



Software for
Business Intelligence

BizInt Smart Charts

Patents & IP Sequences | Clinical Trials | Drug Pipelines

Creating an Index of Hit Structures using BizInt Smart Charts for Patents

John Willmore, VP Product Development

EPO PIC Workshop, Brussels, 14 November 2018

www.bizint.com

Agenda

- Introduction to BizInt Smart Charts
- Hit structure reports
- Saving and importing transcripts
- Step by step
- Integrating data from separate records
- Future directions

bizint.com/slides



Quickly create tabular reports...

BizInt Smart Charts for Patents 4.6 - [Unsaved5]

File Edit View Text Tools Options Window Help

LifeQuest: Sample

	Title	Patent Family			Inventor(s)	CPC	Abstract	Claims	Pub.
		Patent	Kind	Date					
1	Drug delivery compositions	US20050042753	A1	2005-02-24	Victor C. Yang Yoon Jeong Park Junfeng Liang	A61K47/48861 Y10S977/705 A61K2039/505 A61K47/48561 A61K47/48407 A61K47/48315 A61K47/48884 A61K47/4823	The present invention relates to multicomponent compositions and methods of administering these compositions, which specifically translocate therapeutic molecules (e.g., drugs or prodrugs) across biological membranes thus reducing potential toxic side effects on nontargeted cells and tissues.	1. A composition, comprising: a. a first targeting component, wherein said first targeting component comprises i. a molecular recognition element, and ii. an anionic molecule having net negative charge, and; b. a first drug delivery component, wherein said first drug delivery component comprises i. a cationic molecule having a net positive charge, and ii. at least one therapeutic agent. [CONT.]	Applicati
2	DIABETES DRUG	JP2005126430	A	2005-05-19	ASAKAWA TOMOKO		PROBLEM TO BE SOLVED: To obtain a diabetes drug for sulfonylurea secondary failure expressing excellent insulin secretion effect and hypoglycemic effect even for patients who can not obtain insulin secretion effect by using a sulfonylurea compound, a quick-acting insulin secretion promoter or the like, therefore, can not obtain sufficient hypoglycemic effect. [CONT.]	-IV inhibitor dipeptidylpeptidase [...] 2 containing a therapeutic agent diabeto secondary ineffective. Secondary [...] 2 is described in claim 1 due to the compound. A quick-acting secondary [...] 2 noninsulin secretagogue of claim 1 due to the described. Secondary diabeto [...] 2 for producing a therapeutic agent used dipeptidylpeptidase-IV inhibitor. [CONT.]	Applicati
3	DRUG DELIVERY MEDICAL DEVICE	CA2756386	A1	2010-09-30	NEET, JOHN TAYLOR, DOUGLAS MCCLAIN, JAMES B.	A61M25/0045 A61L2420/08 A61L29/085 A61L2300/63 A61L29/16 A61L2300/602 A61L31/16 A61L31/10 A61L2300/608 A61L27/34 A61L27/16	Provided is a coated implantable medical device, comprising: a substrate; and a coating disposed on said substrate, wherein said coating comprises at least one polymer and at least one pharmaceutical agent in a therapeutically desirable morphology and/or at least one active biological agent and optionally, one or more	A device comprising: - a substrate and - a coating on at least a portion of the substrate, wherein the coating comprises a plurality of layers, wherein the coating comprises an active agent, and wherein the polymer comprises a durable polymer. The device of claim 1, wherein the polymer comprises The device of claim 1, wherein the polymer	Applicati

With full records and metadata for each row

Unsaved5

LifeQuest Sample

	Title	Patent Family			Inventor(s)	CPC	Abstract	
		Patent	Kind	Date				
1	Drug delivery compositions	US20050042753	A1	2005-02-24	Victor C. Yang Yoon Jeong Park	A61K47/48861 Y10S977/705	The present invention relates to multicomponent compositions and methods of administering these compositions, which specifically translocate therapeutic molecules (e.g., drugs or prodrugs) across biological membranes thus reducing potential toxic side effects on nontargeted cells and tissues.	1. A composition, comprising: a. a first targeting component, wherein said first targeting component comprises i. a molecular recognition element, and ii. an anionic molecule having net negative charge, and; b. a first drug delivery component, wherein said first drug delivery component comprises i. a cationic molecule having a net positive charge, and ii. at least one therapeutic agent. 2. The
2	DIABETES DRUG						EM TO BE SOLVED: To a diabetes drug for urea secondary failure giving excellent insulin on effect and hypoglycemic ven for patients who can not insulin secretion effect by sulfonyleurea compound, a acting insulin secretion er or the like, therefore, can ain sufficient hypoglycemic CONT.]	-IV inhibit 2 contain diabete s Seconda claim 1 d A quick-a noninsuli 1 due to t Seconda produci used dip inhibitor.]
3	DRUG DELIVERY						d is a coated implantable l device, comprising: a te; and a coating disposed substrate, wherein said comprises at least one r and at least one ceutical agent in a utically desirable ology and/or at least one biological agent and ally, one or more ceutical carrying agents:	A device c - a subst least a p wherein t plurality c coating c and when comprise The devic polymer c claim 1, v comprising

Records: Sample

1: Drug delivery compositions

Drug delivery compositions

Publication

Patent
US20050042753

Applications

Application
US10835151A

Inventor(s): Victor C. Yang
Yoon Jeong Park
Junfeng Liang

CPC
A61K47/48861 Y10S977/705 A
A61K47/48884 A61K47/4823

International Patent Class
A61K47/48

Abstract
The present invention relates to multicomponent compositions and methods of administering these compositions, which specifically translocate therapeutic molecules (e.g., drugs or prodrugs) across biological membranes thus reducing potential toxic side effects on nontargeted cells and tissues.

Claims

1. A composition, comprising: a. a first targeting component, wherein said first targeting component comprises i. a molecular recognition element, and ii. an anionic molecule having net negative charge, and; b. a first drug delivery component, wherein said first drug delivery component comprises i. a cationic molecule having a net positive charge, and ii. at least one therapeutic agent. 2. The

Row Properties

Database: LifeQuest (LIFEQ)

Date: ---

Accession Number: US20050042753A1

Row Status: Unchanged

Publisher URL:
<http://localhost:8080/LifeQuest/patentDocument/show?pn=US20050042753A1>

OK Cancel

How is this different from Excel?

- Customize after creation
- Tables within cells
- Images in cells
- Rows sort properly
- Integrate data from different platforms into a single report
- Update reports with new and changed data
- Deliver final reports in HTML, Word, Excel, PDF



Customize your reports

- Select and **rearrange columns**
- **Add** your own columns.
- Create and apply **chart templates**.
- **Hide rows** that aren't of interest.
- **Sort** by multiple values, **move rows**.
- **Edit text and highlight cells**.
- Change **options for truncation** and full text links.
- Tools | Statistics: simple **statistics** can help analyze search results.

Deliver attractive and useful reports

- Export to **HTML**, **Word**, and **Acrobat** - chart only or chart and linked records.
- Export to **Excel - optimized Excel export**, also HTML and .csv exports.
- BizInt Smart Charts files (.chp) - consider the **Viewer** for “aggressive end users”.
- Printing (options under Page Setup)

Deliver reports in HTML, Word, Excel...

LifeQuest: Sample

	Title	Patent	Patent Family Kind	Date	Inventor(s)	CPC	Abstract	Claims	Pub. Status
1 Link	Drug delivery compositions	US7329638	B2	2008-02-12	Victor C. Yang Yoon Jeong Park Junfeng Liang	A61K2039/505 A61K47/48315 A61K47/48884 A61K47/4823 A61K47/48561	The present invention relates to multicomponent compositions and methods of administering these compositions, which specifically translocate	1. A composition, comprising: a. a first targeting component, wherein said first targeting component comprises i. a molecular recognition element, wherein said molecular recognition element has	Grant
2 Link	Drug delivery compos	<p>ALL-TEXT AND IMAGE DATABASE</p> <p>Advanced Pat Num Help</p> <p>Bottom</p> <p>view Cart Add to Cart</p> <p>Images</p> <p>(1 of 1)</p> <p>United States Patent Yang, et al. 7,329,638 February 12, 2008</p> <p>Drug delivery compositions</p> <p>Abstract</p> <p>The present invention relates to multicomponent compositions and methods of administering these compositions, which specifically translocate therapeutic molecules (e.g., drugs or prodrugs) across biological membranes thus reducing potential toxic side effects on nontargeted cells and tissues.</p> <p>Inventors: Yang; Victor C. (Ann Arbor, MI), Park; Yoon Jeong (Seoul, KR), Liang; Junfeng (Westfield, NJ) Assignee: The Regents of the University of Michigan (Ann Arbor, MI) Family ID: 34198915 Appl. No.: 10/835,151 Filed: April 29, 2004</p> <p>Prior Publication Data</p> <p>Document Identifier: US 20050042753 A1 Publication Date: Feb 24, 2005</p> <p>Related U.S. Patent Documents</p>							
3 Link	POLYMORPHISMS OF REGION OF THE HUMAN HT1A GENE, ASSOCIATED WITH PROTEINS OF THE 5' HTR1A GENE AND A DIAGNOSTIC TEST FOR MAJOR DEPRESSION AND RELATED MENTAL ILLNESSES								
4 Link	Oncology drug innova								

