

International Pharmaceutical Abstracts (IPA) provides comprehensive coverage of worldwide pharmacy literature. Such literature refers to articles on drugs and their properties, pharmacokinetics, manufacturer, research, and use; and pharmacy practice. Therefore, in addition to technical and scientific articles, those discussing the professional practice of pharmacy or the therapeutic and clinical use of drugs are included. Pharmacy publications are abstracted and indexed cover to cover. In addition to articles, coverage includes letters, columns, notes, communications, and editorials if there is substance to the discussion.

International Pharmaceutical Abstracts includes articles on:

- |                                       |                                    |
|---------------------------------------|------------------------------------|
| Adverse Drug Reactions                | Legislation, Laws, and Regulations |
| Biopharmaceutics                      | Methodology and Drug Testing       |
| Drug Analysis                         | Pharmaceutical Chemistry           |
| Drug Evaluations                      | Pharmaceutical Technology          |
| Drug Interactions                     | Pharmaceutics                      |
| Drug Metabolism and Body Distribution | Pharmacoeconomics                  |
| Drug Stability                        | Pharmacognosy                      |
| History                               | Pharmacy Practice                  |
| Information Processing and Literature | Pharmacology                       |
| Institutional Pharmacy Practice       | Sociology, Economics, and Ethics   |
| Investigational Drugs                 | Toxicity                           |

Use International Pharmaceutical Abstracts to answer such questions as:

- What are the effects of policosanol on cholesterol levels?
- Are there any reviews on mouth dissolving tablet technologies?
- What are the anti-inflammatory effects of luteolin?
- How is ginger used in the treatment and prevention of necrotizing enterocolitis?

#### **Date Coverage**

1970 – present

#### **Update Frequency**

Every two weeks

#### **Geographic Coverage**

Worldwide

#### **Document Types**

Journal articles, newsletters, meeting abstracts

**Sources** More than 335 international pharmaceutical, medical, cosmetics, and other health-related journals, including all United States pharmacy journals, are covered. Articles from major medical and special biomedical journals are covered when a clinical or therapeutic experience or when pharmacy practice is discussed. AHFS meeting presentation abstracts have been included since 1988.

#### **Publisher**

International Pharmaceutical Abstracts is provided by Clarivate.

# International Pharmaceutical Abstracts

Citation/Abstract [« Back to results](#)

Add to selected items

Order full text

Save to My Research

Email

TI  
AU,AUFN,AULN,  
PUB, PD, YR

## Influence of paeoniflorin and menthol on puerarin transport across MDCK and MDCK-MDR1 cells as blood-brain barrier invitro model

Yang, B; Du, SY; Lu, Y; Jia, S; Wu, H C. **Journal of Pharmacy and Pharmacology (England)** 70.3: 349-360. (2018)

Highlighting: Off | Single | Multi

[Show duplicate items from other databases](#)

AB

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

**Objective**Our objective of this research was (1) to investigate the transport characteristics of puerarin through MDCK-MDR1 and MDCK cells and (2) to evaluate the effects of paeoniflorin and menthol on puerarin transport so as to (3) explore the enhancement mechanism.

**Methods**The cytotoxicity of drugs on MDCK and MDCK-MDR1 was evaluated by the MTT assay, and the transport studies were performed in both directions. The membrane fluidity was evaluated by fluorescence recovery after photobleaching, and the membrane potential was estimated by the accumulation of DiBAC4(3) in the cells.

**Key findings**Puerarin showed relatively poor absorption and purely passive diffusion. However, the efflux ratio of puerarin was <2 in MDCK-MDR1 models, which suggested puerarin was not P-gp substrates so as to the P-glycoprotein activity determination of puerarin. With the existence of menthol, the transcellular transport of puerarin increased and puerarin transport significantly increased when co-administrated with paeoniflorin and menthol.

**Conclusions**The enhancing effect of paeoniflorin and menthol may be attributed to the significant enhancement on cell membrane fluidity, the decrease in membrane potential. Immunostaining results indicated that menthol behaved as transport enhancer by disassembly effect on tight junction integrity.

SU

### Subject

Peoniflorin -- incompatibilities;  
Menthol -- incompatibilities;  
Puerarin -- transport;  
Central nervous system drugs -- menthol;  
Central nervous system drugs -- peoniflorin;  
Central nervous system drugs -- puerarin;  
Combined therapy -- menthol, peoniflorin and puerarin;  
Combined therapy -- peoniflorin, menthol and puerarin;  
Combined therapy -- puerarin, menthol and peoniflorin;  
Mentha piperita -- menthol;  
Terpenoids -- peoniflorin;  
Pueraria species -- puerarin;  
Incompatibilities -- menthol, peoniflorin and puerarin;  
Incompatibilities -- peoniflorin, menthol and puerarin;  
Incompatibilities -- puerarin, menthol and peoniflorin;  
Incompatibilities -- peoniflorin;  
Paeonia suffruticosa -- peoniflorin;  
Incompatibilities -- menthol;  
Alcohols -- menthol;  
Permeation -- puerarin;  
Isoflavones -- puerarin;  
Folk medicine -- China;  
Plants -- medicinal;  
Permeability -- blood brain barrier;  
China -- folk medicine;  
Blood brain barrier -- permeability

