→ **Plaquetas:** son las células sanguíneas más pequeñas, también conocidas como trombocitos. Tienen muchas funciones, todas relacionadas con la detención del sangrado. Las plaquetas se forman en la médula ósea.

⇒ **Positive-pressure isolation rooms:** hospital boxes with appropriate air filtration system to avoid the entry of infectious agents. They are used during the neutropenic phase, when there is a big risk of infection.

→ **Habitaciones de aislamiento con presión-positiva:** habitaciones de hospital con un sistema de filtración de aire adecuado para evitar la entrada de agentes infecciosos. Se utilizan durante la fase neutropénica, cuando existe un alto riesgo de infección.

⇒ **Progression-free survival:** the time between treatment aimed at shrinking or controlling cancer, and signs that it has started to grow again.

→ **Supervivencia libre de enfermedad:** el tiempo entre el tratamiento destinado a reducir o controlar el cáncer y los signos de que ha comenzado a crecer de nuevo.

⇒ **PICC line:** a peripherally inserted central catheter, it is used to give chemotherapy or other treatments. It is inserted into one of the large veins of the arm, above the bend of the elbow and it finishes in a large vein just above the heart. It can be made up of 2 or 3 fine tubs, called **lumens**. This allows you to have different treatments at the same time.

→ **Catéter PICC:** catéter central de inserción periférica, se usa para administrar quimioterapia u otros tratamientos. Se inserta a través de una de las venas grandes del brazo, por encima del codo, y finaliza en una vena grande por encima del corazón. Puede estar formada por 2 o 3 tubos finos, llamados **lúmenes o luces**, de esta manera se pueden administrar diferentes tratamientos a la vez.

⇒ **Radiotherapy:** use of high-energy rays called radiation to treat cancer. It destroys cancer cells in the area where the radiotherapy is given. Some normal cells in the area being treated can also be damaged by radiotherapy. This can cause side effects. These normal cells are usually able to repair themselves, but cancer cells cannot.

→ **Radioterapia:** uso de rayos de alta energía llamados radiación para tratar el cáncer. Destruye las células cancerosas en el área donde se administra la radioterapia. Además, pueden verse dañadas algunas de las células sanas en el área que se está tratando con radioterapia, lo que puede provocar efectos secundarios. Estas células sanas normalmente podrán repararse a sí mismas, a diferencia de las células cancerosas que no pueden.

⇒ **Recipient or host:** a person who receives tissues or organs from someone else, who is called the **donor**. The recipient or host Is the receiver of a transplant.

→ **Recipiente o huésped:** la persona que recibe tejidos u órganos de alguien, al cual se le conoce como **donante**. El recipiente o huésped es el receptor del trasplante.

⇒ **Relapse:** a return of disease symptoms after recovery had apparently been achieved or the worsening of an apparently recovering patient's condition during the course of an illness.

→ **Recaída:** regreso de los síntomas de la enfermedad después de que aparentemente se hubiese recuperado, o el empeoramiento de la condición de un paciente aparentemente en proceso de recuperación durante el curso de una enfermedad.

⇒ **Remission:** a reduction in the size of a cancer and the symptoms it is causing. Usually found as **complete remission** or **long-term remission**.

→ **Remisión:** reducción en el tamaño de un cáncer y los síntomas que está causando. Por lo general, se suele encontrar como **remisión completa** o **remisión a largo plazo**.

⇒ **Remission induction**: in some blood cancer treatments this is the first phase of treatment, the aim is to get the patient into remission (also called complete remission or CR), where there is no sign of leukaemia cells in blood and bone marrow. This involves using several chemotherapy drugs in combination.

→ **Inducción a la remisión:** primera fase del tratamiento de algunos cánceres de la sangre, el objetivo es lograr que el paciente entre en remisión (también llamada remisión completa), fase en la que no hay signos de células leucémicas en la sangre y la médula ósea. Esto implica el uso de una combinación de varios fármacos de quimioterapia.

⇒ **Stem cells:** undifferentiated cells that are able to renew themselves and produce specialised cells. Adult stem cells occur in many tissues and organs, including bone marrow (**haemopoietic stem cell**), muscle, liver, pancreas, etc., and can produce the specialised cells needed in the particular tissue or organ in which they arise.

Stem cell transplantation: a procedure that replaces damaged blood cells with healthy ones. It can be used to treat conditions in which the bone marrow is damaged and is no longer able to produce healthy blood cells. Transplants can also be carried out to replace blood cells that are damaged or destroyed as a result of intensive cancer treatment.

