APPENDIX A.1

Appendix to the License Agreement for Use of the UMLS® Metathesaurus

UMLS METATHESAURUS® SOURCE VOCABULARIES - 200802 Edition

Sources are listed in order according to the abbreviations used in the UMLS Metathesaurus files. If additional restrictions and notices apply, the category of restrictions and the special notices appear under the name of the source. See the license agreement for an explanation of the categories of restrictions. Many sources publish printed editions and/or other explanatory information that may be essential to understanding the purpose and application of particular sources in data creation and retrieval. Contact information is provided for each source. Please address questions about permissions or license agreements for additional uses not covered by this Agreement, or other inquiries about individual sources, to the appropriate contacts.

NLM is working toward inclusion in the UMLS Metathesaurus of the complete, current edition of most of these vocabulary sources.

AOD2000 - Alcohol and Other Drug Thesaurus: A Guide to Concepts and Terminology in Substance Abuse and Addiction. 3rd. ed. [4 Volumes.] Bethesda, MD: National Institute on Alcohol Abuse and Alcoholism (NIAAA) and Center for Substance Abuse Prevention (CSAP), 2000

Contact: Nancy Winstanley, NIAAA Library, c/o CSR Incorporated 2107 Wilson Blvd., Suite 1000, Arlington, VA 22201; phone: 703-741-7147; e-mail: nwinstanley@csrincorporated.com

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AOT2003 - Authorized Osteopathic Thesaurus. Educational Council of Osteopathic Principles of the American Association of Colleges of Osteopathic Medicine: Chevy Chase MD, 2004

Contact:

BioC_0802D (updated) - Based on BioCarta online maps of molecular relationships, adapted for NCI use.

Contact: Francis W. Hartel, PhD;Center for Bioinformatics, National Cancer Institute;6116 Executive Blvd.;Room 4019;Rockville;MD;USA;20892-8335;301-435-3869;hartel@mail.nih.gov

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CBO2007_06 - "The Clinical Bioinformatics Ontology: A curated semantic network utilizing RefSeq information" Pacific Symposium on Biocomputing, 2007; http://helix-web.stanford.edu/psb05/hoffman.pdf

Contact: Mark Hoffman, Ph.d, 2800 Rockcreek Parkway, Kansas City, MO 64117; (816) 201-6114; mhoffman1@cerner.com

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CCS2005 - Clinical Classifications Software (CCS). Agency for Healthcare Research and Quality (AHRQ), Rockville, MD. Release Date: April 2005. URL: http://www.hcup-us.ahrq.gov/toolssoftware/ccs/ccs.jsp Phone: 301-594-1364.

Contact: Anne Elixhauser, Ph.D., Senior Research Scientist, Agency for Healthcare Research and

Quality, 540 Gaither Road, Rockville, MD 20850; phone: (301) 427-1411; fax: (301) 594-1430; phone: 1-800-358-9295; email: AElixhau@AHRQ.gov

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CDC_0802D (updated) - U.S. Centers for Disease Control and Prevention, Department of Health and Human Services, Atlanta, GA.

Contact: Francis W. Hartel, PhD;Center for Bioinformatics, National Cancer Institute;6116 Executive Blvd.;Room 4019;Rockville;MD;USA;20892-8335;301-435-3869;hartel@mail.nih.gov

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CDISC_0802D (updated) - Clinical Data Interchange Standards Consortium.

Contact: Francis W. Hartel, PhD;Center for Bioinformatics, National Cancer Institute;6116 Executive Blvd.;Room 4019;Rockville;MD;USA;20892-8335;301-435-3869;hartel@mail.nih.gov

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CDT5 - Current Dental Terminology 2005 (CDT 2005). Chicago, IL: American Dental Association, 2005

CATEGORY 3 RESTRICTIONS APPLY

For CDT the following special notice must be displayed:
"For CDT only, copyright 2002 American Dental Association, all rights reserved."

Contact: Ann Pollack, American Dental Association, 211 East Chicago Ave., Chicago, IL 60611-2678; phone: (312)440-2500, ext. 2854 no@email.nil

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COH_0802D (updated) - City of Hope, Duarte, CA

Contact: Sherri de Coronado;Center for Bioinformatics, National Cancer Institute;6116 Executive Blvd.;Suite 403;Rockville;MD;USA;20892-8335;925-377-5960;decorons@osp.nci.nih.gov

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COSTAR_89-95 - Computer-Stored Ambulatory Records (COSTAR). Boston (MA): Massachusetts General Hospital, 1989-1995.

The UMLS Metathesaurus includes terms that were used frequently at 3 COSTAR sites in the years indicated and supplied to NLM by Massachusetts General Hospital.

Contact: G.Octo Barnett, M.D., Laboratory of Computer Science Massachusetts General Hospital, 50 Staniford Street, 5th Floor, Boston, MA 02114; phone: (617) 726-3939; fax: (617) 726-8481; e-mail: Barnett.Octo@mgh.harvard.edu

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CRCH_0802D (updated) - Cancer Research Center of Hawaii, University of Hawaii

Contact: Sherri de Coronado;Center for Bioinformatics, National Cancer Institute;6116 Executive Blvd.;Suite 403;Rockville;MD;USA;20892-8335;925-377-5960;decorons@osp.nci.nih.gov

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CSP2006 - Computer Retrieval of Information on Scientific Projects (CRISP). Bethesda (MD):

National Institutes of Health, Division of Research Grants, Research Documentation Section, 2006.

Contact: Dorrette Finch, Director, Division of Research Documentation, ORA, OER, National Institutes of Health, 6701 Rockledge Drive, Bethesda MD 20892-7983; email: dw33v@nih.gov

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CST95 - Coding Symbols for Thesaurus of Adverse Reaction Terms (COSTART). 5th ed. Rockville (MD): U.S. Food and Drug Administration, Center for Drug Evaluation and Research, 1995.

COSTART has been superseded by the Medical Dictionary for Regulatory Activities (MedDRA) Terminology.

Contact: National Technical Information Service. http://www.ntis.gov/fcpc/cpn5580.htm

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CTCAE_0802D (updated) - Common Terminology Criteria for Adverse Events

Contact: Francis W. Hartel, PhD;Center for Bioinformatics, National Cancer Institute;6116 Executive Blvd.;Room 4019;Rockville;MD;USA;20892-8335;301-435-3869;hartel@mail.nih.gov

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CTEP04 - Cancer Therapy Evaluation Program (CTEP), National Cancer Institute. Bethesda (MD): National Cancer Institute, 2004.

Contact:

DCP_0802D (updated) - Division of Cancer Prevention Program

Contact: Francis W. Hartel, PhD;Center for Bioinformatics, National Cancer Institute;6116 Executive Blvd.;Room 4019;Rockville;MD;USA;20892-8335;301-435-3869;hartel@mail.nih.gov

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DICOM_0802D (updated) - DICOM

Contact: Francis W. Hartel, PhD;Center for Bioinformatics, National Cancer Institute;6116 Executive Blvd.;Room 4019;Rockville;MD;USA;20892-8335;301-435-3869;hartel@mail.nih.gov

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DTP_0802D (updated) - .;National Cancer Institute;NCI Developmental Therapeutics Program;Lawrence Wright, NCI, lwright@mail.nih.gov.

Contact: Francis W. Hartel, PhD;Center for Bioinformatics, National Cancer Institute;6116 Executive Blvd.;Room 4019;Rockville;MD;USA;20892-8335;301-435-3869;hartel@mail.nih.gov

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DXP94 - DXplain (An expert diagnosis program). Boston (MA): Massachusetts General Hospital, 1994.

Contact: G. Octo Barnett, M.D., Laboratory of Computer Science, Massachusetts General Hospital, 50 Staniford Street, 5th Floor, Boston, MA 02114; phone: (617) 726-3939; fax: (617) 726-8481; e-mail: Barnett.Octo@mgh.Harvard

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ELC2001 - Expression Library Classification, version 1 (June 2001). Lash A and Greenhut S, ftp://ncibi.nlm.nih.gov/pub/bioannot/info/keys. Contact: alash@ncbi.nlm.nih.gov

Contact:

FDA_0802D (updated) - Food and Drug Administration

Contact: Francis W. Hartel, PhD;Center for Bioinformatics, National Cancer Institute;6116 Executive Blvd.;Room 4019;Rockville;MD;USA;20892-8335;301-435-3869;hartel@mail.nih.gov

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GO2007_02_01 - Gene Ontology. The Gene Ontology Consortium. February 1, 2007. To reference the Gene Ontology Consortium, cite this paper: The Gene Ontology Consortium. Gene Ontology: tool for the unification of biology. Nature Genet. (2000) 25:25-29. Article available from: http://www.geneontology.org/GO.cite.shtml#cite.

Contact: http://www.geneontology.org/GO.cite.shtml; go@geneontology.org

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HCPCS2007 - Healthcare Common Procedure Coding System (HCPCS). Baltimore, MD: U.S. Centers for Medicare & Medicaid Services, 2007.

The American Medical Association's CPT™ codes in HCPCS have a Source Abbreviation of HCPT04. The American Dental Association's CDT codes in HCPCS have a Source Abbreviation of HCDT4.

Contact: Cynthia Hake, Centers for Medicare & Medicaid Services (CMS) 7500 Security Blvd., Mailstop C5-09-16, Baltimore MD 21244; e-mail:CHake@cms.hhs.gov; phone: (410) 786-3404

HL7V3.0_2006_05 - Health Level Seven Vocabulary (HL7). Ann Arbor (MI): Health Level Seven, 1998-2006. Contact: Mark McDougall, Executive Director, Health Level Seven; 3300 Washtenaw Avenue, Suite 227, Ann Arbor, MI 48104-4250; Phone: (734)677-7777; Fax: (734)677-6622; Email: HQ@HL7.ORG ; Web site: www.HL7.ORG.

Contact: Health Level Seven, 3300 Washtenaw Avenue, Suite 227, Ann Arbor MI 48104-4250; phone: (734)677-7777; fax: (734)677-6622; e-mail: HQ@HL7.ORG

HUGO2007_01 - HUGO Gene Nomenclature, HUGO Gene Nomenclature Committee, Department of Biology, University College London, Wolfson House, 4 Stephenson Way, London NW1 2HE, UK. Tel: 44-20-7679-5027 Fax: 44-20-7387-3496 e-mail: nome@galton.ucl.ac.uk

Contact: nome@galton.ucl.ac.uk

ICD10_1998 - International Statistical Classification of Diseases and Related Health Problems (ICD-10). 10th rev. Geneva (Switzerland): World Health Organization, 1998.

CATEGORY 3 RESTRICTIONS APPLY

Contact: Office of Publications, World Health Organization, 1211 Geneva 27, Switzerland

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ICD10AE_1998 - International Statistical Classification of Diseases and Related Health Problems (ICD-10): Americanized Version. 10th rev. Geneva (Switzerland): World Health Organization, 1998.

CATEGORY 3 RESTRICTIONS APPLY

Contact: Office of Publications, World Health Organization, 1211 Geneva 27, Switzerland

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ICD9CM_2007 - ICD-9-CM [computer file]: international classification of diseases, ninth revision, clinical modification. Baltimore, MD: U.S. Department of Health and Human Services, Centers for Medicare & Medicaid Services, effective October 1, 2006.

NLM has generated fully specified titles for ICD-9-CM codes in cases in which the official ICD- 9-CM titles consist of extensions to higher levels in the ICD-9-CM hierarchy. The fully specified names were produced with reasonable care, but have not yet been reviewed and approved by the producers of ICD-9-CM.

Contact: Contact for Diseases: Donna Pickett, National Center for Health Statistics; e-mail: dfp4@cdc.gov; Contact for Procedures: Patricia Brooks, Health Care Financing Administration; e-mail: pbrooks@hcfa.gov

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ICDO3 - International Classification of Diseases for Oncology (ICD), Third Edition, 2000. Funded by the U.S. National Cancer Institute's Surveillance, Epidemiology and End Results (SEER) program with Emory University, Atlanta SEER Cancer Registry, Atlanta, Georgia, U.S.A.

CATEGORY 3 RESTRICTIONS APPLY

Contact: David Bramley

ICH_0802D (updated) - International Conference on Harmonization

Contact: Lawrence Wright;NCI;lwright@mail.nih.gov

ICPC93 - The International Classification of Primary Care (ICPC). Denmark: World Organisation of Family Doctors, 1993.

This year, the Metathesaurus has also included translations of ICPC93 in the following languages:

- Basque (ICPCBAQ_1993),
- Danish (ICPCDAN_1993),
- Dutch (ICPCDUT_1993),
- Finnish (ICPCFIN_1993),
- French (ICPCFRE_1993),
- German (ICPCGER_1993),
- Hebrew (ICPCHEB_1993),
- Hungarian (ICPCHUN_1993),
- Italian (ICPCITA_1993),
- Norwegian (ICPCNOR_1993),
- Portuguese (ICPCPOR_1993),
- Spanish (ICPCSPA_1993), and

- Swedish (ICPCSWE_1993).

Contact: Henk Lamberts; e-mail: H.Lamberts@AMC.UVA.NL or Inge Hofmans-Okkes; e-mail: I.m.okkes@amc.una.nl; University of Amsterdam

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ICPC2ICD10ENG_200412 - International Classification of Primary Care / prepared by the Classification Committee of the World Organization of National Colleges, Academies and Academic Associations of General Practitioners/Family Physicians (WONCA), known more briefly as the World Organization of Family Doctors. 2nd ed. Henk Lamberts and Inge Hofmans-Okkes, 2002

CATEGORY 3 RESTRICTIONS APPLY

Contact: Prof. Dr. H. Lamberts and Inge M. Okkes, PhD, Department of Family Practice, Division of Clinical Methods & Public Health, Academic Medical Center/University of Amsterdam, Meibergdreef 15 (Room J2-213), 1105 AZ Amsterdam, The Netherlands; Tel: 31 20 566 4711

JAX_0802D (updated) - NCI Mouse Terminology. Based on Jackson Laboratories mouse terminology, adapted for NCI use.;Bar Harbor, ME;2003

Contact: Francis W. Hartel, PhD;Center for Bioinformatics, National Cancer Institute;6116 Executive Blvd.;Room 4019;Rockville;MD;USA;20892-8335;301-435-3869;hartel@mail.nih.gov

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KEGG_0802D (updated) - Based on Kyoto Encyclopedia of Genes and Genomes (KEGG), KEGG Pathway Database, adapted for NCI use.;April 2004

Contact: Francis W. Hartel, PhD;Center for Bioinformatics, National Cancer Institute;6116 Executive Blvd.;Room 4019;Rockville;MD;USA;20892-8335;301-435-3869;hartel@mail.nih.gov

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LNC219 - Logical Observation Identifier Names and Codes (LOINC). Version 2.19. Indianapolis (IN): The Regenstrief Institute, December 22, 2006

Contact: LOINC c/o Medical Informatics, The Regenstrief Institute, Inc., Health Information and Translational Sciences Bldg. (HITS), 410 West 10th Street, Suite 2000, Indianapolis IN 46202; telephone: 317-423-5558; fax: 317-423-5695; email: loinc@regenstrief.org

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LNC215 - Logical Observation Identifier Names and Codes (LOINC). Version 2.15. Indianapolis (IN): The Regenstrief Institute, June 6, 2005

Contact: kmercer@regenstrief.org

MBD07 - MEDLINE Backfiles (1997-2001). Bethesda (MD): National Library of Medicine. Contact: http://www.nlm.nih.gov.

Contact: National Library of Medicine. Bethesda, MD; http://www.nlm.nih.gov

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MCM92 - Glossary of Methodologic Terms for Clinical Epidemiologic Studies of Human Disorders.

Canada: McMaster University, 1992.

Contact: R. Brian Haynes, M.D., Ph.D.; e-mail: bhaynes@mcmaster.ca; Clinical Epidemiology & Biostatistics and Medicine, Faculty of Health Sciences, McMaster University, Room 2C10B, 1200 Main Street, West Hamilton Ontario, Canada L8N 3Z5; phone (905) 525-9140

MDBCAC2005_12 - Mitelman Database of Chromosome Aberrations in Cancer (December 2005). Mitelman F, Johansson B and Mertens F (Eds.), http://cgap.nci.nih.gov/chromosomes/Mitelman

Contact: Sherri De Coronado; NCI Center for Bioinformatics; 6166 Executive Blvd, Suite 403, Bethesda, MD 20892-8335; decorons@mail.nih.gov

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MDR90 - MedDRA [electronic resource] : medical dictionary for regulatory activities terminology. Version 9.0. Reston, VA : Northrop Grumman, MedDRA MSSO, March 2006.

CATEGORY 3 RESTRICTIONS APPLY

Contact: Kate Studeman, Customer Operations Manager, MedDRA MSSO, 12011 Sunset Hills Road, Mailstop: VAR1/7B50/MSSO, Reston VA 20190; phone: 703-345-8175; fax: 703-345-7791; e-mail: kathryn.studeman@ngc.com

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MDRSPA90 - Medical Dictionary for Regulatory Activities Terminology (MedDRA) Version 9.0, Spanish Edition. International conference on Harmonization of Technical Requirements for Registration of Pharmaceuticals for Human Use (ICH). Reston, VA: MedDRA MSSO, March 2006.

CATEGORY 3 RESTRICTIONS APPLY

Contact: Kathryn Studeman, Customer Operations, MedDRA MSSO, 12011 Sunset Hills Rd., VAR1/7B34/MSSO, Reston, VA 20190-3285; phone: 703-345-8175; fax: 703-345-7791; Email: kathryn.studeman@ngc.com

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MED07 - MEDLINE Current Files (2002-2007). Bethesda (MD): National Library of Medicine. Contact: http://www.nlm.nih.gov.

Contact: National Library of Medicine. Bethesda, MD; http://www.nlm.nih.gov

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MEDLINEPLUS_20040814 - MedlinePlus Health Topics. Bethesda (MD): National Library of Medicine, August 14, 2004.

Contact: Naomi Miller; e-mail: millern@mail.nlm.nih.gov

MGED131 - The MGED Ontology, version 1.3.1, November 8, 2006. Concepts, definitions, terms, and resources for standardized description of a microarray experiment in support of MAGE v.1. Creators: Chris Stoeckert, Helen Parkinson, Trish Whetzel, Paul Spellman, Catherine A. Ball, Joseph White, John Matese, Liju Fan, Gilberto Fragoso, Mervi Heiskanen, Susanna Sansone, Helen Causton, Laurence Game, Chris Taylor.

Contact: http://mged.sourceforge.net/ontologies/index.php

MSH2007_2007_05_01 - Medical Subject Headings (MeSH). Bethesda (MD): National Library of Medicine, 2007

This source has been translated into many languages. To date, eight of the translations have been incorporated into the UMLS Metathesaurus.

Contact: Stuart Nelson, M.D., Head, MeSH Section; e-mail: nelson@nlm.nih.gov

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MTH2007AB - UMLS Metathesaurus. Bethesda, MD: National Library of Medicine.

Concept names with this source abbreviation were created by NLM to facilitate creation of the UMLS Metathesaurus. There are relatively few of them.

Contact: Jan Willis, National Library of Medicine, UMLS Support, 38A-4th floor, 8600 Rockville Pike, Bethesda MD 20894; phone: 301-496-7715; e-mail: jwillis@nlm.nih.gov

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MTHFDA_2007_03_08 - Metathesaurus Forms of FDA National Drug Code Directory, 2007_03_08. Bethesda, MD: National Library of Medicine, 2007.

Concept names with this source abbreviation were created by NLM to provide contextual information for FDA NDC terms.

Contact: Jan Willis, National Library of Medicine, UMLS Support, 38A-4th fl, 8600 Rockville Pike, Bethesda MD 20894; phone: 301-496-7715; e-mail: jwillis@nlm.nih.gov. NOTE: Users must also obtain rights to use the parent source.

MTHHH2007 - Metathesaurus Hierarchical HCPCS Terms. Bethesda (MD): National Library of Medicine, 2007

Concept names with this source abbreviation were created by NLM to provide contextual information for HCPCS.

Contact: Jan Willis, U.S. National Library of Medicine, UMLS Support/MEDLARS Management Section, 8600 Rockville Pike, Bethesda MD 20894; email: jwillis@nlm.nih.gov

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MTHICD9_2007 - Metathesaurus additional entry terms for ICD-9-CM [computer file]: international classification of diseases, ninth revision, clinical modification. Bethesda, MD: U.S. Dept. of Health and Human Services, Public Health Service, National Institutes of Health, National Library of Medicine, September 2006.

Contact: National Library of Medicine, UMLS project

MTHICPC2ICD107B_0412 - International Classification of Primary Care / prepared by the Classification Committee of the World Organization of National Colleges, Academies and Academic Associations of General Practitioners/Family Physicians (WONCA), known more briefly as the World Organization of Family Doctors. 2nd ed. Henk Lamberts and Inge Hofmans-Okkes, 7-bit Equivalents, 2002

CATEGORY 3 RESTRICTIONS APPLY

Contact: Prof. Dr. H. Lamberts and Inge M. Okkes, PhD, Department of Family Practice, Division of Clinical Methods & Public Health, Academic Medical Center/University of Amsterdam, Meibergdreef 15 (Room J2-213), 1105 AZ Amsterdam, The Netherlands; Tel: 31 20 566 4711

MTHICPC2ICD10AE_0412 - International Classification of Primary Care / prepared by the Classification Committee of the World Organization of National Colleges, Academies and Academic Associations of General Practitioners/Family Physicians (WONCA), known more briefly as the World Organization of Family Doctors. 2nd ed. Henk Lamberts and Inge Hofmans-Okkes, American English Equivalents, 2002

CATEGORY 3 RESTRICTIONS APPLY

Contact: Prof. Dr. H. Lamberts and Inge M. Okkes, PhD, Department of Family Practice, Division of Clinical Methods & Public Health, Academic Medical Center/University of Amsterdam, Meibergdreef 15 (Room J2-213), 1105 AZ Amsterdam, The Netherlands; Tel: 31 20 566 4711

MTHMST2001 - Metathesaurus Version of Minimal Standard Terminology Digestive Endoscopy. Bethesda, MD: National Library of Medicine, 2001.

Contact: Jan Willis, National Library of Medicine, UMLS Support, 38A-4th fl, 8600 Rockville Pike, Bethesda, MD 20894; phone: 301 496-7715; e-mail: jwillis@nlm.nih.gov

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MTHSPL_2007_04_23 - Metathesaurus Forms of the FDA Structured Product Labels, 2007_04_23. Bethesda, MD: National Library of Medicine, 2007.

Contact: Stuart Nelson, M.D., Head, MeSH Section; e-mail: nelson@nlm.nih.gov

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NCBI2006_01_04 - NCBI Taxonomy. Bethesda, MD: U.S. Department of Health and Human Services, National Institutes of Health, National Library of Medicine, National Center for Biotechnology Information, January 4, 2006. http://www.ncbi.nlm.nih.gov/Taxonomy/

Contact: http://www.ncbi.nlm.nih.gov/Taxonomy

NCI2008_02D (updated) - National Cancer Institute, National Institutes of Health;NCI Thesaurus;TDE version, February 2007;Bethesda (MD)

Subset only.

Contact: Francis W. Hartel, PhD;Center for Bioinformatics, National Cancer Institute;6116 Executive Blvd.;Room 4019;Rockville;MD;USA;20892-8335;301-435-3869;hartel@mail.nih.gov

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NCI-GLOSS_0802D (updated) - National Cancer Institute;NCI-GLOSS (Cancer.gov Dictionary);Bethesda (MD)

Contact: Francis W. Hartel, PhD;Center for Bioinformatics, National Cancer Institute;6116 Executive Blvd.;Room 4019;Rockville;MD;USA;20892-8335;301-435-3869;hartel@mail.nih.gov

NCI-HL7_0802D (updated) - Health Language 7

Contact: Lawrence Wright;NCI;lwright@mail.nih.gov

NCIMTH - NCI Metathesaurus. Bethesda, MD: National Cancer Institute.

Contact: Laura Roth; lroth@msdinc.com

NCISEER_1999 - NCI Surveillance, Epidemiology, and End Results (SEER) conversions between ICD-9-CM and ICD-10 neoplasm codes. National Cancer Institute, Bethesda, MD. Release Date: June 1999. URL: http://www-seer.ims.nci.nih.gov/Admin/ConvProgs/ Phone: 301-496-8510.

