



PubMed

PubMed comprises more than 26 million citations for biomedical literature from MEDLINE, life science journals, and online books. Citations may include links to full-text content from PubMed Central and publisher web sites.

PubMed COMMONS



Featured comment - Sep 21

Single vs. combination drug therapy for reducing cardiovascular risk: CREBP Journal Club discusses #clinicaltrial bit.ly/2cl3JrF

PubMed检索

王萍

wangping@shanghaitech.edu.cn



目录

1. PubMed数据库简介
2. MeSH词表
3. PubMed基本检索
4. PubMed高级检索
5. 个性化订阅以及利用GoPubMed或PubReMiner分析检索结果

1. PubMed简介



- 文摘数据库，但提供全文链接

美国国立卫生研究所



国立医学图书馆



MEDLINE: 综合生物医学信息书目数据库

MEDLINE收录1966年以来世界70多个国家和地区出版的5600余种生物医学期刊的文献，近960万条记录。目前每年递增30-35万条记录，以**题录**和**文摘**形式进行报道。



1. PubMed简介

Citation 题录: 期刊信息、
文章标题、作者姓名、作
者地址

Abstract 摘要

文献类型

控制词检索: MeSH词表

[J Allergy Clin Immunol](#), 2016 Mar;137(3):690-7. doi: 10.1016/j.jaci.2016.01.004.
Microbes and asthma: Opportunities for intervention.
Smits HH¹, Hiemstra PS², Prazeres da Costa C³, Ege M⁴, Edwards M⁵, Garn H⁶, Howarth PH⁷, Jarftli T⁸, de Jong EC⁹,
Malzeles RM¹⁰, Marsland BJ¹¹, McSorley HJ¹⁰, Müller A¹², Pfefferle PI¹³, Savelkoul H¹⁴, Schwarze J¹⁵, Unger WW¹⁶, von
Mutius E⁴, Yazdanbakhsh M¹⁷, Taube C².

Author information

Abstract
The worldwide incidence and prevalence of asthma continues to increase. Asthma is now understood as an umbrella term for different phenotypes or endotypes, which arise through different pathophysiologic pathways. Understanding the many factors contributing to development of the disease is important for the identification of novel therapeutic targets for the treatment of certain asthma phenotypes. The hygiene hypothesis has been formulated to explain the increasing prevalence of allergic disease, including asthma. This hypothesis postulates that decreased exposure at a young age to certain infectious agents as a result of improved hygiene, increased antibiotic use and vaccination, and changes in lifestyle and dietary habits is associated with changes in the immune system, which predispose subjects to allergy. Many microbes, during their coevolution with human subjects, developed mechanisms to manipulate the human immune system and to increase their chances of survival. Improving models of asthma, as well as choosing adequate end points in clinical trials, will lead to a more complete understanding of the underlying mechanisms, thus providing an opportunity to devise primary and secondary interventions at the same time as identifying new molecular targets for treatment. This article reports the discussion and conclusion of a workshop under the auspices of the Netherlands Lung Foundation to extend our understanding of how modulation of the immune system by bacterial, parasitic, and viral infections might affect the development of asthma and to map out future lines of investigation.
Copyright © 2016 American Academy of Allergy, Asthma & Immunology. All rights reserved.

KEYWORDS: Hygiene hypothesis; asthma; helminths; immune regulation; microbes; microbiome; sensitization; viruses

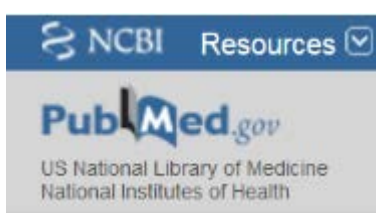
PMD: [26947981](#) DOI: [10.1016/j.jaci.2016.01.004](#)
[PubMed - indexed for MEDLINE]

Publication Types, MeSH Terms

Publication Types
Review

MeSH Terms
[Animals](#)
[Asthma/etiology*](#)
[Asthma/prevention & control](#)
[Asthma/therapy](#)
[Disease Susceptibility](#)
[Environmental Exposure](#)
[Host-Pathogen Interactions](#)
[Humans](#)
[Hygiene](#)
[Microbiota*/immunology](#)

1. PubMed简介



上海科技大学
ShanghaiTech University

美国国立卫生研究所



国立医学图书馆



MEDLINE: 综合生物医学信息书目数据库

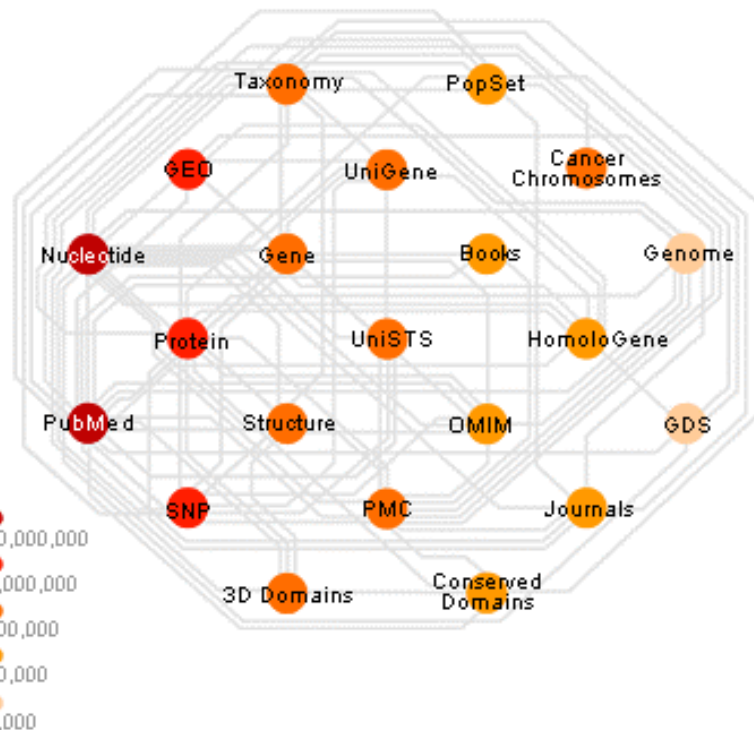
MEDLINE收录1946年以来世界70多个国家和地区出近2300万条记录。目前每年递增30-35万条记录，以

NCBI: 美国国立生物技术信息中心

GenBank遗传序列数据库, BLAST序列
Entrez数据库检索系统, PubMed Cent



PubMed





1. PubMed简介

PubMed central (PMC)

Full text links

nature

PMC **FREE** Full text

PubMed Central (PMC) 是期刊文章全文的电子档案，NIH的智库，提供其内容的免费检索和免费全文下载。PMC高级检索具有与PubMed相同的文献检索功能，且检索出的文章直接链接到免费全文。

例如：



- Journal of Visualized Experiments
订购了5个学科包，其他专辑两年前的数据可通过PubMed免费访问

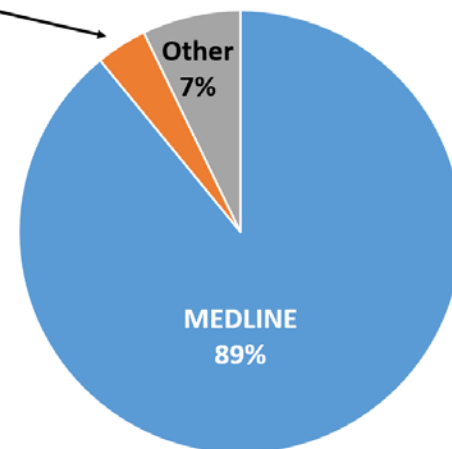
1. PubMed简介



PubMed是什么?

