

# Embase Preprints

Date revised: 17 October 2022

Preprints are full drafts of research articles that are not peer reviewed. They are used for rapid discovery of the latest biomedical information, Randomized Controlled Trials (benefit to systematic reviews), the identification of Key Opinion Leaders and competitive intelligence, as well as advance collaboration between researchers. Embase preprints are from MedRxiv and BioRxiv, two of the main repositories of medical and biological science preprints.

Emtree indexing is applied to Embase preprints for precise and complete retrieval. With automatic indexing articles are indexed with Emtree terms, selected by an algorithm which is applied to the text of the title, the abstract (if present) and author keywords (if present). The algorithm can differentiate major and minor index terms; however, candidate terms and subheadings are not indexed. Trade names, manufacturer names, clinical trial numbers and molecular sequence numbers are not indexed by automatic indexing.

**Date coverage** Full coverage from Dec 2021, plus updates to older items

**Update frequency** Daily (Monday to Friday)

**Geographic coverage** International

**Document types** Working papers, Preprints

**Sources** MedRxiv and BioRxiv

**Publisher**

Elsevier

Radarweg 29

1043 NX Amsterdam, The Netherlands

For more detailed information see the [Embase ProSheet](#)

# Embase Preprints

Citation/Abstract < Back to results

< |

Add to selected items

Order full text

Save to My Research

Email

TI

Evaluating the influence of sleep quality and quantity on glycemic control in adults with Type 1 Diabetes

AU

AUFN,AULN  
PUB

Botella-Serrano, Marta; Velasco, J. Manuel; Sánchez-Sánchez, Almudena; Garnica, Oscar; Hidalgo, J. Ignacio. **medRxiv** (Jul 22, 2022)

Highlighting: Off | Single | Multi

**Abstract (summary)** [Translate](#)

AB

Background: Sleep quality disturbances are frequent in adults with type 1 diabetes. However, the possible influence of sleep problems on glycemic variability has not been deeply studied in the past. This study aims to assess the impact of sleep quality and sleep quantity on glycemic control. Materials and Methods: Observational study in 25 adults with type 1 diabetes, simultaneous recording of continuous glucose monitoring (Abbott FreeStyle Libre system) for 14 days, and a sleep study by wrist actigraphy (Fitbit Ionic device). The study analyzes, using artificial intelligence techniques, the relationship between the quality and structure of sleep with time in normo-, hypo-, and hyperglycemia ranges and with glycemic variability. The patients are also studied as a group, comparing patients with good and poor sleep quality. Several cluster analyses and correlational studies are performed Results: A total of 243 days/nights were analyzed, of which 77% (n=189) were categorized as poor quality and 33% (n=54) as good quality. Linear regression methods find a correlation (r=0.8) between the variability of sleep efficiency and the variability of mean blood glucose. With clustering techniques, patients were grouped according to their sleep structure (characterizing this structure from the number of transitions between the different sleep phases). These clusters show a relationship between time in range and sleep structure. Conclusions: This study suggests that poor sleep quality is associated with lower time in range and greater glycemic variability, so improving sleep quality in patients with type 1 diabetes could improve their glycemic control.

**Indexing (details)** [Cite](#)

SU

EMB MJEMB

Subject

- actimetry;
- adult;
- artificial intelligence;
- blood glucose monitoring;
- cluster analysis;
- continuous glucose monitoring system;
- controlled study;
- correlational study;
- female;
- glucose blood level;
- glycemic control (major);
- human;
- hyperglycemia;
- insulin dependent diabetes mellitus (major);
- intermethod comparison;
- linear regression analysis;
- major clinical study;
- male;
- night;
- observational study;
- sleep efficiency;
- sleep quality (major);
- sleep time;
- wrist



IF	Identifier (keyword)	Clustering Techniques, Glycemic Control, Sleep Structure
TI	Title	Evaluating the influence of sleep quality and quantity on glycemic control in adults with Type 1 Diabetes
AU,AUFN, AULN	Author	Botella-Serrano, Marta <sup>1</sup> ; Velasco, J. Manuel <sup>2</sup> ; Sánchez-Sánchez, Almudena <sup>3</sup> ; Garnica, Oscar <sup>4</sup> ; Hidalgo, J. Ignacio <sup>4</sup>
AF		<sup>1</sup> Hospital Universitario Príncipe de Asturias, Alcalá de Henares, Madrid, Spain, Servicio de Endocrinología y Nutrición <sup>2</sup> Complutense University, Spain <a href="mailto:mvelascc@ucm.es">mvelascc@ucm.es</a> <sup>3</sup> Universidad a Distancia de Madrid, Collado Villalba, Madrid, Spain <sup>4</sup> Complutense University, Madrid, Spain
EA	Author e-mail address	<a href="mailto:mvelascc@ucm.es">mvelascc@ucm.es</a>
AU	Correspondence author	Velasco, J. Manuel Complutense University, Spain. Hidalgo, J. Ignacio Complutense University, Madrid, Spain.
LA	Language	English
SL	Language of abstract	English
DTYPE	Document type	Working Paper/Pre-Print
PUB	Publication title	<a href="#">medRxiv</a>
PSTYPE	Publication type	Working Papers
PBLOC	Publisher location	United States
DOI	DOI	<a href="http://dx.doi.org/10.1101/2022.07.20.22277229">http://dx.doi.org/10.1101/2022.07.20.22277229</a>
NR	Number of references	30
PD, YR	Publication date	Jul 22, 2022
DCRE	Date created	2022-08-16
DSTAT	Document status	New
	Source attribution	Embase, © Publisher specific
AN	Accession number	2019602815
	Document URL	<a href="https://dialog.proquest.com/professional/docview/2702543037?accountid=151754">https://dialog.proquest.com/professional/docview/2702543037?accountid=151754</a>
FAV	Copyright	Copyright 2022 Elsevier B.V., All rights reserved.
	First available	2022-08-16
UD	Updates	2022-08-16
	Database	Embase Preprints (2013 - current)