Contact: National Cancer Institute Bethesda, MD; phone: 301-496-8510

NDFRT_2004_01 - National Drug File - Reference Terminology, 2004_01. Washington, DC: U.S. Department of Veterans Affairs, Veterans Health Administration, January 2004.

Contact: Steven Brown; CPEP Office; 1310 24th Avenue S; Nashville, TN 37215; e-mail: Steven.Brown@msd.va.gov

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OMIM2007_03_19 - Online Mendelian Inheritance in Man, OMIM (TM). McKusick-Nathans Institute for Genetic Medicine, Johns Hopkins University (Baltimore, MD) and National Center for Biotechnology Information, National Library of Medicine (Bethesda, MD), {date of download}. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/

Contact: Jan Willis, NLM; email: willisj@mail.nlm.nih.gov

PDQ2007_11 - PDQ. Bethesda (MD): National Cancer Institute, November 2007.

Contact: Margaret Haber, NCI, Building 6116 - 6116 Exec Blvd, Room 3124, Rockville, MD; telephone: 301-594-9185; Fax: 301-480-8105; Email: mhaber@mail.nih.gov

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PMA2007 - Portfolio Management Application (PMA). NCI Division of Cancer Control and Population Studies (DCCPS), Rockville MD., 2007

Contact:

PNDS2002 - Perioperative nursing data set : the perioperative nursing vocabulary, 2nd Ed. edited by Suzanne C. Beyea. / AORN; Denver, Colo. : AORN, 2002

Contact: Susan Kleinbeck, info@aorn.org

QMR96 - Quick Medical Reference (QMR). San Bruno (CA): First DataBank, 1997.

Contact: Quick Medical Reference, First Databank, 1111 Bayhill Drive San Bruno, CA 94066

RAM99 - QMR clinically related terms from Randolf A. Miller, 1999.

Contact: Dr. Randolph A. Miller (email: randolph.a.miller@vanderbilt.edu), Chair, Dept. of Biomedical Informatics, Vanderbilt University, 436 Eskind Biomedical Library, 2209 Garland Ave., Nashville TN 37232-8340

RENI_0802D (updated) - Registry Nomenclature Information System

Contact: Francis W. Hartel,;Center for Bioinformatics, National Cancer Institute;6116 Executive Blvd.;Room 4019;Rockville;MD;USA;20892-8335;301-435-3869;hartel@mail.nih.gov

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RXNORM_07AA_070503F - RxNorm work done by NLM. National Library of Medicine (NLM). Bethesda (MD): National Library of Medicine, META2007AA Full Update 2007_05_03

This release contains concepts created by the National Library of Medicine which express the meaning of a drug name in a normalized form. These concepts relate the names of orderable medications to a dose form and the components of those medications. For further discussion, see the article at:

http://umlsinfo.nlm.nih.gov/RxNorm.html

Contact: Stuart Nelson, M.D., Head, MeSH Section; e-mail: nelson@nlm.nih.gov

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SCTSPA_2007_04_30 - College of American Pathologists, SNOMED Clinical Terms, Spanish Language Edition, April 30, 2007. SNOMED International, 325 Waukegan Road, Northfield, IL 60093-2750. Phone: 800-323-4040 ext. 7700. Email: snomed@cap.org. URL: http://www.snomed.org

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Contact:

SNOMEDCT_2007_01_31 - College of American Pathologists, SNOMED Clinical Terms. Chicago IL: College of American Pathologists, 2007. URL: http://www.snomed.org

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Contact: Vivian A. Auld, National Library of Medicine; e-mail: auld@nlm.nih.gov. NLM is a Charter Member of the IHTSDO on behalf of the U.S.

SPN2003 - Standard Product Nomenclature (SPN). Rockville, (MD); U.S. Food and Drug Administration, 2003

Contact: Stolber, Carey [Cstolber@ECRI.org]

SRC - UMLS Metathesaurus Source Terminologies. Bethesda, MD: National Library of Medicine.

Contact: Jan Willis, National Library of Medicine, UMLS Support, 38A-4th fl, 8600 Rockville Pike, Bethesda MD 20894; phone: 301 496-7715; e-mail: jwillis@nlm.nih.gov

---

UCUM_0802D (updated) - Unified Code for Units of Measure

Contact: Lawrence Wright;NCI;lwright@mail.nih.gov

UMD2007 - The Universal Medical Device Nomenclature System (UMDNS). Plymouth Meeting (PA): ECRI, 2007.

CATEGORY 1 RESTRICTIONS APPLY

Contact: Elizabeth Richardson (erichard@ecri.org), Director of Database and Nomenclature Systems, ECRI, 5200 Butler Pike, Plymouth Meeting, PA 19462-1298; Phone: (610) 825-6000

USPMG_2004 - United States Pharmacopeia (USP). Medicare Prescription Drug Benefit Model Guidelines: Drug Categories and Classes in Part D, 2004. http://www.usp.org/pdf/EN/mmg/comprehensiveDrugListing2004-12-31.pdf

Contact: http://www.usp.org/healthcareInfo/mmg/finalGuidelines.html

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UWDA173 - University of Washington Digital Anatomist, (UWDA). Seattle (WA): University of Washinton, Version 1.7.3, March, 2003. Jose Mejino, M.D.; email: onard@biostr.washington.edu

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VANDF_2007_04_04 - U.S. Department of Veterns Affairs, Veterans Health Administration National Drug File. Department of Veterans Affairs, Washington, DC. URL: http://www.pbm.va.gov/default.aspx

***NOTE:** Now a CATEGORY 0.

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METATHESAURUS® METADATA

B.0 Introduction

Appendix B provides details on Metathesaurus data described in Section 2 of the documentation, which contains many references to this Appendix. This appendix contains descriptions of:

B.1 **Columns and Data Elements**
Lists column and data element abbreviations, names and descriptions in Metathesaurus files in alphabetical order by abbreviation; includes length of characters and SQL92 datatype information

B.1.1 Columns and Data Elements in Rich Release Format (RRF)
B.1.2 Columns and Data Elements in Original Release Format (ORF)

B.2 **Attribute Names**
Lists attribute names and definitions in alphabetical order by abbreviation

B.3 **Abbreviations Used in Data Elements**
Lists abbreviations and definitions of abbreviations used in data elements alphabetically by attribute type; includes relationship attributes

B.4 **Source Vocabularies**
Lists vocabularies and classifications that are the sources of the concepts, terms and relationships in the Metathesaurus alphabetically by source abbreviation; includes the number of strings each contributes. HIPAA and CHI vocabularies are noted.

B.5 **Source and Term Types: Default Order of Precedence and Suppressibility**
Lists sources and term types in default order of rank, or precedence, used to determine referred names in the Metathesaurus, and notes the default suppressibility status (yes or no) assigned to each Source|Term Type in the Metathesaurus.

B.1 Columns and Data Elements

All data elements in the Metathesaurus are described in this section. The data elements have been divided into Column Descriptions and Attribute Descriptions. The descriptions are arranged alphabetically by data element abbreviation.

Columns are described for Rich Release Format (RRF) in B.1.1, and for Original Release Format (ORF) in B.1.2.

B1.1 Columns and Data Elements in Rich Release Format (RRF)

Abbreviation	Description	File	Length of Value in characters	Average Length of Value in characters	SQL92 Datatype
ATN	Attribute name	MRSAT.RRF	2 - 28	10.03	varchar(50)
ATNL	Attribute name list for a source	MRSAB.RRF	0 - 583	53.22	varchar(1000)
ATUI	Unique identifier for attribute	MRDEF.RRF MRSAT.RRF MRSTY.RRF	10 10 10	10.00 10.00 10.00	varchar(10) varchar(10) varchar(10)
ATV	Attribute value	MRSAT.RRF	0 - 7903	8.69	varchar(8000)
AUI	Unique identifier for atom	MRCONSO.RRF MRCXT.RRF MRDEF.RRF MRHIER.RRF	8 8 8 8	8.00 8.00 8.00 8.00	char(8) char(8) char(8) char(8)
AUI1	Unique identifier for first atom	MRCOC.RRF MRREL.RRF MRAUI.RRF	0 0 - 8 8	0.00 7.99 8.00	char(8) char(8) char(8)
AUI2	Unique identifier for second atom	MRCOC.RRF MRREL.RRF MRAUI.RRF MRCXT.RRF	0 0 - 8 8 8	0.00 7.99 8.00 8.00	char(8) char(8) char(8) char(8)
AV	Average Length, Characters	MRCOLS.RRF	0 - 6	0.05	numeric(5,2)
BTS	Size in Bytes	MRFILES.RRF	0 - 11	0.05	integer
CENC	Character encoding of a source as specified by IANA	MRSAB.RRF	5 - 9	5.05	varchar(20)
CFR	CUI frequency for a source	MRSAB.RRF	0 - 6	3.71	integer
CHANGEKEY	CONCEPTSTATUS (if history relates to a SNOMED CT concept) or DESCRIPTIONSTATUS (if history relates to a SNOMED CT atom or "description")	MRHIST.RRF	0	0.00	varchar(1000)
CHANGETYPE	Source asserted code for type of change	MRHIST.RRF	0	0.00	varchar(1000)
CHANGEVAL	SNOMED CT CONCEPTSTATUS or DESCRIPTIONSTATUS value after the change took place	MRHIST.RRF	0	0.00	varchar(1000)
CLS	Number of columns	MRFILES.RRF	0 - 2	0.01	integer
COA	Attributes of co-occurrence	MRCOC.RRF	0	0.00	varchar(300)

Abbreviation	Description	File	Length of Value in characters	Average Length of Value in characters	SQL92 Datatype
CODE	Unique Identifier or code for string in source	MRSAT.RRF MRCONSO.RRF MRCXT.RRF	0 - 30 1 - 30 1 - 30	7.71 7.64 8.31	varchar(50) varchar(50) varchar(50)
COF	Frequency of co-occurrence	MRCOC.RRF	0	0.00	integer
COL	Column or data element name	MRCOLS.RRF	0 - 11	0.04	varchar(20)
COT	Type of co-occurrence	MRCOC.RRF	0	0.00	varchar(3)
CUI	Unique identifier for concept	MRHIST.RRF MRXW_BAQ.RRF MRXW_CZE.RRF MRXW_DAN.RRF MRXW_DUT.RRF MRXW_FIN.RRF MRXW_FRE.RRF MRXW_GER.RRF MRXW_HEB.RRF MRXW_HUN.RRF MRXW_ITA.RRF MRXW_JPN.RRF MRXW_NOR.RRF MRXW_POR.RRF MRXW_RUS.RRF MRXW_SWE.RRF CHANGE/MERGE DCUI.RRF MRCONSO.RRF MRCXT.RRF MRDEF.RRF MRHIER.RRF MRSAT.RRF MRSTY.RRF MRXNS_ENG.RRF MRXNW_ENG.RRF MRXW_ENG.RRF MRXW_SPA.RRF	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 8 8 8 8 8 8 8 8 8 8 8	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00	char(8) char(8)
CUI1	Unique identifier for first concept	MRCOC.RRF MRAUI.RRF MRCUI.RRF MRREL.RRF	0 8 8 8	0.00 8.00 8.00 8.00	char(8) char(8) char(8) char(8)
CUI2	Unique identifier for second concept	MRCOC.RRF MRCUI.RRF MRAUI.RRF MRCXT.RRF MRREL.RRF	0 0 - 8 8 8 8	0.00 6.85 8.00 8.00 8.00	char(8) char(8) char(8) char(8) char(8)
CUIS	Concept unique identifier list, comma separated	AMBIGLUI.RRF AMBIGSUI.RRF	8 8	8.00 8.00	varchar(1000) varchar(1000)
CURVER	Current Version flag	MRSAB.RRF	1	1.00	char(1)
CVF	Content view flag	MRCOC.RRF	0	0.00	varchar(50)

Abbreviation	Description	File	Length of Value in characters	Average Length of Value in characters	SQL92 Datatype
		MRCONSO.RRF MRCXT.RRF MRDEF.RRF MRHIER.RRF MRHIST.RRF MRMAP.RRF MRREL.RRF MRSAT.RRF MRSMAP.RRF MRSTY.RRF	0 0 0 0 0 0 0 0 0 0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00	varchar(50) varchar(50) varchar(50) varchar(50) varchar(50) varchar(50) varchar(50) varchar(50) varchar(50) varchar(50)
CXL	Context member label, i.e., ANC for ancestor of this atom, CCP for the atom itself, SIB for sibling of this atom, CHD for child of this atom	MRCXT.RRF	3	3.00	char(3)
CXN	The context number if the atom has multiple contexts	MRHIER.RRF MRCXT.RRF	1 - 4 1 - 4	2.05 2.07	integer integer
CXS	String for context member	MRCXT.RRF	1 - 934	27.82	varchar(3000)
CXTY	Context type for a source (as per section 2.3.2)	MRSAB.RRF	0 - 31	5.49	varchar(50)
DEF	Definition	MRDEF.RRF	1 - 6599	223.78	varchar(8000)
DES	Descriptive Name	MRFILES.RRF MRCOLS.RRF	0 - 42 0 - 140	0.21 0.33	varchar(200) varchar(200)
DIR	Source asserted directionality flag	MRREL.RRF	0 - 1	0.00	varchar(1)
DOCKEY	Key to be documented	MRDOC.RRF	2 - 8	3.63	varchar(50)
DTY	SQL-92 data type for this column	MRCOLS.RRF	0 - 13	0.11	varchar(20)
EXPL	Detailed explanation	MRDOC.RRF	0 - 534	29.82	varchar(1000)
FIL	Physical FILENAME	MRCOLS.RRF MRFILES.RRF	0 - 21 0 - 21	0.12 0.14	varchar(50) varchar(50)
FMT	Comma separated list of COL	MRFILES.RRF	0 - 190	0.38	varchar(300)
FROMEXPR	The expression that a mapping is mapped from.	MRMAP.RRF MRSMAP.RRF	0 0	0.00 0.00	varchar(4000) varchar(4000)
FROMID	Metathesaurus identifier for mapped from	MRMAP.RRF	0	0.00	varchar(50)
FROMRES	Mapped from restriction.	MRMAP.RRF	0	0.00	varchar(4000)
FROMRULE	Rule for applying mapped from.	MRMAP.RRF	0	0.00	varchar(4000)

Abbreviation	Description	File	Length of Value in characters	Average Length of Value in characters	SQL92 Datatype
FROMSID	Source asserted identifier for mapped from	MRMAP.RRF	0	0.00	varchar(50)
FROMTYPE	The type of expression that a mapping is mapped from.	MRMAP.RRF MRSMAP.RRF	0 0	0.00 0.00	varchar(50) varchar(50)
HCD	Source asserted hierarchical number or code of context member (if it exists)	MRCXT.RRF MRHIER.RRF	0 - 43 0 - 43	0.01 0.02	varchar(50) varchar(50)
IMETA	Version of the Metathesaurus that a source was added	MRSAB.RRF	6	6.00	varchar(10)
ISPREF	Indicates whether AUI is preferred	MRCONSO.RRF	1	1.00	char(1)
LAT	Language of Term(s)	MRXW_BAQ.RRF MRXW_CZE.RRF MRXW_DAN.RRF MRXW_DUT.RRF MRXW_FIN.RRF MRXW_FRE.RRF MRXW_GER.RRF MRXW_HEB.RRF MRXW_HUN.RRF MRXW_ITA.RRF MRXW_JPN.RRF MRXW_NOR.RRF MRXW_POR.RRF MRXW_RUS.RRF MRXW_SWE.RRF MRSAB.RRF CHANGE/DELETE DSUI.RRF MRCONSO.RRF MRXNS_ENG.RRF MRXNW_ENG.RRF MRXW_ENG.RRF MRXW_SPA.RRF	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 - 3 3 3 3 3 3 3	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 2.88 3.00 3.00 3.00 3.00 3.00 3.00	char(3) char(3)
LUI	Unique identifier for term	CHANGE/MERGE DLUI.RRF MRXW_BAQ.RRF MRXW_CZE.RRF MRXW_DAN.RRF MRXW_DUT.RRF MRXW_FIN.RRF MRXW_FRE.RRF MRXW_GER.RRF MRXW_HEB.RRF MRXW_HUN.RRF MRXW_ITA.RRF MRXW_JPN.RRF MRXW_NOR.RRF	0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00	char(8) char(8) char(8) char(8) char(8) char(8) char(8) char(8) char(8) char(8) char(8) char(8) char(8) char(8)

Abbreviation	Description	File	Length of Value in characters	Average Length of Value in characters	SQL92 Datatype
		MRXW_POR.RRF MRXW_RUS.RRF MRXW_SWE.RRF MRSAT.RRF AMBIGLUI.RRF MRCONSO.RRF MRXNS_ENG.RRF MRXNW_ENG.RRF MRXW_ENG.RRF MRXW_SPA.RRF	0 0 0 - 8 8 8 8 8 8 8	0.00 0.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00	char(8) char(8) char(8) char(8) char(8) char(8) char(8) char(8) char(8)
MAPATN	Mapping attribute name (or future use).	MRMAP.RRF	0	0.00	varchar(20)
MAPATV	Mapping attribute value (for future use).	MRMAP.RRF	0	0.00	varchar(4000)
MAPID	Metathesaurus asserted identifier for mapping	MRMAP.RRF MRSMAP.RRF	0 0	0.00 0.00	varchar(50) varchar(50)
MAPIN	Mapping in current subset	MRCUI.RRF MRAUI.RRF	0 - 1 1	0.86 1.00	char(1) char(1)
MAPRANK	Ordering of mapping entries within a subset id	MRMAP.RRF	0	0.00	integer
MAPREASON	Reason for mapping	MRCUI.RRF MRAUI.RRF	0 4	0.00 4.00	varchar(4000) varchar(4000)
MAPRES	Human readable restriction on when to apply mapping	MRMAP.RRF	0	0.00	varchar(4000)
MAPRULE	Machine processable rule for when to apply mapping	MRMAP.RRF	0	0.00	varchar(4000)
MAPSETCUI	CUI of the map set	MRMAP.RRF MRSMAP.RRF	0 0	0.00 0.00	char(8) char(8)
MAPSETSAB	SAB of the map set	MRMAP.RRF MRSMAP.RRF	0 0	0.00 0.00	varchar(20) varchar(20)
MAPSID	Source asserted identifier for mapping	MRMAP.RRF MRSMAP.RRF	0 0	0.00 0.00	varchar(50) varchar(50)
MAPSUBSETID	Map sub set identifier	MRMAP.RRF	0	0.00	char(8)
MAPTYPE	Type of mapping	MRMAP.RRF	0	0.00	varchar(50)
MAX	Maximum Length	MRCOLS.RRF	0 - 4	0.01	integer
METAUI	Metathesaurus asserted unique identifier	MRSAT.RRF	0 - 8	8.00	varchar(50)
MIN	Minimum Length	MRCOLS.RRF	0 - 2	0.01	integer
NSTR	Normalized string	MRXNS_ENG.RRF	1 - 1558	32.21	varchar(3000)

Abbreviation	Description	File	Length of Value in characters	Average Length of Value in characters	SQL92 Datatype
NWD	Normalized word	MRXNW_ENG.RRF	1 - 80	6.41	varchar(100)
PAUI	Unique identifier for parent atom	MRHIER.RRF	0 - 8	8.00	char(8)
PCUI	Concept unique identifier in the previous Metathesaurus	CHANGE/DELETE DCUI.RRF CHANGE/MERGE DCUI.RRF	8 8	8.00 8.00	char(8) char(8)
PLUI	Lexical unique identifier in the previous Metathesaurus	CHANGE/MERGE DLUI.RRF CHANGE/DELETE DLUI.RRF	0 8	0.00 8.00	char(8) char(8)
PSTR	Preferred name in the previous Metathesaurus	CHANGE/DELETE DCUI.RRF CHANGE/DELETE DSUI.RRF CHANGE/DELETE DLUI.RRF	3 - 109 6 - 109 6 - 109	32.97 24.13 26.64	varchar(3000) varchar(3000) varchar(3000)
PSUI	String unique identifier in the previous Metathesaurus	CHANGE/DELETE DSUI.RRF	8	8.00	char(8)
PTR	Path to root	MRHIER.RRF	0 - 359	98.09	varchar(1000)
RANK	Termgroup ranking	MRCXT.RRF MRRANK.RRF	0 - 2 4	1.00 4.00	integer integer
RCUI	Unique identifier for root SRC concept	MRSAB.RRF	8	8.00	char(8)
REASON	Explanation of change, if present	MRHIST.RRF	0	0.00	varchar(1000)
REF	Documentation Section Number	MRCOLS.RRF	0	0.00	varchar(20)
REL	Relationship	MRAUI.RRF MRMAP.RRF MRSMAP.RRF MRCUI.RRF MRREL.RRF	0 0 0 2 - 3 2 - 3	0.00 0.00 0.00 2.14 2.44	varchar(4) varchar(4) varchar(4) varchar(4) varchar(4)
RELA	Relationship attribute	MRAUI.RRF MRCUI.RRF MRMAP.RRF MRSMAP.RRF MRCXT.RRF MRHIER.RRF MRREL.RRF	0 0 0 0 0 - 12 0 - 12 0 - 53	0.00 0.00 0.00 0.00 2.76 2.98 8.01	varchar(100) varchar(100) varchar(100) varchar(100) varchar(100) varchar(100) varchar(100)
RG	Relationship group	MRREL.RRF	0 - 1	0.09	varchar(10)
RMETA	Version of the Metathesaurus where a version is removed	MRSAB.RRF	0 - 6	1.71	varchar(10)
RSAB	Root source abbreviation	MRSAB.RRF	2 - 15	4.74	varchar(20)
RUI	Unique identifier for	MRREL.RRF	9	9.00	varchar(10)

Abbreviation	Description	File	Length of Value in characters	Average Length of Value in characters	SQL92 Datatype
	relationship				
RWS	Number of rows	MRFILES.RRF	0 - 9	0.04	integer
SAB	Source abbreviation	MRCOC.RRF MRHIST.RRF MRDEF.RRF MRRANK.RRF MRREL.RRF MRCONSO.RRF MRSAT.RRF MRCXT.RRF MRHIER.RRF	0 0 2 - 9 2 - 15 2 - 15 2 - 15 2 - 13 2 - 8 2 - 8	0.00 0.00 3.20 4.21 4.83 5.32 5.88 6.64 6.70	varchar(20) varchar(20) varchar(20) varchar(20) varchar(20) varchar(20) varchar(20) varchar(20) varchar(20)
SABIN	Source in current subset	MRSAB.RRF	1	1.00	char(1)
SATUI	Source asserted attribute identifier	MRDEF.RRF MRSAT.RRF	0 0 - 5	0.00 0.00	varchar(50) varchar(50)
SAUI	Source asserted atom identifier	MRCONSO.RRF	0 - 30	4.33	varchar(50)
SCC	Content contact info for a source	MRSAB.RRF	0 - 201	85.75	varchar(1000)
SCIT	Source citation	MRSAB.RRF	5 - 401	144.08	varchar(4000)
SCUI	Source asserted concept identifier	MRCONSO.RRF	0 - 30	6.03	varchar(50)
SDUI	Source asserted descriptor identifier	MRCONSO.RRF	0 - 13	1.86	varchar(50)
SF	Source Family	MRSAB.RRF	2 - 13	4.44	varchar(20)
SL	Source of relationship labels	MRREL.RRF	2 - 15	4.83	varchar(20)
SLC	License contact info for a source	MRSAB.RRF	0 - 295	123.17	varchar(1000)
SON	Source Official Name	MRSAB.RRF	10 - 109	41.31	varchar(3000)
SOURCEUI	Source asserted unique identifier	MRHIST.RRF	0	0.00	varchar(50)
SRL	Source Restriction Level	MRCONSO.RRF MRSAB.RRF	1 1	1.00 1.00	integer integer
SRUI	Source attributed relationship identifier	MRREL.RRF	0 - 10	0.92	varchar(50)
SSN	Source short name	MRSAB.RRF	4 - 76	25.31	varchar(3000)
STN	Semantic type tree number	MRSTY.RRF	1 - 14	8.27	varchar(100)
STR	String	MRCONSO.RRF	1 - 1657	35.95	varchar(3000)
STT	String type	MRCONSO.RRF	2 - 3	2.01	varchar(3)
STY	Semantic type	MRSTY.RRF	4 - 41	17.98	varchar(50)
STYPE	The name of the column in	MRSAT.RRF	3 - 4	3.00	varchar(50)

