

Appendix D: Aminolevulinic acid and Phototoxicity

From: [Perioperative Medication Management – Adult/Pediatric – Inpatient/Ambulatory Clinical Practice Guideline](#)

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Summary

Use of aminolevulinic acid is associated with photosensitivity. Patients exposed to photosensitizing agents may experience phototoxic skin reactions (e.g. severe sunburn). Due to the increased risk of phototoxic reactions, administration of other phototoxic medications should be avoided whenever possible for 24 hours before and after systemic aminolevulinic acid administration.



Medications associated with inducing phototoxicity are listed in the table below. Coordinate a management plan for these medications with the surgeon and prescribing physician.

Generic name	Therapeutic class
Acitretinoin	Retinoid
Adapalene	Retinoid
Afatinib	Antineoplastic; tyrosine kinase inhibitor
Alitretinoin	Retinoid
Alprazolam	Anxiolytic
Aminolevulinic acid topical	Photosensitizing agent
Amiodarone	Anti-arrhythmic
Amlodipine	Calcium channel blocker
Aripiprazole	Antipsychotic
Atorvastatin	HMG Co-A reductase inhibitor
Atovaquone/proguanil	Anti-malarial
Bendroflumethiazide	Diuretic
Besifloxacin	Antimicrobial; fluoroquinolone
Bexarotene	Retinoid
Bicalutamide	Antineoplastic; antiandrogen
Cabazitaxel	Antineoplastic; antimetabolic agent
Calcitriol	Vitamin D analog
Candesartan	Angiotensin II receptor blocker
Capecitabine	Antineoplastic; anti-metabolite
Carbamazepine	Anticonvulsant
Cefotaxime	Beta-lactam antimicrobial
Ceftazidime	Beta-lactam antimicrobial
Celecoxib	Non-steroidal anti-inflammatory
Chlordiazepoxide	Anxiolytic
Chloroquine	Anti-malarial
Chlorothiazide	Diuretic
Chlorpromazine	Antipsychotic
Chlorthalidone	Diuretic
Ciprofloxacin	Antimicrobial; fluoroquinolone
Citalopram	Antidepressant
Clomipramine	Antidepressant
Clopidogrel	Antiplatelet

Generic name	Therapeutic class
Clozapine	Antipsychotic
Cobimetinib	Antineoplastic; MEK inhibitor
Crizotinib	Antineoplastic; tyrosine kinase inhibitor
Dacarbazine	Antineoplastic; anti-metabolite
Dapsone	Antimicrobial
Delafloxacin	Antimicrobial; fluoroquinolone
Demeclocycline	Tetracycline
Diclofenac	Non-steroidal anti-inflammatory
Diflunisal	Non-steroidal anti-inflammatory
Diltiazem	Calcium channel blocker
Diphenhydramine	Antihistamine
Docetaxel	Antineoplastic; antimetotic agent
Doxorubicin	Antineoplastic; antimetotic agent
Doxycycline	Tetracycline
Dronedarone	Anti-arrhythmic
Eculizumab	Monoclonal antibody
Efavirenz	Antiretroviral
Enalapril	Angiotensin II converting enzyme inhibitor
Epirubicin	Antineoplastic; antimetotic agent
Eravacycline	Tetracycline
Erlotinib	Antineoplastic; tyrosine kinase inhibitor
Escitalopram	Antidepressant
Esomeprazole	Proton pump inhibitor
Ethinyl estradiol	Contraceptive hormone
Etodolac	Non-steroidal anti-inflammatory
Fenofibrate	Fibrate
Fenoprofen	Non-steroidal anti-inflammatory
Fluorouracil	Antineoplastic; anti-metabolite
Fluoxetine	Antidepressant
Flupentixol	Antipsychotic
Fluphenazine	Antipsychotic
Flurbiprofen	Non-steroidal anti-inflammatory
Flutamide	Antineoplastic; antiandrogen
Fluvoxamine	Antidepressant
Furosemide	Diuretic
Gatifloxacin	Antimicrobial; fluoroquinolone
Gemifloxacin	Antimicrobial; fluoroquinolone
Glimepiride	Anti-diabetic
Glipizide	Anti-diabetic
Glyburide	Anti-diabetic
Griseofulvin	Antifungal
Haloperidol	Antipsychotic
Hydrochlorothiazide	Diuretic
Hydroxychloroquine	Anti-malarial
Hydroxyurea	Antineoplastic
Ibuprofen	Non-steroidal anti-inflammatory
Imatinib	Antineoplastic; tyrosine kinase inhibitor