- PubMed是一个免费的搜索引擎，于2000年4月开发的，提供生物医学方面的论文搜寻以及摘要，不包含全文，只提供全文链接（原文网站、OA、PMC）。
- 它的数据库来源有：**MEDLINE**、OLDMEDLINE、Record in process、Record supplied by publisher等。

"Future MEDLINE"
4%



- 数据类型：期刊论文、综述以及与其他数据库链接。
- 其核心主题为医学，同时也提供生化学与细胞生物学及其他生物医学相关的资讯。



各学院文献传递联络人

学院/研究所	文献传递联络人	邮箱
生命学院	杨静	yangjing@shanghaitech.edu.cn
iHuman	唐麟	tanglin@shanghaitech.edu.cn
免疫化学所	王玮	wangwei@shanghaitech.edu.cn



2. MeSH词表

MeSH是Medical Subject Headings的缩写，即**医学主题词**。用规范化术语来描述生物医学概念。



高血压

MeSH: Hypertension

说人话: High blood pressure

PubMed: 给文献做标引，贴**内容**标签。

用户: 高效、准确地找到需要的文献。

Bioinspired self-repairing slippery surfaces with pressure-stable omniphobicity.

Wong TS¹, Kang SH, Tang SK, Smythe EJ, Hatton BD, Grinthal A, Aizenberg J.

Publication Types, MeSH Terms, Substances

Publication Types

[Research Support, Non-U.S. Gov't](#)

[Research Support, U.S. Gov't, Non-P.H.S.](#)

MeSH Terms

[Angiosperms/anatomy & histology](#)

[Angiosperms/chemistry*](#)

[Animals](#)

[Ants/physiology](#)

[Biomimetic Materials/chemistry*](#)

[Blood](#)

[Hydrocarbons/chemistry](#)

[Ice](#)

[Lotus/anatomy & histology](#)

[Lotus/chemistry](#)

[Lubricants/chemistry*](#)

[Lubricants/pharmacology](#)

[Lubrication](#)

[Nanostructures](#)

[Petroleum](#)

[Porosity](#)

[Pressure*](#)

[Surface Properties*/drug effects](#)

[Water/chemistry](#)

[Wettability*](#)

Substances

[Hydrocarbons](#)

[Ice](#)

[Lubricants](#)

[Petroleum](#)

[Water](#)

- 在检索结果页面，加*号的MeSH词就是**主要**主题词。
- 主题词是该篇文章在讲什么，**主要**主题词是该篇文章**主要在**讲什么。

Pub

Link out more resources



2. MeSH词表

利用MeSH词表的几种检索策略

(1) hypertension[MeSH]

检索PubMed的Medline数据库中主题词标引为高血压（包括高血压的副主题词）的所有文章。

Hypertension

Persistently high systemic arterial BLOOD PRESSURE. Based on multiple readings (BLOOD PRESSURE DETE currently defined as when SYSTOLIC PRESSURE is consistently greater than 140 mm Hg or when DIASTOLIC P Hg or more.

- Restrict to MeSH Major Topic.
- Do not include MeSH terms found below this term in the MeSH hierarchy.

PubMed search builder options

Subheadings:

- | | | |
|--|--|---|
| <input type="checkbox"/> adverse effects | <input type="checkbox"/> embryology | <input type="checkbox"/> physiology |
| <input type="checkbox"/> analysis | <input type="checkbox"/> enzymology | <input type="checkbox"/> physiopatholog |
| <input type="checkbox"/> anatomy and histology | <input type="checkbox"/> epidemiology | <input type="checkbox"/> prevention and |
| <input type="checkbox"/> blood | <input type="checkbox"/> ethnology | <input type="checkbox"/> psychology |
| <input type="checkbox"/> blood supply | <input type="checkbox"/> etiology | <input type="checkbox"/> radiography |
| <input type="checkbox"/> cerebrospinal fluid | <input type="checkbox"/> genetics | <input type="checkbox"/> radionuclide im |
| <input type="checkbox"/> chemically induced | <input type="checkbox"/> history | <input type="checkbox"/> radiotherapy |
| <input type="checkbox"/> chemistry | <input type="checkbox"/> immunology | <input type="checkbox"/> rehabilitation |
| <input type="checkbox"/> classification | <input type="checkbox"/> legislation and jurisprudence | <input type="checkbox"/> statistics and n |
| <input type="checkbox"/> complications | <input type="checkbox"/> metabolism | <input type="checkbox"/> surgery |
| <input type="checkbox"/> congenital | <input type="checkbox"/> microbiology | <input type="checkbox"/> therapeutic use |
| <input type="checkbox"/> cytology | <input type="checkbox"/> mortality | <input type="checkbox"/> therapy |
| <input type="checkbox"/> diagnosis | <input type="checkbox"/> nursing | <input type="checkbox"/> transmission |
| <input type="checkbox"/> diet therapy | <input type="checkbox"/> organization and administration | <input type="checkbox"/> ultrasonography |
| <input type="checkbox"/> drug effects | <input type="checkbox"/> parasitology | <input type="checkbox"/> urine |
| <input type="checkbox"/> drug therapy | <input type="checkbox"/> pathology | <input type="checkbox"/> veterinary |
| <input type="checkbox"/> economics | <input type="checkbox"/> pharmacology | <input type="checkbox"/> virology |

Tree Number(s): C14.907.489

MeSH Unique ID: D006973

Entry Terms:

- Blood Pressure, High
- Blood Pressures, High
- High Blood Pressure
- High Blood Pressures

See Also:

- [Antihypertensive Agents](#)
- [Vascular Resistance](#)

[All MeSH Categories](#)

[Diseases Category](#)

[Cardiovascular Diseases](#)

[Vascular Diseases](#)

[Hypertension](#)

[Hypertension, Malignant](#)

[Hypertension, Pregnancy-Induced](#)

[Hypertension, Renal](#)

[Hypertension, Renovascular](#)

[Hypertensive Retinopathy](#)

[Masked Hypertension](#)

[White Coat Hypertension](#)

Restrict to MeSH Major Topic.