Conditions that stem cell transplants can be used to treat include: leukaemia, lymphoma, myeloma, myelodysplastic syndromes (MDS) and other blood disorders. Stem cell transplants are the most common type of transplant because cells are easier to collect from bloodstream, where the amount is also higher.

- → **Células madre:** células indiferenciadas capaces de renovarse y producir células especializadas. Las células madre adultas se encuentran en muchos tejidos y órganos, incluidos la médula ósea (**células madre hematopoyéticas**), los músculos, el hígado, el páncreas, etc. Tienen la capacidad de producir las células especializadas que se requieren en el tejido u órgano en particular en el que se originan.

  Trasplante de células madre: procedimiento para reemplazar las células sanguíneas dañadas por otras sanas. Se puede usar para tratar situaciones en las que la médula ósea está dañada y ya no puede producir células sanguíneas sanas. También se pueden realizar trasplantes para reemplazar las células sanguíneas dañadas o destruidas como resultado del tratamiento intensivo del cáncer. Las enfermedades para las que se pueden usar los trasplantes de células madre incluyen: leucemia, linfoma, mieloma, síndromes mielodisplásicos (SMD) y otros trastornos de la sangre. Los trasplantes de células madre son el tipo de trasplante más habitual porque las células son más fáciles de obtener del torrente sanguíneo, donde además la cantidad es mayor.

⇒ **Targeted therapy:** cancer drugs that change the way cells work and help the body control the growth of cancer. They help the body's immune system to attack the cancer, so some of these drugs are also called immunotherapies. Monoclonal antibodies (MABs) are one of the most common types of targeted therapies.

- → **Terapia dirigida:** fármacos contra el cáncer que cambian el funcionamiento de las células y ayudan al cuerpo a controlar el crecimiento del cáncer. Ayudan al sistema inmunitario del cuerpo a atacar el cáncer, por lo que algunos de estos medicamentos

también se denominan inmunoterapias. Los anticuerpos monoclonales (MAB) son uno de los tipos más comunes de terapias dirigidas.

⇒ **Total body irradiation (TBI):** radiotherapy to the whole body. TBI alongside chemotherapy helps to kill cancer cells in the bone marrow. In a transplant using donor stem cells, TBI also suppresses the immune system. This helps to prevent a rejection of the donor stem cells.

→ **Irradiación corporal total (ICT):** radioterapia a todo el cuerpo. La ICT junto con la quimioterapia ayuda a eliminar las células cancerosas en la médula ósea. En un trasplante que usa células madre de un donante, la ICT también suprime el sistema inmunitario. Esto ayuda a prevenir el rechazo de las células madre del donante.

⇒ **Transplant or transplantation:** the implantation of an organ or tissue from one part of the body to another or from one person (the **donor**) to other (the **recipient**). Success for transplantation depends on the degree of compatibility between donor and **graft**.

→ **Trasplante:** la implantación de un órgano o tejido de una parte del cuerpo a otra, o de una persona (**donante**) a otra (**recipiente**). El éxito del trasplante depende del grado de compatibilidad entre en el donante y el **injerto**.

⇒ **Tumour:** any abnormal swelling in or on a part of de body. The term is usually applied to an abnormal growth of tissue, which may be **benign** or **malignant**.

→ **Tumor:** cualquier hinchazón anormal en una parte del cuerpo. El término generalmente se aplica a un crecimiento anormal de tejido, que puede ser **benigno** o **maligno**.

⇒ **Tumour lysis syndrome:** when cancer drugs kill the cancer cells, the body breaks down the dead cells. Chemicals in the cells are released into your blood. So, the normal balance of chemicals circulating in your blood suddenly changes. Chemicals such as potassium, sodium, phosphates and urea have to be kept within very tight limits in your bloodstream to keep you healthy. Abnormal levels of these chemicals can upset your heart

rhythm and the way your kidneys work. If you are at risk of tumour lysis syndrome you might have: extra fluids and specific drugs such as rasburicase or allopurinol to help prevent it.