Link in the Link to web resource (like USPTO)

Link to record on source platform

Summary Record export in Word

3.	Basic Patent Number:	WO2012033858A2
	Title:	Boron-containing small molecules
	Inventor(s):	Hernandez, Vincent S.; Ding, Charles; Plattner, Jacob J.; Alley, Michael Richard Kevin; Rock, Fernando; Zhang, Suoming; Easom, Eric; Li, Xianfeng; Zhou, Ding
	Patent Assignee:	Anacor Pharmaceuticals, Inc., USA
	Hyperlinks:	Source WO2012033858A2



- Fields are the columns in chart
- Content, like hyperlinks, is included in the Summary Record

THE JOURNEY BEGINS...

Summary Record export with Hit Structures

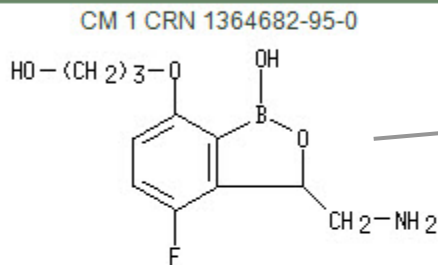
3. Basic Patent Number:	WO2012033858A2
Title:	Boron-containing small molecules
Inventor(s):	Hernandez, Vincent S.; Ding, Charles; Plattner, Jacob J.; Alley, Michael Richard Kevin; Rock, Fernando; Zhang, Suoming; Easom, Eric; Li, Xianfeng; Zhou, Ding
Patent Assignee:	Anacor Pharmaceuticals, Inc., USA
Hyperlinks:	Source WO2012033858A2

Text from CPlus record

Hit Structures:

1364682-96-1 [\(Compd. 2\)](#)

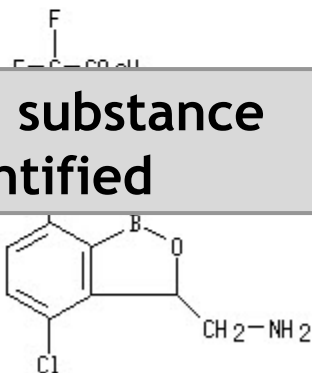
1-Propanol, 3-[[3-(aminomethyl)-4-fluoro-1,3-dihydro-1-hydroxy-2,1-benzoxaborol-7-yl]oxy]-, 2,2,2-trifluoroacetate (1:2) (CA INDEX NAME)



RL: PAC (Pharmacological activity); SPN (Synthetic preparation); TH (Therapeutic use); BIOL (Biological study); PREP (Preparation); U (Uses)

Structures with annotations including multi page images

CM 2 CRN 76-05-1



prepn. of benzoxaborole useful for treating bacterial infections

Each hit substance identified

1364683-03-3 [\(Compd. 3\)](#)

1-Propanol, 3-[[3-(aminomethyl)-4-chloro-1,3-dihydro-1-hydroxy-2,1-benzoxaborol-7-yl]oxy]-, hydrochloride (1:1) (CA INDEX NAME)

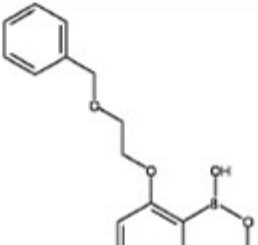
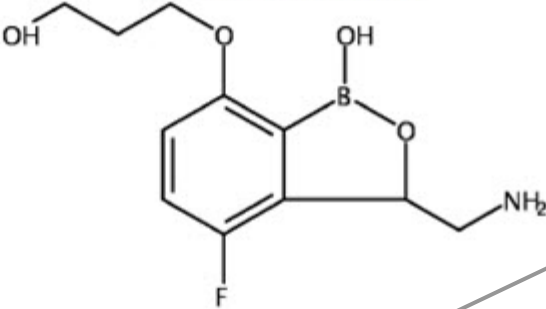
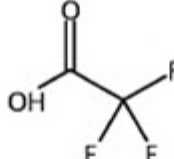
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); U (Uses)

Index Terms

prepn. of benzoxaborole derivs. useful for treating bacterial infections

A structure oriented “Index of Hit Structures”

Index of Hit Structures

Substance	Structure
<p>1 1655492-02-6</p> <p>2,1-Benzoxaborole, 4-fluoro-1,3-dihydro-1-hydroxy-3-(nitromethyl)-7-[2-(phenylmethoxy)ethoxy]-</p>	
<p>2 1364682-96-1</p> <p>1-Propanol, 3-[[3-(aminomethyl)-4-fluoro-1,3-dihydro-1-hydroxy-2,1-benzoxaborol-7-yl]oxy]-, 2,2,2-trifluoroacetate (1:2)</p>	 <p>CM2 CRN 76-05-1</p> 

Structures with annotations

Each hit substance identified

Links to references for each structure

Multiple images (continuation) or mixtures

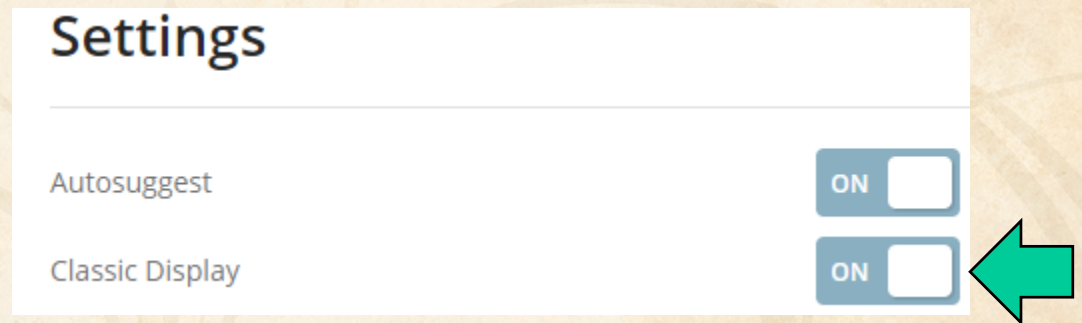
prepn. and biol. applications of tricyclic benzoxaborole compds. [Reference 1](#)

prepn. and biol. applications of tricyclic benzoxaborole compds. [Reference 2](#)

prepn. of benzoxaborole derivs. useful for treating bacterial infections [Reference 3](#)

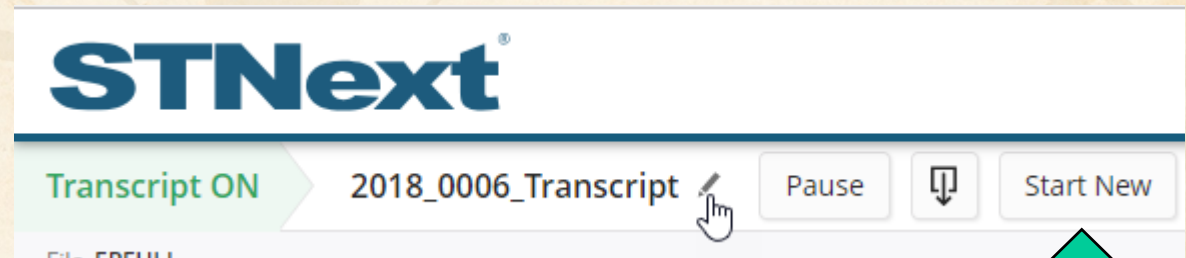
Importing transcripts with hit structures (STNext)