Do not include MeSH terms found below this term in the MeSH hierarchy.

Tree Number(s): C14.907.489

MeSH Unique ID: D006973

2. MeSH词表



- Restrict to MeSH Major Topic.
- Do not include MeSH terms found below this term in the MeSH hierarchy.

Tree Number(s): C14.907.489

MeSH Unique ID: D006973

Entry Terms:

- Blood Pressure, High
- Blood Pressures, High
- High Blood Pressure
- High Blood Pressures

入口词：输入Entry Terms都能得到此MeSH词表。
入口词=主题词的别名

See Also:

- [Antihypertensive Agents](#)
- [Vascular Resistance](#)

扩展结果

[All MeSH Categories](#)

[Diseases Category](#)

[Cardiovascular Diseases](#)

[Vascular Diseases](#)

Hypertension

[Hypertension, Malignant](#)

[Hypertension, Pregnancy-Induced](#)

[Hypertension, Renal](#)

[Hypertension, Renovascular](#)

[Hypertensive Retinopathy](#)

[Masked Hypertension](#)

[White Coat Hypertension](#)



论述文献中心的主题词称**主要主题词**
论述主题某一方面内容的词称为**副主题词**

可搭配使用

MeSH MeSH hypertension [mesh] Search
Create alert Limits Advanced Help

Full Send to: PubMed Search Builder

Hypertension

Persistently high systemic arterial BLOOD PRESSURE. Based on multiple readings (BLOOD PRESSURE DETERMINATION), hypertension is currently defined as when SYSTOLIC PRESSURE is consistently greater than 140 mm Hg or when DIASTOLIC PRESSURE is consistently 90 mm Hg or more.

PubMed search builder options

Subheadings: **副主题词**

- | | | |
|--|--|--|
| <input type="checkbox"/> adverse effects | <input type="checkbox"/> embryology | <input type="checkbox"/> physiology |
| <input type="checkbox"/> analysis | <input type="checkbox"/> enzymology | <input type="checkbox"/> physiopathology |
| <input type="checkbox"/> anatomy and histology | <input type="checkbox"/> epidemiology | <input type="checkbox"/> prevention and control |
| <input type="checkbox"/> blood | <input type="checkbox"/> ethnology | <input type="checkbox"/> psychology |
| <input type="checkbox"/> blood supply | <input type="checkbox"/> etiology | <input checked="" type="checkbox"/> radiography |
| <input type="checkbox"/> cerebrospinal fluid | <input type="checkbox"/> genetics | <input type="checkbox"/> radionuclide imaging |
| <input type="checkbox"/> chemically induced | <input type="checkbox"/> history | <input type="checkbox"/> radiotherapy |
| <input type="checkbox"/> chemistry | <input type="checkbox"/> immunology | <input type="checkbox"/> rehabilitation |
| <input type="checkbox"/> classification | <input type="checkbox"/> legislation and jurisprudence | <input type="checkbox"/> statistics and numerical data |
| <input type="checkbox"/> complications | <input type="checkbox"/> metabolism | <input type="checkbox"/> surgery |
| <input type="checkbox"/> congenital | <input type="checkbox"/> microbiology | <input type="checkbox"/> therapeutic use |
| <input type="checkbox"/> cytology | <input type="checkbox"/> mortality | <input type="checkbox"/> therapy |
| <input type="checkbox"/> diagnosis | <input type="checkbox"/> nursing | <input type="checkbox"/> transmission |
| <input type="checkbox"/> diet therapy | <input type="checkbox"/> organization and administration | <input type="checkbox"/> ultrasonography |
| <input checked="" type="checkbox"/> drug effects | <input type="checkbox"/> parasitology | <input type="checkbox"/> urine |
| <input checked="" type="checkbox"/> drug therapy | <input type="checkbox"/> pathology | <input type="checkbox"/> veterinary |
| <input type="checkbox"/> economics | <input type="checkbox"/> pharmacology | <input type="checkbox"/> virology |

Click

("Hypertension/drug therapy"[Mesh] OR "Hypertension/effects"[Mesh])

Add to search builder AND Search PubMed

YouTube Tutorial

Related information

- PubMed
- PubMed - Major Topic
- Clinical Queries
- NLM MeSH Browser
- dbGaP Links
- MedGen

Recent Activity

Turn Off Clear

- Hypertension MeSH
- hypertension[mesh] (1) MeSH
- Bioinspired self-repairing slippery surfaces with pressure-stable omniphobicity. PubMed
- A SUMOylation-defective MITF germline mutation predisposes to melanoma. PubMed

Restrict to MeSH Major Topic. Do not include MeSH terms found below this term in the MeSH hierarchy.

Tree Number(s): C14.907.489

MeSH Unique ID: D006973



(2) hypertension[Major MeSH]

检索PubMed的Medline数据库中**主要主题词**标引为高血压的所有文章。

Hypertension

Persistently high systemic arterial BLOOD PRESSURE. Based on multiple readings (BLOOD PRESSURE DETERMINATION), hypertension is currently defined as when SYSTOLIC PRESSURE is consistently greater than 140 mm Hg or when DIASTOLIC PRESSURE is consistently 90 mm Hg or more.

PubMed search builder options

Subheadings:

- | | | |
|--|--|--|
| <input type="checkbox"/> adverse effects | <input type="checkbox"/> embryology | <input type="checkbox"/> physiology |
| <input type="checkbox"/> analysis | <input type="checkbox"/> enzymology | <input type="checkbox"/> physiopathology |
| <input type="checkbox"/> anatomy and histology | <input type="checkbox"/> epidemiology | <input type="checkbox"/> prevention and control |
| <input type="checkbox"/> blood | <input type="checkbox"/> ethnology | <input type="checkbox"/> psychology |
| <input type="checkbox"/> blood supply | <input type="checkbox"/> etiology | <input type="checkbox"/> radiography |
| <input type="checkbox"/> cerebrospinal fluid | <input type="checkbox"/> genetics | <input type="checkbox"/> radionuclide imaging |
| <input type="checkbox"/> chemically induced | <input type="checkbox"/> history | <input type="checkbox"/> radiotherapy |
| <input type="checkbox"/> chemistry | <input type="checkbox"/> immunology | <input type="checkbox"/> rehabilitation |
| <input type="checkbox"/> classification | <input type="checkbox"/> legislation and jurisprudence | <input type="checkbox"/> statistics and numerical data |
| <input type="checkbox"/> complications | <input type="checkbox"/> metabolism | <input type="checkbox"/> surgery |
| <input type="checkbox"/> congenital | <input type="checkbox"/> microbiology | <input type="checkbox"/> therapeutic use |
| <input type="checkbox"/> cytology | <input type="checkbox"/> mortality | <input type="checkbox"/> therapy |
| <input type="checkbox"/> diagnosis | <input type="checkbox"/> nursing | <input type="checkbox"/> transmission |
| <input type="checkbox"/> diet therapy | <input type="checkbox"/> organization and administration | <input type="checkbox"/> ultrasonography |
| <input type="checkbox"/> drug effects | <input type="checkbox"/> parasitology | <input type="checkbox"/> urine |
| <input type="checkbox"/> drug therapy | <input type="checkbox"/> pathology | <input type="checkbox"/> veterinary |
| <input type="checkbox"/> economics | <input type="checkbox"/> pharmacology | <input type="checkbox"/> virology |

