

- The **SEARCH** and **SEARCH SAMPLE** command
- Handling RX candidates
- The **BT** and **BT ALL** command
- Housekeeping commands
- Boolean operations
- The **JOIN** command
- The **CN** command
- Subset searching

- **Specific techniques**

Sample Search - The **SEARCH** command

```
- ST - (BA,CN,QT,RF,RE,AA,SB,BL,INFO,HELP) ? SEARCH
```

```
*** RE ***
```

```
RE search started
```

```
* SEARCH IN PROGRESS *
```

```
* SEARCH IN PROGRESS *
```

```
RE Search completed
```

```
Result stored in R set : R05
```

```
R05 - RE / MMS FRONTF MPHARM WPIM BACKF : 44848 answer(s)
```

```
*** AA ***
```

```
Atom by Atom Search started on R set R05
```

```
Removing duplicates
```

```
Atom by Atom Search completed on R set R05
```

```
- 280 answer(s) stored in R set R06
```

```
R06 - AA / R05 : 280 answer(s)
```

```
Projected search time : 0:0:20 to 0:3:29
```

```
Projected answer(s) : 280 to 17457
```

```
Projected Rx candidate(s) : 0 to 1
```

```
- ST - (BA,CN,QT,RF,RE,AA,SB,BL,INFO,HELP) ?
```

The command **SEARCH SAMPLE**
will also run the sample search.

Tip: It is a good practice to
always run a sample
search on a query before
running the actual search.

This query actually gave 1910 answers

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- **The SEARCH SAMPLE command**

Either **SEARCH** or **SEARCH SAMPLE** can be used.

Handling RX candidates

```
- ST - (BA,CN,QT,RF,RE,AA,SB,BL,INFO,HELP) ? RE
*** RE ***
RE search started
* SEARCH IN PROGRESS *
RE Search completed
Result stored in R set : R03
R03 - RE / MMS FRONTF MPHARM WPIM BACKF : 96270 answer(s)

- ST - (BA,CN,QT,RF,RE,AA,SB,BL,INFO,HELP) ? AA
*** AA ***
Atom by Atom Search started on R set R03
.....
51 answer(s) for 95783 candidates ( 3 rx candidate(s) )
Atom by Atom Search completed on R set R03
- 56 answers stored in R set R04
- 3 RX candidates stored in RXR04
#. Name Search Database answer(s) RX RX File
4 R04 AA R03 56 3 RXR04

This AA search left some RX candidates.
Please type :
- B to request a Batch processing of these RX candidates
- P to request a Power-Batch processing of these RX candidates
- C to move to the ST level without requesting any further processing
```

- Handling RX candidates

Handling RX candidates

Please type :

- B to request a Batch processing of these RX candidates
 - P to request a Power-Batch processing of these RX candidates
 - C to move to the ST level without requesting any further processing
- ? **P**

Power Batch processing requested for completed RXR19 set

Please, enter a name to assign to your Power Batch request

(a maximum of 15 characters can be used)

? **TEST**

Please, confirm this choice ? (Y/N)

? **Y**

Warning: you may need to synchronize in order to get the B, P, or C commands to process.

Power Batch request test is stored:

#.	Type	Name	Stat.	Orig.	File	Cand.	Answ.	RX	Date
9	PB	TEST	WAIT	AA	MMS	3	0	0	2009-01-02

The result will be available by tomorrow morning.

- ST - (BA,CN,QT,RF,RE,AA,SB,BL,INFO,HELP) ?

• Handling RX candidates

In order to process the remaining candidates, we request a Power Batch search. We give a name to the search request: **TEST**.

Up to 20 Power-Batch treatments can be requested per day.

Handling RX candidates

The Batch and Power-Batch search requests saved on your account are :

#.	Type	Name	Stat.	Orig.	File	Cand.	Answ.	RX	Date
1	PB	test	DONE	AA	MMS	3	1	0	2009-01-02

**** CURRENT SELECTED DATA BASE :MMS ****

**** BASE MMS - 02/01/07 - 2101776 Compounds ****

**** LAST SELECTED SEGMENT(S) :

FRONTF
MPHARM
WPIM
BACKF

- ST - (BA,CN,QT,RF,RE,AA,SB,BL,INFO,HELP) ? **RF BT TEST**

Recall in progress

The following request was recalled successfully :

#.	Type	Name	Stat.	Orig.	File	Cand.	Answ.	RX	Date
1	PB	test	DONE	AA	MMS	3	1	0	2009-01-02

The answers and the optional RX candidates were placed in the answer set: R20

#.	Name	Search Database	answer(s)	RX	RX File
20	R20	BATCH	MMS	1	

- ST - (BA,CN,QT,RF,RE,AA,SB,BL,INFO,HELP) ?