- Make sure that Classic Display is on



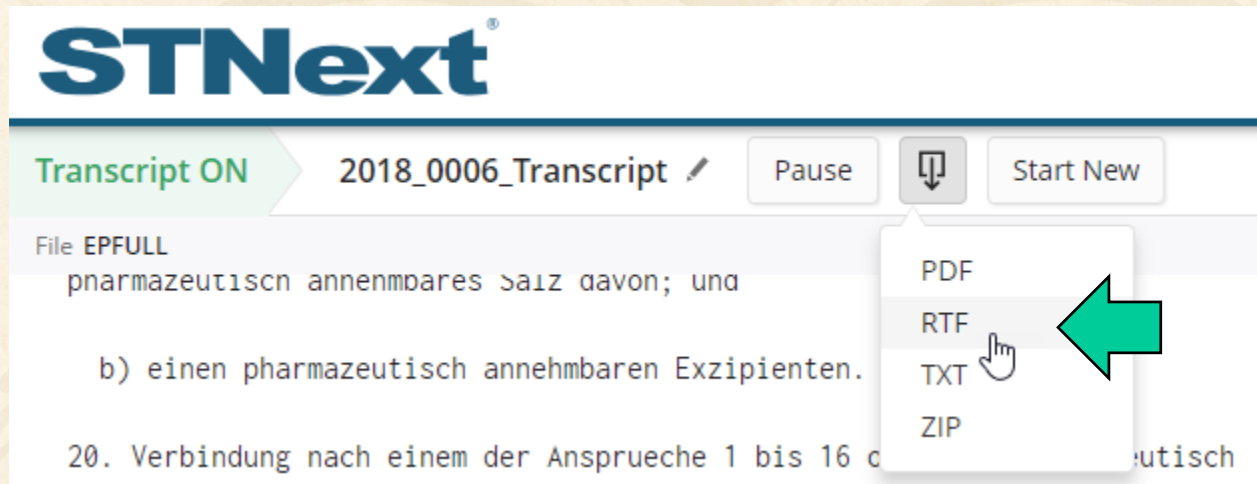
Importing transcripts with hit structures (STNext)

- Make sure that Classic Display is on
- Start new transcript before displaying.



Importing transcripts with hit structures (STNext)

- Make sure that Classic Display is on
- Start new transcript before displaying.
- Display your results including HITSTR.
- Save as RTF.



The screenshot shows the STNext web interface. At the top, the logo "STNext" is displayed. Below it, there is a header bar with "Transcript ON" in a green arrow, the transcript name "2018_0006_Transcript" with an edit icon, and buttons for "Pause", a download icon, and "Start New". The main content area shows a transcript snippet with the text "pharmazeutisch annehmbares Salz davon; und" and "b) einen pharmazeutisch annehmbaren Exzipienten.". A context menu is open over the transcript, listing options: PDF, RTF, TXT, and ZIP. A green arrow points to the RTF option, and a mouse cursor is visible over the TXT option.

BIB vs. IBIB

- We recommend using tagged (BIB), rather than indented (IBIB), display formats
- Some field contents (table headings) appear before the label in IBIB
- Indent levels in RTF are more reliably detected in BIB

Importing transcripts with hit structures (other platforms)

New STN: BizInt export - must include both
REGISTRY and CPlus records in export

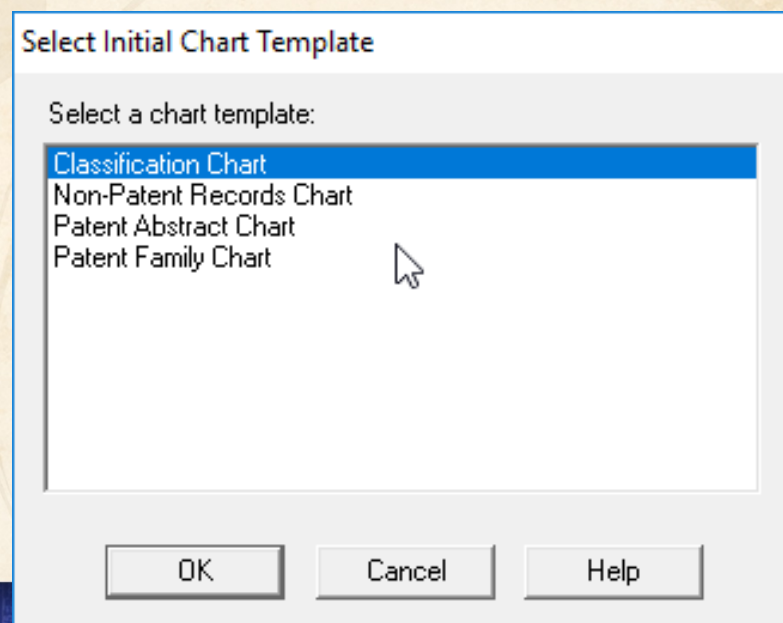
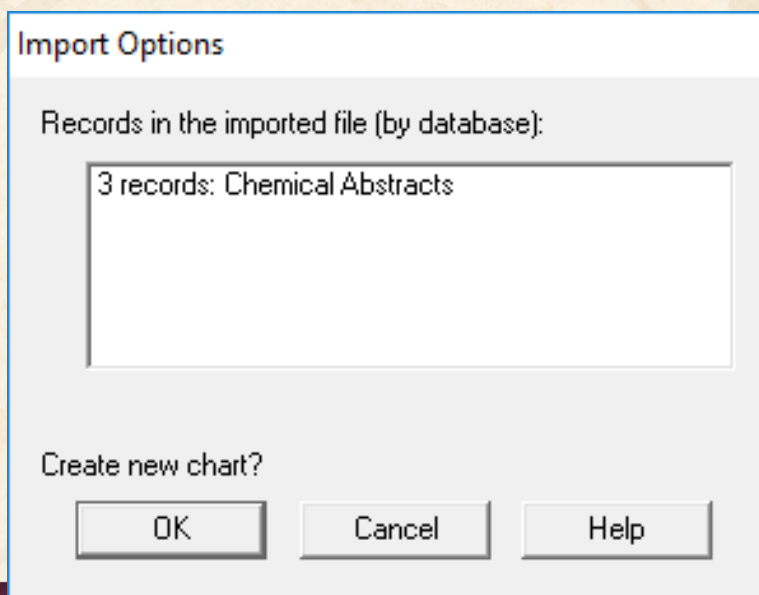
http://www.bizint.com/support/create/newstn_hitstr.php

Classic STN: Using STN Express, display HITSTR,
save transcript as RTF.

*If transcript opens in Word **DO NOT SAVE!***

Import your transcript

- Either **File | Import** or drag your transcript file into BizInt Smart Charts for Patents.
- Chart template is a default set of columns
Create your own!



Select columns to display

- Use **View | Columns** to select and re-order visible columns in the chart

Unsaved1

Chemical Abstracts: stnweb_hitstr

	Title	Basic Patent Number	Inventor(s)	Patent Assignee	International Patent Class	CA Classification
1	Benzoxaborole compounds and uses thereof	WO 2016128949 A1	Alley, M. R. K. Barros-Aguirre,	GlaxoSmithKline Intellectual Property		
2	Tricyclic benzoxab compounds and us					
3	Boron-containing s molecules					

Display Columns

Available Columns

- Accession Number
- Application Details
- Basic Patent Number
- Basic Publication Date
- CA Doc Type
- Designated States
- Document Number
- Full Text Link
- Graphic Information
- Hit Index Terms
- Index Terms
- Language
- Other Source
- Priority
- Priority Date
- Record Num.
- Source
- Subject Area

Selected Columns

- Title
- Patent Family
- Inventor(s)
- Patent Assignee
- Abstract

Up

Down

21

Set column properties

- Use **View | Column Properties** to change column names or set up hyperlinks
- Configure with **Options | Full text patent links**

Patent Family			Inventor(s)	Patent Assignee	Abstract
Patent	Kind	Date			
WO 2016128949	A1	20160818	Alley, M. R. K.	GlaxoSmithKline	Title compds., I and I
CA2976308	A1	20160818	Barros-Aguirre,	Intellectual Property	fluoro, bromo and ioc
AU 2016217508	A1	20170928			
IL 253865	A	20170928			
CR 20170372	A	20171019			
KR 2017117156	A	20171020			
EP 3256480	A1	20171220			
CN 107548398	A	20180105			
JP 2018506540	T	20180308			
AR 103707	A1	20170531			
AR 103708	A1	20170531			
US 20180037595	A1	20180208			
IN 201717032083	A	20171208			
WO 2015021396	A2	20150212			
WO 2015021396	A3	20151029			
WO 2015021396	A9	20160211			
CA2919888	A1	20150212			
AU 2014305792	A1	20160310			

Column Properties

Title: Patent Family

Width: 244

Sort type: <Not sortable>

Link patent numbers to full text in HTML export

Convert DOI to links in HTML export

Link NCT numbers to clinicaltrials.gov in HTML exp

OK Cancel Help

Patent Full-text Link Options

Choose how patent numbers from the following authorities will be converted to full-text links in HTML exports.