Restrict to MeSH Major Topic.

Do not include MeSH terms found below this term in the MeSH hierarchy.

(3) hypertension[mesh:noexp]: 不进行扩展检索。

Restrict to MeSH Major Topic.

Do not include MeSH terms found below this term in the MeSH hierarchy.

Tree Number(s): C14.907.489

MeSH Unique ID: D006973

Entry Terms:

- Blood Pressure, High
- Blood Pressures, High
- High Blood Pressure
- High Blood Pressures

See Also:

- [Antihypertensive Agents](#)
- [Vascular Resistance](#)

[All MeSH Categories](#)

[Diseases Category](#)

[Cardiovascular Diseases](#)

[Vascular Diseases](#)

Hypertension

[Hypertension, Malignant](#)

[Hypertension, Pregnancy-Induced](#)

[Hypertension, Renal](#)

[Hypertension, Renovascular](#)

[Hypertensive Retinopathy](#)

[Masked Hypertension](#)

[White Coat Hypertension](#)

PubMed Search Builder

Search PubMed

Add to search builder AND

PubMed Search Builder

"Hypertension" [Mesh:NoExp]

Search PubMed

Add to search builder AND

Click

即只知检索标引为**高血压**的，不检索标引为其下位词**恶性高血压**、**妊娠性高血压**的。



3. PubMed基本检索

数据库和检索界面选择区
Advanced: 高级检索

The screenshot shows the PubMed website interface. At the top, there is a navigation bar with "NCBI Resources" and "How To" dropdown menus. Below this is the "PubMed.gov" logo and a search bar containing "PubMed". A red oval highlights the search bar area. To the right of the search bar is a "Search" button. Below the search bar, a dropdown menu is open, listing various databases. The "Taxonomy" option is highlighted in blue. The menu is divided into two columns: "All" and "Topic-Specific Queries".

All	Topic-Specific Queries
OMIM	
PMC	
PopSet	
Probe	
Protein	
Protein Clusters	
PubChem BioAssay	
PubChem Compound	
PubChem Substance	
PubMed	
PubMed Health	
SNP	
SRA	
Structure	
Taxonomy	
ToolKit	
ToolKitAll	
ToolKitBook	
ToolKitBookgh	
UniGene	

Other visible elements include: "US National Library of Medicine National Institutes of Health", "NCBI has completed the migration of all web traffic will be directed to HTTPS", "PubMed COMMONS" section with social media icons, "Featured comment" by S Bordenstein, and "More Resources" section with links to MeSH Database, Journals in NCBI Databases, Clinical Trials, E-Utilities (API), and LinkOut.

3. PubMed基本检索

数据库和检索界面选择区
Advanced: 高级检索

NCBI Resources How To Sign in to NCBI

PubMed.gov PubMed Search

US National Library of Medicine National Institutes of Health

PubMed Single Citation Matcher

Use this tool to find PubMed citations. You may omit any field.

Journal [Help](#)

Date (month and day are optional)

Details

Volume	Issue	First page
<input type="text"/>	<input type="text"/>	<input type="text"/>

Author name [Help](#)

Limit authors Only as first author Only as last author

Title words

[Search](#) [Clear form](#)

PubMed COMMONS

Featured comment - Sep 26
Defining concepts: S Bordenstein (@Symbioticism) points to co-authored review of hologenome framework. bit.ly/2c2F6z4

More Resources

- [MeSH Database](#)
- [Journals in NCBI Databases](#)
- [Clinical Trials](#)
- [E-Utilities \(API\)](#)
- [LinkOut](#)

PubMed使用指南

PubMed工具
移动PubMed
单篇引文匹配器
.....

更多资源
MeSH数据库
NCBI收录期刊
.....



3. PubMed基本检索

Automatic Term Mapping (ATM)

- 实义词/词组: stem cell, hypertension
- 长句: a nonrandomized cohort and randomized study of local control of large hepatocarcinoma by targeting
- 无需标点符号 (例如, “ ”)
- 无需另加AND组配
- 无需加字段标签



3. PubMed基本检索

Automatic Term Mapping (ATM)

如果在检索框中没有用到引号、标签、星号，PubMed就会开启ATM模式，为您依次检索：

- 主题 (MeSH, Medical Subject Headings)
- 期刊
- 作者

*一旦PubMed在MeSH找到匹配项了，就不再继续检索下一个字段了。

例如，Cell

直接在检索框输入<cell>

PubMed会默认先在MeSH词表中检索cell相关条目，找到有匹配的，就不会再去检索<cell>期刊和<cell>作者。

如果要找<cell>这本期刊，得用其他的检索方式。

3. PubMed基本检索



NCBI Resources How To

PubMed.gov PubMed cryo electron microscopy

US National Library of Medicine National Institutes of Health

NCBI has completed the https test for today. Beginning at 8:00 AM EDT on Tuesday, September 27, all web traffic will be directed to HTTPS.

Article types: Clinical Trial, Review, Customize ...

Text availability: Abstract, Free full text, Full text

PubMed Commons, Reader comments, Trending articles

Publication dates: 5 years, 10 years, Custom range...

