

To identify attributes that may be contributing to the ability of a drug to be formulated in a pediatric friendly dosage form, these drugs were categorized based on their molecular characteristics such as solubility, permeability, pH stability, etc. However, no attribute could be identified that may be hindering or contributing to the formulation of a drug in one or more of these pediatric friendly dosage forms. Since the pediatric dosage forms should ideally be tasteless, taste-masking of the drug is essential for oral drug delivery for pediatric patients. Hence, a number of formulation approaches, including various taste-making approaches, were evaluated and used to prepare prototype formulations suitable for pediatric patients. The findings of these studies and the knowledge gained have been published in peer-reviewed scientific journals. A summary of the formulation approaches used is provided below, and the corresponding published manuscript, containing details of the individual formulation approach, is included as an attachment to this report.

The formulation approaches used include:

1. Taste-masking by complexation:

- 1.1. Abstract: The purpose of the study was to investigate the complexation between a weakly basic drug (risperidone) and an ion exchange resin (amberlite IRP-64) used as a taste-masking agent via two preparation methods: physical mixture and solvent evaporation. Both methods were prepared in different drug-to-resin ratios by weight (1:1, 1:2, 1:4, 1:6). Physicochemical characterizations were performed using differential scanning calorimetry, x-ray diffraction, infra-red spectroscopy, Raman spectroscopy, near infra-red spectroscopy, chemical imaging and drug release studies. These physicochemical techniques revealed that risperidone formed complex with the resin via the solvent evaporation method where enhanced dissolution occurred but not with the physical mixtures. (Published in *Pharm. Dev. Tech.* 2009; 14(4): 409-421).

- 1.2. Abstract: The aim of this investigation was to evaluate the complexation potential of brompheniramine maleate (BPM) and tannic acid (TA) for sustained release and taste masking effects. The complexes (1:1-1:7 TA to BPM ratio) were prepared by the solvent evaporation method using methanol, phosphate buffer pH 6.8 or 0.1 N HCl as common solvents. The complexes were characterized microscopically by scanning electron microscopy (SEM), chemically by Fourier transform infrared (FTIR) and solid-state NMR (SSNMR), thermally by differential scanning calorimetry (DSC), for crystallinity by powder X-ray powder diffraction (PXRD), for organoleptic evaluation by electronic tongue (e-tongue), and for solubility in 0.1 N HCl and phosphate buffer pH 6.8. The dissolution studies were carried out using the USP II method at 50 rpm in 500 ml of dissolution media (0.1 N HCl or phosphate buffer pH 6.8). SEM images revealed that the morphology of complexes were completely different from the individual

components, and all complexes had the same morphological characteristics, irrespective of the solvent used for their preparation, pH or ratio of BPM and TA. The FTIR spectra showed the presence of chemical interactions between the TA and BPM. DSC, PXRD and SSNMR indicated that the drug lost its crystalline nature by formation of the complex. Complexation has significantly reduced the solubility of BPM and sustained the drug release up to 24 h in phosphate buffer pH 6.8 media. The bitter taste of the BPM was completely masked which was indicated by Euclidean distance values which was far from the drug but near to its placebo in the complexes in all ratios studied. The taste masked complexes can be potentially developed as suitable dosage forms for pediatric use. In summary, complexation of BPM and TA effectively sustained the dissolution and masked the bitter taste of drug for the development of suitable dosage forms for pediatric use. (Published in *Int. J. Pharm.* 2012: 422(1-2):91-100).

- 1.3. Abstract: The focus of present investigation was to evaluate the tannic acid (TA) complexes of chlorpheniramine maleate (CPM) and characterize it by a variety of physicochemical, dissolution, and electronic tongue methods. The complexes were prepared in various molar ratios by solvent evaporation method. They were characterized by spectroscopic, thermal, powder X-ray, electronic tongue, solubility and dissolution methods. FTIR (infrared red) spectra showed complex formation between the TA and CPM. Complex formation has significantly lowered the drug solubility and sustained its release for more than 24 h in phosphate buffer pH 6.8. On the contrary, the release was much faster in the presence of Avicel PH 113 in the same molar ratio complex. The complex formulation has suppressed the bitter taste of CPM as indicated by Euclidean distance in electronic tongue evaluation. NIR-CI (near infrared chemical imaging) showed lower skew value that indicated the homogenous distribution of formulation components. The chemometric models were also developed using the NIR data. The model based on second derivative data was better in predicting the TA and CPM loading as indicated by higher values of R, R² and lower values of root mean square error and standard errors. Furthermore, it has a better accuracy and less biased in comparison to other models. In conclusion, the CPM tannate has a sustained release behavior and excipients play a major role in modifying its release. Additionally, the complexes with varying molar ratio of tannate to CPM have differential taste masking abilities than that of the pure drug. (Published in *Int. J. Pharm.* 2012: 436(1-2):582-592).
- 1.4. Abstract: The objective of the present work was to evaluate and characterize a pediatric friendly formulation of a bitter tasting drug, oseltamivir phosphate (drug). Amberlite IRP64 (resin) was used to make ionic complexes for masking its bitterness. Complexes of four drug-to-resin ratios, 1:1, 1:2, 1:4, and 1:6 (w/w), were prepared and characterized. At buccal pH of 6.8, drug-resin complexes of 1:1, 1:2, 1:4, and 1:6 ratios released 42.13%, 23.26%, 4.13%, and 14.94%, respectively, of loaded drug after 20 s. However,