Authority Link to:

US USPTO

EP esp@cenet

WO esp@cenet

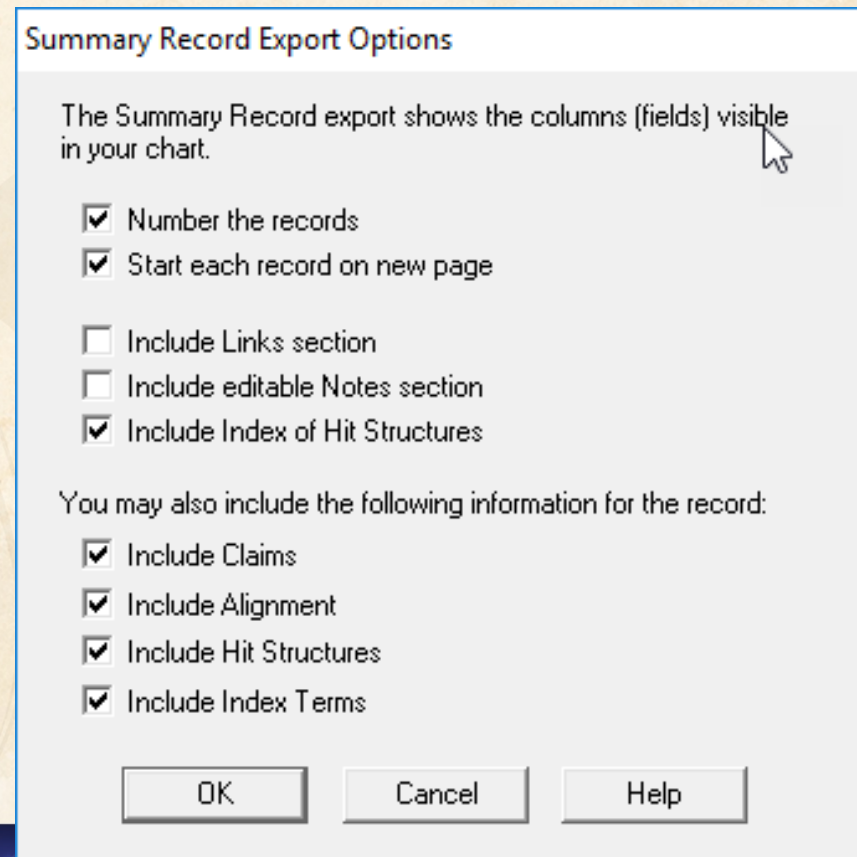
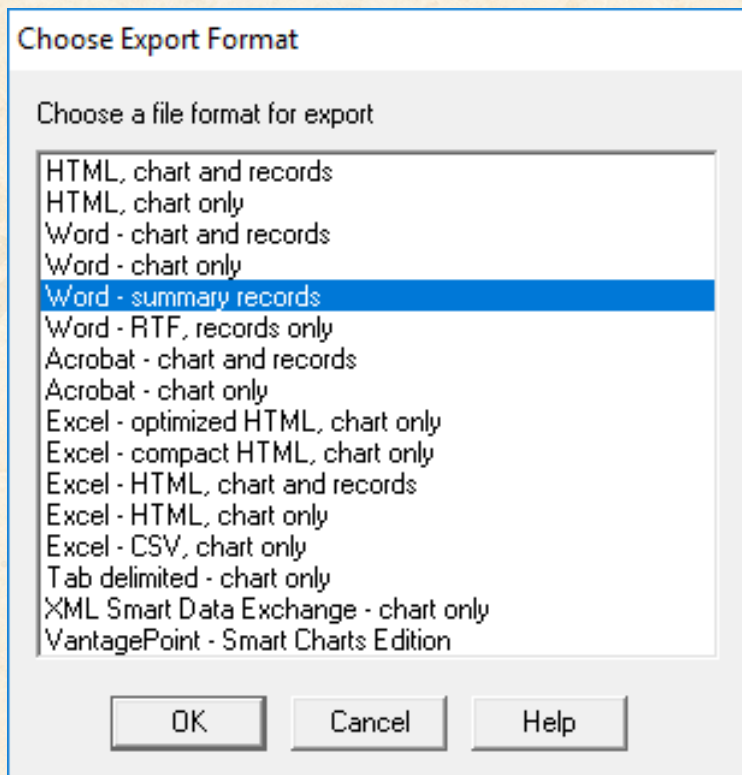
FR,GB

CN

Derwent Innovation
esp@cenet
Micropatent
Orbit.com
PatBase Express
PatentOrder
PatentOrder Direct
Patentscope
Questel PDS
Questel PDS w/ IP validator
TotalPatent

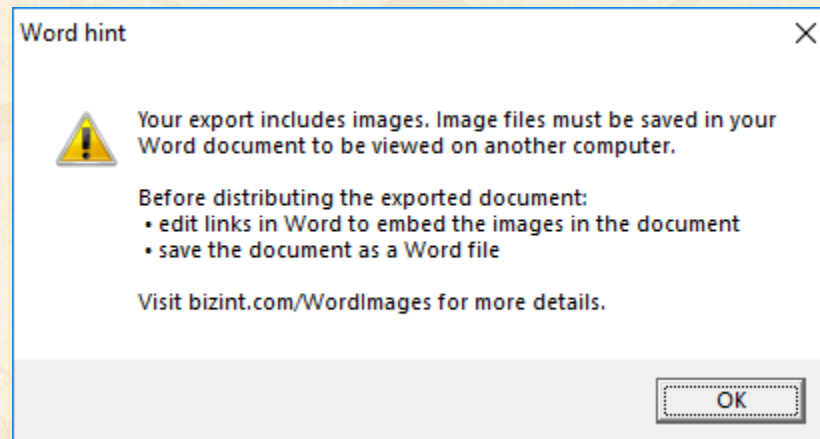
Export to see hit structures

File | Export and choose Word - Summary Records



Export to see hit structures

Tip: Structure images are linked in the exported file - you need to embed images and Save As before sending the exported Word document



Option: Index of Hit Structures

Summary Record Export Options

The Summary Record export shows the columns (fields) visible in your chart.

- Number the records
- Start each record on new page
- Include Links section
- Include editable Notes section
- Include Index of Hit Structures

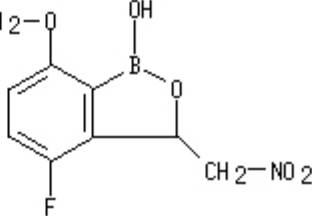
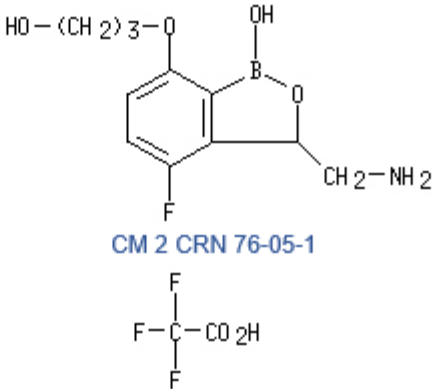
You may also include the following information for the record:

- Include Claims
- Include Alignment
- Include Hit Structures
- Include Index Terms

OK Cancel Help

- Include Editable Notes Section
- Include Index of Hit Structures

Index of Hit Structures

	Substance	Structure	Reference
1	<p>1655492-02-6</p> <p>2,1-Benzoxaborole, 4-fluoro-1,3-dihydro-1-hydroxy-3-(nitromethyl)-7-[2-(phenylmethoxy)ethoxy]- (CA INDEX NAME)</p>	<p>Ph-CH₂-O-CH₂-CH₂-O</p> 	<p>prepn. and antimycobacterial activity of benzoxaborole compds. Reference 1</p> <p>prepn. and biol. applications of tricyclic benzoxaborole compds. Reference 2</p>
2	<p>1364682-96-1</p> <p>1-Propanol, 3-[[[3-(aminomethyl)-4-fluoro-1,3-dihydro-1-hydroxy-2,1-benzoxaborol-7-yl]oxy]-, 2,2,2-trifluoroacetate (1:2) (CA INDEX NAME)</p>	<p>CM 1 CRN 1364682-95-0</p> <p>HO-(CH₂)₃-O</p>  <p>CM 2 CRN 76-05-1</p>	<p>prepn. of benzoxaborole derivs. useful for treating bacterial infections Reference 3</p>

Option: Hit Structures

Summary Record Export Options

The Summary Record export shows the columns (fields) visible in your chart.