Species: Humans, Other Animals

Clear all, Show additional filters

Format: Summary Sort by: Relevance Send to

Search results
Items: 1 to 20 of 7260

Sort by

- Most Recent
- Relevance
- Publication Date
- First Author
- Last Author
- Journal
- Title

1. [Native immunoglobulin microscop](#)
Yi H, Strauss JD, Ke PJ, Spearman PW, ...
J Histochem Cytochem. PMID: 26069287
[Similar articles](#)

2. [Imaging Drosophila brain by combining cryo-soft X-ray microscopy of thick vitreous sections and cryo-electron microscopy of ultrathin vitreous sections.](#)
Leforestier A, Levitz P, Preat T, Guttman P, Michot LJ, Tchénio P.
J Struct Biol. 2014 Nov;188(2):177-82. doi: 10.1016/j.jsb.2014.09.012. Epub 2014 Oct 6.
PMID: 25301679
[Similar articles](#)

3. [Correlated cryo-fluorescence and cryo-electron microscopy with high spatial precision and improved sensitivity.](#)
Schorb M, Briggs JA.
Ultramicroscopy. 2014 Aug;143:24-32. doi: 10.1016/j.ultramic.2013.10.015. Epub 2013 Nov 11.
PMID: 24275379
[Similar articles](#)

Page 1 of 363 Next > Last >>

3. PubMed基本检索



Search Details

Query Translation:

```
"cryoelectron microscopy"[MeSH Terms] OR ("cryoelectron"[All Fields] AND "microscopy"[All Fields]) OR "cryoelectron microscopy"[All Fields] OR ("cryo"[All Fields] AND "electron"[All Fields] AND "microscopy"[All Fields]) OR "cryo electron microscopy"[All Fields]
```

Search

URL

检索语句的翻译，真实的检索命令。如果违背了原意，则需调整检索语句。

Result:

[7260](#)

Translations:

cryo electron microscopy	"cryoelectron microscopy"[MeSH Terms] OR ("cryoelectron"[All Fields] AND "microscopy"[All Fields]) OR "cryoelectron microscopy"[All Fields] OR ("cryo"[All Fields] AND "electron"[All Fields] AND "microscopy"[All Fields]) OR "cryo electron microscopy"[All Fields]
--------------------------	---

Database:

PubMed

User query:

cryo electron microscopy

3. PubMed基本检索



Similar Articles

See 1 citation found by title matching your search:

Elife. 2016 Aug 2;5. pii: e15691. doi: 10.7554/eLife.15691.

A nonrandomized cohort and a randomized study of local control of large hepatocarcinoma by targeting intratumoral lactic acidosis.

Chao M¹, Wu H², Jin K¹, Li B¹, Wu J¹, Zhang G¹, Yang G³, Hu X².

Author information

¹Department of Radiology, The Second Affiliated Hospital of Zhejiang University School of Medicine, Hangzhou, China.

²Cancer Institute, The Second Affiliated Hospital of Zhejiang University School of Medicine, Hangzhou, China.

³Vanderbilt University Medical Center, Nashville, United States.

Abstract

STUDY DESIGN: Previous works suggested that neutralizing intratumoral lactic acidosis combined with glucose deprivation may deliver an effective approach to control tumor. We did a pilot clinical investigation, including a nonrandomized (57 patients with large HCC) and a randomized controlled (20 patients with large HCC) studies.

METHODS: The patients were treated with transarterial chemoembolization (TACE) with or without bicarbonate local infusion into tumor.

RESULTS: In the nonrandomized controlled study, geometric mean of viable tumor residues (VTR) in TACE with bicarbonate was 6.4-fold lower than that in TACE without bicarbonate (7.1% [95% CI: 4.6%-10.9%] vs 45.6% [28.9%-72.0%]; $p < 0.0001$). This difference was recapitulated by a subsequent randomized controlled study. TACE combined with bicarbonate yielded a 100% objective response rate (ORR), whereas the ORR treated with TACE alone was 44.4% (nonrandomized) and 63.6% (randomized). The survival data suggested that bicarbonate may bring survival benefit.

CONCLUSION: Bicarbonate markedly enhances the anticancer activity of TACE. Clinical trial registration: ChiCTR16005319.



Save items

★ Add to Favorites

Similar articles

Meta-analysis on radiofrequency ablation in combination [J Huazhong Univ Sci Technol ...]

Chemoembolization combined with radiofrequency ablation for patients [JAMA. 2008]

Transarterial chemoembolization (TACE) plus percutaneous ethanol [Int J Clin Exp Med. 2015]

Review Sorafenib enhances effects of transarterial che [J Cancer Res Clin Oncol. 2014]

Review Transarterial chemoembolization versus hepatic resection in [Drug Des Devel Ther. 2015]

See reviews...

See all...

评判标准：基于词频比重算法比较文献的Title, Abstract以及标引的MeSH主题词，列出相似文献。

3. PubMed基本检索

过滤器

- 文献类型
- 可获取文本
- PubMed评论
- 发表年限
- 种类
- 语言
- 性别
- 年龄

Article types
Clinical Trial
Review
Customize ...

Text availability
Abstract
Free full text
Full text

PubMed
Commons
Reader comments
Trending articles

Publication dates
5 years
10 years
Custom range...

Species
Humans
Other Animals

[Clear all](#)

[Show additional filters](#)

Format: Summary ▾ [Sort](#)

Search results

Items: 1 to 20 of 1829:

- [Potent, Reversible,](#)
- 1. Kawashima SA, Ch
Cell. 2016 Sep 21. pii:
PMID: 27667686
- [Mutations in Huma](#)
- 2. Doan RN, Bae BI, C
M, Balkhy S, Gascc
Cell. 2016 Sep 21. pii:
PMID: 27667684
- [Timeline: Targeted](#)
- 3. Teitzel G.
Cell. 2016 Sep 22;167
PMID: 27662096
[Similar articles](#)

Additional filters ✕

- Article types
- Text availability
- PubMed Commons
- Publication dates
- Species
- Languages
- Sex
- Subjects
- Journal categories
- Ages
- Search fields

Show

4. PubMed高级检索



PubMed Advanced Search Builder

Filters activated: Reader comments. [Clear all](#)

Use the builder below to create your search

[Edit](#)

[Clear](#)

Builder

All Fields

AND All Fields

Search or [Add to history](#)

- Affiliation
- All Fields
- Author
- Author - Corporate
- Author - First
- Author - Full
- Author - Identifier
- Author - Last
- Book
- Date - Completion
- Date - Create
- Date - Entrez
- Date - MeSH
- Date - Modification
- Date - Publication
- EC/RN Number
- Editor
- Filter
- Grant Number
- ISBN
- Issue
- Journal
- Language
- Location ID
- MeSH Major Topic
- MeSH Subheading
- MeSH Terms
- Other Term
- Pagination
- Pharmacological Action
- Publication Type
- Publisher
- Secondary Source ID
- Subject - Personal Name
- Supplementary Concept
- Text Word
- Title
- Title/Abstract
- Transliterated Title
- Volume

