



## Medical Genetics Summaries Expert Reviewers

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- [Cetuximab Therapy and RAS and BRAF Genotype](#)

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- [Carbamazepine Therapy and HLA Genotype](#)
- [Carvedilol Therapy and CYP2D6 Genotype](#)
- [Warfarin Therapy and VKORC1 and CYP Genotype](#)

Amstutz, Ursula, PhD; University of Bern, Bern, Switzerland

- [Carbamazepine Therapy and HLA Genotype](#)

Appell, Malin Lindqvist, PhD; Linköping University, Linköping, Sweden

- [Thioguanine Therapy and TPMT Genotype](#)

Badary, Osama A., PhD, MSc; The British University in Egypt, Cairo, Egypt

- [Chloroquine Therapy and G6PD Genotype](#)

Bancone, Germana, PhD; University of Oxford, Oxford, UK

- [Hydroxychloroquine Therapy and G6PD Genotype](#)

Bansal, Sumit, PhD; University of Washington, Seattle, WA, USA

- [Dronabinol Therapy and CYP2C9 Genotype](#)

Beam, Teresa, PhD; Manchester University, North Manchester, IN, USA

- [Sofosbuvir Therapy and IFNL4 Genotype](#)

Beckers, Albert, MD, PhD; University of Liège, Liège, Belgium

- [McCune-Albright Syndrome](#)

Beitelshees, Amber, PharmD, MPH, FAHA, FCCP; Baltimore, MD, USA

- [Clopidogrel Therapy and CYP2C19 Genotype](#)

Bitner-Glindzicz, Maria, PhD, FRCP; University College London, London, UK

- [Gentamicin Therapy and \*MT-RNR1\* Genotype](#)

Bousman, Chad, MPH, PhD; University of Calgary, Calgary, AB, Canada

- [Venlafaxine Therapy and \*CYP2D6\* Genotype](#)

Brauch, Hiltrud, PhD; Dr. Margarete Fischer-Bosch-Institute of Clinical Pharmacology (IKP), Stuttgart, Germany

- [Tamoxifen Therapy and \*CYP2D6\* Genotype](#)

Brown, Jacob T., PharmD, MS; University of Minnesota College of Pharmacy, Duluth, MN, USA

- [Atomoxetine Therapy and \*CYP2D6\* Genotype](#)

Burstein, Harold, MD, PhD; Harvard Medical School, Boston, MA, USA

- [Tamoxifen Therapy and \*CYP2D6\* Genotype](#)

Callaghan, John, MD, PhD; Indiana University School of Medicine, Indianapolis, IN, USA

- [Carisoprodol Therapy and \*CYP2C19\* Genotype](#)
- [Propafenone Therapy and \*CYP2D6\* Genotype](#)
- [Risperidone Therapy and \*CYP2D6\* Genotype](#)

Carpenter, William, MD; University of Maryland School of Medicine, Baltimore, MD, USA

- [Clozapine Therapy and \*CYP2D6\*, \*CYP1A2\*, and \*CYP3A4\* Genotype](#)

Cavallari, Larisa H., PharmD; University of Florida, Gainesville, FL, USA

- [Clopidogrel Therapy and \*CYP2C19\* Genotype](#)
- [Codeine Therapy and \*CYP2D6\* Genotype](#)
- [Metoprolol Therapy and \*CYP2D6\* Genotype](#)

Chapman, Paul, MD; Memorial Sloan Kettering Cancer Center, New York, NY, USA

- [Vemurafenib Therapy and \*BRAF\* and \*NRAS\* Genotype](#)

Cheon, Jae Hee, MD; Yonsei University College of Medicine, Seoul, Korea

- [Thioguanine Therapy and \*TPMT\* and \*NUDT15\* Genotype](#)

Chung, Cecilia P., MD, MPH; Vanderbilt University Medical Center, Nashville, TN, USA

- [Azathioprine Therapy and \*TPMT\* and \*NUDT15\* Genotype](#)

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- [Tafenoquine Therapy and \*G6PD\* Genotype](#)

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- [Codeine Therapy and \*CYP2D6\* Genotype](#)

Cronin-Fenton, Deirdre, PhD; Aarhus University, Aarhus, Denmark

- [Tamoxifen Therapy and \*CYP2D6\* Genotype](#)

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- McCune-Albright Syndrome

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- Cetuximab Therapy and RAS and BRAF Genotype