Generic name	Therapeutic class
Imipramine	Antidepressant
Indapamide	Diuretic
Indomethacin	Non-steroidal anti-inflammatory
Irbesartan	Angiotensin II receptor blocker
Isoniazid	Anti-tuberculosis
Isotretinoin	Retinoid
Itraconazole	Antifungal
Ketoconazole	Antifungal
Ketoprofen	Non-steroidal anti-inflammatory
Ketorolac	Non-steroidal anti-inflammatory
Leflunomide	Anti-inflammatory
Levofloxacin	Antimicrobial; fluoroquinolone
Losartan	Angiotensin II receptor blocker
Meclofenamate	Non-steroidal anti-inflammatory
Meclofenamide sodium	Non-steroidal anti-inflammatory
Mefenamic acid	Non-steroidal anti-inflammatory
Meloxicam	Non-steroidal anti-inflammatory
Mesalamine	Anti-inflammatory
MESNA	Chemoprotective agent
Metformin	Anti-diabetic
Methyldopa	Antihypertensive; centrally acting agent
Methylene blue	Antidote; Phenothiazine
Metolazone	Diuretic
Minocycline	Tetracycline
Moxifloxacin	Antimicrobial; fluoroquinolone
Nabumetone	Non-steroidal anti-inflammatory
Naproxen	Non-steroidal anti-inflammatory
Nifedipine	Calcium channel blocker
Ofloxacin	Antimicrobial; fluoroquinolone
Olanzapine	Antipsychotic
Olmesartan	Angiotensin II receptor blocker
Omadacycline	Tetracycline
Oxaprozin	Non-steroidal anti-inflammatory
Paclitaxel	Antineoplastic; antimetabolic agent
Panitumumab	Antineoplastic; monoclonal antibody
Pantoprazole	Proton pump inhibitor
Paroxetine	Antidepressant
Perphenazine	Antipsychotic
Phenelzine	Antidepressant
Pirfenidone	Anti-inflammatory
Piroxicam	Non-steroidal anti-inflammatory
Porfimer	Antineoplastic
Pravastatin	HMG Co-A reductase inhibitor
Prochlorperazine	Antipsychotic
Promethazine	Antihistamine
Pyrazinamide	Anti-tuberculosis
Quinapril	Angiotensin II converting enzyme inhibitor

Generic name	Therapeutic class
Quinidine	Anti-malarial
Quinine	Anti-malarial
Ramipril	Angiotensin II converting enzyme inhibitor
Ranitidine	Antihistamine
Risperidone	Antipsychotic
Sarecycline	Tetracycline
Sertraline	Antidepressant
Simvastatin	HMG Co-A reductase inhibitor
Sitagliptin	Anti-diabetic
St. John's Wort	Herbal
Sulfacetamide	Antimicrobial; sulfonamide derivative
Sulfadiazine	Antimicrobial; sulfonamide derivative
Sulfamethoxazole	Antimicrobial; sulfonamide derivative (in combo w/ trimethoprim)
Sulindac	Non-steroidal anti-inflammatory
Tegafur	Antineoplastic; anti-metabolite
Telmisartan	Angiotensin II receptor blocker
Tenofovir	Antiretroviral
Terbinafine	Antifungal
Tetracycline	Tetracycline
Thioridazine	Antipsychotic
Tocilizumab	Monoclonal antibody
Tolbutamide	Anti-diabetic
Tolmetin	Non-steroidal anti-inflammatory
Tretinoin	Retinoid
Triamterene	Diuretic
Trifluoperazine	Antipsychotic
Trimethoprim	Antimicrobial
Trimethoprim/sulfamethoxazole	Antimicrobial; sulfonamide derivative
Valsartan	Angiotensin II receptor blocker
Vandetanib	Antineoplastic; tyrosine kinase inhibitor
Vemurafenib	Antineoplastic; BRAF kinase inhibitor
Venlafaxine	Antidepressant
Verteporfin	Ophthalmic agent
Vinblastine	Antimitotic agent
Voriconazole	Antifungal

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3. Monteiro M, Rato M, Martins, C. Drug induced photosensitivity: photoallergic and phototoxic reactions. *Clin Dermatol.* 2016;34:571-581.