Show index list

Show index list

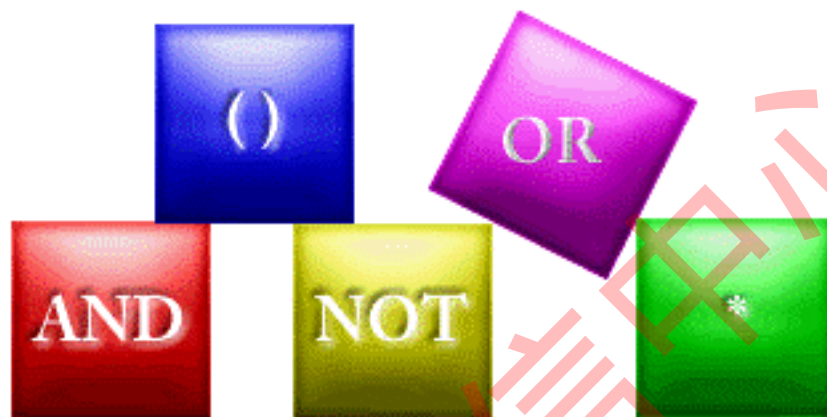
History

Search	Add to builder		Items found	Time
#21	Add	Trending	18	05:04:33
#20	Add	Trending	993	05:04:28
#19	Add	Trending	993	05:03:13
#16	Add	Search c	29	05:00:39
#17	Add	Search c	66	05:00:23

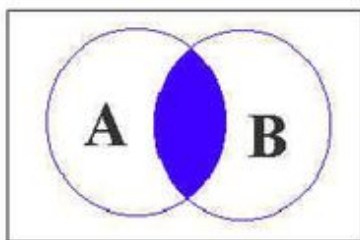
[Download history](#) [Clear history](#)

omments

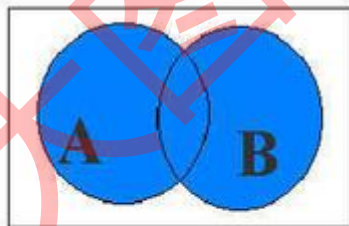
4. PubMed高级检索



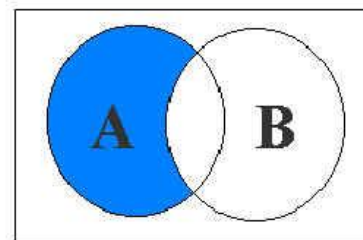
布尔逻辑运算符



A AND B



A OR B



A NOT B

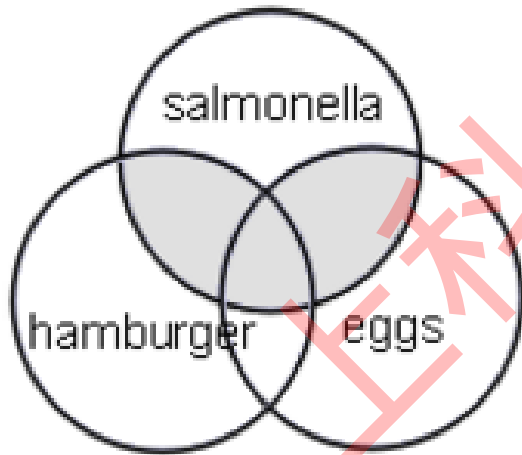
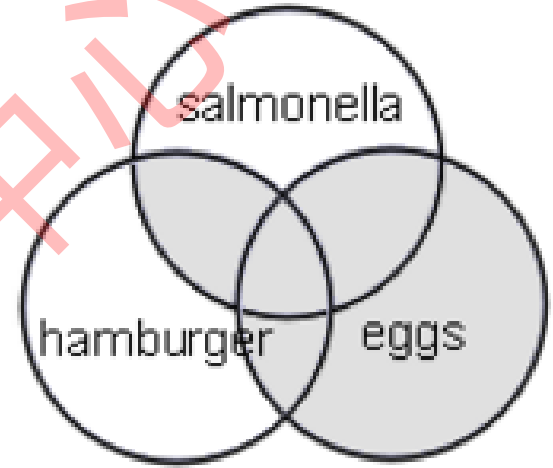
1. 在PubMed中，布尔运算符必须大写（Capital letters）。
2. AND是默认运算符。
3. 在PubMed中，运算顺序从左到右进行。→
4. 括号优先。

4. PubMed高级检索



布尔逻辑运算符

salmonella AND hamburger OR eggs



salmonella AND (hamburger OR eggs)



4. PubMed高级检索

词组检索：在初次检索得不到满意结果后，可尝试。

1. 在词根后加上星号 (*) 表示任何字符。

如：flavor*，

可以变形为flavored, flavorful, flavoring, etc.

- PubMed会检索前600个截词搜索。如果超过600个，会提示用户增加词根以便查找所有可能的后缀。
- 使用截词检索，就不能定位到MeSH词表及MeSH扩展（ATM失效）。

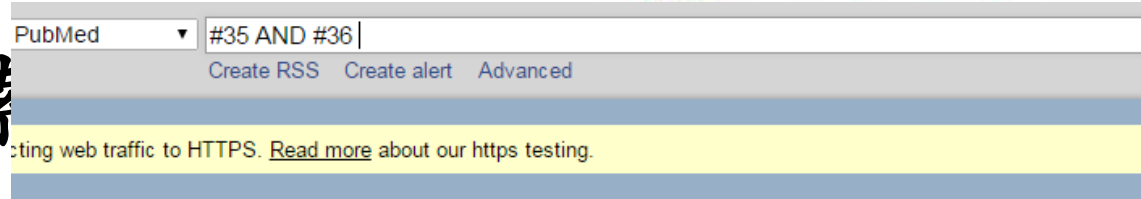
2. 支持精确检索(“”)

如：“Single cell”可检索 single cell, single-cell的文献。

3. 加上字段标签进行检索

如：cell [journal]

4. PubMed高级检索



PubMed Advanced Search Builder

#35 AND #36

[Cancel](#)

or [Add to history](#)

History

Search	
#37	Search #35 AND #36 Sort by: Relevance
#36	Search tsinghua university[Affiliation] S
#35	Search "cryoelectron microscopy"[MeSH]

Format: Summary ▾ Sort by: Relevance ▾

[Send to ▾](#)

Search results

Items: 1 to 20 of 41

[<< First](#) [< Prev](#) Page of 3 [Next >](#) [Last >>](#)