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- Aripiprazole Therapy and CYP2D6 Genotype
- Diazepam Therapy and CYP2C19 Genotype

Esquivel, Bernard, MD, MHA, PhD; Latin American Association for Personalized Medicine, Vancouver, BC, Canada

- Atomoxetine Therapy and CYP2D6 Genotype
- Azathioprine Therapy and TPMT and NUDT15 Genotype
- Carvedilol Therapy and CYP2D6 Genotype
- Diazepam Therapy and CYP2C19 Genotype
- Esomeprazole Therapy and CYP2C19 Genotype
- Phenytoin Therapy and HLA-B\*15:02 and CYP2C9 Genotype
- Rasburicase Therapy and G6PD and CYB5R Genotype
- Venlafaxine Therapy and CYP2D6 Genotype
- Warfarin Therapy and VKORC1 and CYP Genotype

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- Lesinurad Therapy and CYP2C9 Genotype

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- Cetuximab Therapy and RAS and BRAF Genotype

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- Warfarin Therapy and VKORC1 and CYP Genotype

Franciosi, James P., MD, MS; Nemours Children's Hospital, University of Central Florida College of Medicine, Orlando, FL, USA

- Omeprazole Therapy and CYP2C19 Genotype

Gaedigk, Andrea, MS, PhD; University of Missouri, Kansas City, MO, USA

- Aripiprazole Therapy and CYP2D6 Genotype
- Atomoxetine Therapy and CYP2D6 Genotype
- CYP2D6 Overview: Allele and Phenotype Frequencies

Gage, Brian, MSc, MD; Washington University, St. Louis, MO, USA

- Warfarin Therapy and VKORC1 and CYP Genotype

Grond, Stefan, MD; Klinikum Lippe, Lemgo, Germany

- Tramadol Therapy and *CYP2D6* Genotype

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- Celecoxib Therapy and *CYP2C9* Genotype

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- Flurbiprofen Therapy and *CYP2C9* Genotype
- Lesinurad Therapy and *CYP2C9* Genotype
- Piroxicam Therapy and *CYP2C9* Genotype
- Oxycodone Therapy and *CYP2D6* Genotype
- Risperidone Therapy and *CYP2D6* Genotype

Haidar, Cyrine-Eliana, PharmD, BCPS, BCOP, FASHP; St. Jude Children's Research Hospital, Memphis, TN, USA

- Chloroquine Therapy and *G6PD* Genotype

Hampson, Aidan, PhD; National Institutes of Health, Bethesda, MD, USA

- Oxycodone Therapy and *CYP2D6* Genotype

Hardison, Matthew, PhD, FACMG; Aegis Sciences Corporation, Nashville, TN, USA

- Dabrafenib Therapy and *BRAF* and *G6PD* Genotype
- Vemurafenib Therapy and *BRAF* and *NRAS* Genotype

Henrich, Timothy, MD; Brigham and Women's Hospital, Cambridge, MA, USA

- Maraviroc Therapy and *CCR5* Genotype

Henricks, Linda, PharmD; The Netherlands Cancer Institute, Amsterdam, The Netherlands

- Capecitabine Therapy and *DPYD* Genotype
- Fluorouracil Therapy and *DPYD* Genotype

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- Cetuximab Therapy and *RAS* and *BRAF* Genotype

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- Methylenetetrahydrofolate Reductase Deficiency

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- Fluorouracil Therapy and *DPYD* Genotype

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- Abacavir Therapy and *HLA-B\*57:01* Genotype
- Carbamazepine Therapy and *HLA* Genotype
- Carvedilol Therapy and *CYP2D6* Genotype
- Clopidogrel Therapy and *CYP2C19* Genotype
- Esomeprazole Therapy and *CYP2C19* Genotype
- Tamoxifen Therapy and *CYP2D6* Genotype
- Venlafaxine Therapy and *CYP2D6* Genotype

- Warfarin Therapy and *VKORC1* and *CYP* Genotype

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- Trastuzumab Therapy and *ERBB2* (HER2) Genotype

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- Trastuzumab Therapy and *ERBB2* (HER2) Genotype

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- Irinotecan Therapy and *UGT1A1* Genotype

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- Dabrafenib Therapy and *BRAF* and *G6PD* Genotype

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- Siponimod Therapy and *CYP2C9* Genotype