Abbreviation	Description	File	Length of Value in characters	Average Length of Value in characters	SQL92 Datatype
	MRCONSO.RRF or MRREL.RRF that contains the identifier to which the attribute is attached				
STYPE1	The name of the column in MRCONSO.RRF that contains the first identifier to which the relationship is attached	MRREL.RRF	3 - 4	3.03	varchar(50)
STYPE2	The name of the column in MRCONSO.RRF that contains the second identifier to which the relationship is attached	MRREL.RRF	3 - 4	3.03	varchar(50)
SUI	Unique identifier for string	MRXW_BAQ.RRF MRXW_CZE.RRF MRXW_DAN.RRF MRXW_DUT.RRF MRXW_FIN.RRF MRXW_FRE.RRF MRXW_GER.RRF MRXW_HEB.RRF MRXW_HUN.RRF MRXW_ITA.RRF MRXW_JPN.RRF MRXW_NOR.RRF MRXW_POR.RRF MRXW_RUS.RRF MRXW_SWE.RRF MRSAT.RRF AMBIGSUI.RRF MRCONSO.RRF MRCXT.RRF MRXNS_ENG.RRF MRXNW_ENG.RRF MRXW_ENG.RRF MRXW_SPA.RRF	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 - 8 8 8 8 8 8 8 8	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00	char(8) char(8)
SUPPRESS	Suppressible flag	MRCONSO.RRF MRDEF.RRF MRRANK.RRF MRREL.RRF MRSAT.RRF	1 1 1 1 1	1.00 1.00 1.00 1.00 1.00	char(1) char(1) char(1) char(1) char(1)
SVER	Release date or version number of a source	MRHIST.RRF MRSAB.RRF	0 0 - 15	0.00 5.22	varchar(20) varchar(20)
TFR	Term frequency for a source	MRSAB.RRF	0 - 7	3.83	integer
TOEXPR	The expression that a mapping is mapped to.	MRMAP.RRF MRSMAP.RRF	0 0	0.00 0.00	varchar(4000) varchar(4000)

Abbreviation	Description	File	Length of Value in characters	Average Length of Value in characters	SQL92 Datatype
TOID	Metathesaurus identifier for mapped to	MRMAP.RRF	0	0.00	varchar(50)
TORES	Mapped to restriction.	MRMAP.RRF	0	0.00	varchar(4000)
TORULE	Rule for applying mapped to.	MRMAP.RRF	0	0.00	varchar(4000)
TOSID	Source asserted identifier for mapped to	MRMAP.RRF	0	0.00	varchar(50)
TOTYPE	The type of expression that a mapping is mapped to.	MRMAP.RRF MRSMAP.RRF	0 0	0.00 0.00	varchar(50) varchar(50)
TS	Term status	MRCONSO.RRF	1	1.00	char(1)
TTY	Term type in source	MRCONSO.RRF MRRANK.RRF	2 - 8 2 - 8	2.65 2.68	varchar(20) varchar(20)
TTYL	Term type list for a source	MRSAB.RRF	0 - 112	15.43	varchar(200)
TUI	Unique identifier of Semantic type	MRSTY.RRF	4	4.00	char(4)
TYPE	Type of information	MRDOC.RRF	9 - 21	12.79	varchar(50)
VALUE	Value	MRDOC.RRF	0 - 53	14.53	varchar(1000)
VCUI	Unique identifier for versioned SRC concept	MRSAB.RRF	0 - 8	7.69	char(8)
VEND	Valid end date for a source	MRSAB.RRF	0	0.00	char(10)
VER	Last release version in which CUI1 was valid	MRAUI.RRF MRCUI.RRF	6 6	6.00 6.00	varchar(10) varchar(10)
VSAB	Versioned source abbreviation	MRSAB.RRF	3 - 20	10.18	varchar(20)
VSTART	Valid start date for a source	MRSAB.RRF	0	0.00	char(10)
WD	Word in lower-case	MRXW_BAQ.RRF MRXW_CZE.RRF MRXW_DAN.RRF MRXW_DUT.RRF MRXW_FIN.RRF MRXW_FRE.RRF MRXW_GER.RRF MRXW_HEB.RRF MRXW_HUN.RRF MRXW_ITA.RRF MRXW_JPN.RRF MRXW_NOR.RRF MRXW_POR.RRF MRXW_RUS.RRF MRXW_SWE.RRF MRXW_ENG.RRF MRXW_SPA.RRF	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 - 80 1 - 46	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 6.20 6.61	varchar(100) varchar(100) varchar(100) varchar(100) varchar(100) varchar(100) varchar(100) varchar(100) varchar(100) varchar(100) varchar(100) varchar(100) varchar(100) varchar(100) varchar(100) varchar(100) varchar(100)
XC	Has Child	MRCXT.RRF	0 - 1	0.03	varchar(1)

B.1.2 Columns and Data Elements in Original Release Format (ORF)

Abbreviation	Description	File	Length of Value in characters	Average Length of Value in characters	SQL92 Datatype
ATN	Attribute name	MRSAT	2 - 28	10.04	varchar(50)
ATNL	Attribute name list for a source	MRSAB	0 - 583	53.22	varchar(1000)
ATV	Attribute value	MRSAT	0 - 7903	8.69	varchar(8000)
ATX	Associated expression	MRATX	0	0.00	varchar(300)
AV	Average Length, Characters	MRCOLS	4 - 6	4.13	numeric(5,2)
BTS	Size in Bytes	MRFILES	1 - 11	4.32	integer
CENC	Character encoding of a source as specified by IANA	MRSAB	5 - 9	5.05	varchar(20)
CFR	CUI frequency for a source	MRSAB	0 - 6	3.71	integer
CLS	Number of columns	MRFILES	1 - 2	1.05	integer
COA	Attributes of co-occurrence	MRCOC	0	0.00	varchar(300)
CODE	Unique Identifier or code for string in source	MRSAT MRSO MRCXT	0 - 30 1 - 30 1 - 30	7.71 7.64 8.31	varchar(50) varchar(50) varchar(50)
COF	Frequency of co-occurrence	MRCOC	0	0.00	integer
COL	Column or data element name	MRCOLS	2 - 6	3.13	varchar(10)
COT	Type of co-occurrence	MRCOC	0	0.00	varchar(3)
CREL	Relationship to retired CUI (CUI1) to current CUI (CUI2)	MRCUI	2 - 3	2.14	varchar(4)
CUI	Unique identifier for concept	MRATX MRXW.BAQ MRXW.CZE MRXW.DAN MRXW.DUT MRXW.FIN MRXW.FRE MRXW.GER MRXW.HEB MRXW.HUN MRXW.ITA MRXW.JPN MRXW.NOR MRXW.POR MRXW.RUS MRXW.SWE AMBIG.LUI AMBIG.SUI	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 8 8	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 8.00 8.00	char(8) char(8) char(8) char(8) char(8) char(8) char(8) char(8) char(8) char(8) char(8) char(8) char(8) char(8) char(8) char(8) char(8) char(8)

Abbreviation	Description	File	Length of Value in characters	Average Length of Value in characters	SQL92 Datatype
		CHANGE/MER GED.CUI MRCON MRCXT MRDEF MRSAT MRSO MRSTY MRXNS.ENG MRXNW.ENG MRXW.ENG MRXW.SPA	8 8 8 8 8 8 8 8 8 8 8	8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00	char(8) char(8) char(8) char(8) char(8) char(8) char(8) char(8) char(8) char(8) char(8)
CUI1	Unique identifier of first concept	MRCOC MRCUI MRREL	0 8 8	0.00 8.00 8.00	char(8) char(8) char(8)
CUI2	Unique identifier of second concept	MRCOC MRCUI MRCXT MRREL	0 0 - 8 8 8	0.00 6.85 8.00 8.00	char(8) char(8) char(8) char(8)
CURVER	Current Version flag	MRSAB	1	1.00	char(1)
CXL	Context member label	MRCXT	3	3.00	char(3)
CXN	Context number	MRCXT	1 - 4	2.07	integer
CXS	String for context member	MRCXT	1 - 934	27.82	varchar(3000)
CXTY	Context type for a source (as per section 2.3.2)	MRSAB	0 - 31	5.49	varchar(50)
DEF	Definition	MRDEF	1 - 6599	224.15	varchar(8000)
DES	Descriptive Name	MRCOLS MRFILES	4 - 56 7 - 42	26.14 17.92	varchar(100) varchar(100)
DTY	SQL-92 data type for this column	MRCOLS	7 - 13	8.66	varchar(20)
FIL	Physical FILENAME	MRCOLS MRFILES	4 - 18 4 - 18	7.19 8.32	varchar(50) varchar(50)
FMT	Comma separated list of COL	MRFILES	7 - 112	20.98	varchar(150)
HCD	Hierarchical number or code of context member	MRCXT	0 - 43	0.01	varchar(50)
IMETA	Version of the Metathesaurus that a source was added	MRSAB	6	6.00	varchar(10)
LAT	Language of Term(s)	MRXW.BAQ MRXW.CZE MRXW.DAN MRXW.DUT MRXW.FIN MRXW.FRE MRXW.GER MRXW.HEB MRXW.HUN MRXW.ITA	0 0 0 0 0 0 0 0 0 0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00	char(3) char(3) char(3) char(3) char(3) char(3) char(3) char(3) char(3) char(3)

Abbreviation	Description	File	Length of Value in characters	Average Length of Value in characters	SQL92 Datatype
		MRXW.JPN	0	0.00	char(3)
		MRXW.NOR	0	0.00	char(3)
		MRXW.POR	0	0.00	char(3)
		MRXW.RUS	0	0.00	char(3)
		MRXW.SWE	0	0.00	char(3)
		MRSAB	0 - 3	2.88	char(3)
		CHANGE/DELE	3	3.00	char(3)
		TED.SUI	3	3.00	char(3)
		MRCON	3	3.00	char(3)
		MRXNS.ENG	3	3.00	char(3)
		MRXNW.ENG	3	3.00	char(3)
		MRXW.ENG	3	3.00	char(3)
		MRXW.SPA			
LRL	Least Restriction Level	MRCON	1	1.00	integer
LUI	Unique identifier for term	CHANGE/MER	0	0.00	char(8)
		GED.LUI	0	0.00	char(8)
		MRXW.BAQ	0	0.00	char(8)
		MRXW.CZE	0	0.00	char(8)
		MRXW.DAN	0	0.00	char(8)
		MRXW.DUT	0	0.00	char(8)
		MRXW.FIN	0	0.00	char(8)
		MRXW.FRE	0	0.00	char(8)
		MRXW.GER	0	0.00	char(8)
		MRXW.HEB	0	0.00	char(8)
		MRXW.HUN	0	0.00	char(8)
		MRXW.ITA	0	0.00	char(8)
		MRXW.JPN	0	0.00	char(8)
		MRXW.NOR	0	0.00	char(8)
		MRXW.POR	0	0.00	char(8)
		MRXW.RUS	0	0.00	char(8)
		MRXW.SWE	0 - 8	8.00	char(8)
		MRSAT	8	8.00	char(8)
		AMBIG.LUI	8	8.00	char(8)
		MRCON	8	8.00	char(8)
		MRSO	8	8.00	char(8)
		MRXNS.ENG	8	8.00	char(8)
		MRXNW.ENG	8	8.00	char(8)
		MRXW.ENG	8	8.00	char(8)
		MRXW.SPA			
MAPIN	Mapping in current subset	MRCUI	0 - 1	0.86	char(1)
MAX	Maximum Length	MRCOLS	1 - 4	1.29	integer
MEND	Metathesaurus end date for a source	MRSAB	0	0.00	char(8)
MG	Machine generated and unverified indicator	MRREL	0	0.00	varchar(1)
MIN	Minimum Length	MRCOLS	1 - 2	1.00	integer
MSTART	Metathesaurus start date for a source	MRSAB	0	0.00	char(10)

Abbreviation	Description	File	Length of Value in characters	Average Length of Value in characters	SQL92 Datatype
NSTR	Normalized string	MRXNS.ENG	1 - 1558	32.21	varchar(3000)
NWD	Normalized word	MRXNW.ENG	1 - 80	6.41	varchar(100)
PCUI	Concept unique identifier in the previous Metathesaurus	CHANGE/DELETED.CUI CHANGE/MERGED.CUI	8 8	8.00 8.00	char(8) char(8)
PLUI	Lexical unique identifier in the previous Metathesaurus	CHANGE/MERGED.LUI CHANGE/DELETED.LUI	0 8	0.00 8.00	char(8) char(8)
PSTR	Preferred name in the previous Metathesaurus	CHANGE/DELETED.CUI CHANGE/DELETED.SUI CHANGE/DELETED.LUI	3 - 109 6 - 109 6 - 109	32.97 24.13 26.64	varchar(3000) varchar(3000) varchar(3000)
PSUI	String unique identifier in the previous Metathesaurus	CHANGE/DELETED.SUI	8	8.00	char(8)
RANK	Termgroup ranking	MRRANK	4	4.00	integer
RCUI	Unique identifier for root SRC concept	MRSAB	8	8.00	char(8)
REF	Documentation Section Number	MRCOLS	0	0.00	varchar(20)
REL	Relationship	MRATX MRREL	0 2 - 3	0.00 2.48	varchar(3) varchar(3)
RELA	Relationship attribute	MRCXT MRREL	0 - 12 0 - 53	2.76 7.45	varchar(100) varchar(100)
RMETA	Version of the Metathesaurus where a version is removed	MRSAB	0 - 6	1.71	varchar(10)
RNK	Rank	MRCXT	0 - 2	1.00	integer
RSAB	Root source abbreviation	MRSAB	2 - 15	4.74	varchar(20)
RWS	Number of rows	MRFILES	1 - 9	3.42	integer
SAB	Source abbreviation	MRATX MRRANK MRREL MRSO MRDEF MRSAT MRCXT	0 3 - 20 3 - 20 3 - 20 5 - 18 5 - 20 5 - 19	0.00 10.68 13.32 15.44 12.16 16.90 17.09	varchar(20) varchar(20) varchar(20) varchar(20) varchar(20) varchar(20) varchar(20)
SABIN	Source in current subset	MRSAB	1	1.00	char(1)
SCC	Content contact info for a source	MRSAB	0 - 201	85.75	varchar(1000)
SF	Source Family	MRSAB	2 - 13	4.44	varchar(20)
SL	Source of relationship labels	MRREL	3 - 20	13.32	varchar(20)
SLC	License contact info for a source	MRSAB	0 - 295	123.17	varchar(1000)

Abbreviation	Description	File	Length of Value in characters	Average Length of Value in characters	SQL92 Datatype
SOC	Source of co-occurrence information	MRCOC	0	0.00	varchar(20)
SON	Source Official Name	MRSAB	10 - 109	41.31	varchar(3000)
SRL	Source Restriction Level	MRSAB MRSO	1 1	1.00 1.00	integer integer
STR	String	MRCON	1 - 1657	36.72	varchar(3000)
STT	String type	MRCON	2 - 3	2.01	varchar(3)
STY	Semantic type	MRSTY	4 - 41	17.98	varchar(50)
SUI	Unique identifier for string	MRXW.BAQ MRXW.CZE MRXW.DAN MRXW.DUT MRXW.FIN MRXW.FRE MRXW.GER MRXW.HEB MRXW.HUN MRXW.ITA MRXW.JPN MRXW.NOR MRXW.POR MRXW.RUS MRXW.SWE MRSAT AMBIG.SUI MRCON MRCXT MRSO MRXNS.ENG MRXNW.ENG MRXW.ENG MRXW.SPA	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 - 8 8 8 8 8 8 8 8 8	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00	char(8) char(8)
SUPRES	Suppressible flag	MRRANK	1	1.00	char(1)
SVER	Release date or version number of a source	MRSAB	0 - 15	5.22	varchar(20)
TFR	Term frequency for a source	MRSAB	0 - 7	3.83	integer
TS	Term status	MRCON	1	1.00	char(1)
TTY	Term type in source	MRSO MRRANK	2 - 8 2 - 8	2.65 2.68	varchar(20) varchar(20)
TTYL	Term type list for a source	MRSAB	0 - 112	15.43	varchar(200)
TUI	Unique identifier of Semantic type	MRSTY	4	4.00	char(4)
VCUI	Unique identifier for versioned SRC concept	MRSAB	0 - 8	7.69	char(8)
VER	Last release version in which CUI1 was valid	MRCUI	6	6.00	varchar(10)

Abbreviation	Description	File	Length of Value in characters	Average Length of Value in characters	SQL92 Datatype
VSAB	Versioned source abbreviation	MRSAB	3 - 20	10.18	varchar(20)
WD	Word in lower-case	MRXW.BAQ	0	0.00	varchar(100)
		MRXW.CZE	0	0.00	varchar(100)
		MRXW.DAN	0	0.00	varchar(100)
		MRXW.DUT	0	0.00	varchar(100)
		MRXW.FIN	0	0.00	varchar(100)
		MRXW.FRE	0	0.00	varchar(100)
		MRXW.GER	0	0.00	varchar(100)
		MRXW.HEB	0	0.00	varchar(100)
		MRXW.HUN	0	0.00	varchar(100)
		MRXW.ITA	0	0.00	varchar(100)
		MRXW.JPN	0	0.00	varchar(100)
		MRXW.NOR	0	0.00	varchar(100)
		MRXW.POR	0	0.00	varchar(100)
		MRXW.RUS	0	0.00	varchar(100)
		MRXW.SWE	0	0.00	varchar(100)
		MRXW.ENG	1 - 80	6.20	varchar(100)
		MRXW.SPA	1 - 46	6.61	varchar(100)
XC	Has Child	MRCXT	0 - 1	0.03	varchar(1)

B2 Attribute Names

ATN (Attribute Name)	
AA_GI	Amino acid GI number
AA_REFSEQ	Amino acid RefSeq accession number
ACCESSION_NO	Accession number
AMT	AOT uses MeSH term
AN	MeSH Annotation - an informative MeSH note written primarily for indexers or catalogers that may also be useful in explaining the use of a MeSH term to online searchers.
AQL	MeSH Allowable Qualifier - list of allowable qualifier abbreviations for MeSH main headings (e.g. AA, CL, CS, DF, DU, IM, I,P ME, PK)
AQ	SNOMED CT "allowable qualifier" attribute for representing certain relationships (those having a characteristic type of "Qualifier" and a refinability of "Mandatory") which indicate one of several allowable types of qualifiers, such as laterality or severity, that a concept may have
Axis	Terminology axis
BioCarta_ID	BioCarta ID
CAS_Registry	CAS Registry
CCI	ICD-9-CM code(s) clusters in a Clinical Classifications Software (CCS) category - individual ICD-9-CM codes (or ranges of such codes)

	classified into CCS categories.
CDNA_GI	CDNA GI
CDNA_REFSEQ	CDNA RefSeq accession number
CDS_EXON_END	CDS Exon End Position
CDS_EXON_SRT	CDS Exon Start Position
CFR	Code of Federal Regulation Number (e.g. 862.3220, 892.1610)
CHRM_BND_ORD	Chromosome band order
CHROMOSOME	Chromosome
CLASS_ROLE	MO_388: Used to identify the type of class of the term. The value "abstract" indicates that the class is used for organizational purposes. The value "instantiated" indicates that the class contains Individuals that can be used as annotation terms. The value "abstract" indicates that the class is used to provide organization within the MGED Ontology. The value "place_holder" indicates that this class represents the location in the ontology where terms of this class would be located. Allowed values: concrete; placeholder; abstract
CLASS_SOURCE	MO_343: Indicates the derivation of the class. A value of "mage" means that the class is derived from the MAGE-OM and the value "ontology" indicates that the class is derived from the ontology. This property is being added since the MGED Ontology was developed in such a way to include classes that exist in the MAGE-OM as well as classes that exist only in the MGED Ontology. Allowed values: mage; ontology
CONCEPTSTATUS	SNOMED CT status which indicates whether a concept is in active use and, if not, indicates the reason it is inactive.
CRIT_INTERACT_WITH	Critical interaction with
CTV3ID	The Read Code for a SNOMED CT concept taken from the United Kingdom?s Clinical Terms Version 3 terminology.
CV_ALGORITHM	Content view algorithm
CV_CATEGORY	Content view category
CV_CLASS	Content view class
CV_CODE	Content view code
CV_CONTRIBUTOR_DATE	Date corresponding to the contributor version of this concept view
CV_CONTRIBUTOR_URL	URL corresponding to the contributor version of this concept view
CV_CONTRIBUTOR_VERSION	Version of this content view submitted by the contributor
CV_CONTRIBUTOR	Content view contributor
CV_DESCRIPTION	Content view description
CV_IS_GENERATED	Content view generated: Y/N
CV_MAINTAINER_DATE	Date corresponding to the maintainer version of this concept view
CV_MAINTAINER_URL	URL corresponding to the maintainer version of this concept view

CV_MAINTAINER_VERSION	Version of this content view submitted by the maintainer
CV_MAINTAINER	Content view maintainer
CV_PREVIOUS_META	Previous meta version used to generate content view
CV_SUBCLASS	Content view subcategory
CX	MeSH Consider Also Note - other word roots or prefixes that should be consulted for concepts related to this MeSH concept, e.g., the value for "Heart" is "consider also terms at cardi- and myocardi-".
Chemical_Formula	Chemical Formula
Contributing_Source	Contributing Source
DATE_CREATED	Date created
DATE_FIRST_PUBLISHED	Date first published
DATE_LAST_MODIFIED	Date last modified
DATE_NAME_CHANGED	Date name changed
DA	Metathesaurus Date of entry - YYYYMMDD, e.g., 19920830 - date of entry of the concept into the Metathesaurus.
DB_XR	Database cross-reference
DCSA	Controlled Substance Act designation code (e.g. 4)
DC	MeSH Descriptor class - type of MeSH term the concept name represents.
DDF	Drug Doseform (e.g. chewable tablet)
DEPRECATION_IN_VERSION	MO_1014: Indicates what version of the ontology the term was deprecated from. Allowed values: 1.1.7; 1.2.0; 1.1.8; 1.3.0; 1.1.9
DEPRECATION_OLD_PARENT	Indicates the old parent
DEPRECATION_OLD_RESTRICTION	MO_1015: Indicates the restriction that was applied to the class at the time it was deprecated. The value is in the form of: some property filler, e.g. some has_species Organism.
DEPRECATION_REASON	Reason for deprecating a term
DEPRECATION_REPLACEMENT_TERM	Replacement for deprecated term
DESCRIPTIONSTATUS	SNOMED CT description status which indicates whether a description (concept name) is in active use and, if not, the reason it is inactive.
DESCRIPTIONTYPE	SNOMED CT term type, indicating whether the term is the Preferred Term, Synonym or the Fully Specified Name for the associated concept.
DEVTYPE	Device Type
DID	Descriptor Identifier
DIV	NCBI Division/Phyla (e.g. DIV[NCBI]Viruses)
DM_SPL_ID	DailyMed internal identifier for MTHSPL atom
DQ	MeSH Date Qualifier Established YYYYMMDD - date the qualifier

	became available for indexing MEDLARS citations.
DRT	Drug Route of Administration (e.g. Injection (systemic))
DRUG_CLASS_TYPE	VA Drug class type - 0=Major drug class, 1=Minor Drug Class, 2=Sub class
DST	Drug Strength (e.g. 0.01%, 0.02 MG, 0.02 MG/ML)
DX	MeSH Date major descriptor established YYYYMMDD - first day of the Index Medicus publication month in which the descriptor (in any form) was available for searching as a major descriptor.
Design_Note	Design note
EC	MeSH Entry combination - an invalid MeSH main heading/subheading combination that is a cross reference to a single MeSH main heading or a main heading/subheading combination that should be used in its place.
ENTREZGENE_ID	EntrezGene ID
EXCLUDE_DI_CHECK	Exclude drug interaction check
EZ	Enzyme Commission Number - International Union of Biochemists Enzyme Commission number for an enzyme concept.
EntrezGene_ID	EntrezGene ID
Essential_Amino_Acid	Essential Amino Acid
Essential_Fatty_Acid	Essential Fatty Acid
FDASRS	FDA Structured Product Label UNII Code for Active Substance
FDA_Table	FDA Table
FDA_UNII_Code	FDA UNII Code
FROMRSAB	Root source abbreviation for the "from" identifiers of a map set
FROMVSAB	Versioned source abbreviation for the "from" identifiers of a map set
FR	MeSH Frequency
FX	MeSH MH Mapping - maps a MeSH MH to a 'See Related' MH.
GENELOCUS	Gene Locus
GENESYMBOL	Gene Symbol
GENE_FAM	Gene family name
GEN_EXON_END	Genomic CDS Exon End
GEN_EXON_SRT	Genomic CDS Exon Start
GEN_GI	Genomic RefSeq GI number
GEN_INTR_END	Genomic CDS Intron Endn
GEN_INTR_SRT	Genomic CDS Intron Start
GEN_REFSEQ	Genomic RefSeq accession number
GO_Annotation	GO Annotation
GO_COMMENT	GO Comment field data
GO_NAMESPACE	Go Namespace field data
GO_SUBSET	Go Subset field data