Number the records
 Start each record on new page
 Include Links section
 Include editable Notes section
 Include Index of Hit Structures

You may also include the following information for the record:

Include Claims
 Include Alignment
 Include Hit Structures
 Include Index Terms

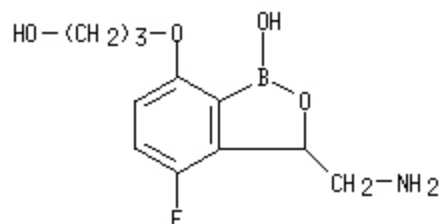
- Include Alignment
 Include Hit Structures
 Include Index Terms

Hit Structures:

1364682-96-1 ([Cmpd. 2](#))

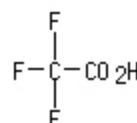
1-Propanol, 3-[[[3-(aminomethyl)-4-fluoro-1,3-dihydro-1-hydroxy-2,1-benzoxaborol-7-yl]oxy]-, 2,2,2-trifluoroacetate (1:2) (CA INDEX NAME)

CM 1 CRN 1364682-95-0



RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

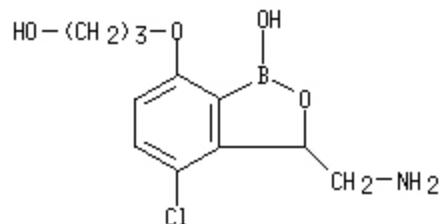
CM 2 CRN 76-05-1



prepn. of benzoxaborole derivs. useful for treating bacterial infections

1364683-03-3 ([Cmpd. 3](#))

1-Propanol, 3-[[[3-(aminomethyl)-4-chloro-1,3-dihydro-1-hydroxy-2,1-benzoxaborol-7-yl]oxy]-, hydrochloride (1:1) (CA INDEX NAME)



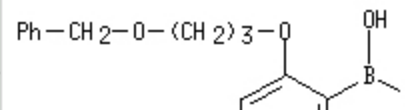
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

prepn. of benzoxaborole derivs. useful for treating bacterial infections

• HCl

1364684-69-4 ([Cmpd. 4](#))

2,1-Benzoxaborole, 4-fluoro-1,3-dihydro-1-hydroxy-3-



RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

Option: Index Terms

Summary Record Export Options


The Summary Record export shows the columns (fields) visible in your chart.

- Number the records
- Start each record on new page
- Include Links section
- Include editable Notes section
- Include Index of Hit Structures

You may also include the following information for the record:

- Include Claims
- Include Alignment
- Include Hit Structures
- Include Index Terms

OK Cancel Help



Include Hit Structures

Include Index Terms

Index Terms:

1364682-96-1P ([Cmpd. 2](#)) 1364683-03-3P ([Cmpd. 3](#)) PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of benzoxaborole derivs. useful for treating bacterial infections)

1364684-69-4P ([Cmpd. 4](#)) 1364684-75-2P ([Cmpd. 5](#)) RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (prepn. of benzoxaborole derivs. useful for treating bacterial infections)

Integrating data from separate records

Reference Rows is a utility to combine multiple records from the same family into one “row”
Records grouped by “Common Family”
Matching publication numbers in the family

Create reports integrating key IP data...

CAS-9 - GenomeQuest, PatBase, DWPI (new STN), FAMPAT

Title	Database	Patent Family			Family Status				Probable Assignee	Sequence Locations					
		Patent	Kind	Date	Pub No.	State	Status	Expiry		Seq. ID Number	% Identity	Length	Location		
1. Modulating expression of a target nucleic acid comprises providing to the cell a guide RNA including a transcriptional activator or repressor domain as a fusion protein, and providing to the cell a nuclease null Cas9 protein	1.1 DWPI	US 2014356959	A	2014-12-04	US	ALIVE	PENDING	2034-06-04	PRESIDENT AND FELLOWS OF HARVARD COLLEGE	US20140356959-0001	100.00	1368	probable disclosure (not found by automated parsing)	1.3	
	1.2 DWPI	US 2014356956	A	2014-12-04	20140356956 A1										
	1.3 GPATPRT link	AU 2014274939	AA	2014-12-11	US 9267135 B2	ALIVE	GRANTED	2034-06-04							
	1.4 GPATPRT link	WO 14197568	A2	2014-12-11											
	1.5 Patbase link	WO 14197568	A3	2015-03-12											
	1.6 FAMPAT link	CA 2914638	AA	2015-12-04											
	1.6 FAMPAT link	KR 20160014036	A	2016-02-05											
	1.1 DWPI				1.5 Patbase				1.6 FAMPAT					1.5 Patbase	
2. New bacteriophage comprises polynucleotide expressing RNA-directed DNA-binding polypeptide comprising nuclease module, and targeting module comprising guide RNA, for restricting growth of host cell, and for preparing antiseptic composition	2.1 DWPI	WO 15070193	A1	2015-05-14	WO 201570193 A1	ALIVE	PENDING	2034-11-11	RADIANT GENOMICS INC	US20150132263-0002	100.00	1368	claim: 19; 20	2.3	
	2.2 DWPI	US 2015132263	A	2015-05-14	US	ALIVE	PENDING	2034-11-11			US20150353901-0002	100.00	1368	claim: 19; 20	2.4
	2.3 GPATPRT link	US 2015353901	A	2015-12-10	20150132263 A1										
	2.4 GPATPRT link				US	ALIVE	PENDING	2034-11-11							
	2.5 Patbase link				20150353901 A1										
	2.6 FAMPAT link														
	2.1 DWPI				2.5 Patbase				2.6 FAMPAT					2.5 Patbase	

choosing content by rules...

	Title	Database	Patent Family		
			Patent	Kind	Date
1.	Modulating expression of a target nucleic acid comprises providing to the cell a guide RNA including a transcriptional activator or repressor domain as a fusion protein, and providing to the cell a nuclease null Cas9 protein	1.1 DWPI	US 2014356959	A	2014-12-04
		1.2 DWPI	US 2014356956	A	2014-12-04
		1.3 GPATPRT link	AU 2014274939	AA	2014-12-11
		1.4 GPATPRT link	WO 14197568	A2	2014-12-11
		1.5 Patbase link	WO 14197568	A3	2015-03-12
		1.6 FAMPAT link	CA 2914638	AA	2015-12-04
			KR 20160014036	A	2016-02-05
		1.1 DWPI			1.5 Patbase
2.	New bacteriophage comprising a polynucleotide expressing RNA-directed DNA-binding polypeptide comprising nuclease module, and targeting module comprising guide RNA, for restricting growth of host cell, and for preparing antiseptic composition	2.1 DWPI	WO 15070193	A1	2015-05-14
		2.2 DWPI	US 2015132263	A	2015-05-14
		2.3 GPATPRT link	US 2015353901	A	2015-12-10
		2.4 GPATPRT link			
		2.5 Patbase link			
		2.6 FAMPAT link			
		2.1 DWPI			2.5 Patbase

linking unique content...

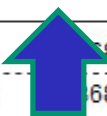
Family Status				Probable Assignee
Pub No.	State	Status	Expiry	
US 20140356956 A1	ALIVE	PENDING	2034-06-04	PRESIDENT AND FELLOWS OF HARVARD COLLEGE
US 9267135 B2	ALIVE	GRANTED	2034-06-04	
1.6 FAMPAT				1.5 Patbase
WO 201570193 A1	ALIVE	PENDING	2034-11-11	RADIANT ECONOMICS INC
US 20150132263 A1	ALIVE	PENDING	2034-11-11	
US 20150353901 A1	ALIVE	PENDING	2034-11-11	
2.6 FAMPAT				2.5 Patbase

...and summarizing data elements.

Sequence Locations				
Seq. ID Number	% Identity	Length	Location	
US20140356959-0001	100.00	1368	probable disclosure (not found by automated parsing)	1.3

US20140356956-0001	100.00	1368	probable disclosure (not found by automated parsing)	1.4

US20150132263-0002	100.00	1368	claim: 19; 20	2.3
US20150353901-0002	100.00	1368	claim: 19; 20	2.4





BizInt Smart Charts

VERSION

5

for Patents

Patent Databases

Provide data on patents filed worldwide

- STN - Classic, STNext, & New STN
- Questel Orbit.com
- Minesoft PatBase
- Innovation, Cortellis IP, Integrity Patents
- LexisNexis TotalPatent
- GQ LifeSciences LifeQuest



BizInt Smart Charts

VERSION

5

for Patents

STN Content

- DWPI, IFI, Caplus, MARPAT, REGISTRY
- Fulltext: US PCT EP JP KR AU CA CN FR GB DE
- Literature: EMBASE, MEDLINE, BIOSIS, AGRICOLA, ANABSTR, AQUASCI, BIOENG, BIOTECHNO, CABA, CANCERLIT, COMPENDEX, COMPUAB, COMPUSCIENCE, DISSABS, ENCOMPLIT, FEDRIP, FSTA, FROSTI, INSPEC, IPA, KOSMET, LIFESCI, METADEX, PASCAL, RAPRA, SciSearch, TOXCENTER, TULSA, GEOREF, PQSciTech, DDF
- Sequence: DGENE, PCTGENE, USGENE

Hit structures in Reference Rows

Reference Rows is a utility to combine multiple records from the same family into one “row”
Records grouped by “Common Family”
Matching publication numbers in the family

Uses:

- Add claims from other sources

Add claims from other sources

Combine results from two or more databases

Unsaved1

Chemical Abstracts: stnext_hitstr

Unsaved2

PatBase: patba

Tric con

TRICYCLIC BENZO COMPOUNDS AN

Bor mol

Create Combined Chart Wizard

Step 1 - Select the Key Chart

- patbase_hitstr_matches
- stnext_hitstr

This wizard helps you create a chart combining data from different charts. Use File | Update if you wish to update a chart with new information.