• Handling RX candidates

The result of the Power-Batch is accessible the day following the request. The batch status is given when connecting to MMS: **DONE**.

To recall the results of the Power-Batch search, we use the RF (Recall File) command with the BT (BaTch) parameter. We can recall the TEST batch in a single step: **RF BT TEST**.

There are 1 answer and 0 RX candidates.

The BT command

```
- ST - (BA,CN,QT,RF,RE,AA,SB,BL,INFO,HELP) ? RE
*** RE ***
RE search started
* SEARCH IN PROGRESS *
RE Search completed
Result stored in R set : R25
R25 - RE / MMS FRONTF MPHARM WPIM BACKF : 44659 answer(s)
- ST - (BA,CN,QT,RF,RE,AA,SB,BL,INFO,HELP) ? BT

Batch processing requested for completed R25 set
Please, enter a name to assign to your request (a maximum of 15 characters
can be used) ? TESTCOMMANDBT

#  Type Name          Stat. Orig. File  Cand.  Answ.  RX  Date
11  B    testcommandbt  WAIT  AA    MMS   44659  0    0    ---
Confirm ? ( Y/N )
? Y
The batch was saved successfully
#  Type Name          Stat. Orig. File  Cand.  Answ.  RX  Date
11  B    testcommandbt  WAIT  AA    MMS   44659  0    0    2009-01-02
The result will be available by tomorrow morning.
```

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- **The BT command**

The BT command permits you to request a Batch processing of the latest answer set directly at the ST level.

The BT ALL command

```
- ST - (BA,CN,QT,RF,RE,AA,SB,BL,INFO,HELP) ? BT ALL
```

```
Please, enter a name to assign to your request (a maximum of 15 characters  
can be used) ? testcommandBTALL
```

#.	Type	Name	Stat.	Orig.	File	Cand.	Answ.	RX	Date
12	ALL	testcommandbtal	WAIT	RA	MMS	0	0	0	---

```
Confirm ? ( Y/N )
```

```
? Y
```

```
The batch was saved successfully
```

#.	Type	Name	Stat.	Orig.	File	Cand.	Answ.	RX	Date
12	ALL	testcommandbtal	WAIT	AA	MMS	0	0	0	2009-01-02

```
The result will be available by tomorrow morning.
```

```
- ST - (BA,CN,QT,RF,RE,AA,SB,BL,INFO,HELP) ?
```

- **The BT ALL command**

The BT ALL command permits you to request a Batch processing of the latest query directly at the ST level. It will run an RE and the subsequent BT search overnight. Results will be available the next morning.

Housekeeping commands

- History of answer sets

```
- ST - (BA,CN,QT,RF,RE,AA,SB,BL,INFO,HELP) ? HI R
```

The answer sets on your account are :

#.	Name	Search	Database	answer(s)	RX	RX File
1	R01	RE	MMS F W	20856		
2	R02	AA	R01	61		
3	R03	RE	MMS F M W B	32649		
4	R04	AA	R03	102	2	RXR04
5	R05	CN	MMS	1		
6	R06	RE	MMS F M W B	43878		
7	R07	AA	R06	22		
8	R08	RE	MMS F M W B	46045		
9	R09	AA	R08	30		
10	R10	BOOL	MMS	9		
11	R11	CN	MMS	1		
12	R12	AA	R11	1		

```
- ST - (BA,CN,QT,RF,RE,AA,SB,BL,INFO,HELP) ?
```

- **Housekeeping commands**

- History of answer sets

A history of all the searches that have been performed during the current week can be obtained with the HI command followed by the R (answer sets) parameter.

Housekeeping commands

- Erasing answer sets

```
- ST - (BA,CN,QT,RF,RE,AA,SB,BL,INFO,HELP) ? ER R 1-2, 5
```

```
Are you sure you want to erase this (these) answer set ? ( Y/N )  
? Y
```

```
The following answer set(s) was(were) erased :
```

#.	Name	Search Database	answer(s)	RX	RX File
1	R01	RE	MMS	20856	
2	R02	AA	MMS	61	
5	R05	CN	MMS	1	

```
Warning : the remaining answer sets have been renumbered starting from R01
```

```
- ST - (BA,CN,QT,RF,RE,AA,SB,BL,INFO,HELP) ?
```

- **Housekeeping commands**

- Erasing answer sets

To erase answer sets R1, R2 and R5, we type **ER R 1-2,5**.

Before erasing, the system asks for confirmation of the erase.

Remaining answer sets are renumbered from R01.