GROUPURL	URL for corresponding health topic groups on MedlinePlus
GXR	GO Cross Reference to external databases (e.g. MetaCyc:TRNA-CHARGING-PWY)
GenBank_Accession_Number	GenBank Accession Number
Gene_Encodes_Product	Gene Encodes Product
HAB	HCPCS abbreviation (short form)
HAC	HCPCS action code - code denoting the change made to a procedure or modifier code within the HCPCS system.
HAD	HCPCS Action Effective Date - effective date of action to a procedure or modifier code.
HAQ	HCPCS Anesthesia Base Unit Quantity - base unit represents the level of intensity for anesthesia procedure services that reflects all activities except time.
HAS_ACCESSION_VERSION	MO_339: indicates that the class has an accession number version
HAS_ACCESSION	MO_231: indicates that the class has an accession number
HAS_ADDRESS	MO_277: indicates that the class has an address
HAS_AUTHORS	MO_318: indicates that the class has authors
HAS_DESCRIPTION	MO_334: indicates that the class has a description
HAS_EDITOR	MO_256: indicates that the class has an editor
HAS_EMAIL	MO_293: indicates that the class has an email address
HAS_FAX	MO_289: indicates that the class has a fax
HAS_FIRST_NAME	MO_258: indicates that the class has a first name
HAS_HUMAN_READABLE_URI	MO_330: indicates that the contents found at this uri are human readable
HAS_ID	MO_323: indicates that the class has an identifier
HAS_ISSUE	MO_294: indicates that the class has an issue. Domain: BibliographicReference
HAS_LAST_NAME	MO_255: indicates that the class has a last name
HAS_MACHINE_READABLE_URI	MO_336: indicates that the contents found at this uri are machine readable (i.e. in a standard format)
HAS_MAKE	MO_271: indicates that the class has a make. Domain: Hardware
HAS_MID_INITIALS	MO_237: indicates that the class has middle initials
HAS_MODEL	MO_270: indicates that the class has a model. Domain: Hardware
HAS_NAME	MO_296: indicates that the class has a name
HAS_ORDER	MO_335: indicates that the class has an order
HAS_PAGES	MO_246: indicates that the class has pages. Domain: BibliographicReference
HAS_PHONE	MO_235: indicates that the class has a phone
HAS_PUBLICATION	MO_251: indicates that the class has a publication

HAS_PUBLISHER	MO_295: indicates that the class has a publisher
HAS_TEXT	MO_298: indicates that the class has text
HAS_TITLE	MO_337: indicates that the class has a title
HAS_TOLL_FREE_PHONE	MO_329: indicates that the class has a toll free phone
HAS_VALUE	MO_326: indicates that the class has a value
HAS_VERSION	MO_239: indicates that the class has a version
HAS_VOLUME	MO_308: indicates that the class has a volume. Domain: BibliographicReference
HAS_YEAR	MO_322: indicates that the class has a year
HAT	HL7 "appliesTo" concept code property
HBT	HCPCS Berenson-Eggers Type of Service Code - BETOS for the procedure code based on generally agreed upon clinically meaningful groupings of procedures and services.
HCC	HCPCS Coverage Code - code denoting Medicare coverage status. There are two subelements separated by "=".
HCDI	HL7 Code Instance: Number to disambiguate case differences (Default 0)
HCD	HCPCS Code Added Date - year the HCPCS code was added to the HCFA Common Procedure Coding System.
HCS	HL7 Concept Status: Status of concept code (P - proposed, A - active, R - retired)
HDS	HL7 Designation Sequence: Designation id within concept
HHA	HL7 "howApplies" concept code property
HID	HL7 internal Id: Internal identifier of codeSystemId/conceptCode. More than one conceptCode/codeInstance may map to the same internalId
HIR	HCPCS Coverage Issues Manual Reference Section Number - number identifying the Reference Section of the Coverage Issues Manual.
HL7_FIELD_SUBFIELD	HL7 Field/Subfield ID
HLC	HCPCS Lab Certification Code - code used to classify laboratory procedures according to the specialty certification categories listed by CMS(formerly HCFA).
HLIR	HL7 "inverseRelationship" concept code property
HMP	HCPCS Multiple Pricing Indicator Code - code used to identify instances where a procedure could be priced.
HMR	HCPCS Medicare Carriers Manual reference section number - number identifying a section of the Medicare Carriers Manual
HM	MeSH Heading Mapped To - heading mapped to attribute in C-MeSH containing repeating (MH or MH/SH) elements (e.g. HM = PYRROLIDINONES, HM = *TARTRATES, HM = ESTRONE/* analogs & derivatives)
HN	History Note - for MeSH history notes, the year when the current form

	of the MeSH term was established as a major and/or minor descriptor.
HOD	HL7 OID
HOI	HL7 "openIssue" concept code property
HPD	HCPCS ACD payment group effective date - date the procedure is assigned to the ASC payment group.
HPG	HCPCS ASC payment group code which represents the dollar amount of the facility charge payable by Medicare for the procedure.
HPI	HCPCS Pricing Indicator Code - used to identify the appropriate methodology for developing unique pricing amounts under Part B.
HPL	HL7 Preferred for Language: Yes means that this designation is the primary designation for the given language
HPN	HCPCS processing note number identifying the processing note contained in Appendix A of the HCPCS Manual.
HSN	HCPCS Statute Number identifying statute reference for coverage or noncoverage of procedure or service.
HTD	HCPCS Termination Date - last date for which a procedure or code may be used by Medicare Providers.
HTS	HCPCS Type of Service Code - carrier assigned HCFA Type of Service which describes the particular kind(s) of service represented by the procedure code.
HXR	HCPCS Cross reference code - an explicit reference crosswalking a deleted code or a code that is not valid for Medicare to a valid current code (or range of codes).
Homologous_Gene	Homologous Gene
ICA	ICD Additional Codes Note - an ICD-9-CM instruction to signal the coder that an additional code should be used if the information is available to provide a more complete picture of that diagnoses or procedure.
ICC	ICD Codes Also Note - an ICD-9-CM instruction to signal the coder to code additional information.
ICD-O-3_Code	ICD-O-3_Code
ICE	ICD Entry Term (e.g. Diarrhea:{dysenteric; epidemic}; Infectious diarrheal disease)
ICF	ICD Fifth-digit Code Note - instruction to coders indicating use of a fifth-digit code.
ICN	ICD Note - instruction providing additional coding information.
ICS	ICD Short Form - 25-character version of the code.
IDNR	Original ID number for source file
II	MeSH Indexing Information - for MeSH chemical terms (Term Type=NM), MeSH headings that may be relevant to articles that are also assigned the NM term.
INCLUDED_MESH_UIS	Used for MoA concepts where multiple MeSH descriptors were merged

	into one NDF-RT concept
INFOODS	INFOODS
INITIALCAPITALSTATUS	SNOMED CT capital status, indicating whether the capitalization of the first character of the SNOMED CT term is significant.
INTERVENTION_DESCRIPTION	Intervention description
INTERVENTION_SEQUENCE	Intervention sequence number
INTERVENTION_TEXT	Intervention text
IPX	ICD10 code related to an ICPC code - a + indicates that the ICD10 code is broader than the ICPC code; a - indicates that the ICD10 code is narrower than the ICPC code.
ISPRIMITIVE	SNOMED CT indicator of whether concept is primitive or fully defined by its defining characteristics.
IS_SOLVENT	MO_332: indicates that the class is a solvent
Initial_Release	Initial release date
KEGG_ID	KEGG ID
LAC	ASTM Code - E1238-94 code for a test in a LOINC name.
LAL	LOINC Answerlist - list of answers for results that are reportable from a multiple choice list, e.g., the answers for the term DISPOSITION OF BLOOD PACK are GIVEN;PARTIALLY GIVEN;DISCARDED.
LANGUAGECODE	SNOMED CT string identifying a language and, if appropriate, a dialect in which this description is valid.
LAST_REVIEWED	Last reviewed
LCA	LOINC ACSSYM field - LOINC chemical name synonyms, alternative names and chemical formulae from the Chemical Abstract Society.
LCB	LOINC Chemical base name from the Chemical Abstract Society.
LCC	LOINC CDC Code - code from the Centers for Disease Control Complexity file that maps a laboratory test to the instruments used to perform the test. The code is at the analyte level, not at the test instrument level.
LCD	LOINC CDISC common tests
LCI	LOINC Molecular structure ID, usually a Chemical Abstract Society number.
LCL	LOINC Class - arbitrary classification of terms in LOINC designed to assist LOINC development and to group related observations together (e.g. ABXBACT = Antibiotic susceptibility)
LCN	LOINC Classtype - 1 = Laboratory class; 2 = Clinical class
LCR	LOINC Reason for Change - a brief explanation of the change made to a LOINC term.
LCS	LOINC Depreciated or superseded status - an indicator that a LOINC term is no longer to be used. The term that should now be used will

	appear in the LMP element.
LCT	LOINC Change Type Code - type of change made to a LOINC term.
LDE	LOINC DEEDS_CD - Data Elements for Emergency Department Systems Codes (CDC). This field contains the DEEDS code value which maps to the LOINC code in question.
LEA	LOINC Example Answers - for some tests and measurements, LOINC has supplied examples of valid answers. These values differ from those in the ANSWERLIST field because that details possible values for nominal scale terms.
LEC	LOINC Analyte Code - EUCLIDES code for the analyte which is the first subpart of the first part of a LOINC name.
LEVEL	Specifies the type of drug concepts.
LFO	LOINC Formula - regression equation details for many OB.US calculated terms.
LFR	French name for LOINC Term - supplied by Centre Suisse de Controle de Qualite; contains extended characters and will not transfer correctly to 7-bit systems.
LGC	GPI Code, GPI Code Total - for drugs, this field contains a map to the Medispan GPI codes, a hierarchical system of classifying pharmaceutical products. For a few products, a simple one-to-one mapping with a GIP code was not possible. In these cases, all applicable GPI codes are contained in this field, separated by semicolons.
LGR	German Name for LOINC Term - supplied by Centre Suisse de Controle de Qualite; contains extended characters and will not transfer correctly to 7-bit systems.
LIC	IUPAC Code code for the component, kind of property, and system in a LOINC name. Note that most IUPAC codes assume that the component is measured in substance concentration, e.g., moles. The IUPAC code for substance concentration is applied to mass concentration in LOINC, because IUPAC has no code for the mass concentration variant, which is more commonly used in the U.S.
LIR	Italian Name for LOINC Term - supplied by Centre Suisse de Controle de Qualite; contains extended characters and will not transfer correctly to 7-bit systems.
LIU	IUPAC Analyte code - contains the chemical abstract service number or the enzyme nomenclature number for the chemical components for chemicals and/or enzymes. These were also contributed by IUPAC.
LLR	LOINC Date Last Changed YYYYMMDD - date the LOINC term was last changed.
LMC	LOINC Metpath Code representing the LOINC name at MetPath laboratories.
LMM	Molecular weights - contains the molecular weights of many chemical moieties when they are provided.

LMP	LOINC Map to Code of the term that has superseded a term with a LCS value of DEL.
LMT	LOINC MULTUM_CD - maps to Multum Inc. database of codes for drugs.
LNC	LOINC NAACCR_ID - LOINC terms mapped to North American Association of Central Cancer Registries Identification
LNE	LOINC CODE_TABLE
LOCUS_TYPE	Locus Type
LOINC_COMPONENT	LOINC component
LOINC_METHOD_TYP	LOINC method type
LOINC_PROPERTY	LOINC property
LOINC_SCALE_TYP	LOINC scale type
LOINC_SYSTEM	LOINC system
LOINC_TIME_ASPECT	LOINC time aspect
LOR	LOINC ORDER_OBS field. Defines term as order only, observation only, or both. Values are: BOTH OBSERVATION ORDER. A fourth category, Subset, is used for terms that are subsets of a panel but do not represent a package that is known to be orderable.
LPL	LOINC Panel Elements
LQS	Survey Question Source
LQT	Survey Question Text
LRF	Reference - contains references to medical literature, product announcements, or other written sources of information on the test or measurement described by the LOINC record.
LRN2	Related names 2
LRN	LOINC related name - Previously was released as a RN string from LOINC; converted from a term type in 2002AD (e.g. AMIKIN)
LSC	Code for a SNOMED International laboratory procedure name that is related to (usually broader than) the LOINC term.
LSN	Spanish name for LOINC term - supplied by Centre Suisse de Controle de Qualite; contains extended characters and will not transfer correctly to 7-bit systems.
LSP	LOINC Species code
LSR	Root of a set of LOINC codes - currently used for claims attachments. Yes in this field signifies that this record is the root of a set of LOINC codes.
LSU	SUBMITED_UNITS
LT	Indicates if a chemicals or medical device is a tradename (present in older versions of the Metathesaurus and was discontinued, then brought back starting in 2002AD)
LUN	LOINC Typical Units - typical units in which the observation is recorded.

LUR	Units required when used as OBX segment - a Y/N field that indicates that units are required when this LOINC is included as an OBX segment in a HIPAA attachment
Locus_ID	Locus ID
MAPPED_ENTREZGENE_ID	Entrez gene ID (mapped data)
MAPPED_GDB_ID	GDB ID (mapped data)
MAPPED_REFSEQ_ID	RefSeq (mapped data)
MAPSETID	Identifier for a map set
MAPSETNAME	Official name of a map set
MAPSETRSAB	Root source abbreviation for a map set
MAPSETTYPE	Indicates the nature of a map set. Its value is map set specific. It can be used to indicate the inclusion of one to one, one to many and choices of maps.
MAPSETVERSION	Version of the map set
MAPSETVSAB	Versioned source abbreviation for a map set
MDA	MeSH date of entry YYYYMMDD - date the term was added to the MeSH file, which is prior to the date the term became available for indexing and searching MEDLARS citations. Terms that have been part of MeSH for many years may have no value in this element.
MED1901	Medline citation counts from articles dated 1901.
MED1902	Medline citation counts from articles dated 1902.
MED1903	Medline citation counts from articles dated 1903.
MED1904	Medline citation counts from articles dated 1904.
MED1905	Medline citation counts from articles dated 1905.
MED1906	Medline citation counts from articles dated 1906.
MED1907	Medline citation counts from articles dated 1907.
MED1908	Medline citation counts from articles dated 1908.
MED1909	Medline citation counts from articles dated 1909.
MED1910	Medline citation counts from articles dated 1910.
MED1911	Medline citation counts from articles dated 1911.
MED1912	Medline citation counts from articles dated 1912.
MED1913	Medline citation counts from articles dated 1913.
MED1914	Medline citation counts from articles dated 1914.
MED1915	Medline citation counts from articles dated 1915.
MED1916	Medline citation counts from articles dated 1916.
MED1917	Medline citation counts from articles dated 1917.
MED1918	Medline citation counts from articles dated 1918.
MED1919	Medline citation counts from articles dated 1919.
MED1920	Medline citation counts from articles dated 1920.

MED1921	Medline citation counts from articles dated 1921.
MED1922	Medline citation counts from articles dated 1922.
MED1923	Medline citation counts from articles dated 1923.
MED1924	Medline citation counts from articles dated 1924.
MED1925	Medline citation counts from articles dated 1925.
MED1926	Medline citation counts from articles dated 1926.
MED1927	Medline citation counts from articles dated 1927.
MED1928	Medline citation counts from articles dated 1928.
MED1929	Medline citation counts from articles dated 1929.
MED1930	Medline citation counts from articles dated 1930.
MED1931	Medline citation counts from articles dated 1931.
MED1932	Medline citation counts from articles dated 1932.
MED1933	Medline citation counts from articles dated 1933.
MED1934	Medline citation counts from articles dated 1934.
MED1935	Medline citation counts from articles dated 1935.
MED1936	Medline citation counts from articles dated 1936.
MED1937	Medline citation counts from articles dated 1937.
MED1938	Medline citation counts from articles dated 1938.
MED1939	Medline citation counts from articles dated 1939.
MED1940	Medline citation counts from articles dated 1940.
MED1941	Medline citation counts from articles dated 1941.
MED1942	Medline citation counts from articles dated 1942.
MED1943	Medline citation counts from articles dated 1943.
MED1944	Medline citation counts from articles dated 1944.
MED1945	Medline citation counts from articles dated 1945.
MED1946	Medline citation counts from articles dated 1946.
MED1947	Medline citation counts from articles dated 1947.
MED1948	Medline citation counts from articles dated 1948.
MED1949	Medline citation counts from articles dated 1949.
MED1950	Medline citation counts from articles dated 1950.
MED1951	Medline citation counts from articles dated 1951.
MED1952	Medline citation counts from articles dated 1952.
MED1953	Medline citation counts from articles dated 1953.
MED1954	Medline citation counts from articles dated 1954.
MED1955	Medline citation counts from articles dated 1955.
MED1956	Medline citation counts from articles dated 1956.
MED1957	Medline citation counts from articles dated 1957.
MED1958	Medline citation counts from articles dated 1958.

MED1959	Medline citation counts from articles dated 1959.
MED1960	Medline citation counts from articles dated 1960.
MED1961	Medline citation counts from articles dated 1961.
MED1962	Medline citation counts from articles dated 1962.
MED1963	Medline citation counts from articles dated 1963.
MED1964	Medline citation counts from articles dated 1964.
MED1965	Medline citation counts from articles dated 1965.
MED1966	Medline citation counts from articles dated 1966.
MED1967	Medline citation counts from articles dated 1967.
MED1968	Medline citation counts from articles dated 1968.
MED1969	Medline citation counts from articles dated 1969.
MED1970	Medline citation counts from articles dated 1970.
MED1971	Medline citation counts from articles dated 1971.
MED1972	Medline citation counts from articles dated 1972.
MED1973	Medline citation counts from articles dated 1973.
MED1974	Medline citation counts from articles dated 1974.
MED1975	Medline citation counts from articles dated 1975.
MED1976	Medline citation counts from articles dated 1976.
MED1977	Medline citation counts from articles dated 1977.
MED1978	Medline citation counts from articles dated 1978.
MED1979	Medline citation counts from articles dated 1979.
MED1980	Medline citation counts from articles dated 1980.
MED1981	Medline citation counts from articles dated 1981.
MED1982	Medline citation counts from articles dated 1982.
MED1983	Medline citation counts from articles dated 1983.
MED1984	Medline citation counts from articles dated 1984.
MED1985	Medline citation counts from articles dated 1985.
MED1986	Medline citation counts from articles dated 1986.
MED1987	Medline citation counts from articles dated 1987.
MED1988	Medline citation counts from articles dated 1988.
MED1989	Medline citation counts from articles dated 1989.
MED1990	Medline citation counts from articles dated 1990.
MED1991	Medline citation counts from articles dated 1991.
MED1992	Medline citation counts from articles dated 1992.
MED1993	Medline citation counts from articles dated 1993.
MED1994	Medline citation counts from articles dated 1994.
MED1995	Medline citation counts from articles dated 1995.
MED1996	Medline citation counts from articles dated 1996.

MED1997	Medline citation counts from articles dated 1997.
MED1998	Medline citation counts from articles dated 1998.
MED1999	Medline citation counts from articles dated 1999.
MED2000	Medline citation counts from articles dated 2000.
MED2001	Medline citation counts from articles dated 2001.
MED2002	Medline citation counts from articles dated 2002.
MED2003	Medline citation counts from articles dated 2003.
MED2004	Medline citation counts from articles dated 2004.
MED2005	Medline citation counts from articles dated 2005.
MED2006	Medline citation counts from articles dated 2006.
MED2007	Medline citation counts from articles dated 2007.
MESH_UI	MeSH UI
MGD_ID	MGD ID
MGI_Accession_ID	MGI_Accession_ID
MIMTYPEMEANING	OMIM MimType Meaning
MIMTYPEVALUE	OMIM MimType Value
MIMTYPE	OMIM Entry Type
MISO	MedDRA Serial Code International SOC Sort Order Digit (01-26)
MMR	MeSH revision date YYYYMMDD - date of the last major revision to the term's MeSH record.
MN	MeSH hierarchical number for the concept in the MeSH tree structures. This number also appears in the HCD subelement of the REL and CXT elements.
MOVED_FROM	Moved From
MPS	MedDRA primary SOC (PTs may have multiple treepositions, but each has a primary soc)
MR	Major revision date YYYYMMDD - date the Metathesaurus entry for the concept underwent any revision in content.
MSA	MedDRA abbreviation
MSC	Minimal Standard (Terminology) Class
MSP	SPN Medical Specialty Panel (responsible for reviewing the product).
MTH_MAPFROMCOMPLEXITY	Indicates the complexity of "from" expressions used in a map set
MTH_MAPFROMEXHAUSTIVE	Indicates whether or not the "from" source of a map set is completely mapped
MTH_MAPSETCOMPLEXITY	Indicates the overall complexity of a map set
MTH_MAPTOCOMPLEXITY	Indicates the complexity of "to" expressions in a map set
MTH_MAPTOEXHAUSTIV	Indicates whether or not the "to" source is completely mapped

E	
MXR	MedDRA cross reference to WHOART, COSTART, or ICD-9-CM
Macronutrient	Macronutrient
Micronutrient	Micronutrient
Mitelman_Code	Mitelman Code
NCBI_Taxon_ID	NCBI_Taxon_ID
NC_Name	NC Name
NDC	National Drug Code corresponding to a clinical drug (e.g. 66109-ABD-00)
NDF_GCN_SEQ_NUMBER	NDF Generic Code Number (GCN) Sequence Number
NDF_STRENGTH	NDF strength
NDF_TRANSMIT_TO_CMOP	NDF Transmit to Consolidated Mail Outpatient Pharmacy (CMOP)
NDF_UNITS	NDF units
NFI	National formulary indicator - "YES" or "NO" indicating whether a drug is in the VA's National Formulary
NF_INACTIVATE	National Formulary Inactivation Date - the date a drug was removed from the VA's National Formulary
NF_NAME	National Formulary Name
NH	NonHuman Flag - single character: Y. An indication that the concept does not apply to human beings, used only when the concept's Semantic type(s) could imply the contrary. For example, the concept BEAK and CLAW are assigned the Semantic type" Body Part, Organ, or Organ Component", but do not apply to human beings.
NSC_Code	NSC Code
NST	Normalized strength and units for drugs with one active ingredient (e.g. 769 MG)
Nutrient	Nutrient
OL	MeSH Online Note - information helpful to online searchers of MEDLINE, especially when the history of a term or cross-reference has implications for online searching. This is a potential source of useful information for rules for search interface programs.
OMIM_ALLELE	OMIM Allele ID
OMIM_ID	OMIM ID
OMIM_Number	OMIM Number
ORIG_CODE	Original code associated with this string
ORIG_SOURCE	Original source associated with this string
ORIG_STY	Original semantic type
ORIG_TTY	Original term type
ORIG_VSAB	Original versioned source abbreviation
OUTCOME_EXAMPLES	Outcome examples