CC	<b>Classification</b>	8: Biopharmaceutics 10: Drug Stability 22: Sociology, Economics and Ethics 17: Pharmacognosy
	<b>Therapeutic classification</b>	28:00: Central nervous system drugs, Menthol 28:00: Central nervous system drugs, Peoniflorin 28:00: Central nervous system drugs, Puerarin
SUBST	<b>Substance</b>	Substance: Peoniflorin CAS: 23180-57-6  Substance: Menthol CAS: 1490-04-6  Substance: Puerarin CAS: 3681-99-0
GN	<b>Generic name</b>	Peoniflorin
TN,TNDRUG	<b>Drug trade name</b>	Paeoniflorin
TI	<b>Title</b>	Influence of paeoniflorin and menthol on puerarin transport across MDCK and MDCK-MDR1 cells as blood-brain barrier invitro model
AU,AUFN,AULN	<b>Author</b>	Yang, B; Du, SY; Lu, Y; Jia, S; Wu, H C
AF	<b>Correspondence author</b>	Du, SY Beijing Univ Chinese Med, Sch Chinese Mat Med, Beijing, Peoples R China dushouying@263.net.
LA	<b>Language</b>	English
SL	<b>Language of abstract</b>	English
DTYPE	<b>Document type</b>	Article
	<b>Publication title</b>	Journal of Pharmacy and Pharmacology (England)
PUB	<b>Volume</b>	70
VO	<b>Issue</b>	3
ISS	<b>Pagination</b>	349-360
PG	<b>ISSN</b>	0022-3573
ISSN	<b>CODEN</b>	JPPMAB
CODEN	<b>Publication type</b>	Journal
RTYPE	<b>Number of references</b>	34
NR	<b>Publication date</b>	2018
PD,YR	<b>Source attribution</b>	International Pharmaceutical Abstracts, © Publisher specific
AN	<b>Accession number</b>	55-11443
	<b>Document URL</b>	<a href="https://dialog.proquest.com/professional/docview/2135030689?accountid=174335">https://dialog.proquest.com/professional/docview/2135030689?accountid=174335</a>
FAV	<b>First available</b>	2018-11-19
UD	<b>Updates</b>	2018-11-19
	<b>Database</b>	International Pharmaceutical Abstracts (1970 - current)

## Search Fields

You can use field codes on the Basic Search, Advanced Search, and Command Line Search pages to limit searches to specific fields. The table below lists the field codes for this file.

Field name	Field code	Example	Description and Notes
Abstract	AB	ab("rosmarinic acid")	Use Adjacency and/or Boolean operators to narrow search results.
Accession number	AN	an(50-16687)	A unique document identification number assigned by the information provider, Clarivate.
All fields	ALL	all("liquid chromatography") all(muscular N/4 tissue)	Use Adjacency and/or Boolean operators to narrow search results.
Author <sup>1</sup> Author First Name Author Last Name	AU AUFN AULN	au(mendelson, john) aufn(john) auln(mendelson)	Includes all Authors.
First Author	FAU	fau(wang x y)	Use First author to find only the first author of the document. Additional authors will not be searched.
Author affiliation	AF	af("tianjin tasly grp ")	Includes as much data as is available in the original document – such as department, organization, address, city, state, country, author email, etc.
CAS® Registry Number <sup>3</sup>	RN	rn(1135-24-6)	Searches the CAS Registry Number and the Registry Name.
AHFS Pharmacologic Therapeutic Classification name or Classification code	CC	cc("drug evaluations") cc(6)	Search using either the Classification name or code.
Coden	CODEN	coden(DDIPD8)	
Document title	TI	ti("simultaneous determination" PRE/5 "phenolic components" )	Use Adjacency and/or Boolean operators to narrow search results.
Document type	DTYPE	dtype(article)	Most document types are articles, reviews, conference papers or conference proceedings.
First available	FAV	fav(20181119)	Indicates the first time a document was loaded on Dialog. It will not change however many times the record is subsequently reloaded, as long as the Accession number does not change.
From database <sup>2</sup>	FDB	"cisplatin-induced emesis" AND fdb(ipab)	Useful in multi-file searches to isolate records from a single file. FDB cannot be searched on its own; specify at least one search term then AND it with FDB.