In Step 1, you select the "Key Chart". The Key Chart is used to define the initial presentation of the combined chart.

In Step 2, you select the remaining charts that you wish to combine with the Key Chart.

In Step 3, you enter the title of the new combined chart and select options for the combine chart behavior.

Chart file information:

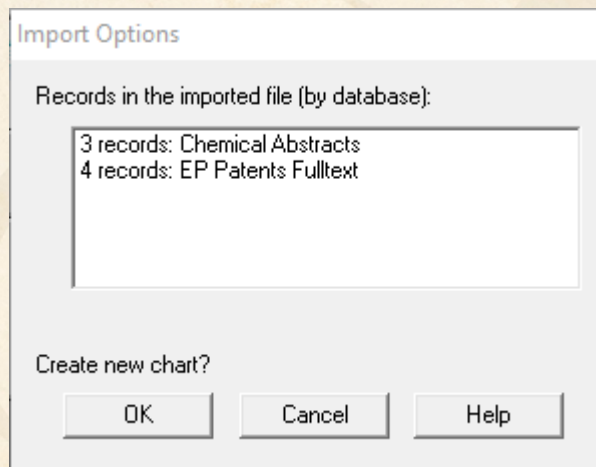
Next >

Cancel

Help

Add claims from other sources


Or import a multi-file transcript
file epfull
transfer pn l2 1-...



Add claims from other sources

Send to Reference Rows

Create Reference Rows (1 of 3)



Welcome to the Create Reference Rows Wizard

BizInt Smart Charts Reference Rows offers the ability to create a "Reference Row" which combines information from a set of related records into a single row. The Create Reference Rows Wizard will help you create and set up rules for Reference Rows.

NOTE: Reference Rows are based on the Common Patent Family column in your report. You can generate this column now.

Click Next to continue.



Option: Claims + Hit Structures

Summary Record Export Options

The Summary Record export shows the columns (fields) visible in your chart.

Number the records
 Start each record on new page
 Include Links section
 Include editable Notes section
 Include Index of Hit Structures

You may also include the following information for the record:

Include Claims
 Include Alignment
 Include Hit Structures
 Include Index Terms

You may also include the following information for the record:

Include Claims

Include Hit Structures

10. An in vitro method of:

(A) inhibiting an enzyme, comprising: contacting the enzyme with the compound of any of claims 1 to 5, thereby inhibiting the enzyme;

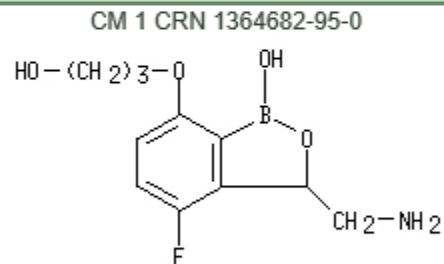
(B) killing and/or preventing the growth of a microorganism, comprising: contacting the microorganism with an effective amount of the compound of any of claims 1 to 5, thereby killing and/or preventing the growth of the microorganism; or

(C) inhibiting the editing domain of a t-RNA synthetase, comprising: contacting the synthetase with an effective amount of a compound of any of claims 1 to 5, or a pharmaceutically-acceptable salt thereof, thereby inhibiting the synthetase.

Hit Structures:

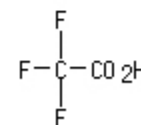
1364682-96-1 ([Cmpd. 2](#))

1-Propanol, 3-[[3-(aminomethyl)-4-fluoro-1,3-dihydro-1-hydroxy-2,1-benzoxaborol-7-yl]oxy]-, 2,2,2-trifluoroacetate (1:2) (CA INDEX NAME)



RL: PAC
(Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

CM 2 CRN 76-05-1



prepn. of [benzoxaborole derivs.](#) useful for treating bacterial infections

1364683-03-3 ([Cmpd. 3](#))



RL: PAC

Hit structures in Reference Rows

Reference Rows is a utility to combine multiple records from the same family into one “row”
Records grouped by “Common Family”
Matching publication numbers in the family

Uses:

- Add claims from other sources
- Link sequence results with hit structures



BizInt Smart Charts

VERSION

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for Patents

IP Sequence Databases

Provide data on sequences filed in patents

- GenomeQuest (Geneseq, GQ-PAT)
- STN (USGENE, DGENE, PCTGEN)

Link sequence results with hit structures

Follow Cookbook recipe to create a summary of sequence hits for each

1.	Title: Selective high-affinity polydentate ligands and methods of making such																																
	Database: GQPAT Gold+ Proteins GQPAT Gold+ Proteins GQPAT Gold+ Proteins GQPAT Gold+ Proteins GQPAT Gold+ Proteins GQPAT Gold+ Proteins GQPAT Gold+ Proteins GQPAT Gold+ Proteins Chemical Abstracts Chemical Abstracts																																
	Organism Species: Homo sapiens (human)																																
Sequence Summary:	<table border="1"><thead><tr><th>Seq. ID Number</th><th>Length</th><th>% Identity</th><th>Location</th></tr></thead><tbody><tr><td>US20180008621-0003</td><td>237</td><td>100.00</td><td>probable disclosure (not found by automated parsing)</td></tr><tr><td>US9884070-0003</td><td>237</td><td>100.00</td><td>probable disclosure (not found by automated parsing)</td></tr><tr><td>US20180008622-0003</td><td>237</td><td>100.00</td><td>probable disclosure (not found by automated parsing)</td></tr><tr><td>JP5623384-0003</td><td>237</td><td>100.00</td><td>probable disclosure (not found by automated parsing)</td></tr><tr><td>JP2014122234-0003</td><td>237</td><td>100.00</td><td>probable disclosure (not found by automated parsing)</td></tr><tr><td>US20110144065-0003</td><td>237</td><td>100.00</td><td>probable disclosure (not found by automated parsing)</td></tr><tr><td>CA2721980-0003</td><td>237</td><td>100.00</td><td>probable disclosure (not found by automated parsing)</td></tr></tbody></table>	Seq. ID Number	Length	% Identity	Location	US20180008621-0003	237	100.00	probable disclosure (not found by automated parsing)	US9884070-0003	237	100.00	probable disclosure (not found by automated parsing)	US20180008622-0003	237	100.00	probable disclosure (not found by automated parsing)	JP5623384-0003	237	100.00	probable disclosure (not found by automated parsing)	JP2014122234-0003	237	100.00	probable disclosure (not found by automated parsing)	US20110144065-0003	237	100.00	probable disclosure (not found by automated parsing)	CA2721980-0003	237	100.00	probable disclosure (not found by automated parsing)
Seq. ID Number	Length	% Identity	Location																														
US20180008621-0003	237	100.00	probable disclosure (not found by automated parsing)																														
US9884070-0003	237	100.00	probable disclosure (not found by automated parsing)																														
US20180008622-0003	237	100.00	probable disclosure (not found by automated parsing)																														
JP5623384-0003	237	100.00	probable disclosure (not found by automated parsing)																														
JP2014122234-0003	237	100.00	probable disclosure (not found by automated parsing)																														
US20110144065-0003	237	100.00	probable disclosure (not found by automated parsing)																														
CA2721980-0003	237	100.00	probable disclosure (not found by automated parsing)																														

Option: Alignments + Hit Structures

Summary Record Export Options

The Summary Record export shows the columns (fields) visible in your chart.