OUTCOME_INDICATORS	Outcome indicators
OUTCOME_STATEMENT	Outcome statement
PARENT_CLASS	VA Internal entry number of the parent class
PA	Pharmacologic Action of MeSH main headings (MH) for drugs and supplementary concept names (NM). The information in this element is also represented by an "isa" relationship between the MH or NM concept and the MeSH concept name for the class of drugs with a particular pharmacologic action.
PDC	SPN Product Device Class (level of CDRH regulation: class 1, 2, or 3).
PDQ_Closed_Trial_Search_ID	PDQ Closed Trial Search ID
PDQ_Open_Trial_Search_ID	PDQ Open Trial Search ID
PID	Legacy PDQ ID
PI	MeSH heading or heading/subheading combination(s) followed by a date range in parentheses (YYYY).
PMID	Pubmed ID
PM	Public MeSH note - combines key information from the HN and PI elements in a format that is printed in the MeSH publications.
PRC	Product Third Party Review Code from SPN.
PREV_NAME	Previous name
PREV_SYMBOL	Previous symbol
PRN	VA print/label name
PTR	SPN Product Tier (level of CDRH triage: 1, 2, 3, or E{xempt}).
PXC	PDQ Protocol Exclusion Criteria - terms with type "exclusion criteria," which may be indexed on protocol records to identify conditions that exclude a patient from eligibility.
Preferred_Name	Preferred name.
PubMedID_Primary_Reference	PubMedID Primary Reference
QA	MeSH Topical Qualifier Abbreviation - for MeSH subheadings (Term Type=TQ), an abbreviation that may be used in place of the full text of the abbreviation in searching on NLM's system and possibly on other systems offering NLM data.
RANK	NCBI Rank (e.g. RANK[NCBI]species)
REFSEQ_ID	RefSeq ID
REF	References or citations related to a given atom or concept.
REPLACED_WITH_TERM	MO_1018: indicates the replacement term
RN	Registry Number - series of numbers and hyphens (any leading zeros in an RN are dropped) or a series of numbers and periods, preceded by EC
RR	The Chemical Abstracts Registry numbers for salts, optical isomers, or isotope-labeled versions of the concept followed by the relationship of

	this RR to the RN (in parentheses.) Applies to chemicals only. These numbers can be used as links to information in a number of chemical and toxicological databases.
RXAUI	RxNorm atom identifier for the atom it is connected to
RXCUI	RxNorm concept identifier for the atom this is connected to
RXNORM_SCDC	RxNorm SCDC
RXNORM_SCD	RxNorm SCD
RXN_ACTIVATED	Date the RxNorm atom was reactivated
RXN_BN_CARDINALITY	Cardinality of RxNorm Brand Name Atom
RXN_IN_STRENGTH_FLAG	Strength Expressed As Precise Flag
RXN_OBSOLETED	Date the RxNorm atom became obsolete
RXO	Drug Description from NDF - R for Rx and O for OTC
Related_Lash_Concept	Related Lash Concept
Related_MedDRA_Code	Related MedDRA Code
Relation_ID	Relation ID
SAC	Site Associated Code
SID	Secondary GO ID (e.g. GO:0020034)
SIGNIF_INTERACT_WITH	Significant interaction with
SNGL_OR_MULT_SRC_PRD	Single or multi-source product
SNOMEDID	SNOMED RT identifier for a SNOMED CT concept
SOS	Scope Statement
SPLIT_TO_TERM	MO_1017: indicates a replacement term since the term was split.
SPL_SET_ID	FDA Structured Product Label SET_ID code
SRC	MeSH Literature source of chemical name - a citation to an article in a journal indexed for MEDLINE in which the chemical has been identified. (Note: Not to be confused with source abbreviation of SRC)
ST	Concept Attributes Status - valid values: R Reviewed, U Unreviewed
SUBSETCONTEXTID	SNOMED CT identifier of a subset
SUBSETLANGUAGECODE	SNOMED CT identifier of a language and, if appropriate, a dialect to which a subset applies.
SUBSETMEMBER	Indicates the subset(s) to which an atom belongs and its status (e.g., active, inactive) in the subset(s).
SUBSETORIGINALID	SNOMED CT identifier for the first version of the subset on which this subset is based.
SUBSETREALMID	"Realm" or context in which a SNOMED CT subset is used, e.g., nation, speciality, institution, etc. to which it applies. A four-character ISO6523 identifier followed by an optional series of concatenated subdivisions codes defined by the registered organization.
SUBSETTYPE	Single digit integer indicating the nature of a SNOMED CT subset and

	the type of SNOMED CT component that may be a member of the subset. The meaning of the non-zero values can be found in the SNOMED CT documentation; a value of 0 is not defined as a type.
SUBSETVERSION	SNOMED CT identifier for the version of a subset. An integer increased for each revised release.
SWP	Swiss Protein Number
SYCODE	Synonym Code
Swiss_Prot	Swiss Prot
TERMUI	Term unique identifier
TH	MeSH Thesaurus ID - identifies thesauri other than MeSH in which the MeSH heading or cross-reference is included.
TORSAB	Root source abbreviation for the "to" identifiers of a map set
TOVSAB	Versioned source abbreviation for the "to" identifiers of a map set
TRN	Trade Name of Product
Tolerable_Level	Tolerable_Level
UMLSRELA	UMLS relationship attribute
UMLSREL	The UMLS Metathesaurus REL relationship (SY, CHD, NT, BT, RT) assigned to SNOMED CT relationship identifiers.
UNII_CODE	FDA Unique Ingredient Identifier (UNII) Code
URL	URL for corresponding health topic on MedlinePlus
USDA_ID	USDA_ID
US_Recommended_Intake	US Recommended Intake
UWT	A semantic type provided from terms from the University of Washington Digital Anatomist
Unit	Unit
Use_For	Use For
VAC	VA Class - the code of an NDF/HT drug class name (e.g. COD LIVER OIL (CHERRY FLAVOR))
VA_CLASS_NAME	VA class name
VA_DISPENSE_UNIT	VA dispense unit
VA_GENERIC_NAME	VA generic name
VMO	VA CMOP (central mail - order pharmacy) ID

COA (Co-Occurrence Attribute)	
<>	No MeSH subheading (qualifier)
AA	analogs & derivatives
AB	abnormalities
AD	administration & dosage
AE	adverse effects
AG	agonists

AH	anatomy & histology
AI	antagonists & inhibitors
AN	analysis
AO	in adolescence
AU	in adulthood
BI	biosynthesis
BL	blood
BS	blood supply
CF	cerebrospinal fluid
CH	chemistry
CI	chemically induced
CL	classification
CN	congenital
CO	complications
CS	chemical synthesis
CT	contraindications
CY	cytology
DE	drug effects
DF	deficiency
DH	diet therapy
DI	diagnosis
DT	drug therapy
DU	diagnostic use
EC	economics
ED	education
EH	ethnology
EM	embryology
EN	enzymology
EP	epidemiology
ES	ethics
ET	etiology
GD	growth & development
GE	genetics
HI	history
IC	in infancy & childhood
IM	immunology
IN	injuries
IP	isolation & purification

IR	innervation
IS	instrumentation
LJ	legislation & jurisprudence
MA	manpower
ME	metabolism
MI	microbiology
MO	mortality
MT	methods
MY	in middle age
NU	nursing
OA	in old age
OG	organization & administration
PA	pathology
PC	prevention & control
PD	pharmacology
PH	physiology
PK	pharmacokinetics
PO	poisoning
PP	physiopathology
PR	in pregnancy
PS	parasitology
PX	psychology
PY	pathogenicity
RA	radiography
RE	radiation effects
RH	rehabilitation
RI	radionuclide imaging
RT	radiotherapy
SC	secondary
SD	supply & distribution
SE	secretion
SN	statistics & numerical data
ST	standards
SU	surgery
TD	trends
TH	therapy
TM	transmission
TO	toxicity

TR	transplantation
TU	therapeutic use
UL	ultrastructure
UR	urine
US	ultrasonography
UT	utilization
VE	veterinary
VI	virology

B.2.1 Sources of Additional (non-concept name) information

Format VSAB|Official Source Name

HLREL|ICPC2E-ICD10 relationships from Dr. Henk Lamberts
MBD07|MEDLINE (1996-2000)
MED07|MEDLINE (2001-2006)
NCISEER_1999|NCI SEER ICD Neoplasm Code Mappings, 1999
NLM-MED||National Library of Medicine Medline Data

B3 Abbreviations Used in Data Elements

COT (Type of Co-Occurrence)	
KN	negative association in Knowledge Base, e.g., a finding that is inconsistent with a disease.
KP	positive association in Knowledge Base
LQB	second concept is qualified by the first (a MeSH topical qualifier) in citations to the published literature
LQ	second concept occurs as a MeSH topical qualifier of the first in citations to the published literature. Where CUI2 is not present, the count of citations of CUI1 with no MeSH qualifiers is reported.
L	Co-occurrence of primary or main subject headings in citations to the published literature
MP	Co-occurrence of modifier and problem within a patient record
PP	Co-occurrence of two problems within a patient record

CXTY	
FULL-MULTIPLE	Full contexts, multiple tree positions
FULL-NOSIB-MULTIPLE-IGNORE-RELA	Full contexts, no siblings, multiple tree positions, RELA not used when computing ancestors/descendants
FULL-NOSIB-MULTIPLE	Full contexts, no siblings, multiple tree positions
FULL-NOSIB	Full contexts, no siblings

FULL	Full contexts

FROMTYPE (Type of Expression from Which a Mapping is Mapped)	
AUI	Atom identifier
BOOLEAN_EXPRESSION	Boolean expression of strings or identifiers
CODE	Unique Identifier or code for string in source
CUI	Concept unique identifier
SAUI	Source asserted atom unique identifier
SCUI	Source asserted concept unique identifier
SDUI	Source asserted descriptor identifier

LAT (Language of Terms)	
BAQ	Basque
CZE	Czech
DAN	Danish
DUT	Dutch
ENG	English
FIN	Finnish
FRE	French
GER	German
HEB	Hebrew
HUN	Hungarian
ITA	Italian
JPN	Japanese
NOR	Norwegian
POR	Portuguese
RUS	Russian
SPA	Spanish
SWE	Swedish

MAPATN	
	Empty attribute name

REL (Relationship)	
AQ	Allowed qualifier
CHD	has child relationship in a Metathesaurus source vocabulary
DEL	Deleted concept

PAR	has parent relationship in a Metathesaurus source vocabulary
QB	can be qualified by.
RB	has a broader relationship
RL	the relationship is similar or "alike". the two concepts are similar or "alike". In the current edition of the Metathesaurus, most relationships with this attribute are mappings provided by a source, named in SAB and SL; hence concepts linked by this relationship may be synonymous, i.e. self-referential: CUI1 = CUI2. In previous releases, some MeSH Supplementary Concept relationships were represented in this way.
RN	has a narrower relationship
RO	has relationship other than synonymous, narrower, or broader
RQ	related and possibly synonymous.
RU	Related, unspecified
SIB	has sibling relationship in a Metathesaurus source vocabulary.
SUBX	Concept removed from current subset
SY	source asserted synonymy.
XR	Not related
	Empty relationship

RELA (Relationship Attribute)	
3_UTR_of	3 UTR of
5_UTR_of	5 UTR of
Abnormal_Cell_Affected_By_Chemical_Or_Drug	Abnormal Cell Affected By Chemical Or Drug
Abnormality_Associated_With_Allele	Abnormality Associated With Allele
Activity_Of_Allele	Activity Of Allele
Allele_Absent_From_Wild-type_Chromosomal_Location	Allele Absent From Wild-type Chromosomal Location
Allele_Associated_With_Disease	Allele Associated With Disease
Allele_Has_Abnormality	Allele Has Abnormality
Allele_Has_Activity	Allele Has Activity
Allele_In_Chromosomal_Location	Allele In Chromosomal Location
Allele_Not_Associated_With_Disease	Allele Not Associated With Disease

Allele_Plays_Altered_Role_In_Process	Allele Plays Altered Role In Process
Allele_Plays_Role_In_Metabolism_Of_Chemical_Or_Drug	Allele Plays Role In Metabolism Of Chemical Or Drug
Allele_of	Allele of
Amino_Acid_Variant_of	Amino Acid Variant of
Anatomic_Structure_Has_Location	Anatomic Structure Has Location
Anatomic_Structure_Is_Physical_Part_Of	Anatomic Structure Is Physical Part Of
Anatomy_Originated_From_Biological_Process	Anatomy Originated From Biological Process
Aneuploidy_Addition_of	Aneuploidy Addition of
Aneuploidy_Deletion_of	Aneuploidy Deletion of
Arm_Location_of	Arm Location of
Arm_of	Arm of
Associated_With_Malfunction_Of_Gene_Product	Associated With Malfunction Of Gene Product
Band_Location_of	Band Location of
Band_of	Band of
Biological_Process_Has_Associated_Location	Biological Process Has Associated Location
Biological_Process_Has_Initiator_Chemical_Or_Drug	Biological Process Has Initiator Chemical Or Drug
Biological_Process_Has_Initiator_Process	Biological Process Has Initiator Process
Biological_Process_Has_Result_Anatomy	Biological Process Has Result Anatomy
Biological_Process_Has_Result_Biolo	Biological Process Has Result Biological Process

gical_Process	
Biological_Process_Has_Result_Chemical_Or_Drug	Biological Process Has Result Chemical Or Drug
Biological_Process_Involves_Chemical_Or_Drug	Biological Process Involves Chemical Or Drug
Biological_Process_Involves_Gene_Product	Biological Process Involves Gene Product
Biological_Process_Is_Part_Of_Process	Biological Process Is Part Of Process
Biological_Process_Results_From_Biological_Process	Biological Process Results From Biological Process
Biomarker_Type_Includes_Gene_Product	Biomarker Type Includes Gene Product
Biomarker_Type_Includes_Gene	Biomarker Type Includes Gene
CH3_Status_of	CH3 Status of
Cell_Type_Is_Associated_With_EO_Disease	Cell Type Is Associated With EO Disease
Cell_Type_Or_Tissue_Affected_By_Chemical_Or_Drug	Cell Type Or Tissue Affected By Chemical Or Drug
Centromere_of	Centromere of
Chemical_Or_Drug_Affects_Abnormal_Cell	Chemical Or Drug Affects Abnormal Cell
Chemical_Or_Drug_Affects_Cell_Type_Or_Tissue	Chemical Or Drug Affects Cell Type Or Tissue
Chemical_Or_Drug_Affects_Gene_Product	Chemical Or Drug Affects Gene Product
Chemical_Or_Drug_Has_Mechanism_Of_Action	Chemical Or Drug Has Mechanism Of Action
Chemical_Or_Drug_Has_Physiologic_Effect	Chemical Or Drug Has Physiologic Effect

Chemical_Or_Drug_Initiates_Biological_Process	Chemical Or Drug Initiates Biological Process
Chemical_Or_Drug_Is_Metabolized_By_Enzyme	Chemical Or Drug Is Metabolized By Enzyme
Chemical_Or_Drug_Is_Product_Of_Biological_Process	Chemical Or Drug Is Product Of Biological Process
Chemical_Or_Drug_Metabolism_Is_Associated_With_Allele	Chemical Or Drug Metabolism Is Associated With Allele
Chemical_Or_Drug_Plays_Role_In_Biological_Process	Chemical Or Drug Plays Role In Biological Process
Chemotherapy_Regimen_Has_Component	Chemotherapy Regimen Has Component
Chromosomal_Location_Of_Allele	Chromosomal Location Of Allele
Chromosomal_Location_of_Wild-type_Gene	Chromosomal Location of Wild-type Gene
Chromosomal_Location_of	Chromosomal Location of
Chromosomal_Structural_Variant	Chromosomal Structural Variant
Completely_Excised_Anatomy_Has_Procedure	Completely Excised Anatomy Has Procedure
Completely_Excised_Anatomy_May_Have_Procedure	Completely Excised Anatomy May Have Procedure
Complex_Has_Physical_Part	Complex Has Physical Part
Concept_In_Subset	Concept In Subset
Conceptual_Part_Of	Conceptual Part Of
Constituent_Amino_Acid_of	Constituent Amino Acid of
Constituent_Element_of	Constituent Element of
Constituent_Protein	Constituent Protein of

_of	
Constituent_Variant_of	Constituent Variant of
Deleted_Region_End_Band	Deleted Region End Band
Deleted_Region_Start_Band	Deleted Region Start Band
Disease_Associated_With_Allele	Disease Associated With Allele
Disease_Excludes_Abnormal_Cell	Disease Excludes Abnormal Cell
Disease_Excludes_Cytogenetic_Abnormality	Disease Excludes Cytogenetic Abnormality
Disease_Excludes_Finding	Disease Excludes Finding
Disease_Excludes_Molecular_Abnormality	Disease Excludes Molecular Abnormality
Disease_Excludes_Normal_Cell_Origin	Disease Excludes Normal Cell Origin
Disease_Excludes_Normal_Tissue_Origin	Disease Excludes Normal Tissue Origin
Disease_Excludes_Primary_Anatomic_Site	Disease Excludes Primary Anatomic Site
Disease_Has_Abnormal_Cell	Disease Has Abnormal Cell
Disease_Has_Accepted_Treatment_With_Regimen	Disease Has Accepted Treatment With Regimen
Disease_Has_Associated_Anatomic_Site	Disease Has Associated Anatomic Site
Disease_Has_Associated_Disease	Disease Has Associated Disease
Disease_Has_Associated_Gene	Disease Has Associated Gene
Disease_Has_Cytogenetic_Abnormality	Disease Has Cytogenetic Abnormality

Disease_Has_Finding	Disease Has Finding
Disease_Has_Metastatic_Anatomic_Site	Disease Has Metastatic Anatomic Site
Disease_Has_Molecular_Abnormality	Disease Has Molecular Abnormality
Disease_Has_Normal_Cell_Origin	Disease Has Normal Cell Origin
Disease_Has_Normal_Tissue_Origin	Disease Has Normal Tissue Origin
Disease_Has_Primary_Anatomic_Site	Disease Has Primary Anatomic Site
Disease_Is_Grade	Disease Is Grade
Disease_Is_Marked_By_Gene	Disease Is Marked By Gene
Disease_Is_Stage	Disease Is Stage
Disease_May_Have_Abnormal_Cell	Disease May Have Abnormal Cell
Disease_May_Have_Associated_Disease	Disease May Have Associated Disease
Disease_May_Have_Cytogenetic_Abnormality	Disease May Have Cytogenetic Abnormality
Disease_May_Have_Finding	Disease May Have Finding
Disease_May_Have_Molecular_Abnormality	Disease May Have Molecular Abnormality
Disease_May_Have_Normal_Cell_Origin	Disease May Have Normal Cell Origin
Disease_Not_Associated_With_Allele	Disease Not Associated With Allele
Duplicated_Region_End_Band	Duplicated Region End Band
Duplicated_Region_Start_Band	Duplicated Region Start Band
EO_Anatomy_Is_Associated_With_EO_Disease	EO Anatomy Is Associated With EO Disease
EO_Disease_Has_	EO Disease Has Associated Cell Type

Associated_Cell_Type	
EO_Disease_Has_Associated_EO_Anatomy	EO Disease Has Associated EO Anatomy
EO_Disease_Has_Property_Or_Attribute	EO Disease Has Property Or Attribute
EO_Disease_Maps_To_Human_Disease	EO Disease Maps To Human Disease
Effect_of	Effect of
Encoded_by	Encoded by
Encodes	Encodes
Endogenous_Product_Related_To	Endogenous Product Related To
Enzyme_Metabolizes_Chemical_Or_Drug	Enzyme Metabolizes Chemical Or Drug
Excised_Anatomy_Has_Procedure	Excised Anatomy Has Procedure
Excised_Anatomy_May_Have_Procedure	Excised Anatomy May Have Procedure
Exon_of	Exon of
Feature_of	Feature of
Gene_Associated_With_Disease	Gene Associated With Disease
Gene_Encodes_Gene_Product	Gene Encodes Gene Product
Gene_Found_In_Organism	Gene Found In Organism
Gene_Has_Abnormality	Gene Has Abnormality
Gene_Has_Physical_Location	Gene Has Physical Location
Gene_In_Chromosomal_Location	Gene In Chromosomal Location
Gene_Is_Biomarker_Of	Gene Is Biomarker Of
Gene_Is_Biomarker_Type	Gene Is Biomarker Type
Gene_Is_Element_I	Gene Is Element In Pathway

n_Pathway	
Gene_Location_of	Gene Location of
Gene_Plays_Role_In_Process	Gene Plays Role In Process
Gene_Product_Affected_By_Chemical_Or_Drug	Gene Product Affected By Chemical Or Drug
Gene_Product_Encoded_By_Gene	Gene Product Encoded By Gene
Gene_Product_Expressed_In_Tissue	Gene Product Expressed In Tissue
Gene_Product_Has_Abnormality	Gene Product Has Abnormality
Gene_Product_Has_Associated_Anatomy	Gene Product Has Associated Anatomy
Gene_Product_Has_Biochemical_Function	Gene Product Has Biochemical Function
Gene_Product_Has_Chemical_Classification	Gene Product Has Chemical Classification
Gene_Product_Has_Malfunction_Type	Gene Product Has Malfunction Type
Gene_Product_Has_Organism_Source	Gene Product Has Organism Source
Gene_Product_Has_Structural_Domain_Or_Motif	Gene Product Has Structural Domain Or Motif
Gene_Product_Is_Biomarker_Of	Gene Product Is Biomarker Of
Gene_Product_Is_Biomarker_Type	Gene Product Is Biomarker Type
Gene_Product_Is_Element_In_Pathway	Gene Product Is Element In Pathway
Gene_Product_Is_Physical_Part_Of	Gene Product Is Physical Part Of
Gene_Product_Malfunction_Associated_With_Disease	Gene Product Malfunction Associated With Disease
Gene_Product_Plays_Role_In_Biological_Process	Gene Product Plays Role In Biological Process

Gene_of	Gene of
Genomic_Mutation_Of	Genomic Mutation Of
Has_3_UTR	Has 3 UTR
Has_5_UTR	Has 5 UTR
Has_Allele	Has Allele
Has_Amino_Acid_Variant	Has Amino Acid Variant
Has_Aneuploidy_Addition	Has Aneuploidy Addition
Has_Aneuploidy_Deletion	Has Aneuploidy Deletion
Has_Arm_Location	Has Arm Location
Has_Arm	Has Arm
Has_Band_Location	Has Band Location
Has_Band	Has Band
Has_CH3_Status	Has CH3 Status
Has_Centromere	Has Centromere
Has_Chromosomal_Location	Has Chromosomal Location
Has_Conceptual_Part	Has Conceptual Part
Has_Constituent_Amino_Acid	Has Constituent Amino Acid
Has_Constituent_Element	Has Constituent Element
Has_Constituent_Protein	Has Constituent Protein
Has_Constituent_Variant	Has Constituent Variant
Has_Effect	Has Effect
Has_Exon	Has Exon
Has_Feature	Has Feature
Has_Free_Acid_Or_Base_Form	Has free acid or base form
Has_Gene_Location	Has Gene Location
Has_Gene_Product_Element	Has Gene Product Element
Has_Gene	Has Gene

Has_Genomic_Mutation	Has Genomic Mutation
Has_Intron	Has Intron
Has_Location	Has Location
Has_Maternal_Uniparental_Disomy	Has Maternal Uniparental Disomy
Has_Mode_of_Inheritance	Has Mode of Inheritance
Has_Nucleotide_Repeat	Has Nucleotide Repeat
Has_Nucleotide_Variant	Has Nucleotide Variant
Has_Paternal_Uniparental_Disomy	Has Paternal Uniparental Disomy
Has_Physical_Part_Of_Anatomic_Structure	Has Physical Part Of Anatomic Structure
Has_RT_Product	Has RT Product
Has_Salt_Form	Has Salt Form
Has_Segment	Has Segment
Has_Target	Has Target
Has_Telomere	Has Telomere
Has_Transcript	Has Transcript
Human_Disease_Maps_To_EO_Disease	Human Disease Maps To EO Disease
Human_Sex_Determinant	Human Sex Determinant
INV_Chromosomal_Structural_Variant	INV Chromosomal Structural Variant
INV_Deleted_Region_End_Band	INV Deleted Region End Band
INV_Deleted_Region_Start_Band	INV Deleted Region Start Band
INV_Duplicated_Region_End_Band	INV Duplicated Region End Band
INV_Duplicated_Region_Start_Band	INV Duplicated Region Start Band
INV_Human_Sex_Determinant	INV Human Sex Determinant
INV_Inverted_Region_End_Band	INV Inverted Region End Band

