

Thesauri on STN

Online thesauri are available in many databases on STN. An online thesaurus is useful when you want to:

- Develop a search strategy of controlled terminology
- Learn the terminology of the field and develop a free-text search strategy

Developing a search strategy of controlled terminology

Search the literature on hepatitis vaccines in MEDLINE.

1 Enter MEDLINE[®].

2 EXPAND on a term in the Controlled Term (/CT) field. The thesaurus entry for HEPATITIS VACCINE shows that it is not a valid CT term (0 postings) and has no associated thesaurus terms.

3 To find all associated terms for E4, EXPAND on E4 followed by +ALL. E2 displays the preferred term (USE) and its number of references.

```
=> FILE MEDLINE

=> E HEPATITIS VACCINE/CT
E#   FREQUENCY   AT   TERM
--   -
E1           0     2   HEPATITIS NON-A, NON-B
      ANTIGEN/CT
E2           0     2   HEPATITIS TOX/CT
E3           0     -->  HEPATITIS VACCINE/CT
E4           0     2   HEPATITIS VACCINES, VIRAL/CT
E5           0     2   HEPATITIS VIRUS/CT
E6           0     2   HEPATITIS VIRUS (MHV)
      GLYCOPROTEIN E2/CT
E7           0     2   HEPATITIS VIRUS, CANINE/CT
E8          62    18   HEPATITIS VIRUS, DUCK/CT
E9           1           HEPATITIS VIRUS, DUCK: CH,
      CHEMISTRY/CT
E10          7           HEPATITIS VIRUS, DUCK: CL,
      CLASSIFICATION/CT
E11          1           HEPATITIS VIRUS, DUCK: DE, DRUG
      EFFECTS/CT
E12          1           HEPATITIS VIRUS, DUCK: EN,
      ENZYMOLOGY/CT

=> E E4+ALL
E1           0     -->  Hepatitis Vaccines, Viral/CT
E2          2848    USE   Viral Hepatitis Vaccines/CT
***** END *****
```

4 To display information on all associated thesaurus terms for a valid CT term, enter the valid CT term (E2) followed by +ALL. Broader Terms are identified as BT. Narrower Terms are identified as NT.

```

=> E E2+ALL
E1          0      BT5   D Chemicals and Drugs/CT
E2          963    BT4   Complex Mixtures/CT
E3          5712   BT3   Biological Products/CT
E4          10959  BT2   Vaccines/CT
E5          16147  BT1   Viral Vaccines/CT
E6          2848   -->   Viral Hepatitis Vaccines/CT
E7          7596   MN    D20.215.894.899.955./CT
          DC      an INDEX MEDICUS major
          descriptor
          NOTE    Any vaccine raised against
          any virus or viral
          derivative that causes
          hepatitis.
          INDX    coord IM with specific
          hepatitis virus or viral
          hepatitis (IM or NIM) if
          pertinent
          AQ      AD AE AG AI AN BI BL CF CH
          CL CS CT DU EC GE HI IM IP
          ME PD PK PO RE SD SEST TO
          TU UR
          PNTE    Hepatitis, Viral, Animal
          (1977-1984)
          PNTE    Hepatitis, Viral, Human
          (1977-1984)
          PNTE    Viral Vaccines (1966-1984)
          HNTE    85
          MHTH    NLM (1985)
E8          0      UF    Hepatitis Vaccines,
          Viral/CT
E9          0      UF    Hepatitis, Viral,
          Vaccines/CT
E10         0      UF    Vaccines, Viral
          Hepatitis/CT
E11         1040   NT1   Hepatitis A Vaccines/CT
E12         5588   NT1   Hepatitis B Vaccines/CT
***** END *****

```

5 Search any of the E-numbers or E-number ranges. You can also search an E-number followed by + and a relationship code.

```

=> S E6+NT
L1          7596  "VIRAL HEPATITIS VACCINES"+NT/CT  (4
          TERMS)

```

Developing a free-text search strategy

Search INSPEC and COMPENDEX on the uses of photolithography in semiconductor manufacturing.

