

### SULFONAMIDES

MOA	Mammalian cells lack dihydropteroate synthase and require exogenous sources of folate. Inhibiting synthesis of folic acid (folate), a compound required by all cells to make DNA, RNA, and proteins
PK	Absorbed from the stomach and small intestines, widely distributed to tissues and body fluids (CNS, CSF, placenta, fetus) Excreted unchanged into the urine. Eliminated by glomerular filtration and breast milk.
AE	Crystalluria, hypersensitivity, hematopoietic disturbances (hemolytic anemia), kernicterus
CONTRA	Pregnant women, children <2 mo old

### SULFONAMIDES

#### ORAL, NONABSORB

SULFASALAZINE

#### ORAL, ABSORBABLE

SHORT SULFACYTINE

SULFISOXAZOLE **Indications:** UTI

FULFAMETHIZOLE

INTERM SULFADIAZINE **Indications:** 1st line for acute toxoplasmosis

SULFAMETHOXAZOLE **Indications:** UTI

SULFAPYRIDINE

LONG SULFADOXINE **Indication:** 2nd line for malaria

#### TOPICAL

SODIUM SULFACETAMIDE

MAFENIDE ACETATE

SILVER SULFADIAZINE

**Sulfadiazine** and **sulfadoxone** are used in combo with pyrimethamine

### DHFR INHIBITORS

TMP/SMX	Drug of choice for infections such as Pneumocystis jiroveci pneumonia, toxoplasmosis, nocardiosis, and occasionally other bacterial infections
TRIMETHOPRIM	UTI
PYRIMETHAMINE	Parasitic
<b>AE:</b> megaloblastic anemia, leukopenia, granulocytopenia	

### FLUOROQUINOLONES

MOA	Inhibit one or both of the 2 prokaryotic type II topoisomerases
PK	Well absorbed, widely distributed in body fluids and tissues Excreted really
INDICATIONS	Resistant respiratory infections, anthrax, gonorrhea, UTI and bacterial diarrhea caused by shigella, salmonella, toxigenic E coli, and campylobacter
AE	NVD, HA, dizziness, phototoxic, connective tissue problems
BBW	Tendinitis, tendon rupture
CONTRA	Avoid in pregos, nursing mothers, and children <18
DDI	THEOPHYLLINE, WARFARIN, CYCLOSPORINE
Concentration-dependent killing	

### FLUOROQUINOLONES

NALIDIXIC ACID

NORFLOXACIN

OFLOXACIN

CIPROFLOXACIN No longer recommended for gonococcal in the US  
**Indications:** chlamydial urethritis, cervicitis

LEVOFLOXACIN No longer recommended for gonococcal in the US  
**Indications:** chlamydial urethritis, cervicitis  
QD, long t1/2

MOXIFLOXACIN Only one not effective in UTI's  
QD, long t1/2  
**Contra:** puts predisposed to arrhythmias or pts that are taking anti arrhythmic meds due to QT prolongation

### METHENAMINE

MOA	Metabolized to formaldehyde and ammonia in acidic pH. The formaldehyde is lethal to bacteria.
INDICATION	Urinary tract antiseptics/antimicrobials
SIDE EFFECTS	GI distress, may cause albuminuria, hematuria, and rashes at higher doses
CONTRA	Pts with renal insufficiency