- → **Síndrome de lisis tumoral (SLT):** ocurre cuando los fármacos contra el cáncer matan las células cancerígenas y el cuerpo descompone las células muertas. Las sustancias químicas de las células se liberan en la sangre, provocando que el equilibrio normal de las sustancias químicas que circulan en la sangre cambie repentinamente. Los elementos químicos como el potasio, el sodio, los fosfatos y la urea, deben mantenerse dentro de límites muy estrictos en el torrente sanguíneo para que sean saludables. Los niveles anormales de estos elementos pueden alterar el ritmo cardíaco y el funcionamiento de los riñones. Si existe riesgo de síndrome de lisis tumoral, es posible que se administren líquidos adicionales y medicamentos específicos como rasburicasa o alopurinol para ayudar a prevenirlo.

⇒ **Transfusion:** the injection of a volume of blood obtained from a healthy person (the **donor**) into the circulation of a patient (the **recipient**) whose blood is deficient in quantity or quality, through accident or disease. It is also the administration of any fluid, such as plasma, platelets or saline solution, into a patient's vein by means of a drip.

- → **Transfusión:** inyección de un volumen de sangre obtenido de una persona sana (**donante**) en la circulación de un paciente (**recipiente**), la sangre del cual es deficiente en cantidad o calidad, consecuencia de un accidente o enfermedad. También se considera transfusión a la administración de cualquier fluido, tales como plasma, plaqueta o solución salina, en la vena de un paciente a través de una infusión.

⇒ **Veno-occlusive disease (liver):** a condition in which blood vessels in the liver are blocked or damaged due to blood clots. Symptoms include fast weight gain, fluid build-up in your tummy (abdomen), enlarged liver and yellowing of the skin and whites of the eyes. It may occur at some point in

time after radiation therapy to the liver and bile ducts or after high-dose anticancer drugs were given before a stem cell transplant.

- → **Enfermedad venooclusiva hepática (EVO):** situación en la cual los vasos sanguíneos del hígado están bloqueados o dañados debido a coágulos de sangre. Los síntomas incluyen aumento rápido de peso, acumulación de líquido en la barriga (abdomen), agrandamiento del hígado y coloración amarillenta de la piel y el blanco de los ojos. Puede ocurrir después de la radioterapia en el hígado y las vías biliares o después de administrar dosis altas de fármacos contra el cáncer antes de un trasplante de células madre.

⇒ **White blood cells (leucocytes):** blood cells that help your body fight infection. They are part of your immune system. The main types of white blood cell are: neutrophils, eosinophils and basophils (all called granulocytes), lymphocytes (there are B lymphocytes and T lymphocytes) and monocytes.

- → **Glóbulos blancos (leucocitos):** células sanguíneas que ayudan al cuerpo a combatir la infección y que forman parte del sistema inmune. Los principales tipos de glóbulos blancos son: neutrófilos, eosinófilos y basófilos (también conocidos como granulocitos), linfocitos (linfocitos B y linfocitos T) y monocitos.

5. Conclusions and recommendations for future research.

Once we are coming to the end of our study, we will review the objectives that we specified in the project and check if we have achieved them.

1. In regard to providing a new tool in the field of medical translation and specialised language, we have proved that the proposed corpus-based contrastive methodology works properly and we can obtain a reliable specialised glossary of the field we intend to study on.
2. From the English monolingual glossary elaborated through the corpus, we have translated all the terms and their definitions into Spanish. This translation has been adapted to the target language, making it easily understandable for native Spanish speakers. In the project, we show together both glossaries, consequently achieving the goal of obtaining an

English-Spanish bilingual glossary specialised in bone marrow and stem cell transplant, that can help professionals, patients and relatives.

3. In addition, we have proved through the quantitative results of the analysis of the corpus, that texts related to haematology cancers and their treatments contain more phrases than single-word terminology.

Having proved that this methodology works and the most important objective has been achieved, there could be improvements made to both glossaries.

- First, the original glossary could have been bigger if we had used more documents to provide more words. This could be made in a more specialised project related to medical translation.
- Second, we could consider the possibility of making two different glossaries for the different audiences that can use them. One more specialised for professionals with a deeper knowledge of the topic, obtained from highly specialised texts. And another glossary elaborated from texts, made for patients and relatives, people who don't necessarily know as much of the field.

Above all, I would like to point out the important social impact that this kind of study can offer. By relating a linguistics field to such a different one like healthcare, we are capable of making a difference by helping people in distress such as patients, and also by giving a hand to the professionals that help to fight diseases like cancer.

To sum up, as an active healthcare worker, I feel confident that this kind of research has a final impact in people who really need it. And as a professional, I can say that to work with patients in these situations is highly complex and stressful, so every help is welcome.

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