- [The bacteriophage φ29 tail possesses a pore-forming loop for cell membrane penetration.](#)
1. Xu J, Gui M, Wang D, Xiang Y.
Nature. 2016 Jun 15;534(7608):544-7. doi: 10.1038/nature18017.
PMID: 27309813
[Similar articles](#)
- [Diverse roles of assembly factors revealed by structures of late nuclear pre-60S ribosomes.](#)
2. Wu S, Tutuncuoglu B, Yan K, Brown H, Zhang Y, Tan D, Gamalinda M, Yuan Y, Li Z, Jakovljevic J, Ma C, Lei J, Dong MQ, Woolford JL Jr, Gao N.
Nature. 2016 May 25;534(7605):133-7. doi: 10.1038/nature17942.
PMID: 27251291
[Similar articles](#)
- [Structural Basis for Recognition of Human Enterovirus 71 by a Bivalent Broadly Neutralizing Monoclonal Antibody.](#)
3. Ye X, Fan C, Ku Z, Zuo T, Kong L, Zhang C, Shi J, Liu Q, Chen T, Zhang Y, Jiang W, Zhang L, Huang Z, Cong Y.
PLoS Pathog. 2016 Mar 3;12(3):e1005454. doi: 10.1371/journal.ppat.1005454. eCollection 2016 Mar.
PMID: 26938634 [Free PMC Article](#)
[Similar articles](#)
- [Structure of an endogenous yeast 26S proteasome reveals two major conformational states.](#)
4. Luan B, Huang X, Wu J, Mei Z, Wang Y, Xue X, Yan C, Wang J, Finley DJ, Shi Y, Wang F.
Proc Natl Acad Sci U S A. 2016 Mar 8;113(10):2642-7. doi: 10.1073/pnas.1601561113. Epub 2016 Feb 29.
PMID: 26929360 [Free PMC Article](#)
[Similar articles](#)
- [Structural and molecular basis for Ebola virus neutralization by protective human antibodies.](#)
5. Misasi J, Gilman MS, Kanekiyo M, Gui M, Cagigi A, Mulangu S, Corti D, Ledgerwood JE, Lanzavecchia A, Cunningham J, Muyembe-Tamfun JJ, Baxa U, Graham BS, Xiang Y, Sullivan NJ, McLellan JS.
Science. 2016 Mar 18;351(6279):1343-6. doi: 10.1126/science.aad6117. Epub 2016 Feb 25.
PMID: 26917592
[Similar articles](#)



4. PubMed高级检索

发表在《Nature》上有关高血压的文章

(1). 在检索框中输入: high blood pressure AND "Nature" [Journal]

PubMed Advanced Search Builder

You Tube T

(high blood pressure) AND "Nature"[Journal]

[Edit](#)

[Clear](#)

Builder

All Fields

high blood pressure



[Show index list](#)

AND

Journal

Nature



[Show index list](#)

AND

All Fields



[Show index list](#)

Search

or [Add to history](#)

Detail: ("hypertension"[MeSH Terms] OR "hypertension"[All Fields] OR ("high"[All Fields] AND "blood"[All Fields] AND "pressure"[All Fields]) OR "high blood pressure"[All Fields]) AND "Nature"[Journal]

4. PubMed高级检索



(2). 利用MeSH词表

在检索框中输入: high blood pressure, 并选择MeSH数据库

NCBI Resources ▾ How To ▾

MeSH MeSH ▾ high blood pressure

[Create alert](#) [Limits](#) [Advanced](#)

Summary ▾ [Send to: ▾](#)

Search results

Items: 2

[Hypertension](#)

1. Persistently high systemic arterial BLOOD PRESSURE. Based on multiple readings (BLOOD PRESSURE DETERMINATION), **hypertension** is currently defined as when SYSTOLIC PRESSURE is consistently greater than 140 mm Hg or when DIASTOLIC PRESSURE is consistently 90 mm Hg or more.

[HBP1 protein, human \[Supplementary Concept\]](#)

2. RefSeq NM_012257
Date introduced: August 6, 2004



4. PubMed高级检索

2. 在检索框中输入 hypertension [MeSH] AND "Nature" [Journal]

NCBI Resources How To

PubMed.gov PubMed hypertension [MeSH] AND "Nature" [Journal]

US National Library of Medicine National Institutes of Health

Create RSS Create alert **Advanced**

History

[Download history](#) [Clear history](#)

Search	Query	Items found	Time
#30	Search hypertension [MeSH] AND "Nature" [Journal] Sort by: PublicationDate	88	22:55:12
#28	Search hypertension [mesh] Sort by: PublicationDate	225826	22:46:06
#6	Search hypertension [mesh] AND "Nature"[Journal] Sort by: PublicationDate	88	21:07:39
#18	Search swine flu	3122	21:03:41
#17	Search swing flu	1	21:03:21
#14	Search high blood pressure AND Nature [Journal]	149	20:37:52
#9	Search #5 NOT #6	61	20:20:08
#8	Search #6 NOT #5 Schema: all	0	20:20:00
#7	Search #6 NOT #5	0	20:20:00
#5	Search high blood pressure AND "Nature"[Journal]	149	20:18:06
#1	Search (high blood pressure[Title/Abstract]) AND "Nature"[Journal]	4	20:06:46

Detail: "hypertension"[MeSH Terms] AND "Nature"[Journal]

#5 NOT #6

[Cancel](#)[Clear](#)[Search](#) or [Add to history](#)

NCBI Resources How To

PubMed.gov PubMed [Create RSS](#) [Create alert](#) [Advanced](#)

US National Library of Medicine National Institutes of Health

Article types: Summary Sort by Most Recent

Clinical Trial
Review
Customize ...

Text availability: Abstract

Search results
Items: 1 to 20 of 61

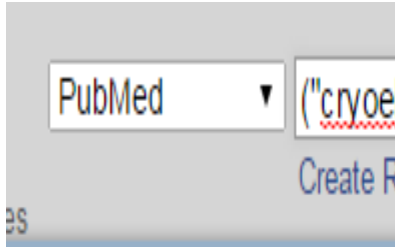
<< First < Prev Page 1 of 4 Next > Last >>

Detail: ("hypertension"[MeSH Terms] OR "hypertension"[All Fields] OR ("high"[All Fields] AND "blood"[All Fields] AND "pressure"[All Fields]) OR "high blood pressure"[All Fields]) AND "Nature"[Journal]

哪些噪声：

1. 地址栏: Division of Nephrology and Hypertension, Christian-Albrechts-University, Kiel 24105, Germany.
2. pulmonary hypertension 肺动脉高压
3. 仅提到hypertension而已 (such as hypertension)

4. 检索结果



Your PubMed search

Name of saved search: ("cryoelectron microscopy"[MeSH Terms]).

Search terms: ("cryoelectron microscopy"[MeSH Terms]) AND (tsinghua university[Affiliation])

[Test search terms](#)

Would you like e-mail updates of new search results?

- No, thanks.
 Yes, please.