Housekeeping commands

Command	Answers	Query	Batch
SV	SV CN <i>name</i>	SV QU <i>name</i>	
HI	HI CN	HI QU	HI BT
RF	RF CN <i>name</i>	RF QU <i>name</i>	RF BT <i>name</i>
ER	ER CN <i>name</i> ER CN 1-3	ER QU <i>name</i>	ER BT <i>name</i>

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•Housekeeping commands

• Recall, Saving, Erasing

– Recall of structure query

To recall the query saved with the name EGF1, we type: **RF QU EGF1**

– Saving answers

To obtain a permanent saving of the Compound Numbers contained in the R4 answer set with the name EGF2, we use the SV command with the CN parameter. We can type the entire command on a single line:

SV CN R4 EGF2

– Erasing

You can Erase a range of items; simply type the ER command, followed by the type of item then by the range to erase. Eg. **ER CN 1-4** to erase the first 4 CN lists saved on your account.

The HI (History), ER (Erase) and RF (Recall File) commands can be used with the CN (Compound Number), BT (BaTch search), QU (structure Query) and QO (Questel-Orbit list) parameters. The SV command can be used with the CN and QU parameters. Right-hand truncation can also be used for erasing: type **ER CN TEST+** to erase all those CN lists starting with the same stem (TEST).

Boolean Operations

- Using Boolean Operators

The Boolean operators **AND**, **OR**, and **NOT** can be used with set numbers to combine results from two search statements.

The answer sets on your account are :

#.	Name	Search Database	answer(s)	RX	RX File
1	R01	BS MMS F M W B	452034		
2	R02	AA R01	21	1	RXR02
3	R03	BS MMS F M W B	170966		
4	R04	AA R03	45		

- ST - (BA,CN,QT,RF,RE,AA,SB,BL,INFO,HELP) ?

2 OR 4

*** BL ***

Boolean Search started : R02 or R04

Boolean Search completed

Result stored in R set : R05

#.	Name	Search Database	answer(s)	RX	RX File
5	R05	BOOL MMS	66		

R05 - BOOL / MMS : 66 answer(s)

Warning: only one boolean operator at a time can be used in a search statement

The **JOIN** Command

- The **JOIN** Command can be used in the bibliographic system to transfer CN numbers from the bibliographic files to the MMS system.
- It can be useful for **VIEW**ing the structures of CN numbers found in the bibliographic records.
- It is also useful for creating a CN number subset that an **AA** structure search can be run against.
- CN lists transferred to MMS are stored as **QO** (Questel-Orbit) lists.

The JOIN Command

The **JOIN** command is available in the PHARM and DWPI bibliographic files. It extracts up to 50,000 CNs contained in an answer set obtained by a bibliographic search and transfers the list of CNs to the MMS structure file. These CNs can be recalled for display or for use as a subset for structural searching.

IN DWPI

Selected file: DWPI

Search statement 1

A search is conducted in DWPI on a specific patent record of interest.

WO2005026123/pn

** SS 1: Results 1

Search statement 2

prt ticn

1/1 DWPI - (C) Thomson Reuters- image

AN - 2005-242347 [25]

TI - New 2-pyridone derivatives are neutrophil elastase inhibitors useful to treat e.g. inflammatory diseases, adult respiratory distress syndrome, pulmonary emphysema, chronic obstructive pulmonary disease and ischemic-reperfusion injury

CN - RAHDIB-N RAHDIB-P RAHDIB-T RAHDIC-N RAHDIC-P RAHDIC-T 0152-93701-N 0152-93701-P 0152-93701-T

The JOIN Command

IN DWPI

```
Selected file: DWPI
Search statement 2
join to wpim via test10
Total number of terms extracted: 9
```

IN MMS

```
- ST - (BA,CN,QT,RF,RE,AA,SB,BL,INFO,HELP) ?
```

```
rf qo test10
```

```
Recalling the Questel-Orbit query named : sleep01
# Name Search Database answer(s) RX RX File
14 R14 CN MMS 3
```

The **JOIN** command is used on SS 1. A QO list called 'test10' is created containing 9 numbers (CN numbers may be repeated with different roles). QO lists are limited to 50000 numbers. JOIN can only extract numbers from one bibliographic file at a time.

The **RF QO** command is executed in MMS on the QO list called test10. A new R set is created containing 3 numbers.

The steps are:

- 1) Questel search in DWPI on WO2005026123.
- 2) Extraction and transfer of the CN list with the name "TEST10"

JOIN TO WPIM VIA TEST10

JOIN has extracted nine CNs from TEST10. Please note that roles can distinguish the same CNs.

Once JOIN is executed, log off of Questel.

Log onto MMS and type RF QO TEST10 to recall the Questel Orbit list Test10.