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- Schizophrenia

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- Dabrafenib Therapy and *BRAF* and *G6PD* Genotype

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- Aripiprazole Therapy and *CYP2D6* Genotype

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- Fluorouracil Therapy and *DPYD* Genotype

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- Phenytoin Therapy and *HLA-B\*15:02* and *CYP2C9* Genotype

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- Diazepam Therapy and *CYP2C19* Genotype

- Simeprevir Therapy and *IFNL3* Genotype

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- Tramadol Therapy and *CYP2D6* Genotype

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- Carbamazepine Therapy and *HLA* Genotype

- Gentamicin Therapy and *MT-RNR1* Genotype

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- Amitriptyline Therapy and *CYP2D6* and *CYP2C19* Genotype

- Imipramine Therapy and *CYP2D6* and *CYP2C19* Genotype

- Sofosbuvir Therapy and *IFNL4* Genotype
- Thioridazine Therapy and *CYP2D6* Genotype

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- Belinostat Therapy and *UGT1A1* Genotype
- Brivaracetam Therapy and *CYP2C19* Genotype
- Carisoprodol Therapy and *CYP2C19* Genotype
- Dabrafenib Therapy and *BRAF* Genotype
- Irinotecan Therapy and *UGT1A1* Genotype
- Lacosamide Therapy and *CYP2C19* Genotype
- Propafenone Therapy and *CYP2D6* Genotype
- Risperidone Therapy and *CYP2D6* Genotype

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- Dronabinol Therapy and *CYP2C9* Genotype

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- Flibanserin Therapy and *CYP2C19* Genotype

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- Tafenoquine Therapy and *G6PD* Genotype

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- Sofosbuvir Therapy and *IFNL4* Genotype

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- ACHOO Syndrome

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- Flurbiprofen Therapy and *CYP2C9* Genotype

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- Aripiprazole Therapy and *CYP2D6* Genotype
- Atomoxetine Therapy and *CYP2D6* Genotype

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- Thioguanine Therapy and *TPMT* Genotype

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- Clozapine Therapy and *CYP* Genotype

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- Risperidone Therapy and *CYP2D6* Genotype

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- [Trastuzumab Therapy and ERBB2 \(HER2\) Genotype](#)

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- [Trastuzumab Therapy and ERBB2 \(HER2\) Genotype](#)

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- [Fluorouracil Therapy and DPYD Genotype](#)

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- [Clozapine Therapy and CYP2D6, CYP1A2, and CYP3A4 Genotype](#)

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- [Pegloticase Therapy and G6PD Genotype](#)

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- [Gentamicin Therapy and MT-RNR1 Genotype](#)

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- [Thioguanine Therapy and TPMT and NUDT15 Genotype](#)

- [Mercaptopurine Therapy and TPMT and NUDT15 Genotype](#)

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- [Gentamicin Therapy and MT-RNR1 Genotype](#)
- [Clopidogrel Therapy and CYP2C19 Genotype](#)

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- [Lesinurad Therapy and CYP2C9 Genotype](#)

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- [Mercaptopurine Therapy and TPMT and NUDT15 Genotype](#)

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- [Irinotecan Therapy and UGT1A1 Genotype](#)

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- [Venlafaxine Therapy and CYP2D6 Genotype](#)

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- [Eliglustat Therapy and CYP2D6 Genotype](#)

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- [Risperidone Therapy and CYP2D6 Genotype](#)

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- [Deutetrabenazine Therapy and CYP2D6 Genotype](#)

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- [Omeprazole Therapy and CYP2C19 Genotype](#)

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- Brivaracetam Therapy and CYP2C19 Genotype
- Carisoprodol Therapy and CYP2C19 Genotype
- Lacosamide Therapy and CYP2C19 Genotype
- Propafenone Therapy and CYP2D6 Genotype

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- [Clozapine Therapy and CYP Genotype](#)

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- [ABO Blood Group](#)