at stomach pH of 1.2 (0.1 N HCl), 61.96%, 70.18%, 85.88%, and 91.42% of drug was released from the same complexes in 6 min. Nearinfrared (NIR) chemical imaging of the complexes showed homogeneous distribution of drug in the resin. Chemometric partial least squares model using NIR data of the drug showed a high correlation between calibration and predicted data ($R^2 > 0.998$). Overall, these results indicated the complex formation between drug and resin. The pH dependence of drug release from these complexes could minimize drug release in the mouth, whereas immediately releasing it in the stomach. Electronic tongue used to evaluate taste indicated that conductivity taste signals were different from control, suggesting taste masking of the drug. (Published in *J. Pharm. Sci.* 2013; 102(6):1800-1812).

2. Niosomes for pediatric drug delivery:

2.1. Abstract: A variety of factors were systemically evaluated in order to establish the characteristics of the niosomes obtained with a high-pressure homogenizer. The vesicular sizing parameters, electrical properties, drug entrapment data and drug release characteristics were investigated using two groups of factors. The first group presented the physical process variables such as pressure of the homogenizer and the times that the samples were processed (cycles). The second group encompassed the compositional variables such as the drug loading, surfactant chain length, cholesterol level and the level of the charge imparting agent. The obtained data showed that the drug distributed within both the aqueous and lipid phases of the formed niosomes. Saturation-like behaviors for both the effect of homogenization cycles on the produced size and the effect of the pressure on the size homogeneity were recorded. In contrast to the drug entrapment and conductivity of the niosomal suspension, the vesicular size parameters as well as the zeta potential were inversely proportional with the homogenization parameters. Drug release was significantly affected by the compositional factors rather than the physical ones. The current study demonstrated the usefulness of the microfluidization for the production and further scale-up of anti-HIV niosomes with very small mean vesicular sizes. (Published in *Eur. J. Pharm. Sci.* 2011; 44(1-2): 93-102).

3. Salt engineering for pediatric drug delivery:

3.1. Abstract: The focus of the present investigation was to evaluate the feasibility of using cyclamic salt of lamotrigine in order to improve its solubility and intrinsic dissolution rate (IDR). The salt was prepared by solution crystallization method and characterized chemically by fourier transform infrared spectroscopy (FTIR), proton (1H) and carbon (^{13}C) nuclear magnetic resonance (liquid and solid, NMR) spectroscopy, physically by powder X-ray diffraction (PXRD), thermally by differential scanning calorimetry (DSC) and thermogravimetric analysis (TGA), physicochemically for solubility, IDR, solution and solid-state stability, and polymorphism by solution recrystallization and slurry conversion studies. The FTIR, NMR, PXRD, DSC, and TGA spectra and thermograms

indicated the salt formation. The salt formation increased lamotrigine solubility by 19-fold and IDR by 4.9-fold in water. The solution and solid-state stability were similar to parent molecule and were resistant to polymorphic transformation. In conclusion, cyclamic salt of lamotrigine provides another potential avenue for the pharmaceutical development of lamotrigine with improved physicochemical properties especially for pediatric population. It is also possible that appropriate dosage forms can be formulated with much lower drug amount and better safety profile than existing products. (Published in *AAPS PharmSciTech* 2012; 13(3):793-801).

- 3.2. Abstract: The aim of present research was to design and evaluate orally disintegrating tablet (ODT) of novel lamotrigine- cyclamate salt. Box-Behnken response surface methodology was selected to design the optimized formulation. The independent factors selected were tablet hardness (X1), disintegrant (X2) and lubricant (X3) levels, and responses chosen were disintegration time (DT, Y1), friability (Y2), T50 (Y3), and T90 (Y4). The tablets were also characterized for drug uniformity by near infrared chemical imaging (NIR-CI) and taste masking evaluation by electronic tongue. All the selected independent variables were statistically ($p < 0.05$) effect the Y1 while Y2, Y3, and Y4 affected only by X2. The optimized ODT was found to meet the regulatory requirement of DT and friability specification. The NIR-CI images indicated uniform distribution of active and inactive ingredients within the tablets. The electronic tongue results were analyzed by principle component analysis (PCA). It indicated that novel salt of lamotrigine and its ODT formulation have a taste similar to cyclamic acid which is indicated by close proximity on PCA score plot, lower Euclidean distance, and high discrimination index values. Furthermore, these parameters were very close to ODT placebo formulation. On the other hand, lamotrigine, its ODT, and placebo formulation were far from each other. In summary, lamotrigine salt provides another avenue for pediatric friendly formulation for children and will enhance patient compliance. (Published in *Eur. J. Pharm. Biopharm.* 2013; 85(3):1300-1309).