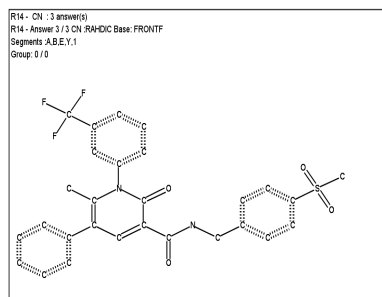
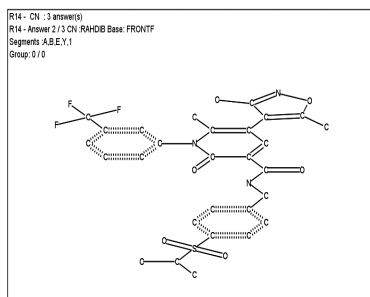
There are three CNs.

The JOIN Command

To view CN numbers from the QO list, use the **VI** command at the ST prompt.

- ST - (BA, CN, QT, RF, RE, AA, SB, BL, INFO, HELP) ?

vi 2,3



The CN Command

CN numbers can also be viewed by using the **CN** command in MMS. Multiple numbers can be viewed.

- ST - (BA,CN,QT,RF,RE,AA,SB,BL,INFO,HELP) ?

cn

*** COMPOUND NUMBER SEARCH ***

Type

- a Compound Number at the CN ? prompt level, then a carriage return.

- a carriage return to move back to the ST level.

?

R03570

?

R03812

?

R03816

?

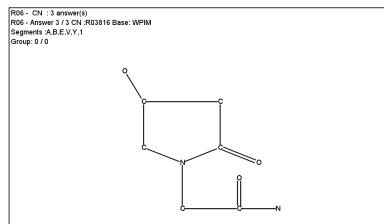
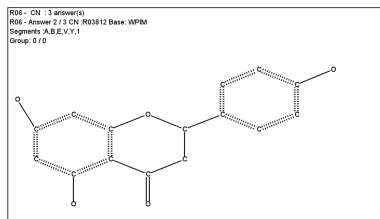
R06 - CN / MMS : 3 answer(s)

The CN Command

The **VI** command can be used.

- ST - (BA,CN,QT,RF,RE,AA,SB,BL,INFO,HELP) ?

vi 2-3



Subset Searching

- **Subset Searching** can be used when you have an answer set from a query search and you want to get some answers that have a particular structure characteristic of the original query.
- The RE candidate search is not necessary when conducting a subset search. The candidates are the original answer set from your query search; only the AA search is run for a subset search .
- The AA Subset Search is half the price of a full AA search.

Subset Searching

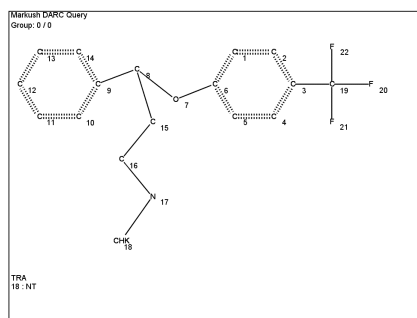
Subset Search procedure is as follows:

- Create a query, validate it, and run the RE/AA search
- Create your subset query and validate it
- Run the AA search on the R set containing the original answer set

Subset Searching

Subset Search Example:

A structure search was run in MMS on the following query:



42 answers were obtained and stored in set R08.

Subset Searching

A new query is created with an ethyl group replacing the CHK

```
- QT - (CN,CA,GM,GI,GR,BO,AT,FS,AP,VP,ATTR,VE) ?
```

```
fi
```

```
Query validation in progress
```

```
Query validated
```

```
- ST - (BA,CN,QT,RF,RE,AA,SB,BL,INFO,HELP) ?
```

```
aa/r08
```

```
*** AA ***
```

```
Atom by Atom Search started on R set R08
```

```
Removing duplicates
```

```
Atom by Atom Search completed on R set R08
```

```
- 2 answer(s) stored in R set R09
```

```
R09 - AA / R08 : 2 answer(s)
```

```
- 1 RX candidate(s) stored in RXR09
```

```
This AA search left some RX candidates.
```

```
Please type :
```

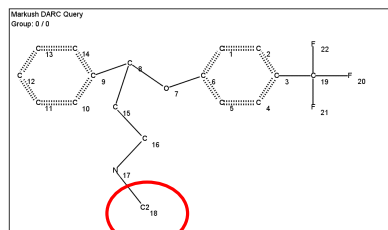
- B to request a Batch processing of these RX candidates
- P to request a Power-Batch processing of these RX candidates
- C to cancel the search

```
c
```

```
Atom by Atom Search completed on R set R09
```

```
- 2 answer(s) stored in R set R09
```

```
- 1 RX candidate(s) stored in RXR09
```



Two answers contain
an ethyl group.