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- Amitriptyline Therapy and CYP2D6 and CYP2C19 Genotype
- Capecitabine Therapy and DPYD Genotype
- Carbamazepine Therapy and HLA Genotype
- Carisoprodol Therapy and CYP2C19 Genotype
- Fluorouracil Therapy and DPYD Genotype
- Flurbiprofen Therapy and CYP2C9 Genotype
- Imipramine Therapy and CYP2D6 and CYP2C19 Genotype
- Lesinurad Therapy and CYP2C9 Genotype
- Phenytoin Therapy and HLA-B\*15:02 and CYP2C9 Genotype
- Piroxicam Therapy and CYP2C9 Genotype
- Prasugrel Therapy and CYP Genotype
- Propafenone Therapy and CYP2D6 Genotype
- Risperidone Therapy and CYP2D6 Genotype
- Thioridazine Therapy and CYP2D6 Genotype

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- [Gentamicin Therapy and MT-RNR1 Genotype](#)

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- Allopurinol Therapy and HLA-B\*58:01 Genotype
- Aripiprazole Therapy and CYP2D6 Genotype
- Clozapine Therapy and CYP Genotype
- Codeine Therapy and CYP2D6 Genotype
- Phenytoin Therapy and HLA-B\*15:02 and CYP2C9 Genotype
- Tramadol Therapy and CYP2D6 Genotype

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- [Pegloticase Therapy and G6PD Genotype](#)

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- [Sofosbuvir Therapy and IFNL4 Genotype](#)

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- Capecitabine Therapy and *DYPD* Genotype

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- Maraviroc Therapy and *CCR5* Genotype
- Prasugrel Therapy and *CYP* Genotype

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- Abacavir Therapy and *HLA-B\*57:01* Genotype

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- Irinotecan Therapy and *UGT1A1* Genotype

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- Fluorouracil Therapy and *DYPD* Genotype
- Risperidone Therapy and *CYP2D6* Genotype
- Warfarin Therapy and *VKORC1* and *CYP* Genotype

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- Capecitabine Therapy and *DYPD* Genotype
- Phenytoin Therapy and *HLA-B\*15:02* and *CYP2C9* Genotype

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- Dabrafenib Therapy and *BRAF* and *G6PD* Genotype
- Vemurafenib Therapy and *BRAF* and *NRAS* Genotype

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- Panitumumab Therapy and *RAS* and *BRAF* Genotype

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- Abacavir Therapy and *HLA-B\*57:01* Genotype

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- Abacavir Therapy and *HLA-B\*57:01* Genotype
- Rasburicase Therapy and *G6PD* and *CYB5R* Genotype

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- Venlafaxine Therapy and *CYP2D6* Genotype

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- Pertuzumab Therapy and *ERBB2 (HER2)* Genotype

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- Fluorouracil Therapy and *DYPD* Genotype
- Irinotecan Therapy and *UGT1A1* Genotype

- Maraviroc Therapy and *CCR5* Genotype
- Prasugrel Therapy and *CYP* Genotype

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- Panitumumab Therapy and *RAS* and *BRAF* Genotype

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- Atazanavir Therapy and *UGT1A1* Genotype

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- Abacavir Therapy and *HLA-B\*57:01* Genotype

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- Gentamicin Therapy and *MT-RNR1* Genotype

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- Irinotecan Therapy and *UGT1A1* Genotype

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- Belinostat Therapy and *UGT1A1* Genotype
- Capecitabine Therapy and *DYPD* Genotype
- Oxycodone Therapy and *CYP2D6* Genotype

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- Hydroxychloroquine Therapy and *G6PD* Genotype

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- Primaquine Therapy and *G6PD* and *CYP2D6* Genotype

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- Trastuzumab Therapy and *ERBB2* (HER2) Genotype

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- Brivaracetam Therapy and *CYP2C19* Genotype
- Carbamazepine Therapy and *HLA* Genotype
- Clobazam Therapy and *CYP2C19* Genotype
- Phenytoin Therapy and *HLA-B\*15:02* and *CYP2C9* Genotype

Rosenzweig, Mark, PhD; Foundation Medicine Inc., Cambridge, MA, USA

- Dabrafenib Therapy and *BRAF* and *G6PD* Genotype
- Vemurafenib Therapy and *BRAF* and *NRAS* Genotype

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- Abacavir Therapy and *HLA-B\*57:01* Genotype

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- Amitriptyline Therapy and *CYP2D6* and *CYP2C19* Genotype
- Imipramine Therapy and *CYP2D6* and *CYP2C19* Genotype
- Thioridazine Therapy and *CYP2D6* Genotype

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- Pertuzumab Therapy and *ERBB2 (HER2)* Genotype

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- Aripiprazole Therapy and *CYP2D6* Genotype
- Tramadol Therapy and *CYP2D6* Genotype