## Search fields

Field Name	Field Code	Example	Description and Notes
Abstract	AB	ab("blood glucose")	Over 70% of articles in Embase have an abstract. Use adjacency and/or Boolean operators to narrow or broaden your search and double quotes to search for a precise phrase.
Abstract present	ABANY	"sleep quality" AND abany(yes)	Add: <i>AND ABANY(YES)</i> to a query to limit retrieval to records with abstracts. Use double quotes to search for a precise phrase.
Accession number	AN	an(2019602815)	A unique document identification number assigned by the information provider.
All fields	ALL	all(glycemic OR "hyperglycemia range*")	Searches all fields. Use proximity and/or Boolean operators to narrow search results.
All fields + text	--	"glycemic variability"	Same as ALL field code - searches all fields.
Author <sup>1</sup> Author First Name Author Last Name	AU AUFN AULN	au(velasco, j*) au(manuel) au(velasco)	All authors are included in the document. Elsevier has no standardization policy for author names. Names are captured as they appear in the source, so you will sometimes find authors with surname and initial(s), sometimes with surname and full first name(s).
First author	FAU	fau(botella-serrano)	First name listed in Author field. It is included in the Author browse, but its position cannot be specified in the Author browse.
Author affiliation	AF	af(universitario and asturias) af(spain)	Includes as much data as is available in the original document, such as department, organization, address, city, state, country, author email, etc.
Country of manufacturer	CN	cn(belgium)	This is the country of the drug or device manufacturer usually displayed with the trade name.
Country of publisher			See Publisher location.
Date created	DCRE	dcre(2022-08-16) dcre(>20181231)	This represents the date Elsevier created the record and added it to their system. It predates its delivery to Dialog and has no relation to the Dialog update date.
Date delivered	DREV	drev(20220817)	The date on which Elsevier delivered the record. This is a static date and is not affected by a reload of the database. This date is not displayed, but it is searchable and range searching is supported.

<sup>1</sup> A Lookup/Browse feature is available for this field in the Advanced Search dropdown or in Browse Fields.

Field Name	Field Code	Example	Description and Notes
Document status	DSTAT	dstat(new) dstat(revised)	The following document status values are available: <ul style="list-style-type: none"> <li>- 'new', for documents which have never been seen on Dialog before</li> <li>- 'revised', for documents which are an updated version of an earlier record</li> </ul>
Document title			See Title
Document type <sup>1</sup>	DTYPE	dtype("working paper") dtype(pre-print)	Most document types in Embase are articles, but a small number of other types are also available, notably conference abstracts.
DOI	DOI	doi(10.1101/2022.07.20.22277229)	Digital Object Identifier. Search the portion of the number that follows <a href="http://dx.doi.org">http://dx.doi.org</a>
Email address	EA	ea(mvelascc@ucm.es)	The email address of the correspondence author
Emtree subject <sup>1</sup>	EMB	emb(heart) emb.exact(heart) emb.exact.explode(heart)	Emtree subjects are terms from the Emtree thesaurus describing the subjects of the original article. The following search tips may be useful.  emb(heart) = 'heart' as a single term and as part of a longer phrase (e.g. heart disease)  emb.exact(heart) = 'heart' as a single term only  emb.exact.explode(heart) = 'heart' and all its narrower terms
Emtree subject (major) <sup>1</sup>	MJEMB	mjemb(heart) mjemb.exact(heart) mjemb.exact.explode(heart)	These are the Emtree terms representing the major topics of the article.
First available	FAV	fav(20220816)	Indicates the first time a document was loaded on Dialog. It will not change regardless of how many times the record is subsequently reloaded, if the accession number remains the same.
Journal title	JN	jn(medRxiv)	Full journal name (periodical title); Look-Up list available under Publication title.
Identifier (Keyword)	IF	if("sleep structure")	These are author keywords, not part of the Emtree thesaurus. They are not available in every document.