INV_Inverted_Region_End_Exon	INV Inverted Region End Exon
INV_Inverted_Region_End_Gene	INV Inverted Region End Gene
INV_Inverted_Region_End_UTR	INV Inverted Region End UTR
INV_Inverted_Region_Start_Band	INV Inverted Region Start Band
INV_Inverted_Region_Start_Exon	INV Inverted Region Start Exon
INV_Inverted_Region_Start_Gene	INV Inverted Region Start Gene
INV_Inverted_Region_Start_Intron	INV Inverted Region Start Intron
INV_Involves	INV Involves
INV_Isochromosome_Origin	INV Isochromosome Origin
INV_Karyotype_Class	INV Karyotype Class
INV_Source_Band	INV Source Band
INV_Source_Exon	INV Source Exon
INV_Source_Gene	INV Source Gene
INV_Source_Intron	INV Source Intron
INV_Target_Band	INV Target Band
INV_Target_Exon	INV Target Exon
INV_Target_Gene	INV Target Gene
INV_Target_Intron	INV Target Intron
Imaged_Anatomy_Has_Procedure	Imaged Anatomy Has Procedure
Intron_of	Intron of
Inverted_Region_End_Band	Inverted Region End Band
Inverted_Region_End_Exon	Inverted Region End Exon
Inverted_Region_End_Gene	Inverted Region End Gene
Inverted_Region_End_UTR	Inverted Region End UTR
Inverted_Region_Start_Band	Inverted Region Start Band
Inverted_Region_St	Inverted Region Start Exon

art_Exon	
Inverted_Region_Start_Gene	Inverted Region Start Gene
Inverted_Region_Start_Intron	Inverted Region Start Intron
Involves	Involves
Is_Abnormal_Cell_Of_Disease	Is Abnormal Cell Of Disease
Is_Abnormality_Of_Gene_Product	Is Abnormality Of Gene Product
Is_Abnormality_Of_Gene	Is Abnormality Of Gene
Is_Associated_Anatomic_Site_Of	Is Associated Anatomic Site Of
Is_Associated_Anatomy_Of_Gene_Product	Is Associated Anatomy Of Gene Product
Is_Associated_Disease_Of	Is Associated Disease Of
Is_Biochemical_Function_Of_Gene_Product	Is Biochemical Function Of Gene Product
Is_Chemical_Classification_Of_Gene_Product	Is Chemical Classification Of Gene Product
Is_Chromosomal_Location_Of_Gene	Is Chromosomal Location Of Gene
Is_Component_Of_Chemotherapy_Regimen	Is Component Of Chemotherapy Regimen
Is_Cytogenetic_Abnormality_Of_Disease	Is Cytogenetic Abnormality Of Disease
Is_Finding_Of_Disease	Is Finding Of Disease
Is_Grade_Of_Disease	Is Grade Of Disease
Is_Location_Of_Anatomic_Structure	Is Location Of Anatomic Structure
Is_Location_Of_Biological_Process	Is Location Of Biological Process
Is_Location_Of	Is Location Of
Is_Malfunction_Ty	Is Malfunction Type Of Gene Product

pe_Of_Gene_Product	
Is_Marked_By_Gene_Product	Is Marked By Gene Product
Is_Mechanism_Of_Action_Of_Chemical_Or_Drug	Is Mechanism Of Action Of Chemical Or Drug
Is_Metastatic_Anatomic_Site_Of_Disease	Is Metastatic Anatomic Site Of Disease
Is_Molecular_Abnormality_Of_Disease	Is Molecular Abnormality Of Disease
Is_Normal_Cell_Origin_Of_Disease	Is Normal Cell Origin Of Disease
Is_Normal_Tissue_Origin_Of_Disease	Is Normal Tissue Origin Of Disease
Is_Not_Abnormal_Cell_Of_Disease	Is Not Abnormal Cell Of Disease
Is_Not_Cytogenetic_Abnormality_Of_Disease	Is Not Cytogenetic Abnormality Of Disease
Is_Not_Finding_Of_Disease	Is Not Finding Of Disease
Is_Not_Molecular_Abnormality_Of_Disease	Is Not Molecular Abnormality Of Disease
Is_Not_Normal_Cell_Origin_Of_Disease	Is Not Normal Cell Origin Of Disease
Is_Not_Normal_Tissue_Origin_Of_Disease	Is Not Normal Tissue Origin Of Disease
Is_Not_Primary_Anatomic_Site_Of_Disease	Is Not Primary Anatomic Site Of Disease
Is_Organism_Source_Of_Gene_Product	Is Organism Source Of Gene Product
Is_Physical_Location_Of_Gene	Is Physical Location Of Gene
Is_Physiologic_Effect_Of_Chemical_Or_Drug	Is Physiologic Effect Of Chemical Or Drug
Is_Primary_Anato	Is Primary Anatomic Site Of Disease

mic_Site_Of_Disease	
Is_Property_Or_Attribute_Of_EO_Disease	Is Property Or Attribute Of EO Disease
Is_Qualified_By	Is Qualified By
Is_Related_To_Endogenous_Product	Is Related To Endogenous Product
Is_Stage_Of_Disease	Is Stage Of Disease
Is_Structural_Domain_Or_Motif_Of_Gene_Product	Is Structural Domain Or Motif Of Gene Product
Is_Target_Of_Agent	Is Target Of Agent
Isochromosome_Origin	Isochromosome Origin
Karyotype_Class	Karyotype_Class
Kind_Is_Domain_Of	Kind Is Domain Of
Kind_Is_Range_Of	Kind Is Range Of
Maternal_Uniparental_Disomy_of	Maternal Uniparental Disomy of
May_Be_Abnormal_Cell_Of_Disease	May Be Abnormal Cell Of Disease
May_Be_Associated_Disease_Of_Disease	May Be Associated Disease Of Disease
May_Be_Cytogenetic_Abnormality_Of_Disease	May Be Cytogenetic Abnormality Of Disease
May_Be_Finding_Of_Disease	May Be Finding Of Disease
May_Be_Molecular_Abnormality_Of_Disease	May Be Molecular Abnormality Of Disease
May_Be_Normal_Cell_Origin_Of_Disease	May Be Normal Cell Origin Of Disease
Mode_of_Inheritance_of	Mode of Inheritance of
Nucleotide_Repeat_of	Nucleotide Repeat of

Nucleotide_Variant_of	Nucleotide Variant of
Organism_Has_Gene	Organism Has Gene
Partially_Excised_Anatomy_Has_Procedure	Partially Excised Anatomy Has Procedure
Partially_Excised_Anatomy_May_Have_Procedure	Partially Excised Anatomy May Have Procedure
Paternal_Uniparental_Disomy_of	Paternal Uniparental Disomy of
Pathway_Has_Gene_Element	Pathway Has Gene Element
Procedure_Has_Completely_Excised_Anatomy	Procedure Has Completely Excised Anatomy
Procedure_Has_Excised_Anatomy	Procedure Has Excised Anatomy
Procedure_Has_Imaged_Anatomy	Procedure Has Imaged Anatomy
Procedure_Has_Partially_Excised_Anatomy	Procedure Has Partially Excised Anatomy
Procedure_Has_Target_Anatomy	Procedure Has Target Anatomy
Procedure_May_Have_Completely_Excised_Anatomy	Procedure May Have Completely Excised Anatomy
Procedure_May_Have_Excised_Anatomy	Procedure May Have Excised Anatomy
Procedure_May_Have_Partially_Excised_Anatomy	Procedure May Have Partially Excised Anatomy
Process_Altered_By_Allele	Process Altered By Allele
Process_Includes_Biological_Process	Process Includes Biological Process
Process_Initiates_Biological_Process	Process Initiates Biological Process
Process_Involves_Gene	Process Involves Gene

Qualifier_Applies_To	Qualifier Applies To
RT_Product_of	RT Product of
Regimen_Has_Accepted_Use_For_Disease	Regimen Has Accepted Use For Disease
Role_Has_Domain	Role Has Domain
Role_Has_Parent	Role Has Parent
Role_Has_Range	Role Has Range
Role_Is_Parent_Of	Role Is Parent Of
Segment_of	Segment of
Source_Band	Source Band
Source_Exon	Source Exon
Source_Gene	Source Gene
Source_Intron	Source Intron
Subset_Includes_Concept	Subset Includes Concept
Target_Anatomy_Has_Procedure	Target Anatomy Has Procedure
Target_Band	Target Band
Target_Exon	Target Exon
Target_Gene	Target Gene
Target_Intron	Target Intron
Telomere_of	Telomere of
Tissue_Is_Expression_Site_Of_Gene_Product	Tissue Is Expression Site Of Gene Product
Transcript_of	Transcript of
access_device_used_by	Access device used by
access_of	Access of
action_of	Action of
active_ingredient_of	Active ingredient of
alias_of	Alias_of
allelic_variant_of	Allelic Variant of
analyzed_by	Analyzed by
analyzes	Analyzes
approach_of	Approach of
associated_disease	Associated disease

associated_finding_of	Associated finding of
associated_genetic_condition	Associated genetic condition
associated_morphology_of	Associated morphology of
associated_procedure_of	Associated procedure of
associated_with	Associated with
branch_of	Branch of
british_form_of	British form of
causative_agent_of	Causative agent of
cause_of	Cause of
classified_as	Classified as
classifies	Classifies
clinical_course_of	Clinical course of
clinically_similar	Clinically similar
component_of	Component of
conceptual_part_of	Conceptual part of
consists_of	Consists of
constitutes	Constitutes
contraindicated_with	Contraindicated with
definitional_manifestation_of	Definitional manifestation of
degree_of	Degree of
device_used_by	Device used by
diagnosed_by	Diagnosed by
diagnoses	Diagnoses
direct_device_of	Direct device of
direct_morphology_of	Direct morphology of
direct_procedure_site_of	Direct procedure site of
direct_substance_of	Direct substance of
dose_form_of	Dose form of
drug_contraindicated_for	Drug contraindicated for
due_to	Due to
energy_used_by	Energy used by

entry_version_of	Entry version of
episodicity_of	Episodicity of
evaluation_of	Evaluation of
exhibited_by	Exhibited by
exhibits	Exhibits
expanded_form_of	Expanded form of
finding_context_of	Finding context of
finding_informer_of	Finding informer of
finding_method_of	Finding method of
finding_site_of	Finding site of
focus_of	Focus of
form_of	Form of
has_MAGE_description	MO_260: indicates that the class has an association to a MAGE description
has_URI	MO_340: indicates that the class has a URI
has_access	Has access
has_action	Has action
has_active_ingredient	Has active ingredient
has_additive	MO_314: indicates that the class has an additive
has_affiliation	MO_309: indicates that the class has an affiliation to an institution
has_alias	Has alias
has_allelic_variant	Has allelic variant
has_approach	Has approach
has_associated_finding	Has associated finding
has_associated_morphology	Has associated morphology
has_associated_procedure	Has associated procedure
has_atmospheric_component	MO_259: indicates that the class has an atmospheric component
has_been_treated	MO_341: indicates that the class has been treated
has_bioassay_data	MO_252: indicates that the class has bioassay data
has_bioassays	MO_238: indicates that the class has bioassays
has_biomaterial_characteristics	MO_272: indicates that the class has biomaterial characteristics
has_branch	Has branch
has_british_form	Has British form

has_cancer_site	MO_248: indicates that the class has a cancer site
has_category	MO_249: indicates that the class has a category
has_causative_agent	Has causative agent
has_chromosomal_aberration_classification	MO_253: indicates that the class has a chromosomal aberration classification
has_citation	MO_274: indicates that the class has a citation
has_clinical_course	Has clinical course
has_clinical_finding	MO_316: indicates that the class has a clinical finding
has_clinical_record	MO_247: indicates that the class has a clinical record
has_clinical_treatment	MO_282: indicates that the class has a clinical treatment
has_component	Has component
has_compound	MO_302: indicates that the class has a compound
has_conceptual_part	Has conceptual part
has_contraindicated_drug	Has contraindicated drug
has_contraindication	Has contraindication
has_cubic_volume	MO_245: indicates that the class contains a cubic volume measurement
has_database_entry_type	MO_240: indicates that the class has a database entry type
has_database	MO_233: indicates that the class has a database
has_definitional_manifestation	Has definitional manifestation
has_degree	Has degree
has_diameter	MO_301: indicates that the class has a diameter
has_direct_device	Has direct device
has_direct_morphology	Has direct morphology
has_direct_procedure_site	Has direct procedure site
has_direct_substance	Has direct substance
has_disease_location	MO_290: property indicating the location of the disease
has_disease_staging	MO_275: indicates that the class has disease staging
has_disease_state	MO_305: indicates that the class has a disease state

has_donor	MO_342: indicates that the class has a donor
has_dose_form	Has dose form
has_entry_version	Has entry version
has_episodicity	Has episodicity
has_evaluation	Has evaluation
has_expanded_form	Has expanded form
has_experiment_design_type	MO_288: indicates that the class has an experiment design type
has_experiment_design	MO_291: indicates that the class has an experiment design
has_experiment_factors	MO_328: indicates that the class has experiment factors
has_factor_value_ontology_entry	MO_263: indicates that the class has an ontology entry
has_factor_value	MO_236: indicates that the class has a factor value
has_family_member	MO_243: indicates that the class has a family member
has_family_relationship	MO_250: indicates that the class has a family relationship
has_feature_shape	MO_268: indicates that the class has a feature shape
has_fiducials	MO_267: indicates that the class has fiducials
has_finding_context	Has finding context
has_finding_informer	Has finding informer
has_finding_method	Has finding method
has_finding_site	Has finding_site
has_focus	Has focus
has_form	Has form
has_hardware	MO_286: indicates that the class has hardware
has_height	MO_317: indicates that the class has a height
has_host_part	MO_283: indicates that the class has a host part. Domain: Host
has_host	MO_313: indicates that the class has a host. Domain: Host
has_image_format	MO_234: indicates that the class has an image format. Domain: PhysicalBioAssay
has_indirect_device	Has indirect device
has_indirect_morphology	Has indirect morphology
has_indirect_procedure_site	Has indirect procedure site

has_individual_genetic_characteristics	MO_254: indicates that the class has individual genetic characteristics
has_individual	MO_327: indicates that the class has an individual
has_ingredient	Has ingredient
has_inheritance_type	Has inheritance type
has_initial_time_point	MO_292: indicates that the class has an individual time point. Domain: Age
has_intent	Has intent
has_interpretation	Has interpretation
has_laterality	Has laterality
has_length	Indicates that the class has length
has_location	Has location
has_manifestation	Has manifestation
has_manufacturer	MO_232: indicates that the class has a manufacturer
has_mass	MO_280: indicates that the class has a mass
has_maximum_measurement	MO_297: indicates that the class has a maximum measurement. Domain: Age
has_measurement_method	Has measurement method
has_measurement_type	MO_242: indicates that the class has a measurement type. Domain: Measurement
has_measurement	Has measurement
has_mechanism_of_action	Has mechanism of action
has_method	Has method
has_multi_level_category	Has multi-level category
has_node_value_type	MO_264: indicates that the class has a node value type
has_node_value	MO_310: indicates that the class has a node value
has_nodes	MO_307: indicates that the class has a node
has_nutrient_component	MO_321: indicates that the class has a nutrient component
has_occurrence	Has occurrence
has_organism_part	MO_285: indicates that the class has an organism part
has_outcome	Has associated outcome
has_owner	MO_278: indicates that the class has an owner
has_parent_organization	MO_257: indicates that the class has a parent organization

has_part_modified	MO_241: indicates that the class has a modified part
has_part	Has part
has_pathological_process	Has pathological process
has_performer	MO_273: indicates that the protocol has a performer or contact person
has_permuted_term	Has permuted term
has_pharmacokinetics	Has pharmacokinetics
has_physiologic_effect	Has physiologic effect
has_plain_text_form	Has plain text form
has_precise_ingredient	Has precise ingredient
has_prior_disease_state	MO_276: indicates that the class has a prior disease state
has_priority	Has priority
has_procedure_context	Has procedure context
has_procedure_device	Has procedure device
has_procedure_morphology	Has procedure morphology
has_procedure_site	Has procedure site
has_property_set	MO_266: indicates that the class has a property set
has_property	Has property
has_protocol	MO_300: indicates that the class has a protocol
has_providers	MO_303: indicates that the class has providers
has_reason_for_deprecation	MO_306: property to indicate the reason for deprecating a term
has_recipient_category	Has recipient category
has_result	Has result
has_revision_status	Has revision status
has_route_of_administration	Has route of administration
has_scale_type	Has scale type
has_scale	Has scale
has_severity	Has severity
has_single_level_category	Has single level category

has_software	MO_284: indicates that the class has software
has_sort_version	Has sort version
has_species	MO_320: indicates that the class has species
has_specimen_procedure	Has specimen procedure
has_specimen_source_identity	Has specimen source identity
has_specimen_source_morphology	Has specimen source morphology
has_specimen_source_topography	Has specimen source topography
has_specimen_substance	Has specimen substance
has_specimen	Has specimen
has_subject_relationship_context	Has subject relationship context
has_temporal_context	Has temporal context
has_test_result	MO_261: indicates that the test has a test result
has_test_type	MO_311: indicates that the class has a clinical test
has_time_aspect	Has time aspect
has_tradename	Has tradename
has_translation	Has translation
has_treatment	MO_262: indicates that the class has a treatment
has_tributary	Has tributary
has_type	MO_319: indicates that the class has a type
has_units	MO_269: indicates that the class has units
has_version	Has version
indirect_device_of	Indirect device of
indirect_morphology_of	Indirect morphology of
indirect_procedure_site_of	Indirect procedure site of
induced_by	Induced by
induces	Induces
ingredient_of	Ingredient of
inheritance_type_of	Inheritance type of
intent_of	Intent of
interpretation_of	Interpretation of
interprets	Interprets

inverse_has_MAGE_description	Inverse of has_MAGE_description
inverse_has_URI	Inverse of has_URI
inverse_has_additive	Inverse of has_additive
inverse_has_affiliation	Inverse of has_affiliation
inverse_has_atmospheric_component	Inverse of has_atmospheric_component
inverse_has_been_treated	Inverse of has_been_treated
inverse_has_bioassay_data	Inverse of has_bioassay_data
inverse_has_bioassays	Inverse of has_bioassays
inverse_has_biomaterial_characteristics	Inverse of has_biomaterial_characteristics
inverse_has_cancer_site	Inverse of has_cancer_site
inverse_has_category	Inverse of has_category
inverse_has_chromosomal_aberration_classification	Inverse of has_chromosomal_aberration_classification
inverse_has_citation	Inverse of has_citation
inverse_has_clinical_finding	Inverse of has_clinical_finding
inverse_has_clinical_record	Inverse of has_clinical_record
inverse_has_clinical_treatment	Inverse of has_clinical_treatment
inverse_has_compound	Inverse of has_compound
inverse_has_cubic_volume	Inverse of has_cubic_volume
inverse_has_database_entry_type	Inverse of has_database_entry_type
inverse_has_database	Inverse of has_database
inverse_has_diameter	Inverse of has_diameter
inverse_has_disease	Inverse of has_disease_location

_location	
inverse_has_disease_staging	Inverse of has_disease_staging
inverse_has_disease_state	Inverse of has_disease_state
inverse_has_donor	Inverse of has_donor
inverse_has_experiment_design_type	Inverse of has_experiment_design_type
inverse_has_experiment_design	Inverse of has_experiment_design
inverse_has_experiment_factors	Inverse of has_experiment_factors
inverse_has_factor_value_ontology_entry	Inverse of has_factor_value_ontology_entry
inverse_has_factor_value	Inverse of has_factor_value
inverse_has_family_member	Inverse of has_family_member
inverse_has_family_relationship	Inverse of has_family_relationship
inverse_has_feature_shape	Inverse of has_feature_shape
inverse_has_fiducials	Inverse of has_fiducials
inverse_has_hardware	Inverse of has_hardware
inverse_has_height	Inverse of has_height
inverse_has_host_part	Inverse of has_host_part
inverse_has_host	Inverse of has_host
inverse_has_image_format	Inverse of has_image_format
inverse_has_individual_genetic_characteristics	Inverse of has_individual_genetic_characteristics
inverse_has_individual	Inverse of has_individual
inverse_has_initial_time_point	Inverse of has_initial_time_point
inverse_has_length	Inverse of has_length
inverse_has_manuf	Inverse of has_manufacturer

acturer	
inverse_has_mass	Inverse of has_mass
inverse_has_maximum_measurement	Inverse of has_maximum_measurement
inverse_has_measurement_type	Inverse of has_measurement_type
inverse_has_node_value_type	Inverse of has_node_value_type
inverse_has_node_value	Inverse of has_node_value
inverse_has_nodes	Inverse of has_nodes
inverse_has_nutrient_component	Inverse of has_nutrient_component
inverse_has_organism_part	Inverse of has_organism_part
inverse_has_owner	Inverse of has_owner
inverse_has_parent_organization	Inverse of has_parent_organization
inverse_has_part_modified	Inverse of has_part_modified
inverse_has_performer	Inverse of has_performer
inverse_has_prior_disease_state	Inverse of has_prior_disease_state
inverse_has_property_set	Inverse of has_property_set
inverse_has_protocol	Inverse of has_protocol
inverse_has_providers	Inverse of has_providers
inverse_has_reason_for_deprecation	Inverse of has_reason_for_deprecation
inverse_has_software	Inverse of has_software
inverse_has_species	Inverse of has_species
inverse_has_test_result	Inverse of has_test_result
inverse_has_test_type	Inverse of has_test_type
inverse_has_treatment	Inverse of has_treatment
inverse_has_type	Inverse of has_type

inverse_has_units	Inverse of has_units
inverse_isa	Inverse is a
inverse_was_tested_for	Inverse of was_tested_for
is_interpreted_by	Is interpreted by
isa	Is a
larger_than	Larger Than
laterality_of	Laterality of
location_of	Location of
manifestation_of	Manifestation of
mapped_from	Mapped from
mapped_to	Mapped to
may_be_diagnosed_by	May be diagnosed by
may_be_prevented_by	May be prevented by
may_be_treated_by	May be treated by
may_diagnose	May diagnose
may_prevent	May prevent
may_treat	May treat
measured_by	Measured by
measurement_method_of	Measurement method of
measurement_of	Measurement of
measures	Measures
mechanism_of_action_of	Mechanism of action of
metabolic_site_of	Metabolic site of
metabolized_by	Metabolized by
metabolizes	Metabolizes
method_of	Method of
mth_british_form_of	MTH British form of
mth_expanded_form_of	MTH expanded form of
mth_has_british_form	MTH has British form
mth_has_expanded_form	MTH has expanded form
mth_has_plain_text	Has plain text form, Metathesaurus-asserted

_form	
mth_has_xml_form	Has XML form, Metathesaurus-asserted
mth_plain_text_form_of	Plain text form of, Metathesaurus-asserted
mth_xml_form_of	XML form of, Metathesaurus-asserted
occurs_after	Occurs after
occurs_before	Occurs before
occurs_in	Occurs in
outcome_of	Associated outcome
part_of	Part of
pathological_process_of	Pathological process of
permuted_term_of	Permuted term of
pharmacokinetics_of	Pharmakokinetics of
physiologic_effect_of	Physiologic effect of
plain_text_form_of	Plain text form of
precise_ingredient_of	Precise ingredient of
priority_of	Priority of
procedure_context_of	Procedure context of
procedure_device_of	Procedure device of
procedure_morphology_of	Procedure morphology of
procedure_site_of	Procedure site of
property_of	Property of
recipient_category_of	Recipient category of
reformulated_to	Reformulated to
reformulation_of	Reformulation of
related_to	Is Related to
result_of	Result of
revision_status_of	Revision status of
route_of_administration_of	Route of administration of
scale_of	Scale of
scale_type_of	Scale type of

see_from	See from
see	See
severity_of	Severity of
sib_in_branch_of	Sibling in branch of
sib_in_isa	Sibling in is a
sib_in_part_of	Sibling in part of
sib_in_tributary_of	Sibling in tributary of
site_of_metabolism	Site of metabolism
smaller_than	Smaller Than
sort_version_of	Sort version of
specimen_of	Specimen of
specimen_procedure_of	Specimen procedure of
specimen_source_identity_of	Specimen source identity of
specimen_source_morphology_of	Specimen source morphology of
specimen_source_topography_of	specimen source topography of
specimen_substance_of	Specimen substance of
subject_relationship_context_of	Subject relationship context of
substance_used_by	Substance used by
temporal_context_of	Temporal context of
time_aspect_of	Time aspect of
tradename_of	Tradename of
translation_of	Translation of
treated_by	Treated by
treats	Treats
tributary_of	Tributary of
used_by	Used by
used_for	Used for
uses_access_device	Uses access device
uses_device	Uses device
uses_energy	Uses energy
uses_substance	Uses substance
uses	Uses
use	Use

version_of	Version of
was_tested_for	MO_265: indicates that the class was tested for
	Empty relationship attribute

RELEASE

STT (String Type)	
C	Varies from the preferred term only in upper-lower case
O	Other variant of the preferred form
PF	Preferred form of term
P	Plural of the preferred form
S	Singular of the preferred form
VCW	Case and word-order variant of the preferred form
VC	Case variant of the preferred form
VO	Variant of the preferred form
VW	Word-order variant of the preferred form
V	Followed by one or more of the following types of variation, in this order:
W	Contains same words as the preferred form, disregarding order and punctuation

STYPE (Column name in MRCONSO.RRF or MRREL.RRF with identifier to which attribute is attached)	
AUI	Atom identifier
CODE	Unique Identifier or code for string in source
CUI	Concept unique identifier
RUI	Relationship identifier
SAUI	Source asserted atom unique identifier
SCUI	Source asserted concept unique identifier
SDUI	Source asserted descriptor identifier
SRUI	Source asserted relationship identifier

STYPE1 (Column name in MRCONSO.RRF with first identifier to which relationship is attached)	
AUI	Atom identifier
CODE	Unique Identifier or code for string in source
CUI	Concept unique identifier
SAUI	Source asserted atom unique identifier
SCUI	Source asserted concept unique identifier
SDUI	Source asserted descriptor identifier

STYPE2 (Column name in MRCONSO.RRF with second identifier to which relationship is attached)	
AUI	Atom identifier
CODE	Unique Identifier or code for string in source
CUI	Concept unique identifier
SAUI	Source asserted atom unique identifier
SCUI	Source asserted concept unique identifier
SDUI	Source asserted descriptor identifier

SUPPRESS	
E	Suppressible due to editor decision
N	Not suppressible
O	Obsolete, SAB,TTY may be independently suppressible
Y	Suppressible due to SAB,TTY
	Suppressibility not yet assigned by the UMLS

TOTYPE (Type of Expression to Which a Mapping is Mapped)	
AUI	Atom identifier
BOOLEAN_EXPRESSION_CODE	Boolean expression of CODE values
BOOLEAN_EXPRESSION_STR	Boolean expression of STR values
BOOLEAN_EXPRESSION	Boolean expression of strings or identifiers
CODE	Unique Identifier or code for string in source
CUI	Concept unique identifier
SAUI	Source asserted atom unique identifier
SCUI	Source asserted concept unique identifier
SDUI	Source asserted descriptor identifier
	No type, used for XR mappings.