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- Clobazam Therapy and *CYP2C19* Genotype

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- Tafenoquine Therapy and *G6PD* Genotype

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- Capecitabine Therapy and *DPYD* Genotype

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- Trastuzumab Therapy and *ERBB2 (HER2)* Genotype

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- Celecoxib Therapy and *CYP2C9* Genotype
- Codeine Therapy and *CYP2D6* Genotype
- Tramadol Therapy and *CYP2D6* Genotype

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- Pertuzumab Therapy and *ERBB2 (HER2)* Genotype

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- Tamoxifen Therapy and *CYP2D6* Genotype

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- Atazanavir Therapy and *UGT1A1* Genotype

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- Warfarin Therapy and *VKORC1* and *CYP* Genotype

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- Allopurinol Therapy and *HLA-B\*58:01* Genotype
- Amitriptyline Therapy and *CYP2D6* and *CYP2C19* Genotype
- Azathioprine Therapy and *TPMT* Genotype

- Celecoxib Therapy and *CYP2C9* Genotype
- Clopidogrel Therapy and *CYP2C19* Genotype
- Deutetrabenazine Therapy and *CYP2D6* Genotype
- Diazepam Therapy and *CYP2C19* Genotype
- Esomeprazole Therapy and *CYP2C19* Genotype
- Flibanserin Therapy and *CYP2C19* Genotype
- Gentamicin Therapy and *MT-RNR1* Genotype
- Imipramine Therapy and *CYP2D6* and *CYP2C19* Genotype
- Lacosamide Therapy and *CYP2C19* Genotype
- Mercaptopurine Therapy and *TPMT* and *NUDT15* Genotype
- Omeprazole Therapy and *CYP2C19* Genotype
- Pegloticase Therapy and *G6PD* Genotype
- Phenytoin Therapy and *HLA-B\*15:02* and *CYP2C9* Genotype
- Rasburicase Therapy and *G6PD* and *CYB5R* Genotype
- Simeprevir Therapy and *IFNL3* Genotype
- Tamoxifen Therapy and *CYP2D6* Genotype
- Thioguanine Therapy and *TPMT* Genotype
- Venlafaxine Therapy and *CYP2D6* Genotype

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- Primaquine Therapy and *G6PD* and *CYP2D6* Genotype

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- Trastuzumab Therapy and *ERBB2 (HER2)* Genotype

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- Hydroxychloroquine Therapy and *G6PD* Genotype

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- Clopidogrel Therapy and *CYP2C19* Genotype

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- Allopurinol Therapy and *HLA-B\*58:01* Genotype

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- Belinostat Therapy and *UGT1A1* Genotype

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- Codeine Therapy and *CYP2D6* Genotype

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- Capecitabine Therapy and *DPYD* Genotype

Stamp, Lisa, MBChB, FRACP, PhD; University of Otago, Christchurch, New Zealand

- Allopurinol Therapy and *HLA-B\*58:01* Genotype

Stockis, Armel, UCB Pharma, Brussels, Belgium

- Brivaracetam Therapy and *CYP2C19* Genotype

Sukasem, Chonlaphat, PhD; Mahidol University, Bangkok, Thailand

- Carbamazepine Therapy and *HLA* Genotype
- Risperidone Therapy and *CYP2D6* Genotype

Sweatt, J. David, PhD; Vanderbilt University, Nashville, TN, USA

- Pitt-Hopkins Syndrome

Szer, Jeff, B Med Sc, MB BS, FRACP; University of Melbourne, Peter MacCallum Cancer Centre and The Royal Melbourne Hospital, Melbourne, Australia

- Eliglustat Therapy and *CYP2D6* Genotype

Tanasescu, Radu, MD; University of Nottingham School of Medicine, Queen's Medical Centre, Nottingham, UK

- Siponimod Therapy and *CYP2C9* Genotype

Thirumaran, Ranjit, MPharm, PhD; Genelex Labs, Seattle, WA, USA

- Imipramine Therapy and *CYP2D6* and *CYP2C19* Genotype

Thompson, Alex, MD, PhD; Duke University Medical Centre, Durham, NC, USA

- Simeprevir Therapy and *IFNL3* Genotype

Trenk, Dietmar, PhD; Albert Ludwig University of Freiburg, Freiburg, Germany

- Clopidogrel Therapy and *CYP2C19* Genotype

Tsunedomi, Ryouichi, PhD; Yamaguchi University Graduate School of Medicine, Yamaguchi, Japan