4. Taste masking by coating:

- 4.1. Abstract: The purpose of this research was to develop an orally disintegrating tablet (ODT) dosage form containing taste-masked beads of clindamycin HCl. Several formulation strategies were evaluated and a taste-masked ODT of clindamycin HCl was prepared without the use of a waxy cushioning agent. Clindamycin HCl (ca. 46% w/w) was coated onto microcrystalline cellulose beads (Cellets 200) followed by the addition of a taste-masking layer of amino methacrylate copolymer, NF (Eudragit EPO (EPO)) coating suspension. The efficiency of both the drug coating process and the taste-masking polymer coating process, as well as the taste masking ODTs was determined using potency and drug release analysis. Magnesium stearate was found to be advantageous over talc in improving the efficiency of the EPO coating suspension. A

response surface methodology using a Box–Behnken design for the tablets revealed compression force and levels of both disintegrant and talc to be the main factors influencing the ODT properties. Blending of talc to the EPO-coated beads was found to be the most critical factor in ensuring that ODTs disintegrate within 30 s. The optimized ODTs formulation also showed negligible (50.5%) drug release in 1 min using phosphate buffer, pH 6.8 (which is analogous to the residence time and pH in the oral cavity). By carefully adjusting the levels of coating polymers, the amounts of disintegrant and talc, as well as the compression force, robust ODTs can be obtained to improve pediatric and geriatric patient compliance for clindamycin oral dosage forms. (Published in *Drug Dev. Ind. Pharm.* 2014. DOI 10.310903639045.201, Epub ahead of print).

List of publications:

1. Cantor SL, Khan MA, Gupta A. Development and optimization of taste-masked orally disintegrating tablets (ODTs) of clindamycin hydrochloride. *Drug Dev Ind Pharm.* 2014. . DOI 10.310903639045.201. [Epub ahead of print]
2. Gupta A, Khan MA. Challenges of pediatric formulations: a FDA science perspective. *Int J Pharm.* 2013;457(1):346-8. doi: 10.1016/j.ijpharm.2013.08.064.
3. Rahman Z, Siddiqui A, Khan MA. Orally disintegrating tablet of novel salt of antiepileptic drug: formulation strategy and evaluation. *Eur J Pharm Biopharm.* 2013;85(3 Pt B):1300-9. doi: 10.1016/j.ejpb.2013.06.006.
4. Zajicek A, Fossler MJ, Barrett JS, Worthington JH, Ternik R, Charkoftaki G, Lum S, Breitzkreutz J, Baltezar M, Macheras P, Khan M, Agharkar S, MacLaren DD. A report from the pediatric formulations task force: perspectives on the state of child-friendly oral dosage forms. *AAPS J.* 2013;15(4):1072-81. doi:10.1208/s12248-013-9511-5.
5. Siddiqui A, Shah RB, Khan MA. Oseltamivir phosphate-amberlite(TM) IRP 64 ionic complex for taste masking: preparation and chemometric evaluation. *J Pharm Sci.* 2013;102(6):1800-12. doi: 10.1002/jps.23518.
6. Rahman Z, Zidan AS, Khan SR, Reddy IK, Khan MA. Chlorpheniramine tannate complexes: physicochemical, chemometric, and taste masking evaluation. *Int J Pharm.* 2012;436(1-2):582-92. doi: 10.1016/j.ijpharm.2012.07.037.
7. Khan MA, Wu K, Gupta A. FDA: contribution to developing pediatric formulations and transatlantic collaboration. *Int J Pharm.* 2012;435(2):146-8. doi:10.1016/j.ijpharm.2012.05.060.
8. Rahman Z, Zidan AS, Samy R, Sayeed VA, Khan MA. Improvement of physicochemical properties of an antiepileptic drug by salt engineering. *AAPS PharmSciTech.* 2012;13(3):793-801. doi: 10.1208/s12249-012-9800-9.
9. Rahman Z, Zidan AS, Berendt RT, Khan MA. Tannate complexes of antihistaminic drug: sustained release and taste masking approaches. *Int J Pharm.* 2012;422(1-2):91-100. doi: 10.1016/j.ijpharm.2011.10.033.

10. Zidan AS, Rahman Z, Khan MA. Product and process understanding of a novel pediatric anti-HIV tenofovir niosomes with a high-pressure homogenizer. *Eur J Pharm Sci.* 2011;44(1-2):93-102. doi: 10.1016/j.ejps.2011.06.012.
11. Tawakkul MA, Shah RB, Zidan A, Sayeed VA, Khan MA. Complexation of risperidone with a taste-masking resin: novel application of near infra-red and chemical imaging to evaluate complexes. *Pharm Dev Technol.* 2009;14(4):409-21. doi:10.1080/1083745080271266.