- Number the records
- Start each record on new page
- Include Links section
- Include editable Notes section
- Include Index of Hit Structures

You may also include the following information for the record:

- Include Claims
- Include Alignment
- Include Hit Structures
- Include Index Terms

OK Cancel Help

- Include Claims
- Include Alignment
- Include Hit Structures

Alignment:

```
Q:      1  GDTRPRFLEEVKFECHFFNGTIERVRLLERRVHNOEEYARYSDVGEYRAVTELGRPDAEY  60
      |
S:      1  GDTRPRFLEEVKFECHFFNGTIERVRLLERRVHNOEEYARYSDVGEYRAVTELGRPDAEY  60
      |
Q:     61  WNSQKDLLERRRAAVDTYCRHNYGVGESFTVQRRVQPKVTIVYPSKTQPLQHHNLLVCSVN  120
      |
S:     61  WNSQKDLLERRRAAVDTYCRHNYGVGESFTVQRRVQPKVTIVYPSKTQPLQHHNLLVCSVN  120
      |
Q:    121  GFYPGSIEVRWFRNGQEEKTG VVSTGLIQNGDWTFTQLVMLETVPOSGEVYTCQVEHPSV  180
      |
S:    121  GFYPGSIEVAWFRNGQEEKTG VVSTGLIQNGDWTFTQLVMLETVPOSGEVYTCQVEHPSV  180
      |
Q:    181  MSPLTVEWRARSESAQSKMLSGVGGFVLGLLVLGAGLFYIFRNQKGHSGLPPTGFLS  237
      |
S:    181  MSPLTVEWRARSESAQSKMLSGVGGFVLGLLVLGAGLFYIFRNQKGHSGLPPTGFLS  237
```

Option: Alignments + Hit Structures

Summary Record Export Options

The Summary Record export shows the columns (fields) visible in your chart.

- Number the records
- Start each record on new page
- Include Links section
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- Include Index of Hit Structures

You may also include the following information for the record:

- Include Claims
- Include Alignment
- Include Hit Structures
- Include Index Terms

OK Cancel Help

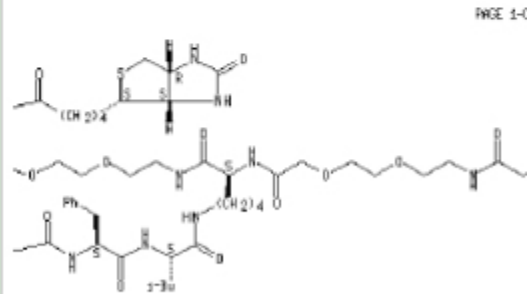
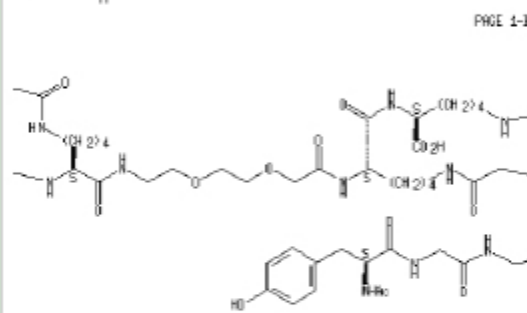
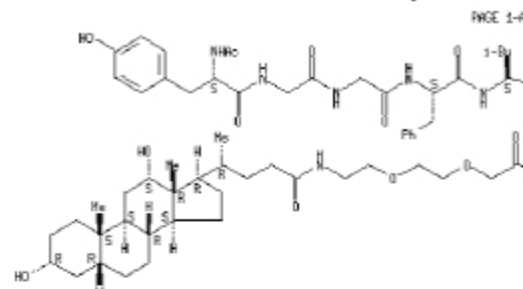
- Include Claims
- Include Alignment
- Include Hit Structures

Hit Structures:

1045703-23-8 ([Cmpd. 1](#))

L-Lysine, N2,N6-bis[N6-(N-acetyl-L-tyrosylglycylglycyl-L-phenylalanyl-L-leucyl)-N2-[2-[2-[[[(3-oxocholan-24-yl)amino]ethoxy]ethoxy]acetyl]-L-lysyl-2-[2-(2-aminoethoxy)ethoxy]acetyl]-L-lysyl-N6-[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]- (CA INDEX NAME)

Absolute stereochemistry.



RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

HLA-DR10 selective high-affinity polydentate ligand; selective high-affinity polydentate ligands of target mols. and methods of making such and uses for diagnosis and therapeutics in relation to delivery of effectors

Hit structures in Reference Rows

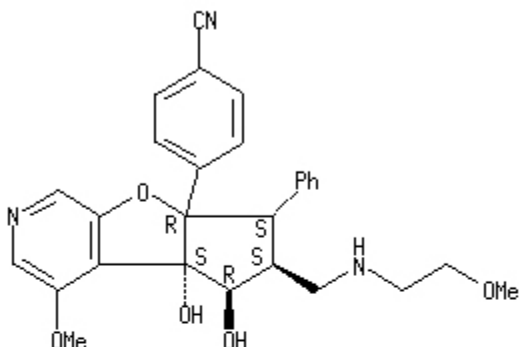
Reference Rows is a utility to combine multiple records from the same family into one “row”
Records grouped by “Common Family”
Matching publication numbers in the family

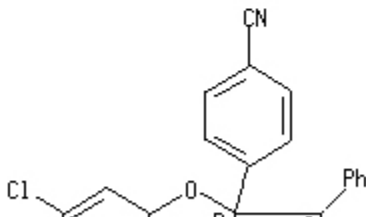
Uses:

- Add claims from other sources
- Link sequence results with hit structures
- Merge hit structures spread across multiple CPlus records (“mega-TAN” records)

Group Mega-TAN records

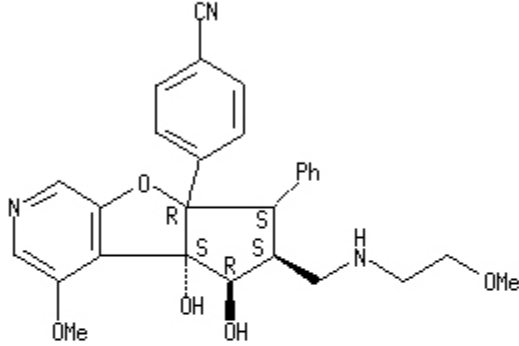
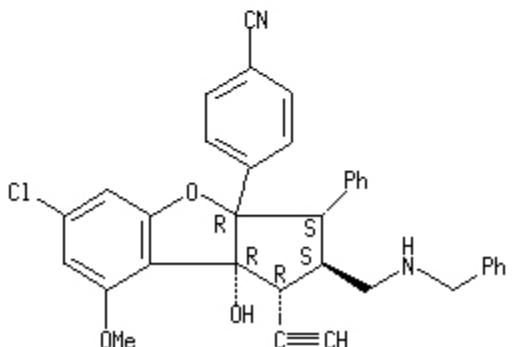
Multiple CA records for a single family...

1.		
Title: Heterocyclic derivatives as eIF4A inhibitors and their preparation		
Accession Number: 2017:1085458		
Hit Structures:		
2098192-11-9 (Cmpd. 1)	Absolute stereochemistry. Rotation (-).	RL: PAC (Pharmacological activity); PRPH (Prophetic); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
INDEX NAME NOT YET ASSIGNED		prepn. of heterocyclic derivs. as eIF4A inhibitors

2.		
Title: Heterocyclic derivatives as eIF4A inhibitors and their preparation		
Accession Number: 2017:1085457		
Hit Structures:		
2099275-30-4 (Cmpd. 2)	Absolute stereochemistry.	RL: PAC (Pharmacological activity); PRPH (Prophetic); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
INDEX NAME NOT YET ASSIGNED		prepn. of heterocyclic derivs. as eIF4A inhibitors

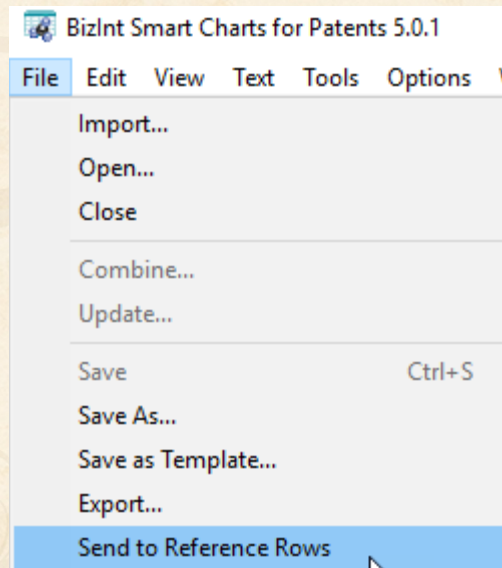
Group Mega-TAN records

Simply send to Reference Rows and export!