TS (Term Status)	
P	Preferred LUI of the CUI
S	Non-Preferred LUI of the CUI
p	Preferred LUI of the CUI, suppressible (only used in ORF MRCON)
s	Non-Preferred LUI of the CUI, suppressible (only used in ORF MRCON)

TTY (Term Type in Source)	
AB	Abbreviation in any source vocabulary

ACR	Acronym
AD	Adjective
BN	Fully-specified drug brand name that can not be prescribed
BSY	Broad synonym
CA2	ISO 3166-1 standard country code in alpha-2 (two-letter) format
CA3	ISO 3166-1 standard country code in alpha-3 (three-letter) format
CAS	CAS Registry name
CCN	Chemical code name
CCS	FIPS 10-4 country code
CC	Trimmed ICPC component process
CDC	Clinical drug name in concatenated format (NDDF), Clinical drug name (NDFRT)
CD	Clinical Drug
CE	Entry "term" to a Supplementary Concept "term"
CHN	Chemical structure name
CMN	Common name
CNU	ISO 3166-1 standard country code in numeric (three-digit) format
CN	LOINC official component name
CON	Code name
CO	Component name (these are hierarchical terms, as opposed to the LOINC component names which are analytes)
CP	ICPC component process (in original form)
CSN	Chemical Structure Name
CS	Short component process in ICPC, i.e. include some abbreviations
CU	Common usage
CV	Content view
CX	Component process in ICPC with abbreviations expanded
DEV	Descriptor entry version
DE	Descriptor
DF	Dose Form
DHT	Deprecated hierarchical term
DI	Disease name
DN	Display Name
DPT	Deprecated preferred term
DP	Drug Product
DSV	Descriptor sort version
DSY	Deprecated synonym
DS	Short form of descriptor

DX	Diagnosis
EN	MeSH nonprint entry "term"
EP	Entry "term"
EQ	Equivalent name
ES	Short form of entry term
ETAV	Entry Term Allelic Variant
ET	Entry "term"
EX	Expanded form of entry term
FBD	Foreign brand name
FI	Finding name
FN	Full form of descriptor
GT	Glossary "term"
HC	Hierarchical class
HD	Hierarchical descriptor
HG	High Level Group Term
HS	Short or alternate version of hierarchical term
HT	Hierarchical term
HX	Expanded version of short hierarchical term
IND	IND code
INP	Ingredient preparation
IN	Name for an ingredient
IS	Obsolete Synonym
IV	Intervention
LN	LOINC official fully specified name
LO	Obsolete official fully specified name
LS	Expanded system/sample type (The expanded version was created for the Metathesaurus and includes the full name of some abbreviations.)
LT	Lower Level Term
LV	Lexical variant
LX	Official fully specified name with expanded abbreviations
MD	CCS multi-level diagnosis categories
MH	Main heading
MOA	Mechanism of action
MP	Preferred names of modifiers
MTH_AB	MTH abbreviation
MTH_ACR	MTH acronym
MTH_BN	MTH fully-specified drug brand name that can not be prescribed
MTH_BSY	Metathesaurus broad synonym expanded

MTH_CHN	MTH chemical structure name
MTH_FN	MTH Full form of descriptor
MTH_HG	MTH High Level Group Term
MTH_HT	MTH Hierarchical term
MTH_IS	Metathesaurus-supplied form of obsolete synonym
MTH_LT	MTH Lower Level Term
MTH_LV	MTH lexical variant
MTH_NPT	MTH non-preferred for language term
MTH_NSY	Metathesaurus narrow synonym expanded
MTH_OL	MTH Non-current Lower Level Term
MTH_OP	Metathesaurus obsolete preferred term
MTH_OS	MTH System-organ class
MTH_PTGB	Metathesaurus-supplied form of British preferred term
MTH_PT	Metathesaurus preferred term
MTH_RLS	Metathesaurus related synonym expanded
MTH_SC	MTH Special Category term
MTH_SYGB	Metathesaurus-supplied form of British synonym
MTH_SY	MTH Designated synonym
MV	Multi-level procedure category
N1	Chemical Abstracts Service Type 1 name of a chemical
NM	Supplementary chemical "term", a name of a substance
NPT	HL7 non-preferred for language term
NP	Non-preferred term
NSC	NSC code
NSY	Narrow synonym
NS	Short form of non-preferred term
NX	Expanded form of non-preferred term
OBS	Obsolete broad synonym
OCD	Obsolete clinical drug
OLX	Expanded LOINC obsolete fully specified name
OL	Non-current Lower Level Term
OM	Obsolete modifiers in HCPCS
ONP	Obsolete non-preferred for language term
ONS	Obsolete narrow synonym
OOSN	Obsolete official short name
OP	Obsolete preferred term
ORS	Obsolete related synonym
OSN	Official short name

OS	System-organ class in the WHO Adverse Reaction Terminology
PCE	Preferred entry "term" to a Supplementary Concept "term"
PC	Preferred "trimmed term" in ICPC
PEN	Preferred MeSH nonprint entry "term"
PEP	Preferred entry "term"
PE	Physiologic effect
PK	Pharmacokinetics
PM	Machine permutation
PN	Metathesaurus preferred name
PSC	Protocol selection criteria
PS	Short forms that needed full specification
PTAV	Preferred Allelic Variant
PTCS	Preferred Clinical Synopsis
PTGB	British preferred term
PT	Designated preferred name
PXQ	Preferred term in preferred qualifier concept.
PX	Expanded preferred terms (pair with PS)
QAB	Qualifier abbreviation
QEV	Qualifier entry version
QSV	Qualifier sort version
RAB	Root abbreviation
RHT	Root hierarchical term
RLS	Related synonym
RPT	Root preferred term
RSY	Root synonym
RT	Designated related "term"
SBDC	Semantic Branded Drug Component
SBDF	Semantic branded drug and form
SBD	Semantic branded drug
SB	Named subset of a source
SCDC	Semantic Drug Component
SCDF	Semantic clinical drug and form
SCD	Semantic Clinical Drug
SCN	Scientific name
SC	Special Category term
SD	CCS single-level diagnosis categories
SN	Official component synonym in LOINC
SP	CCS single-level procedure categories

SSN	Source short name, used in the UMLS Knowledge Source Server
SU	Active Substance
SX	Mixed-case component synonym with expanded abbreviations
SYGB	British synonym
SYN	Designated alias
SY	Designated synonym
TQ	Topical qualifier
UCN	Unique common name
UE	Unique equivalent name
USN	Unique scientific name
USY	Unique synonym
VAB	Versioned abbreviation
VPT	Versioned preferred term
VSY	Versioned synonym
XD	Expanded descriptor in AOD
XM	Cross mapping set
XQ	Alternate name for a qualifier

TTY (tty_class)	
AB	abbreviation
ACR	abbreviation
AD	attribute
BN	preferred
BSY	synonym
CA2	abbreviation
CA3	abbreviation
CAS	synonym
CCN	synonym
CCS	synonym
CC	preferred
CDC	preferred
CD	preferred
CE	entry_term
CHN	synonym
CMN	preferred
CN	preferred
CNU	abbreviation
CON	synonym

CO	hierarchical
CP	preferred
CSN	synonym
CS	abbreviation
CU	synonym
CV	preferred
CX	expanded
CX	preferred
DE	preferred
DEV	abbreviation
DF	preferred
DHT	hierarchical
DHT	obsolete
DI	preferred
DN	synonym
DPT	obsolete
DPT	preferred
DP	preferred
DS	abbreviation
DSV	abbreviation
DSY	obsolete
DSY	synonym
DX	preferred
EN	entry_term
EP	entry_term
EQ	synonym
ES	abbreviation
ES	entry_term
ETAV	entry_term
ET	entry_term
EX	entry_term
EX	expanded
FBD	synonym
FI	preferred
FN	preferred
GT	entry_term
HC	hierarchical
HD	hierarchical

HG	hierarchical
HS	abbreviation
HS	hierarchical
HT	hierarchical
HT	preferred
HX	expanded
HX	hierarchical
IND	synonym
INP	preferred
IN	preferred
IS	obsolete
IS	synonym
IV	preferred
LN	preferred
LO	obsolete
LS	expanded
LT	entry_term
LV	synonym
LX	expanded
LX	preferred
MD	preferred
MH	preferred
MOA	preferred
MP	attribute
MTH_AB	abbreviation
MTH_ACR	abbreviation
MTH_BN	preferred
MTH_BSY	synonym
MTH_CHN	synonym
MTH_FN	preferred
MTH_HG	hierarchical
MTH_HT	hierarchical
MTH_IS	obsolete
MTH_IS	synonym
MTH_LT	entry_term
MTH_LV	synonym
MTH_NPT	synonym
MTH_NSY	synonym

MTH_OL	entry_term
MTH_OL	obsolete
MTH_OP	obsolete
MTH_OP	preferred
MTH_OS	hierarchical
MTH_PTGB	preferred
MTH_PT	expanded
MTH_PT	preferred
MTH_RLS	synonym
MTH_SC	other
MTH_SYGB	synonym
MTH_SY	synonym
MV	preferred
N1	synonym
NM	preferred
NPT	synonym
NP	synonym
NSC	synonym
NS	abbreviation
NS	synonym
NSY	synonym
NX	expanded
NX	synonym
OBS	obsolete
OBS	synonym
OCD	obsolete
OCD	preferred
OL	entry_term
OL	obsolete
OLX	expanded
OLX	obsolete
OLX	synonym
OM	attribute
OM	obsolete
ONP	obsolete
ONP	synonym
ONS	obsolete
ONS	synonym

OOSN	obsolete
OP	obsolete
OP	preferred
ORS	obsolete
ORS	synonym
OSN	abbreviation
OSN	preferred
OS	hierarchical
PCE	entry_term
PCE	preferred
PC	preferred
PEN	entry_term
PEN	preferred
PEP	entry_term
PEP	preferred
PE	preferred
PK	preferred
PM	synonym
PN	preferred
PSC	preferred
PS	abbreviation
PTAV	preferred
PTCS	preferred
PTGB	preferred
PT	preferred
PXQ	entry_term
PX	expanded
PX	preferred
QAB	abbreviation
QEV	abbreviation
QSV	abbreviation
RAB	abbreviation
RHT	hierarchical
RLS	synonym
RPT	preferred
RSY	synonym
RT	other
SBDC	preferred

SBDF	preferred
SBD	preferred
SB	other
SCDC	preferred
SCDF	preferred
SCD	preferred
SCN	preferred
SC	other
SD	preferred
SN	synonym
SP	preferred
SSN	abbreviation
SU	preferred
SX	expanded
SX	synonym
SYGB	synonym
SYN	synonym
SY	synonym
TQ	attribute
UCN	preferred
UE	synonym
USN	preferred
USY	synonym
VAB	abbreviation
VPT	preferred
VSY	synonym
XD	expanded
XD	preferred
XM	other
XQ	attribute
XQ	synonym

B.4 Source Vocabularies

All sources that contribute strings or relationships to the 200802 Metathesaurus are listed. Each entry includes the:

- RSAB: Root Source Abbreviation
- VSAB: Versioned Source Abbreviation
- Source Official Name

- Citation: Publisher name, date and place of publication, and contact
- Number of strings included from this source

HIPAA or CHI standard vocabularies are identified.

- HIPAA standard: national standard for electronic health care transactions established by the Department of Health and Human Services under the Administrative Simplificationprovisions of the Health Insurance Portability and Accountability Act of 1996 (HIPAA, Title II)
- CHI standard: standard for use in U.S. Federal Government systems for the electronic exchange of clinical health information

Additional information on the status or use of some vocabularies in the Metathesaurus is also noted

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RSAB	VSAB	Source Official Name
AOD	**AOD2000**	**Alcohol and Other Drug Thesaurus, 2000**

Alcohol and Other Drug Thesaurus: A Guide to Concepts and Terminology in Substance Abuse and Addiction. 3rd. ed. [4 Volumes.] Bethesda, MD: National Institute on Alcohol Abuse and Alcoholism (NIAAA) and Center for Substance Abuse Prevention (CSAP), 2000

Number of Strings: 20685
Context: FULL-MULTIPLE

AOT	**AOT2003**	**Authorized Osteopathic Thesaurus, 2003**

Authorized Osteopathic Thesaurus. Educational Council of Osteopathic Principles of the American Association of Colleges of Osteopathic Medicine: Chevy Chase MD, 2004

Number of Strings: 471
Context: FULL-MULTIPLE

BioC (updated)	**BioC_0802D**	**Based on BioCarta online maps of molecular relationships, adapted for NCI use, 0802D**

Based on BioCarta online maps of molecular relationships, adapted for NCI use.

Number of Strings: 300

CBO	**CBO2007_06**	**Cerner Clinical Bioinformatics Ontology, June 2007**

"The Clinical Bioinformatics Ontology: A curated semantic network utilizing RefSeq information" Pacific Symposium on Biocomputing, 2007; http://helix-

web.stanford.edu/psb05/hoffman.pdf

Number of Strings: 17231
Context: FULL-NOSIB-MULTIPLE

CCS | **CCS2005** | **Clinical Classifications Software, 2005**

Clinical Classifications Software (CCS). Agency for Healthcare Research and Quality (AHRQ), Rockville, MD. Release Date: April 2005. URL: http://www.hcup-us.ahrq.gov/toolssoftware/ccs/ccs.jsp Phone: 301-594-1364.

Number of Strings: 1144
Context: FULL

CDC (updated) | **CDC_0802D** | **U.S. Centers for Disease Control and Prevention, Department of Health and Human Services, Atlanta, GA., 0802D**

U.S. Centers for Disease Control and Prevention, Department of Health and Human Services, Atlanta, GA.

Number of Strings: 921

CDISC (updated) | **CDISC_0802D** | **Clinical Data Interchange Standards Consortium, 0802D**

Clinical Data Interchange Standards Consortium.

Number of Strings: 2538

CDT | **CDT5** | **Current Dental Terminology 2005 (CDT-5), 5**

Current Dental Terminology 2005 (CDT 2005). Chicago, IL: American Dental Association, 2005

Number of Strings: 590

COH (updated) | **COH_0802D** | **City of Hope, 0802D**

City of Hope, Duarte, CA

COSTAR | **COSTAR_89-95** | **COSTAR, 1989-1995**

Computer-Stored Ambulatory Records (COSTAR). Boston (MA): Massachusetts General Hospital, 1989-1995.

Number of Strings: 3461

CRCH (updated) | **CRCH_0802D** | **Cancer Research Center of Hawaii, 0802D**

Cancer Research Center of Hawaii, University of Hawaii

Number of Strings: 866

CSP | **CSP2006** | **CRISP Thesaurus, 2006**

Computer Retrieval of Information on Scientific Projects (CRISP). Bethesda (MD): National Institutes of Health, Division of Research Grants, Research Documentation Section, 2006.

Number of Strings: 21169
Context: FULL-MULTIPLE

CST | **CST95** | **COSTART, 1995**

Coding Symbols for Thesaurus of Adverse Reaction Terms (COSTART). 5th ed. Rockville (MD): U.S. Food and Drug Administration, Center for Drug Evaluation and Research, 1995.

Number of Strings: 6410
Context: FULL-NOSIB-MULTIPLE

CTCAE (updated) | **CTCAE_0802D** | **Common Terminology Criteria for Adverse Events, 0802D**

Common Terminology Criteria for Adverse Events

Number of Strings: 5598

CTEP | **CTEP04** | **Cancer Therapy Evaluation Program (CTEP), 2004**

Cancer Therapy Evaluation Program (CTEP), National Cancer Institute. Bethesda (MD): National Cancer Institute, 2004.

Number of Strings: 373

DCP | **DCP_0802D** | **Division of Cancer Prevention**

(updated)		**Program, 0802D**

Division of Cancer Prevention Program

Number of Strings: 911

DICOM (updated)	**DICOM_0802D**	**DICOM, 0802D**

DICOM

Number of Strings: 114

DTP (updated)	**DTP_0802D**	**NCI Developmental Therapeutics Program, 0802D**

.;National Cancer Institute;NCI Developmental Therapeutics Program;Lawrence Wright, NCI, lwright@mail.nih.gov.

Number of Strings: 1970

DXP	**DXP94**	**DXplain, 1994**

DXplain (An expert diagnosis program). Boston (MA): Massachusetts General Hospital, 1994.

Number of Strings: 9974

ELC	**ELC2001**	**Expression Library Classification**

Expression Library Classification, version 1 (June 2001). Lash A and Greenhut S, ftp://ncibi.nlm.nih.gov/pub/bioannot/info/keys. Contact: alash@ncbi.nlm.nih.gov

Number of Strings: 450

FDA (updated)	**FDA_0802D**	**Food and Drug Administration, 0802D**

Food and Drug Administration

Number of Strings: 8096

GO	**GO2007_02_01**	**Gene Ontology, 2007_02_01**

Gene Ontology. The Gene Ontology Consortium. February 1, 2007. To reference the Gene Ontology Consortium, cite this paper: The Gene Ontology Consortium. Gene Ontology: tool for the unification of biology. Nature Genet. (2000) 25:25-29. Article

available from: http://www.geneontology.org/GO.cite.shtml#cite.

Number of Strings: 48136
Context: FULL-NOSIB-MULTIPLE-IGNORE-RELA

HCPCS **HCPCS2007** **Healthcare Common Procedure Coding System, 2007**

Healthcare Common Procedure Coding System (HCPCS). Baltimore, MD: U.S. Centers for Medicare & Medicaid Services, 2007.

Number of Strings: 5460
Context: FULL-NOSIB
HIPAA standard
CHI standard

HL7V3.0 **HL7V3.0_2006_05** **HL7 Vocabulary Version 3.0, 2006_05**

Health Level Seven Vocabulary (HL7). Ann Arbor (MI): Health Level Seven, 1998-2006. Contact: Mark McDougall, Executive Director, Health Level Seven; 3300 Washtenaw Avenue, Suite 227, Ann Arbor, MI 48104-4250; Phone: (734)677-7777; Fax: (734)677-6622; Email: HQ@HL7.ORG ; Web site: www.HL7.ORG.

Number of Strings: 7667
Context: FULL-NOSIB-MULTIPLE-IGNORE-RELA

HUGO **HUGO2007_01** **HUGO Gene Nomenclature, 2007_01**

HUGO Gene Nomenclature, HUGO Gene Nomenclature Committee, Department of Biology, University College London, Wolfson House, 4 Stephenson Way, London NW1 2HE, UK. Tel: 44-20-7679-5027 Fax: 44-20-7387-3496 e-mail: nome@galton.ucl.ac.uk

Number of Strings: 76081

ICD10 **ICD10_1998** **ICD10, 1998**

International Statistical Classification of Diseases and Related Health Problems (ICD-10). 10th rev. Geneva (Switzerland): World Health Organization, 1998.

Number of Strings: 13490
Context: FULL-NOSIB

ICD10AE **ICD10AE_1998** **ICD10, American English Equivalents, 1998**

International Statistical Classification of Diseases and Related Health Problems (ICD-10): Americanized Version. 10th rev. Geneva (Switzerland): World Health Organization, 1998.

Number of Strings: 1107

ICD9CM | **ICD9CM_2007** | **ICD-9-CM, 2007**

ICD-9-CM [computer file]: international classification of diseases, ninth revision, clinical modification. Baltimore, MD: U.S. Department of Health and Human Services, Centers for Medicare & Medicaid Services, effective October 1, 2006.

Number of Strings: 20667
Context: FULL
HIPAA standard
CHI standard

ICDO | **ICDO3** | **International Classification of Diseases for Oncology (ICD)**

International Classification of Diseases for Oncology (ICD), Third Edition, 2000. Funded by the U.S. National Cancer Institute's Surveillance, Epidemiology and End Results (SEER) program with Emory University, Atlanta SEER Cancer Registry, Atlanta, Georgia, U.S.A.

Number of Strings: 3652
Context: FULL

ICH (updated) | **ICH_0802D** | **International Conference on Harmonization, 0802D**

International Conference on Harmonization

Number of Strings: 290

ICPC | **ICPC93** | **International Classification of Primary Care, 1993**

The International Classification of Primary Care (ICPC). Denmark: World Organisation of Family Doctors, 1993.

Number of Strings: 1052
Context: FULL-NOSIB-MULTIPLE

ICPC2ICD10ENG | **ICPC2ICD10ENG_200412** | **ICPC2 - ICD10 Thesaurus, 200412**

International Classification of Primary Care / prepared by the Classification Committee of the World Organization of National Colleges, Academies and Academic Associations of General Practitioners/Family Physicians (WONCA), known more briefly as the World Organization of Family Doctors. 2nd ed. Henk Lamberts and Inge Hofmans-Okkes, 2002

Number of Strings: 81798

JAX (updated) | **JAX_0802D** | **NCI Mouse Terminology, 0802D**

NCI Mouse Terminology. Based on Jackson Laboratories mouse terminology, adapted for NCI use.;Bar Harbor, ME;2003

Number of Strings: 156

KEGG (updated) | **KEGG_0802D** | **KEGG Pathway Database, 0802D**

Based on Kyoto Encyclopedia of Genes and Genomes (KEGG), KEGG Pathway Database, adapted for NCI use.;April 2004

Number of Strings: 126

LNC | **LNC219** | **Logical Observation Identifier Names and Codes, 219**

Logical Observation Identifier Names and Codes (LOINC). Version 2.19. Indianapolis (IN): The Regenstrief Institute, December 22, 2006

Number of Strings: 154285
Context: FULL-NOSIB
CHI standard

MBD | **MBD07** | **MEDLINE (1997-2001)**

MEDLINE Backfiles (1997-2001). Bethesda (MD): National Library of Medicine. Contact: http://www.nlm.nih.gov.

MCM | **MCM92** | **McMaster University Epidemiology Terms, 1992**

Glossary of Methodologic Terms for Clinical Epidemiologic Studies of Human Disorders. Canada: McMaster University, 1992.

Number of Strings: 43

MDBCAC | **MDBCAC2005_12** | **Mitelman Database of Chromosome Aberrations in Cancer (MDBCAC), 2005_12**

Mitelman Database of Chromosome Aberrations in Cancer (December 2005). Mitelman F, Johansson B and Mertens F (Eds.), http://cgap.nci.nih.gov/chromosomes/Mitelman

Number of Strings: 342
Context: FULL

MDR **MDR90** **Medical Dictionary for Regulatory Activities Terminology (MedDRA), 9.0**

MedDRA [electronic resource] : medical dictionary for regulatory activities terminology. Version 9.0. Reston, VA : Northrop Grumman, MedDRA MSSO, March 2006.