Appendix I: List of available dosage forms for drugs with pediatric use information as part of product labeling until Dec 2014.

| | Generic Name | Trade Name | BCS Class | Down to Age (years) ¹ | Pediatric Dosage Form Available? | Dosage Forms suitable for Pediatric | Tablet (Oral) | Injection | Capsule (Oral) | Solution/Syrup (Oral) | Suspension (Oral) | Topical | Chewable Tablet | Nasal | Ophthalmic | Orally Disintegrating Tablet (ODT) | Granules/Pellets/Powder | Rectal | Elixir | Vaginal | Transdermal | Sublingual | Dailymed Permanent Link to Prescribing Information (http://dailymed.nlm.nih.gov/dailymed/lookup.cfm?setid=) |
|---|---------------------|----------------------------------|-----------|--|----------------------------------|--|---------------|-----------|----------------|-----------------------|-------------------|---------|-----------------|-------|------------|------------------------------------|-------------------------|--------|--------|---------|-------------|------------|---|
| 1 | Abacavir Sulfate | Ziagen | 3 | 0.25 | Y | Oral Solution | x | | | x | | | | | | | | | | | | | ca73b519-015a-436d-aa3c-af53492825a1 |
| 2 | Abatacept | Orencia | | 6 | N | | | x | | | | | | | | | | | | | | | 0836c6ac-ee37-5640-2fed-a3185a0b16eb |
| 3 | Acetaminophen | | 3 | 2/Oral 3/Rectal | Y | Oral Solution/ Suspension, Chewable Tablet | x | | x | x | x | | x | | | | | x | | | | | 0027e3a2-862a-474d-8c33-dda1a2264b27 32bbe845-7f0e-c33d-adb2-659f18fedfa9 |
| 4 | Acyclovir | Sitavig, Zovirax | 3 | 2 (Sublingual not approved for Ped) | Y | Oral Suspension, Topical | x | | x | | x | x | | | | | | | | | | x | f94a46a2-2e86-4d98-ec89-9483a41d290a 00f7425a-6236-47ff-a087-f28f8cdb1aec |
| 5 | Adalimumab | Humira | | 4 | N | | | x | | | | | | | | | | | | | | | 608d4f0d-b19f-46d3-749a-7159aa5f933d |
| 6 | Albuterol Sulfate | Ventolin HFA Vospire ER | 3 | 2/Syrup 4/Inhalation 6/Oral Tablets | Y | Syrup, Metered Nasal Aerosol | x | | | x | | | | x | | | | | | | | | 8a9b20e4-82e6-4151-9c9d-39aaf2a767e2 d92c5d6b-ff10-4087-36a2-1cfc464cb967 16efdd16-04db-4874-92de-d1de22aee074 |
| 7 | Allopurinol | Aloprim, Zyloprim | 3 | 6 | N | | x | x | | | | | | | | | | | | | | | 10cc918f-aa44-415b-932d-2404695ac449 342832b5-1a32-4bea-bc49-ab0fd152154e |
| 8 | Amlodipine Besylate | Norvasc | 1 | 6 | N | | x | | | | | | | | | | | | | | | | abd6a2ca-40c2-485c-bc53-db1c652505ed |
| 9 | Amoxicillin | Amoxil/Tr imox | 3 | 0 | Y | Oral Suspension, Chewable Tablet | x | | x | | x | | x | | | | | | | | | | 4c0f348a-a65d-409c-8668-207c82a5e3cb |

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|----|---------------------------|-------------------------------------|-----------|--|----------------------------------|---------------------------------------|---------------|-----------|----------------|-----------------------|-------------------|---------|-----------------|-------|------------|------------------------------------|-------------------------|--------|--------|---------|-------------|------------|---|
| 10 | Amphetamine Mixed Salts | Adderall | 3 | 3/Tablets 6/Capsule | N | | x | | x | | | | | | | | | | | | | | 24af5ced-ed01-4188-95f0-b6b8e4f70aab aff45863-ffe1-4d4f-8acf-c7081512a6c0 |
| 11 | Aripiprazole | Abilify | 2 | 6 | Y | ODT, Oral Solution | x | x | | x | | | | | | x | | | | | | | c040bd1d-45b7-49f2-93ea-aed7220b30ac |
| 12 | Aspirin | Halfprin | 3 | 12 | Y | Chewable Tablet, Oral Powder | x | | x | | | | x | | | | x | | | | | | 46f1c9a8-590f-47db-a060-4be0c59f55ca |
| 13 | Atazanavir | Reyataz | 2 | 0.25 | N | | | | x | | | | | | | | | | | | | | 165cff62-b284-4a27-a65d-9ec8a5bfcdd8 |
| 14 | Atomoxetine Hydrochloride | Strattera | 1? | 6 | N | | | | x | | | | | | | | | | | | | | 309de576-c318-404a-bc15-660c2b1876fb |
| 15 | Atorvastatin Calcium | Lipitor | 2 | 10 | N | | x | | | | | | | | | | | | | | | | c6e131fe-e7df-4876-83f7-9156fc4e8228 |
| 16 | Azelastine Hydrochloride | Astelin, Optivar | 1 | 5/Inhalation 3/Ophthalmic | Y | Metered Nasal Spray, Ophthalmic | | | | | | | | x | x | | | | | | | | 46b2ddff-d40a-43ac-b027-4fac9fc2f4b9 f4b9597c-5b50-4889-be41-20bd1f13aaa5 |
| 17 | Azithromycin | Zithromax , Zmax, Azasite, | 2 | 0.5/Oral 1/Ophthalmic (Injection not approved for Ped) | Y | Oral Suspension, Ophthalmic | x | x | | | x | | | | x | | | | | | | | db52b91e-79f7-4cc1-9564-f2eee8e31c45 14ae4c07-b042-452a-b069-2b41bc646e04 8d24bacb-feff-4c6a-b8df-625e1435387a |
| 18 | Benazepril Hydrochloride | Lotensin | 1 | 6 | N | | x | | | | | | | | | | | | | | | | 4d954024-a191-46e3-ba71-2a7d5b0c65d5 |
| 19 | Benzonatate | Tessalon | 3 | 10 | N | | | | x | | | | | | | | | | | | | | 8edd07a0-5f5b-9000-bafb-dbf8ff7609d4 |
| 20 | Benztropine Mesylate | Cogentin | ? | 3 | N | | x | x | | | | | | | | | | | | | | | b707bc17-3ab4-47a9-a83e-ebd1d384a9d8 |
| 21 | Brimonidine Tartrate | Alphagan | ? | 2 | Y | Topical, | | | | | | x | | | x | | | | | | | | 264c4494-c225-486f-888a- |