		"cisplatin-induced emesis" AND fdb(1007819)	
Generic name	GN	gn(peoniflorin)	
ISSN	ISSN	issn(0731-7085) issn(07317085)	Use of hyphen is optional. Also searchable via the Look Up Citation tool.
Issue	ISS	iss(7) iss(dec)	Also searchable via the Look Up Citation tool.
Journal name	JN	jn("journal of pharmaceutical and biomedical")	Use PUB for all Publication titles. Look Up list is available for Publication title (PUB).
Language	LA	la(french)	Language in which the document was originally published.
Number of references	NR	nr(22) nr(<10)	
Pagination	PG	pg(82) pg(5-9)	The start page is searchable on the Look Up Citation page.
Publication date	PD	pd(201811) pd(20180101-20190331)	This is the publication date of the article. Date range searching is supported.
Publication title <sup>1</sup>	PUB	pub("journal of pharmaceutical and biomedical" PRE/8 england)	Title of publication where document originally appeared, usually a periodical title. Look Up list is available.
Publication type	RTYPE, PSTYPE	rtype(journal)	Look Up list is available.
Publication year	YR	yr(2018) yr(2016-2019)	May also be searched using PY.
Source information	SRC	src("aaps journal") src("aaps journal" AND 2010)	Includes Publication title, Volume, Issue, ISSN, Publication date, and Pagination. Also searchable via the Look Up Citation tool.
Subject <sup>1</sup>	SU	su("spectrometry, mass") su(peoniflorin -- incompatibilities)	The main subjects of the article. Mainheadings are connected to qualifying 'subheadings' by means of a double dash (--). Look Up list is available.
Substance	SUBST	subst("ferulic acid") subst(54910-89-3)	Includes all substance types and names.
Title (document)	TI	ti("simultaneous determination" AND "phenolic components" )	Use Adjacency and/or Boolean operators to narrow search results.
Trade name Trade name - drug	TN TNDRUG	tn(paeoniflorin) tndrug("ibuprofen lysine")	Also searchable with SUBST.
Updated	UD	ud(20181119)	The date(s) the record was loaded as a result of an update provided by the supplier.
Volume	VO	vo(86)	Also searchable via the Look Up Citation tool.

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

<sup>2</sup> Click the “Field codes” hyperlink at the top right of the Advanced Search page. Click “Search syntax and field codes”, then click on “FDB command” to get a list of database names and codes that can be searched with FDB.

<sup>3</sup> CAS Registry Numbers® are the intellectual property of the American Chemical Society; and are used by Clarivate Analytics with the express permission of CAS. CAS Registry Number(s)® have not been verified by CAS and may be inaccurate.

In addition to [Search Fields](#), other tools available for searching are [Limit Options](#), [Browse Fields](#), [“Narrow Results By” Limiters](#) and [Look Up Citation](#). Each is listed separately below. Some data can be searched using more than one tool.

## Limit Options

Limit options are quick and easy ways of searching certain common concepts. A check box is available for:

### **Abstract included**

Short lists of choices are available for:

### **Document type, Language**

**Date limiters** are available in which you can select single dates or ranges for **Date of publication** and **Updated**.

## Browse Fields

You can browse the contents of certain fields by using Look Up lists. These are particularly useful to validate spellings or the presence of specific data. Terms found in the course of browsing may be selected and automatically added to the Advanced Search form. Look Up lists are available in the fields drop-down and in the search options for:

### **Author, Publication title, Subject**

If one of those search fields is selected, the Look Up feature appears under the Field code drop-down box.

## “Narrow Results by” Limiters

When results of a search are presented, the results display is accompanied by a list of “Narrow Results by” options shown on the right-hand panel. Click on any of these options and you will see a ranked list showing the most frequently occurring terms in your results. Click on the term to apply it to (“narrow”) your search results. “Narrow Results by” Limiters in International Pharmaceutical Abstracts include:

### **Author, Language, Publication title, Subject, Classification, Document type, Publication date**

## Look Up Citation

If you need to trace a particular bibliographic reference, use the Look Up Citation feature. Find a link to this towards the top left-hand corner of the Advanced Search page; click this and you will go to a form where you can enter any known details of the citation, including:

**Document title, Author, Journal name, Volume, Issue, Page, Publication date, ISSN**

## 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, Volume, Issue, Pagination, Publication date, Abstract, Subject	✓	
<b>Preview (transactional)</b>	Title, Publication date, abbreviated Abstract	✓	
<b>Brief citation</b>	Bibliographic record minus Abstract and Indexing	✓	✓
<b>Citation / Abstract</b>	Complete record	✓ <sup>1</sup>	✓
<b>Custom</b>	Choose the fields you want	✓	✓ <sup>2</sup>

### Terms & Conditions

In addition to the [Dialog Standard Terms & Conditions](#), the following [Provider terms and conditions](#) also 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**