- Irinotecan Therapy and *UGT1A1* Genotype

Unadkat, Jashvant D., PhD; University of Washington, Seattle, WA, USA

- Dronabinol Therapy and *CYP2C9* Genotype

Uppugunduri, Chakradhara, PhD, BPharm, MSc; University of Geneva, Geneva, Switzerland

- Amitriptyline Therapy and *CYP2D6* and *CYP2C19* Genotype
- Celecoxib Therapy and *CYP2C9* Genotype
- Flurbiprofen Therapy and *CYP2C9* Genotype
- Diazepam Therapy and *CYP2C19* Genotype
- Imipramine Therapy and *CYP2D6* and *CYP2C19* Genotype
- Lesinurad Therapy and *CYP2C9* Genotype
- Piroxicam Therapy and *CYP2C9* Genotype
- Warfarin Therapy and *VKORC1* and *CYP* Genotype

van Laarhoven, Hanneke W.M., MD, PhD, PhD; University of Amsterdam, Amsterdam, The Netherlands

- Trastuzumab Therapy and *ERBB2* (*HER2*) Genotype

van Rhenen, Mandy, MSc; Royal Dutch Pharmacists Association (KNMP), The Hague, The Netherlands

- Amitriptyline Therapy and *CYP2D6* and *CYP2C19* Genotype
- Imipramine Therapy and *CYP2D6* and *CYP2C19* Genotype
- Fluorouracil Therapy and *DYPD* Genotype
- Metoprolol Therapy and *CYP2D6* Genotype
- Omeprazole Therapy and *CYP2C19* Genotype
- Propafenone Therapy and *CYP2D6* Genotype
- Risperidone Therapy and *CYP2D6* Genotype

Vieira, José Luiz Fernandes, PhD; Universidade Federal do Pará, Belém, Pará, Brazil

- Chloroquine Therapy and *G6PD* Genotype

Visk, DeeAnn, PhD; San Diego, CA, USA

- Propafenone Therapy and *CYP2D6* Genotype

Wadelius, Mia, PhD; Uppsala University, Uppsala, Sweden

- Allopurinol Therapy and *HLA-B\*58:01* Genotype
- Atomoxetine Therapy and *CYP2D6* Genotype
- Esomeprazole Therapy and *CYP2C19* Genotype
- Irinotecan Therapy and *UGT1A1* Genotype
- Omeprazole Therapy and *CYP2C19* Genotype

Wainberg, Mark, PhD, OC, OQ, FRSC; McGill University, Montreal, QC, Canada

- Maraviroc Therapy and *CCR5* Genotype

Weinberg, Benjamin A., MD; MedStar Georgetown University Hospital, Georgetown Lombardi Comprehensive Cancer Center, Georgetown University Medical Center, Washington, DC, USA

- Panitumumab Therapy and *RAS* and *BRAF* Genotype

Whirl-Carrillo, Michelle, PhD; Stanford University, Stanford, CA, USA

- *CYP2D6* Overview: Allele and Phenotype Frequencies

Wikstrand, John, MD, PhD; University of Gothenburg, Gothenbeg, Sweden

- Metoprolol Therapy and *CYP2D6* Genotype

Wolowich, William R., PharmD; Nova Southeastern University, Fort Lauderdale, FL, USA

- Dronabinol Therapy and *CYP2C9* Genotype

Yadlapati, Rena, MD, MSHS; University of California San Diego, San Diego, CA, USA

- Omeprazole Therapy and *CYP2C19* Genotype

Yaeger, Rona, MD; Memorial Sloan Kettering Cancer Center, New York, NY, USA

- Dabrafenib Therapy and *BRAF* Genotype

Yin, Ji-Ye; Xiangya Hospital, Central South University, Changsha, Hunan Province, China

- Irinotecan Therapy and *UGT1A1* Genotype

Zgheib, Nathalie K., MD; American University of Beirut, Beirut, Lebanon

- Mercaptopurine Therapy and *TMPT* and *NUDT15* Genotype

Zujewski, Jo Anne, MD; National Cancer Institute, Bethesda, MD, USA

- Pertuzumab Therapy and *ERBB2 (HER2)* Genotype

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