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|----|-----------------------|------------------------------|-----------|--|----------------------------------|-------------------------------------|---------------|-----------|----------------|-----------------------|-------------------|---------|-----------------|-------|------------|------------------------------------|-------------------------|--------|--------|---------|-------------|------------|---|
| | | P, Mirvaso | | | | Ophthalmic | | | | | | | | | | | | | | | | | caaf36be46b3f6a4353f-ae69-4214-901f-e5d42a6fbde7 |
| 22 | Busulfan | Busulfex, Myleran | ? | Not established | N | | x | x | | | | | | | | | | | | | | | 5cb9d285-1803-4a99-946a-d0b239b32df6bf456fc7-3a79-47f7-8acc-600b5e2f0dc2 |
| 23 | Caffeine Citrate | Cafcit | 3 | 0 | Y | Oral Solution | | x | | x | | | | | | | | | | | | | fbcd234e-57e1-4da2-a96c-e3f7b7cf6ec0 |
| 24 | Calcitriol | Rocaltrol, Calcijex Vertical | 2/4 | 1/Oral 13/Injection (Topical not approved for Ped) | Y | Oral Solution | | x | x | x | | x | | | | | | | | | | | d1013494-bf62-4e68-9f0c-e6571137f20f63d26a82-4b79-44ce-52a4-395e4368acd4a1567da9-af74-4afd-9ac5-8b53ec5d7cbf |
| 25 | Canakinumab | Ilaris | | 2 | N | | | x | | | | | | | | | | | | | | | 7d271f3b-e4f9-4d80-8dcf-28d49123f80e |
| 26 | Candesartan Cilexetil | Atacand | 2 | 1 | N | | x | | | | | | | | | | | | | | | | a73e1339-9643-4eea-2cbe-e879c88fb50e |
| 27 | Carbamazepine | Tegretol, Carbatrol | 2 | 6 | Y | Oral Suspension, Chewable Tablet | x | | x | | x | | x | | | | | | | | | | 536811ab-308b-4866-9185-9e4149483512bc03e499-5bac-4293-bff4-6864153a624d |
| 28 | Cefaclor | Ceclor | 3 | 0.08/Capsule and For Oral Suspension 16/Tablet | Y | Oral Suspension | x | | x | | x | | | | | | | | | | | | 9f919252-7a87-4386-a64c-5d8213f7e8810878bdc2-0410-4938-9890-96523aa81c2f |
| 29 | Cefadroxil | Duricef | ? | 0.08 | Y | Oral Suspension | x | | x | | x | | | | | | | | | | | | 4ad759f3-72dd-412e-9500-055335cda6cf |
| 30 | Cefdinir | Omnicef | 4 | 0.5 | Y | Oral Suspension | | | x | | x | | | | | | | | | | | | 5fb3c464-ab1a-4e2f-ba7a-9aa59b94ca00 |