1. Title: Heterocyclic derivatives as eIF4A inhibitors and their preparation		
Accession Number: 2017:1085458; 2017:1085457		
Hit Structures:		
2098192-11-9 (Cmpd. 1) INDEX NAME NOT YET ASSIGNED	Absolute stereochemistry. Rotation (-). 	RL: PAC (Pharmacological activity); PRPH (Prophetic); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) prepn. of heterocyclic derivs. as eIF4A inhibitors
2099275-30-4 (Cmpd. 2) INDEX NAME NOT YET ASSIGNED	Absolute stereochemistry. 	RL: PAC (Pharmacological activity); PRPH (Prophetic); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) prepn. of heterocyclic derivs. as eIF4A inhibitors

Minimum effort with Reference Rows

- Save chart in BizInt Smart Charts for Patents
- Send to Reference Rows



Minimum effort with Reference Rows

- Generate Common Patent Family (if needed)

Create Reference Rows (1 of 3)

Welcome to the Create Reference Rows Wizard

BizInt Smart Charts Reference Rows offers the ability to create a "Reference Row" which combines information from a set of related records into a single row. The Create Reference Rows Wizard will help you create and set up rules for Reference Rows.

NOTE: Reference Rows are based on the Common Patent Family column in your report. You can generate this column now.

Click Next to continue.

Generate

< Back Next > Finish Cancel



Minimum effort with Reference Rows

- Simply “Finish” on step two

Create Reference Rows (2 of 3)

Database Ranking


Data in cells will be chosen according to the Database Ranking if no other rule is present or if there is a tie in the rules.

Rank the databases in your preferred order

CAS REGISTRY Chemical Abstracts	Move Up
	Move Down
	Properties

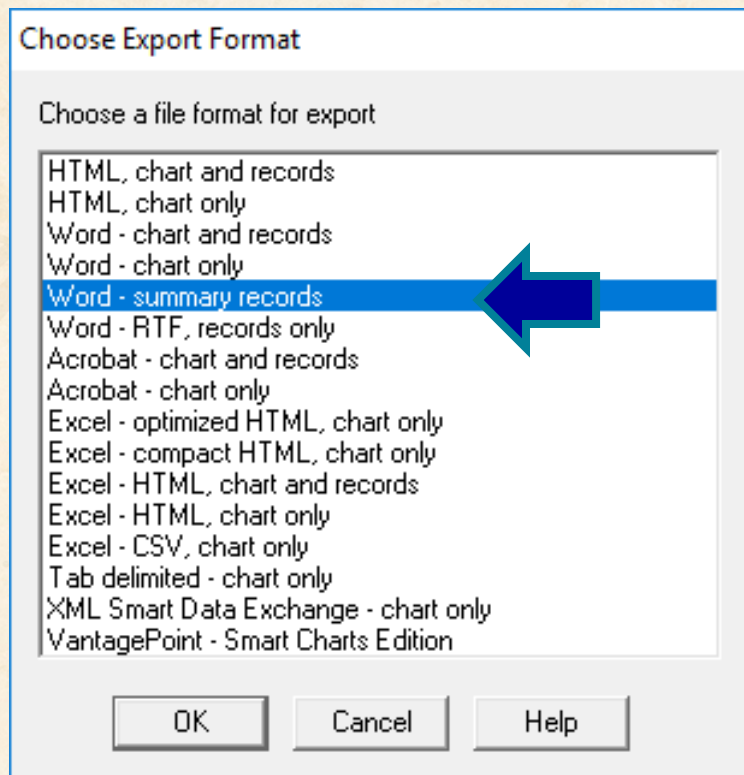
Rules Template

Database rankings and rules based on:



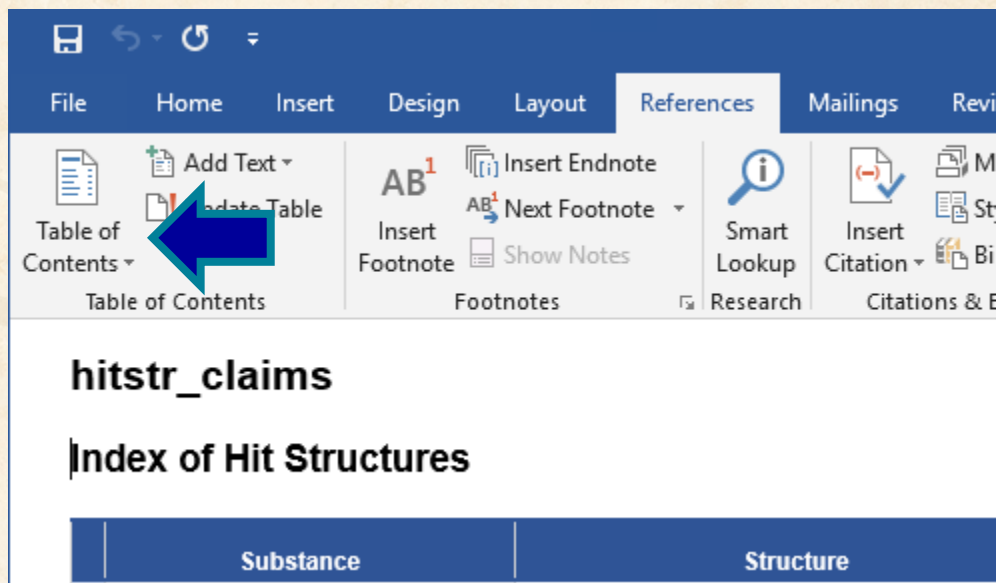
Minimum effort with Reference Rows

- File | Export ... Word - summary records



Summary Records - Table of Contents

- Add a table of contents in Word



Summary Records - Table of Contents

- Sections are marked up for headings
- First column in chart is used as TOC entry

hitstr claims

Contents

[Index of Hit Structures](#)

[References](#)

[Tricyclic benzoxaborole compounds and uses thereof](#)

[Boron-containing small molecules](#)

[Benzoxaborole compounds and uses thereof](#)

Index of Hit Structures

Substance	Structure
-----------	-----------

Summary Records - Table of Contents

- Can collapse the Index of Hit Structures (in recent versions of Word)

▷ **Index of Hit Structures**

References

1.	Title:	Tricyclic <u>benzoxaborole</u> compounds and uses thereof		
	Common Family:	EP 3030519		
	Database:	Chemical Abstracts EP Patents Fulltext		
	Patent Family:	Patent	Kind	Date
		WO 2015021396	A2	20150212
		WO 2015021396	A3	20151029

F

Best Practices

- Typical use as described by Marley at PIUG 2018 Annual Meeting is to display structures exemplified in CAplus records (the Index of Hit Structures)
- Plus a separate table of non-exemplified structures from REGISTRY
- Today, this should be done as two chart files
- Also, today we do not capture complex structures from REGISTRY

Best Practices

- The hit structure displays are driven by the “Hit Index Terms” column
- You can remove a compound from the hit structure display and the index by removing the CAS REGISTRY Number from the Hit Index Terms column

Hit Index Terms		
RN	Role	Notes
1364682-96-1P 1364683-03-3P	RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)	prepn. of benzoxaborole derivs. useful for treating bacterial infections
1364684-69-4P 1364684-75-2P	RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)	prepn. of benzoxaborole derivs. useful for treating bacterial infections

Best Practices

- Keep your transcripts!
- As we improve displays, some features may require re-importing transcripts.

Best Practices

- Keep your chart files!
- Even though you may have delivered a report to your client, if they ask for changes (additional fields, different sort order) it is easier to start from a prepared chart than from scratch.

Best Practices

- Keep your chart files!
- This month's report can be the baseline for an updated report.
- You can Update a report to see which families are new in your results and which have changed.

PatBase: Natamycin_Update								
Title	Row Status	Patent Family			Priority Data		Applications	
		Patent	Kind	Date	Number	Date	Application	Date
SUBMICRON NATAMYCIN PARTICLE	Added	WO 15044465	A2	2015-04-02	EP20140167408	2014-05-07	WO2015EP50647	2015-01-15
		WO 15044465	A3	2015-05-21	EP20140192514	2014-11-10	WO2015EP50647	2015-01-15
COMPOSITION COMPRISING A PESTICIDAL TERPENE MIXTURE AND A FUNGICIDE	Updated	WO 14020109	A1	2014-02-06	EP20120179145	2012-08-03	WO2013EP66178	2013-08-01
		AU 2013298562	AA	2014-02-06	WO2013EP66178	2013-08-01	AU20130298562	2013-08-01
		CA 2880671	AA	2015-01-30			CA20132880671	2013-08-01
		AR 091953	AA	2015-03-11			AR2013P102729	2013-08-01
		KR 20150041638	A	2015-04-16			KR20157004997	2013-08-01

Future Directions

- Options to control display
- Mark new structures in updated reports
- More sources (e.g. MARPAT, DWPIIM)
- Handling of complex structures in REGISTRY
- More export formats
- Hit structures in the table

2018 is the Year of the Dog!



狗

Thank you...
Questions???