1 Enter INSPEC.

2 EXPAND in the CT thesaurus to identify terminology. Photolithography is a valid controlled term. Additional terminology is noted in the Used For (UF) and Narrower Terms (NT).

```
=> FILE INSPEC
=> E PHOTOLITHOGRAPHY+ALL/CT
E1          3786   BT1  lithography/CT
E2          12937  --> photolithography/CT
                   DA   January 1974
E3           0    UF   g-line lithography/CT
E4           0    UF   optical lithography/CT
E5           0    NT1  X-ray lithography/CT
E6           0    NT2  LIGA/CT
E7           0    NT2  X-ray masks/CT
E8           0    NT1  immersion lithography/CT
E9           0    NT1  photoresists/CT
E10          0    NT1  ultraviolet lithography/CT
E11         10498  RT   integrated circuit
                   manufacture/CT
E12         28306  RT   integrated circuit technology/CT
E13         11097  RT   masks/CT
E14         1837   RT   phase shifting masks/CT
E15         3574   RT   photographic applications/CT
E16         12588  RT   printed circuits/CT
E17         1960   RT   proximity effect
                   (lithography)/CT
E18         1162   RT   reticles/CT
E19         16004  RT   semiconductor technology/CT
E20         2419   PT   integrated circuit production/CT
E21         3574   PT   photographic applications/CT
E22         12588  PT   printed circuits/CT
E23         8362   CC   B2210/CT
E24         6927   CC   B2220/CT
E25         37672  CC   B2550G/CT
E26         78762  CC   B2570/CT
E27         17643  CC   B2575F/CT
***** END *****
```

3 Enter COMPENDEX.

4 EXPAND in the CT thesaurus to identify terminology.

```
=> FILE COMPENDEX
=> E PHOTOLITHOGRAPHY+ALL/CT
E1          16669  BT1  Lithography/CT
E2          12059  --> Photolithography/CT
                   DA   January 1993
E3           838   OLD  Lithography:Photolithography/CT
E4           9638  NT1  Photoresists/CT
E5           1260  NT1  X ray lithography/CT
E6          18519  RT   Integrated circuit
                   manufacture/CT
E7           11112  RT   Masks/CT
E8           9803  RT   Printed circuits/CT
E9          23318  RT   Semiconductor device
                   manufacture/CT
E10          1     CC   714.2/CT
E11          0     CC   745.1/CT
***** END *****
```

- 5 Enter *INSPEC* and *COMPENDEX*.
- 6 Enter *SET MSTEPS ON* to create an L-number for a search in each database.
- 7 In the *SEARCH* or *QUERY* command, create a free-text search query using terms found in the *CT* thesauri in these databases.

```

=> FILE INSPEC COMPENDEX

=> SET MSTEPS ON
SET COMMAND COMPLETED

=> S (G-LINE OR OPTICAL OR ULTRAVIOLET OR UV OR
X-RAY)(W)LITHOG? OR PHOTORESIST? OR LIGA OR X-RAY
MASKS OR PHOTOLITHOG?
L2          36816 FILE INSPEC
L3          30276 FILE COMPENDEX

TOTAL FOR ALL FILES
L4          67092 (G-LINE OR OPTICAL OR ULTRAVIOLET OR UV
                OR X-RAY)(W) LITHOG? OR PHOTORESIST? OR
                LIGA OR X-RAY MASKS OR PHOTOLITHOG?

=> S L4 AND SEMICONDUCT?
L5          9507 FILE INSPEC
L6          6834 FILE COMPENDEX

TOTAL FOR ALL FILES
L7          16341 L4 AND SEMICONDUCT?

```

For more information

Refer to the STN Database Summary Sheets, available at www.cas.org.

For database-specific thesaurus information, enter *HELP THESAURUS* at an arrow prompt for a list of fields with an online thesaurus. Enter *HELP RCODES* to find definitions of all database-specific relationship codes, e.g., *NT*, *BT*, that you may use with *EXPAND* or *SEARCH* in the thesaurus fields.



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