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|----|-----------------------------|------------|-----------|--|----------------------------------|-------------------------------------|---------------|-----------|----------------|-----------------------|-------------------|---------|-----------------|-------|------------|------------------------------------|-------------------------|--------|--------|---------|-------------|------------|---|
| 31 | Cefprozil | Cefzil | ? | 0.5 | Y | Oral Suspension | x | | | | x | | | | | | | | | | | | 3ec55c0a-1456-412e-972f-352b3135c8f2 |
| 32 | Ceftibuten | Cedax | ? | 0.5 | Y | Oral Suspension | | | x | | x | | | | | | | | | | | | 756d627b-021d-4609-aa08-af6cab80a812 |
| 33 | Ceftriaxone Sodium | Rocephin | 3 | 0 | N | | | x | | | | | | | | | | | | | | | 9467f6c9-3e59-45c6-a1be-77200f2d4554 |
| 34 | Cefuroxime Axetil | Ceftin | 4 | 0.25 | Y | Oral Suspension | x | | | | x | | | | | | | | | | | | 2f439b86-59d6-4350-aeb4-c904b3781db4 |
| 35 | Celecoxib | Celebrex | 2 | 2 | N | | | | x | | | | | | | | | | | | | | 8d52185d-421f-4e34-8db7-f7676db2a226 |
| 36 | Cephalexin | Keflex | 4 | 1 | Y | Oral Suspension | x | | x | | x | | | | | | | | | | | | 19307ff0-71de-477b-965d-ea243e5ede3a |
| 37 | Cetirizine Hydrochloride | Zyrtec | 1 | 6 | Y | ODT, Chewable Tablet, Syrup | x | | x | x | | | x | | | x | | | | | | | 6a962a1c-c197-492b-bfa6-e0c28eda1533 |
| 38 | Chloroquine Phosphate | Aralen | 1 | 0.25 | N | | x | | | | | | | | | | | | | | | | 9b585ad5-ae86-4403-b83f-8d8363d43da5 |
| 39 | Chlorothiazide | Diuril | 4 | 0.08/Oral (Injection not approved for Ped) | Y | Oral Suspension | x | x | | | x | | | | | | | | | | | | bd936e35-1af8-42da-bcc0-f22489d68574 |
| 40 | Ciclesonide | Alvesco | | 12 | Y | Metered Aerosol | | | | | | | | x | | | | | | | | | a1a31258-d164-4369-91f0-52900bbd1509 |
| 41 | Ciprofloxacin Hydrochloride | Cipro | 3 | 1 | Y | Ophthalmic | x | x | | | | | | | x | | | | | | | | 888dc7f9-ad9c-4c00-8d50-8ddfd9bd27c0 |
| 42 | Clarithromycin | Biaxin | 2 | 0.5 | Y | Oral Suspension | x | | | | x | | | | | | | | | | | | aa44552c-3cfe-4111-8aa5-4251aeed9be9 |
| 43 | Clindamycin | Cleocin | 1 | 0 | Y | Oral Solution, Topical | | x | x | x | | x | | | | | | | | | x | | 7d72c291-d96f-468d-b3bb-8c255c4906b1 |
| 44 | Clobazam | Onfi | | 2 | Y | Oral Suspension | x | | | | x | | | | | | | | | | | | de03bd69-2dca-459c-93b4-541fd3e9571c |

| | Generic Name | Trade Name | BCS Class | Down to Age (years) ¹ | Pediatric Dosage Form Available? | Dosage Forms suitable for Pediatric | Tablet (Oral) | Injection | Capsule (Oral) | Solution/Syrup (Oral) | Suspension (Oral) | Topical | Chewable Tablet | Nasal | Ophthalmic | Orally Disintegrating Tablet (ODT) | Granules/Pellets/Powder | Rectal | Elixir | Vaginal | Transdermal | Sublingual | Dailymed Permanent Link to Prescribing Information (http://dailymed.nlm.nih.gov/dailymed/lookup.cfm?setid=) |
|----|----------------------------------|----------------|-----------|----------------------------------|----------------------------------|-------------------------------------|---------------|-----------|----------------|-----------------------|-------------------|---------|-----------------|-------|------------|------------------------------------|-------------------------|--------|--------|---------|-------------|------------|---|
| 45 | Clonazepam | Klonopin | ? | 1 | Y | ODT | x | | | | | | | | | x | | | | | | | 1aef0069-80ea-483d-ac70-c8d485462c5b |
| 46 | Clorazepate Dipotassium | Tranxene | ? | 9 | N | | x | | | | | | | | | | | | | | | | 9c7ab45c-7461-6e4e-ee6d-f0ebe3eb4a28 |
| 47 | Colesevelam Hydrochloride | Welchol | ? | 10 | Y | Oral Suspension | x | | | | x | | | | | | | | | | | | 4a06d3b2-7229-4398-baba-5d0a72f63821 |
| 48 | Cyclophosphamide | Cytoxan | 3 | 6 | N | | x | x | x | | | | | | | | | | | | | | 367b47d7-c4de-4b39-bd3a-69c29d80396f |
| 49 | Dantrolene Sodium | Dantrium | ? | 5 | N | | | x | x | | | | | | | | | | | | | | 146f7be7-5cd4-4279-a482-794d0cd554e1 |
| 50 | Dapsone | Aczone | 4 | 12 | Y | Topical | x | | | | | x | | | | | | | | | | | b7d605cf-bf84-461b-939b-1f773a4cba65 |
| 51 | Darbepoetin Alfa | Aranesp | | 1 | N | | | x | | | | | | | | | | | | | | | 0fd36cb9-c4f6-4167-93c9-8530865db3f9 |
| 52 | Darunavir | Prezista | 2 | 3 | N | | x | | | | x | | | | | | | | | | | | 814301f9-c990-46a5-b481-2879a521a16f |
| 53 | Denosumab | Xgeva | | 13 | N | | | x | | | | | | | | | | | | | | | 628f0998-1206-4001-aeec-18133aa9f3bf |
| 54 | Desloratadine | Clarinet | 1 | 0.5 | Y | ODT, Oral Solution | x | | | x | | | | | | x | | | | | | | 5b79aff4-9bed-429d-8def-a7929293387d |
| 55 | Desmopressin Acetate | Stimate, DDAVP | ? | 1/Nasal 4/Oral | Y | Metered Nasal Spray | x | x | | | | | | x | | | | | | | | | 30d4c387-b99c-49f8-a8bd-de23fdafb739 1bb9b8d5-eed6-45cb-b1b9-e43d3ee6fecb |
| 56 | Desonide | Desonate | | 0.25 | Y | Topical, Elixir | | | | | | x | | | | | | | | | | | 8d7c46ed-e6c3-465b-be3d-16ecab43a9e7 |
| 57 | Dexamethasone | Decadron | 1 | 1 | Y | Oral Solution, Elixir, Ophthalmic | x | x | | x | | | | | x | | | | | | | | 537b424a-3e07-4c81-978c-1ad99014032a |
| 58 | Dexmethylphenidate Hydrochloride | Focalin | ? | 6 | N | | x | | x | | | | | | | | | | | | | | 7c552f11-e24a-4d9b-bb8d-be10c928eca8 |