E-mail:

Your e-mail address, @163.com, has not been confirmed. To receive search e-mails please:

- [Request a confirmation e-mail](#) to be sent to that address.
- Click the confirmation link in the e-mail.

If you would like to change the e-mail address associated with your account, click the "Change" button on your [NCBI Account Settings](#)

If you do not receive a confirmation e-mail, you should check your [SPAM filtering software](#).

Schedule:

Frequency: Monthly

Which day? the first Sunday

Formats:

Report format: Summary

Number of items:

Send at most: 5 items Send even when there aren't any new results

Any text you want to be added at the top of your e-mail (optional):

Save

Cancel

4. 检索结果分析



<http://www.gopubmed.org/web/gopubmed/>

在检索框输入同样的检索式：

hypertension [MeSH] AND "Nature" [Journal]

The screenshot shows the gopubmed search results page. The search query is "hypertension [MeSH] AND 'Nature' [Journal]". The results are displayed in a list format, with the first two results highlighted. The first result is a perspective article titled "time to tackle blood pressure." by Koroshetz, Walter J, published in Nature, Vol. 510 (7506): S4, 2014. The second result is a perspective article titled "silent, but preventable, perils." by Hakim, Antoine M, published in Nature, Vol. 510 (7506): S12, 2014. The "statistics" button in the top navigation bar is highlighted with a red box.

powered by TRANSINSIGHT Enterprise Semantic Intelligence® Server

help login

show abstracts documents **statistics** top author clipboard

88 documents found

Perspective: time to tackle blood pressure.
Authors: Koroshetz, Walter J
Journal: Nature, Vol. 510 (7506): S4, 2014
No Abstract available.
PubMed 24964024 Related Articles Read Full Text
Affiliation: US National Institute of Neurological Disorders and Stroke in Bethesda, Maryland.

Perspective: silent, but preventable, perils.
Authors: Hakim, Antoine M
Journal: Nature, Vol. 510 (7506): S12, 2014
No Abstract available.
PubMed 24964022 Related Articles Read Full Text

refine search

- Favorite concepts
- Highly related concepts
 - Blood Pressure 30
 - Rats, Inbred SHR 11
 - Kidney 14
 - Angiotensin II 8
 - Pressure 13
 - Renin 7
 - regulation of blood pressure 6
 - Renin-Angiotensin System 6
 - Antihypertensive Agents 7
 - Nephrectomy 6
 - more
- All related concepts
- Authors
- Locations
- Journals
- Publication Dates
- Find concepts in Knowledge Base
- Previous queries
- Explore current query

share export

find



Top Year	Publications
1982	4
1976	4
1965	4
1962	4
1958	4
2002	3
1990	3
1969	3
1964	3
1963	3
1961	3
1960	3
2014	2
2013	2
2012	2
2008	2
2007	2
2005	2
2004	2
1997	2

Top Countries	Publications
United States	8
Canada	2
Germany	2
China	1
United Kingdom	1
Japan	1
Belgium	1
France	1

Top Cities	Publications
Boston	2
Bethesda	1
Ottawa	1
Beijing	1
New Haven	1
New York City	1
San Francisco	1
Toronto	1
Cambridge	1
Saitama	1
Brussels	1
Dallas	1
Salt Lake City	1
Paris	1
Heidelberg	1
Freiburg	1

Top Journals	Publications
Nature	88

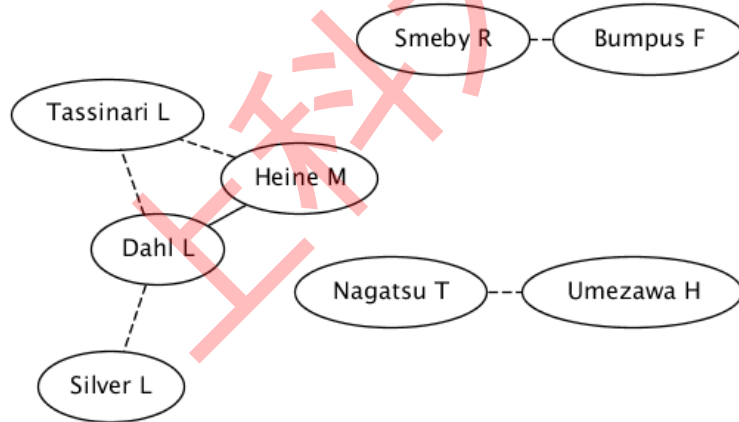
Top Authors	Publications
Dahl L	7
Heine M	3
Ganten D	2
Meyer P	2
Umezawa H	2
Nagatsu T	2
Smeby R	2
Bumpus F	2
Tassinari L	2
Silver L	2
Koroshetz W	1
Hakim A	1
Gammon K	1
Xiao R	1
Song R	1
Peng W	1
Zhang Y	1
Lv F	1
Wu H	1
Guo J	1

1 2 3

Top Terms	Publications
Hypertension	85
Animals	56
Humans	44
Rats	37
Blood Pressure	30
Male	19
Kidney	14
Pressure	13
Mice	
Sodium Chloride	
Rats, Inbred SHR	
Genes	
Female	
Metabolism	
Angiotensin II	
Angiotensins	
Sodium	
Antihypertensive Agents	
Renin	
metabolic process	

1 2 3 ...43

network of top authors



1 collaboration

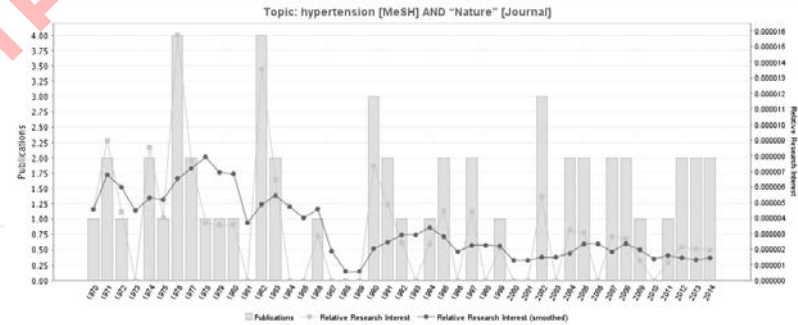
2 collaborations

3-5 collaborations

6+ collaborations

statistics of 88 documents

publications over time



world map





小结

1. 掌握PubMed及NCBI， NLM， PMC大家族的关系
2. MeSH词表的意义及使用
3. PubMed基本检索， ATM
4. PubMed高级检索， 逻辑运算符、 通配符、 检索式组合
5. 结果分析， Email alert， GoPubMed， PubReMiner



任何工具只能帮助检索及归纳，知识的吸收
还是需要认真读文献的。

谢谢!

王萍

wangping@shanghaitech.edu.cn