Number of Strings: 67029
Context: FULL-MULTIPLE

MDRSPA **MDRSPA90** **Medical Dictionary for Regulatory Activities Terminology (MedDRA), Spanish Edition, 9.0**

Medical Dictionary for Regulatory Activities Terminology (MedDRA) Version 9.0, Spanish Edition. International conference on Harmonization of Technical Requirements for Registration of Pharmaceuticals for Human Use (ICH). Reston, VA: MedDRA MSSO, March 2006.

Number of Strings: 87837
Context: FULL-MULTIPLE

MED **MED07** **MEDLINE (2002-2007)**

MEDLINE Current Files (2002-2007). Bethesda (MD): National Library of Medicine. Contact: http://www.nlm.nih.gov.

MEDLINEPLUS **MEDLINEPLUS_20040814** **MedlinePlus Health Topics_2004_08_14, 20040814**

MedlinePlus Health Topics. Bethesda (MD): National Library of Medicine, August 14, 2004.

Number of Strings: 1435

MGED **MGED131** **The MGED Ontology, 131**

The MGED Ontology, version 1.3.1, November 8, 2006. Concepts, definitions, terms, and resources for standardized description of a microarray experiment in support of MAGE v.1. Creators: Chris Stoeckert, Helen Parkinson, Trish Whetzel, Paul Spellman, Catherine A. Ball, Joseph White, John Matese, Liju Fan, Gilberto Fragoso, Mervi

Heiskanen, Susanna Sansone, Helen Causton, Laurence Game, Chris Taylor.

Number of Strings: 964
Context: FULL

MSH **MSH2007_2007_05_01** **Medical Subject Headings, 2007_2007_05_01**

Medical Subject Headings (MeSH). Bethesda (MD): National Library of Medicine, 2007

Number of Strings: 652807
Context: FULL-MULTIPLE

MTH **MTH2007AB** **UMLS Metathesaurus, 2007AB**

UMLS Metathesaurus. Bethesda, MD: National Library of Medicine.

Number of Strings: 95060

MTHFDA **MTHFDA_2007_03_08** **Metathesaurus FDA National Drug Code Directory, 2007_03_08**

Metathesaurus Forms of FDA National Drug Code Directory, 2007_03_08. Bethesda, MD: National Library of Medicine, 2007.

Number of Strings: 25642

MTHHH **MTHHH2007** **Metathesaurus HCPCS Hierarchical Terms, 2007**

Metathesaurus Hierarchical HCPCS Terms. Bethesda (MD): National Library of Medicine, 2007

Number of Strings: 294

MTHICD9 **MTHICD9_2007** **Metathesaurus additional entry terms for ICD-9-CM, 2007**

Metathesaurus additional entry terms for ICD-9-CM [computer file]: international classification of diseases, ninth revision, clinical modification. Bethesda, MD: U.S. Dept. of Health and Human Services, Public Health Service, National Institutes of Health, National Library of Medicine, September 2006.

Number of Strings: 19040

MTHICPC2ICD107B **MTHICPC2ICD107B_04** **ICPC2 - ICD10 Thesaurus, 7-bit**

	12	**Equivalents, 0412**

International Classification of Primary Care / prepared by the Classification Committee of the World Organization of National Colleges, Academies and Academic Associations of General Practitioners/Family Physicians (WONCA), known more briefly as the World Organization of Family Doctors. 2nd ed. Henk Lamberts and Inge Hofmans-Okkes, 7-bit Equivalents, 2002

Number of Strings: 214

MTHICPC2ICD10AE	**MTHICPC2ICD10AE_0412**	**ICPC2 - ICD10 Thesaurus, American English Equivalents, 0412**

International Classification of Primary Care / prepared by the Classification Committee of the World Organization of National Colleges, Academies and Academic Associations of General Practitioners/Family Physicians (WONCA), known more briefly as the World Organization of Family Doctors. 2nd ed. Henk Lamberts and Inge Hofmans-Okkes, American English Equivalents, 2002

Number of Strings: 137

MTHMST	**MTHMST2001**	**Metathesaurus Version of Minimal Standard Terminology Digestive Endoscopy, 2001**

Metathesaurus Version of Minimal Standard Terminology Digestive Endoscopy. Bethesda, MD: National Library of Medicine, 2001.

Number of Strings: 1944

MTHSPL	**MTHSPL_2007_04_23**	**Metathesaurus FDA Structured Product Labels, 2007_04_23**

Metathesaurus Forms of the FDA Structured Product Labels, 2007_04_23. Bethesda, MD: National Library of Medicine, 2007.

Number of Strings: 6323

NCBI	**NCBI2006_01_04**	**NCBI Taxonomy, 2006_01_04**

NCBI Taxonomy. Bethesda, MD: U.S. Department of Health and Human Services, National Institutes of Health, National Library of Medicine, National Center for Biotechnology Information, January 4, 2006. http://www.ncbi.nlm.nih.gov/Taxonomy/

Number of Strings: 297559
Context: FULL-NOSIB

NCI	**NCI2008_02D**	**National Cancer Institute Thesaurus,**

(updated)	**2008_02D**	

National Cancer Institute, National Institutes of Health;NCI Thesaurus;TDE version, February 2007;Bethesda (MD)

Number of Strings: 144000
Context: FULL-NOSIB-MULTIPLE-IGNORE-RELA
HIPAA standard

NCI-GLOSS (updated)	**NCI-GLOSS_0802D**	**NCI-GLOSS (Cancer.gov Dictionary), 0802D**

National Cancer Institute;NCI-GLOSS (Cancer.gov Dictionary);Bethesda (MD)

Number of Strings: 2718

NCI-HL7 (updated)	**NCI-HL7_0802D**	**Health Language 7, 0802D**

Health Language 7

Number of Strings: 226

NCIMTH	**NCIMTH**	**NCI Metathesaurus**

NCI Metathesaurus. Bethesda, MD: National Cancer Institute.

Number of Strings: 31

NCISEER	**NCISEER_1999**	**NCI SEER ICD Neoplasm Code Mappings, 1999**

NCI Surveillance, Epidemiology, and End Results (SEER) conversions between ICD-9-CM and ICD-10 neoplasm codes. National Cancer Institute, Bethesda, MD. Release Date: June 1999. URL: http://www-seer.ims.nci.nih.gov/Admin/ConvProgs/ Phone: 301-496-8510.

NDFRT	**NDFRT_2004_01**	**National Drug File - Reference Terminology, 2004_01**

National Drug File - Reference Terminology, 2004_01. Washington, DC: U.S. Department of Veterans Affairs, Veterans Health Administration, January 2004.

Number of Strings: 37919
Context: FULL-NOSIB-MULTIPLE

OMIM	**OMIM2007_03_19**	**Online Mendelian Inheritance in Man, 2007_03_19**

Online Mendelian Inheritance in Man, OMIM (TM). McKusick-Nathans Institute for Genetic Medicine, Johns Hopkins University (Baltimore, MD) and National Center for Biotechnology Information, National Library of Medicine (Bethesda, MD), {date of download}. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/

Number of Strings: 113720

PDQ	**PDQ2007_11**	**Physician Data Query, 2007_11**

PDQ. Bethesda (MD): National Cancer Institute, November 2007.

Number of Strings: 28814
Context: FULL-NOSIB-MULTIPLE

PMA	**PMA2007**	**Portfolio Management Application (PMA), 2007**

Portfolio Management Application (PMA). NCI Division of Cancer Control and Population Studies (DCCPS), Rockville MD., 2007

Number of Strings: 2008

PNDS	**PNDS2002**	**Perioperative Nursing Data Set, 2nd edition, 2002**

Perioperative nursing data set : the perioperative nursing vocabulary, 2nd Ed. edited by Suzanne C. Beyea. / AORN; Denver, Colo. : AORN, 2002

Number of Strings: 268
Context: FULL-NOSIB

QMR	**QMR96**	**Quick Medical Reference (QMR), 1996**

Quick Medical Reference (QMR). San Bruno (CA): First DataBank, 1997.

Number of Strings: 943

RAM	**RAM99**	**QMR clinically related terms from Randolph A. Miller, 1999**

QMR clinically related terms from Randolf A. Miller, 1999.

Number of Strings: 258

RENI (updated)	**RENI_0802D**	**Registry Nomenclature Information System, 0802D**

Registry Nomenclature Information System

Number of Strings: 310

RXNORM	**RXNORM_07AA_070503F**	**RxNorm Vocabulary, 07AA_070503F**

RxNorm work done by NLM. National Library of Medicine (NLM). Bethesda (MD): National Library of Medicine, META2007AA Full Update 2007_05_03

Number of Strings: 376375

SCTSPA	**SCTSPA_2007_04_30**	**SNOMED Clinical Terms, Spanish Language Edition, 2007_04_30**

College of American Pathologists, SNOMED Clinical Terms, Spanish Language Edition, April 30, 2007. SNOMED International, 325 Waukegan Road, Northfield, IL 60093-2750. Phone: 800-323-4040 ext. 7700. Email: snomed@cap.org. URL: http://www.snomed.org

Number of Strings: 1117192
Context: FULL-NOSIB-MULTIPLE

SNOMEDCT	**SNOMEDCT_2007_01_31**	**SNOMED Clinical Terms, 2007_01_31**

College of American Pathologists, SNOMED Clinical Terms. Chicago IL: College of American Pathologists, 2007. URL: http://www.snomed.org

Number of Strings: 777979
Context: FULL-NOSIB-MULTIPLE
CHI standard

SPN	**SPN2003**	**Standard Product Nomenclature, 2003**

Standard Product Nomenclature (SPN). Rockville, (MD); U.S. Food and Drug Administration, 2003

Number of Strings: 4881

SRC	**SRC**	**Metathesaurus Source Terminology Names**

UMLS Metathesaurus Source Terminologies. Bethesda, MD: National Library of Medicine.

Number of Strings: 392

UCUM (updated) | **UCUM_0802D** | **Unified Code for Units of Measure, 0802D**

Unified Code for Units of Measure

Number of Strings: 550

UMD | **UMD2007** | **The Universal Medical Device Nomenclature System (UMDNS), 2007**

The Universal Medical Device Nomenclature System (UMDNS). Plymouth Meeting (PA): ECRI, 2007.

Number of Strings: 19896
Context: FULL-MULTIPLE

USPMG | **USPMG_2004** | **USP Model Guidelines, 2004**

United States Pharmacopeia (USP). Medicare Prescription Drug Benefit Model Guidelines: Drug Categories and Classes in Part D, 2004. http://www.usp.org/pdf/EN/mmg/comprehensiveDrugListing2004-12-31.pdf

Number of Strings: 1777
Context: FULL-MULTIPLE

UWDA | **UWDA173** | **University of Washington Digital Anatomist, 1.7.3**

University of Washington Digital Anatomist, (UWDA). Seattle (WA): University of Washinton, Version 1.7.3, March, 2003. Jose Mejino, M.D.; email: onard@biostr.washington.edu

Number of Strings: 92913
Context: FULL-MULTIPLE

VANDF | **VANDF_2007_04_04** | **Veterans Health Administration National Drug File, 2007_04_04**

U.S. Department of Veterns Affairs, Veterans Health Administration National Drug File. Department of Veterans Affairs, Washington, DC. URL: http://www.pbm.va.gov/default.aspx

Number of Strings: 25203

B.5 Source and Term Type Default Order of Precedence and Suppressibility

This Appendix displays the default order of Source|Term Types and suppressibility as set by NLM and distributed in the Metathesaurus® in MRRANK.RRF or MRRANK in ORF.

Effective with the 200802 release, MTH|MM is no longer assigned to Metathesaurus strings with multiple meanings and has been deleted from this list. Ambiguous strings are identified in the AMBIGLUI.RRF (AMBIG.LUI in ORF) and AMBIGSUI.RRF (AMBIG.SUI in ORF) files.

Users are encouraged to change the order of Source|Term Type precedence and suppressibility to suit their requirements. The default settings will not be suitable for all applications. The highest ranking Source|Term Type within a concept determines the preferred name for that concept. Use MetamorphoSys (Section 6) to change the selection of preferred names or to alter suppressibility.

Source Abbreviation	Term Type	Suppressible
NCIMTH	PN	No
MTH	PN	No
MTH	PT	No
MTH	SY	No
MTH	RT	No
MTH	CV	No
NCI	PT	No
NCI	HD	No
NCI	SY	No
NCI	AD	No
NCI	AB	No
NCI	CSN	No
NCI	CCN	No
NCI	CNU	No
NCI	CA3	No
NCI	CA2	No
NCI	BN	No
NCI	CCS	No
NCI	DN	No
NCI	FBD	No
NCI	OP	Yes
MSH	MH	No
MSH	HT	No
MSH	EP	No
MSH	EN	No
MSH	PM	No
MSH	NM	No
MSH	N1	No

MSH	CE	No
SNOMEDCT	PT	No
SNOMEDCT	PTGB	No
SNOMEDCT	FN	No
SNOMEDCT	SY	No
SNOMEDCT	SYGB	No
SNOMEDCT	SB	No
NCBI	USN	No
NCBI	SCN	No
NCBI	USY	No
NCBI	SY	No
NCBI	UCN	No
NCBI	CMN	No
NCBI	EQ	No
NCBI	UE	No
RXNORM	SCD	No
RXNORM	SBD	No
RXNORM	SY	No
RXNORM	OCD	No
RXNORM	SCDF	No
RXNORM	SBDF	No
RXNORM	SCDC	No
RXNORM	BN	No
RXNORM	IN	No
RXNORM	DF	No
RXNORM	ET	No
RXNORM	SBDC	No
MTHFDA	CD	No
SNOMEDCT	MTH_FN	No
SNOMEDCT	MTH_PTGB	No
SNOMEDCT	MTH_SYGB	No
SNOMEDCT	MTH_PT	No
SNOMEDCT	MTH_SY	No
HUGO	PT	No
HUGO	ACR	No
HUGO	SYN	No
CSP	PT	No
CSP	SY	No
CSP	ET	No
CSP	AB	No

MTHSPL	DP	No
MTHSPL	SU	No
USPMG	HC	No
USPMG	HT	No
USPMG	PT	No
VANDF	CD	No
VANDF	IN	No
VANDF	PT	No
UWDA	PT	No
UWDA	SY	No
CDT	PT	No
CDT	OP	No
ICD10AE	PT	No
ICD10	PT	No
ICD10AE	PX	No
ICD10	PX	No
ICD10AE	PS	No
ICD10	PS	No
ICD10AE	HT	No
ICD10	HT	No
ICD10AE	HX	No
ICD10	HX	No
ICD10AE	HS	No
ICD10	HS	No
ICD9CM	PT	No
ICD9CM	HT	No
LNC	LX	No
LNC	LN	No
LNC	LO	No
LNC	CX	No
LNC	OSN	No
LNC	HC	No
LNC	CN	No
LNC	SX	No
LNC	SN	No
LNC	LS	No
LNC	HS	No
LNC	OLX	No
LNC	OOSN	No
LNC	XM	No

NDFRT	CD	No
NDFRT	CDC	No
NDFRT	HT	No
NDFRT	IN	No
NDFRT	INP	No
NDFRT	DI	No
NDFRT	PE	No
NDFRT	MOA	No
NDFRT	DF	No
NDFRT	PK	No
NDFRT	SY	No
GO	PT	No
GO	OP	No
GO	BSY	No
GO	NSY	No
GO	OBS	No
GO	ONS	No
CBO	PT	No
GO	MTH_BSY	No
GO	MTH_NSY	No
GO	MTH_OP	No
GO	MTH_PT	No
GO	MTH_RLS	No
GO	ORS	No
GO	RLS	No
GO	IS	No
GO	MTH_IS	No
GO	MTH_SY	No
GO	SY	No
AOT	ET	No
AOT	PT	No
HL7V3.0	PT	No
HL7V3.0	NPT	No
MEDLINEPLUS	PT	No
HL7V3.0	MTH_NPT	No
HL7V3.0	MTH_PT	No
HL7V3.0	ONP	No
HL7V3.0	OP	No
MEDLINEPLUS	ET	No
UMD	PT	No

UMD	ET	No
UMD	RT	No
UMD	HT	No
UMD	SY	No
CCS	HT	No
CCS	MD	No
CCS	SD	No
CCS	MV	No
CCS	SP	No
CCS	XM	No
DXP	DI	No
DXP	FI	No
DXP	SY	No
MCM	PT	No
MCM	RT	No
RAM	PT	No
RAM	RT	No
CST	GT	No
CST	HT	No
CST	PT	No
CST	SC	No
HCPCS	PT	No
HCPCS	MP	No
HCPCS	OP	No
HCPCS	OM	No
QMR	PT	No
PNDS	DX	No
PNDS	HT	No
PNDS	IV	No
PNDS	PS	No
OMIM	ACR	No
OMIM	ET	No
OMIM	ETAV	No
OMIM	HT	No
OMIM	PT	No
OMIM	PTAV	No
OMIM	PTCS	No
OMIM	SYN	No
PNDS	PX	No
ICPC	PX	No

ICPC	PT	No
ICPC	PC	No
ICPC	CX	No
ICPC	CP	No
ICPC	CC	No
ICPC	CO	No
ICPC	HT	No
ICPC	CS	No
ICPC	PS	No
AOD	DE	No
AOD	DS	No
AOD	FN	No
AOD	ET	No
AOD	ES	No
AOD	EX	No
AOD	NP	No
AOD	NS	No
AOD	NX	No
AOD	XD	No
COSTAR	PT	No
MTHICD9	ET	No
MTHMST	PT	No
MTHMST	SY	No
SPN	PT	No
MTHHH	HT	No
MSH	HS	No
MSH	PCE	No
MSH	PEN	No
MSH	PEP	No
MSH	PXQ	No
MSH	TQ	No
MSH	XQ	No
MSH	DEV	No
MSH	DSV	No
MSH	QAB	No
MSH	QEV	No
MSH	QSV	No
ICPC2ICD10ENG	PT	No
MTHICPC2ICD107B	PT	No
MTHICPC2ICD10AE	PT	No

FDA	PT	No
ICH	SY	No
ICH	AB	No
ICH	PT	No
NCI-HL7	SY	No
NCI-HL7	AB	No
NCI-HL7	PT	No
UCUM	AB	No
UCUM	PT	No
UCUM	SY	No
FDA	SY	No
FDA	AB	No
PDQ	MTH_PT	No
PDQ	PT	No
PDQ	HT	No
CBO	SY	No
PDQ	PSC	No
PDQ	MTH_SY	No
PDQ	SY	No
PDQ	CU	No
PDQ	DN	No
PDQ	MTH_LV	No
PDQ	LV	No
PDQ	MTH_ACR	No
PDQ	ACR	No
PDQ	MTH_AB	No
PDQ	AB	No
PDQ	BN	No
PDQ	MTH_BN	No
PDQ	FBD	No
PDQ	OP	Yes
PDQ	CAS	No
PDQ	MTH_CHN	No
PDQ	CHN	No
PDQ	CON	No
PDQ	IND	No
PDQ	NSC	No
PDQ	IS	Yes
DCP	SY	No
DCP	PT	No

NCI-GLOSS	PT	No
NCI-GLOSS	SY	No
ICDO	HT	No
ICDO	PT	No
ICDO	SY	No
ICDO	ET	No
CTCAE	PT	No
CTEP	HT	No
CTEP	PT	No
MDR	MTH_HG	No
MDR	HG	No
MDR	MTH_PT	No
MDR	PT	No
MDR	MTH_OL	Yes
MDR	OL	Yes
MDR	OS	No
MDR	MTH_HT	No
MDR	HT	No
MDR	MTH_SC	No
MDR	SC	No
MDR	MTH_LT	No
MDR	LT	No
MDRSPA	LT	No
MDRSPA	MTH_HT	No
MDRSPA	MTH_LT	No
MDRSPA	MTH_PT	No
MDRSPA	MTH_SC	No
MDRSPA	SC	No
MDRSPA	HG	No
MDRSPA	HT	No
MDRSPA	MTH_HG	No
MDRSPA	MTH_OS	No
MDRSPA	OL	Yes
MDRSPA	OS	No
MDRSPA	PT	No
RENI	DN	No
CRCH	PT	No
CRCH	SY	No
BioC	PT	No
DICOM	PT	No

CDISC	PT	No
CDISC	SY	No
CDC	PT	No
DTP	PT	No
DTP	SY	No
JAX	PT	No
PMA	PT	No
JAX	SY	No
KEGG	PT	No
ELC	HT	No
ELC	PT	No
MDBCAC	HT	No
MDBCAC	PT	No
MGED	PT	No
MGED	HT	No
MGED	SY	No
MGED	DPT	Yes
MGED	DHT	Yes
MGED	DSY	Yes
SCTSPA	MTH_FN	No
SCTSPA	MTH_PT	No
SCTSPA	MTH_SY	No
SCTSPA	FN	No
SCTSPA	PT	No
SCTSPA	SB	No
SCTSPA	SY	No
SRC	RPT	No
SRC	RHT	No
SRC	RAB	No
SRC	RSY	No
SRC	VPT	No
SRC	VAB	No
SRC	VSY	No
SRC	SSN	No

B.6 Release Metadata

Official Counts:

Number of strings from each source:

AOD2000|20685
AOT2003|471

BioC_0802D|300
CBO2007_06|17231
CCS2005|1144
CDC_0802D|921
CDISC_0802D|2538
CDT5|590
COH_0802D|
COSTAR_89-95|3461
CRCH_0802D|866
CSP2006|21169
CST95|6410
CTCAE_0802D|5598
CTEP04|373
DCP_0802D|911
DICOM_0802D|114
DTP_0802D|1970
DXP94|9974
ELC2001|450
FDA_0802D|8096
GO2007_02_01|48136
HCPCS2007|5460
HL7V3.0_2006_05|7667
HUGO2007_01|76081
ICD10AE_1998|1107
ICD10_1998|13490
ICD9CM_2007|20667
ICDO3|3652
ICH_0802D|290
ICPC2ICD10ENG_200412|81798
ICPC93|1052
JAX_0802D|156
KEGG_0802D|126
LNC215|
LNC219|154285
MBD07|
MCM92|43
MDBCAC2005_12|342
MDR90|67029
MDRSPA90|87837
MED07|
MEDLINEPLUS_20040814|1435
MGED131|964
MSH2007_2007_05_01|652807
MTH2007AB|95060
MTHFDA_2007_03_08|25642
MTHHH2007|294
MTHICD9_2007|19040
MTHICPC2ICD107B_0412|214
MTHICPC2ICD10AE_0412|137

MTHMST2001|1944
MTHSPL_2007_04_23|6323
NCBI2006_01_04|297559
NCI-GLOSS_0802D|2718
NCI-HL7_0802D|226
NCI2008_02D|144000
NCIMTH|31
NCISEER_1999|
NDFRT_2004_01|37919
OMIM2007_03_19|113720
PDQ2007_11|28814
PMA2007|2008
PNDS2002|268
QMR96|943
RAM99|258
RENI_0802D|310
RXNORM_07AA_070503F|376375
SCTSPA_2007_04_30|1117192
SNOMEDCT_2007_01_31|777979
SPN2003|4881
SRC|392
UCUM_0802D|550
UMD2007|19896
USPMG_2004|1777
UWDA173|92913
VANDF_2007_04_04|25203

Release version: 200802
Release format: RRF
Concepts: 1,332,200
Number of concept names (AUIs): 4,633,254
Number of distinct concept names (SUIs): 4,202,716
Number of distinct normalized concept names (LUIs): 3,739,784
Number of sources (distinct source families by language): 54
Number of sources contributing concept names: 76
Number of languages contributing concept names: 2

Name Count by Language:

Language	Name Count	% of Metathesaurus
ENG	3387158	73.11%
SPA	1246096	26.89%

Name Count by Source Restriction Level (SRL):

SRL	Source Count	% of Sources
0	2397503	51.75%

SRL	Source Count	% of Sources
1	19896	0.43%
3	309328	6.68%
4	1906527	41.15%
0+4	4304030	92.89%

Count of Atoms by Suppressibility:

Suppressibility Status	Name Count	% of Metathesaurus
E	12362	0.27%
N	4324583	93.34%
O	296178	6.39%
Y	131	0%

Source Counts by Language (from MRSAB):

Language	Name count	% of Metathesaurus
ENG	71	93.42%
*	3	3.95%
SPA	2	2.63%

*Note: 3 sources contribute relationships which have no associated language values.