Field Name	Field Code	Example	Description and Notes
Language	LA	la(english)	The language in which the document was originally published.
Language of abstract	SL	sl(english)	Some documents in Embase have both an English and a foreign-language abstract. Both are searchable in their respective languages.
Number of references	NR	nr(23)	Number of references is not available in all articles.
Publication date	PD	pd(20220501) pd(>20180415) pd(20200101-20221231)	This is the publication date of the article. Date range searching is supported.
Publication title <sup>1</sup>	PUB	Pub(bioRxiv) Pub(medRxiv)	The publication title. Both the full and abbreviated form of the journal name are searchable.
Publication type <sup>1</sup>	PSTYPE	pstype("working papers")	Most documents in Embase are from journals, but a small number of other publication types are available too.
Publication year	YR	yr(2022) yr(2020-2022)	Date range searching is supported.
Publisher location	PBLOC	Pbloc("united states")	This is the country of the journal's publisher.
Subject <sup>1</sup>	SU	su(allometry)	Includes Emtree subject (EMB) and Keyword/Identifier (IF). An alternative to EMB for cross-file searching.
Subject (major)	MJSUB	mjsub("genetic variation")	Alternative to MJEMB for cross-file searching.
Title	TI	ti(sleep and "glycemic control")	This is the title of the article. TI searches the Title, Alternate Title and Subtitle, when available.
Title only	TIO	tio("sleep quality and quantity")	TIO searches the Title only, not Subtitle or Alternate title.
Updates	UD	ud(20220822)	The date(s) the record was loaded as a result of an update provided by the supplier.

## Document Formats

Document Format	Fields	Online	Export / Download
<b>Brief view</b>	Title and Publication date	✓	
<b>Detailed view</b>	Same as Brief view plus a 3-line KWIC window	✓	
<b>KWIC (Keyword in Context)</b>	Detailed view plus all occurrences of your search terms, highlighted within the fields where the terms occur	✓	✓
<b>Preview (subscribers only)</b>	Title, Author, Publication title, Pagination, Publication date, Abstract, Subject terms	✓	
<b>Preview (transactional)</b>	Title, Publication date, abbreviated Abstract	✓	
<b>Result Item Export</b>	Article title, Author, Author affiliation, Publication title, Publication date, Publisher, Issue, Volume, Pagination, Database and Document URL		✓
<b>Brief citation</b>	Complete record minus Abstract and Indexing	✓	✓
<b>Citation / Abstract</b>	Complete record	✓ <sup>2</sup>	✓
<b>Custom</b>	Choose the fields you want		✓ <sup>3</sup>

**For information on Limit options and Notes – see ProSheet for Embase.**

### Terms & Conditions

The database is owned and copyrighted by Elsevier B.V. and all rights are reserved.

No part of the databases may be copied in machine-readable, hard-copy or any other form, or made available for the use of any third party without permission of the copyright owner. Downloading is only permissible with the written permission of Elsevier B.V.

ELSEVIER B.V. REPRESENTS THAT THE DATABASE PROVIDED HEREUNDER WAS FORMULATED WITH A REASONABLE STANDARD OF CARE AND IN CONFORMANCE TO PROFESSIONAL STANDARDS IN THE FIELD, EXCEPT WITH RESPECT TO THE FOREGOING AND AS OTHERWISE SPECIFICALLY PROVIDED IN THIS AGREEMENT, ELSEVIER B.V. MAKES NO REPRESENTATIONS OR WARRANTIES EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTY OR MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WITH RESPECT TO SUCH DATABASES AND SPECIFICALLY DISCLAIMS ALL SUCH WARRANTIES AND REPRESENTATIONS.

<sup>2</sup> In Online-view mode, Dialog gives access to two Document Formats only: *Brief citation*, and the 'most complete' format available. Depending on the database, or the amount of data available for a record, the most complete format may be any one of *Citation*, *Citation/Abstract*, *Full text*, or *Full text – PDF*.

<sup>3</sup> Custom export/download format is available in the following mediums only: HTML, PDF, RefWorks, RTF, Text only, XLS.

No responsibility is assumed by the Publisher for any injury and/or damage to persons or property as a matter of products liability, negligence or otherwise, or from any use or operation of any methods, products, instructions or ideas contained in the material herein. Because of rapid advances in the medical sciences, we recommend that independent verification of diagnoses and drug dosages should be made.

Note that Elsevier has a separate Archive policy and data may only be held in electronic form for a maximum period of 12 months from the date it is first downloaded and must then be deleted. Those customers that want to archive beyond 12 months should contact their Account Manager or nearest Customer Services desk to obtain an extended archiving license.

[Dialog Standard Terms & Conditions](#) apply.

Contact: **Dialog Global Customer Support**

Email: [Customer@dialog.com](mailto:Customer@dialog.com)

Within North America **1 800 334 2564**

Outside North America **00 800 33 34 2564**