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|----|-------------------------------|-------------------------------|-----------|--|----------------------------------|---|---------------|-----------|----------------|-----------------------|-------------------|---------|-----------------|-------|------------|------------------------------------|-------------------------|--------|--------|---------|-------------|------------|---|
| 59 | Diazepam | Valium | 1 | 0.08/Injection 0.5/Oral 2/Rectal | Y | Oral Solution | x | x | | x | | | | | | | | x | | | | | 7e7dd743-a87b-4ab3-b6ae-f116cd0c8b0f 554baee5-b171-4452-a50a-41a0946f956c 88e0f275-dd7b-447d-b9d3-316a06da934f |
| 60 | Diazoxide | Proglycem | | 0.08 | Y | Oral Suspension | | | | | x | | | | | | | | | | | | b16c7832-2fd9-49af-b923-1dc0d91fd6e2 |
| 61 | Didanosine | Videx | 3 | 0.04 | Y | Oral Solution | | | x | x | | | | | | | | | | | | | d4401ca0-98ae-af38-84c7-2f615d0706b9 |
| 62 | Digoxin | Lanoxin | 3 | 0 | N | | x | x | | | | | | | | | | | | | | | 58678fd6-afe3-4a4c-a37f-356444194cd6 |
| 63 | Diphenhydramine Hydrochloride | | 1 | 6 | Y | Oral Solution/ Syrup, Elixir, Topical | x | x | x | x | | x | | | | | | | x | | | | 0b624128-5f68-47b6-b837-81ff6f064ddd |
| 64 | Divalproex Sodium | Depakote | ? | 10 | Y | Pellets | x | | x | | | | | | | | x | | | | | | 4619aff4-0f80-444f-858d-42e4137aa809 |
| 65 | Docusate | Colace, Diocto, Enemeez | ? | 2 | Y | Oral Solution/ Syrup | x | | x | x | | | | | | | | x | | | | | 7793fced-e8ee-44e2-b212-dd2a59a5f462 afac6c3d-a513-4655-9545-3e489f26558a 0b06445d-0839-497e-bdff-e0fe224a7738 |
| 66 | Dolutegravir Sodium | Tivicay | 2 | 12 | N | | x | | | | | | | | | | | | | | | | 63df5af3-b8ac-4e76-9830-2dbb340af922 |
| 67 | Doxycycline | Vibramycin | 3 | 8 | Y | Syrup, Oral Suspension | x | x | x | x | x | | | | | | | | | | | | d6f98d3c-5a20-4cbf-9a9c-abef10b9e465 |
| 68 | Emtricitabine | Emtriva | 1 | 0 | Y | Oral Solution | | | x | x | | | | | | | | | | | | | d6599395-3944-44f9-97f2-e0424c6b6a1f |
| 69 | Enalapril Maleate | Epaned, Vasotec | 3 | 0 | Y | Oral Solution | x | | | x | | | | | | | | | | | | | 94c9a9d6-957f-4667-8f09-509e99bac777 |

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|----|------------------------|------------|-----------|----------------------------------|----------------------------------|--------------------------------------|---------------|-----------|----------------|-----------------------|-------------------|---------|-----------------|-------|------------|------------------------------------|-------------------------|--------|--------|---------|-------------|------------|---|
| | | | | | | | | | | | | | | | | | | | | | | | 39631f1f-5d19-43c1-b504-bf56d991ed97 |
| 70 | Epoetin Alfa | Epogen | | 0.08 | N | | | x | | | | | | | | | | | | | | | 1f2d0b28-9cc5-4523-80b8-637fdaf3f7a5 |
| 71 | Ergocalciferol | Calciferol | 3/1 | 0 | N | | | | x | | | | | | | | | | | | | | 0d501431-82d3-4f8e-94c4-5eabcefc00ad |
| 72 | Ertapenem sodium | Invanz | | 0.25 | N | | | x | | | | | | | | | | | | | | | 33f3b99b-fa82-42e0-26bf-f49891ae3d22 |
| 73 | Erythromycin | | 1 | 0.08 | Y | Oral Suspension, Topical, Ophthalmic | x | | x | | x | x | | | x | | | | | | | | b455bbdb-a3f1-470f-aa5f-ed83ac2e228d |
| 74 | Erythropoietin | Procrit | | 0.08 | N | | | x | | | | | | | | | | | | | | | 0c721ba4-ae19-417f-aae1-221ed1a0866a |
| 75 | Escitalopram Oxalate | Lexapro | 1 | 6 | Y | Oral Solution | x | | | x | | | | | | | | | | | | | 13bb8267-1cab-43e5-acae-55a4d957630a |
| 76 | Esomeprazole Magnesium | Nexium | 3 | 0.08 | Y | Oral Suspension | | x | x | | x | | | | | | | | | | | | f4853677-1622-4037-688b-fdf533a11d96 |
| 77 | Etanercept | Enbrel | | 68 lb | N | | | x | | | | | | | | | | | | | | | a002b40c-097d-47a5-957f-7a7b1807af7f |
| 78 | Ethosuximide | Zarontin | 1/3 | 3 | Y | Syrup | | | x | x | | | | | | | | | | | | | 7bf3e616-45e8-4469-a75d-4d824ce951ea |
| 79 | Etravirine | Intelence | 4 | 6 | N | | x | | | | | | | | | | | | | | | | 6a9cbc29-9f15-4b24-8d86-206b82887f3d |
| 80 | Everolimus | Afinitor | | 1 | Y | Oral Suspension | x | | | | x | | | | | | | | | | | | 2150f73a-179b-4afc-b8ce-67c85cc72f04 |
| 81 | Ezetimibe | Zetia | 2 | 10 | N | | x | | | | | | | | | | | | | | | | a773b0b2-d31c-4ff4-b9e8-1eb2d3a4d62a |
| 82 | Famotidine | Pepcid | 3 | 0 | Y | Oral Suspension, Chewable Tablet | x | x | | | x | | x | | | | | | | | | | 4f1a0b58-f7c8-485e-a317-432e1c374d2f |
| 83 | Felbamate | Felbatol | 2 | 2 | Y | Oral Suspension | x | | | | x | | | | | | | | | | | | 2f522701-397a-11de-8a39- |

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|----|----------------------------|--|-----------|--|----------------------------------|---|---------------|-----------|----------------|-----------------------|-------------------|---------|-----------------|-------|------------|------------------------------------|-------------------------|--------|--------|---------|-------------|------------|---|--|
| | | | | | | | | | | | | | | | | | | | | | | | 0800200c9a66 | |
| 84 | Fentanyl | Duragesic, Sublimaze, Actiq, Lazanda, Subsys | ? | 2/ Transdermal, Injection 16/Oral (Nasal Spray not approved for Ped) | Y | Sublingual, Transdermal | x | x | | | | | | x | | | | | | | | x | x | d7aade83-9e69-4cd5-8dab-dbf1d7b89bb4 8944ea18-016e-4971-876d-2365fac190ea 90b94524-f913-48b3-3771-7b2fcffd888a 9dcaff31-1653-11e3-8ffd-0800200c9a66 18a413e9-11e0-4a8f-86c0-d33b37b7b771 |
| 85 | Fexofenadine Hydrochloride | Allegra | 1 | 0.5 | Y | ODT, Oral Suspension | x | | | | x | | | | | x | | | | | | | | 7c25b695-bbed-4ad1-aa47-de47091bc808 |
| 86 | Fluconazole | Diflucan | 3 | 0.5 | Y | Oral Suspension | x | x | | | x | | | | | | | | | | | | | f694c617-3383-416c-91b6-b94fda371204 |
| 87 | Fluocinonide | Lidex | | 12 | Y | Topical | | | | | | x | | | | | | | | | | | | 95cb19a0-4b71-4c66-92bd-901cfd223301 |
| 88 | Fluoxetine Hydrochloride | Prozac | 1 | 7 | Y | Oral Solution | x | | x | x | | | | | | | | | | | | | | c88f33ed-6dfb-4c5e-bc01-d8e36dd97299 |
| 89 | Fluticasone | Cutivate Veramyst Flonase Flovent | ? | 1/Topical 2/Nasal (furoate salt) 4/Nasal (propionate salt) | Y | Metered Nasal Spray/ Aerosol/ Powder, Topical | | | | | | x | | x | | | | | | | | | | 9953df12-a2b4-4d22-b204-746fc29f7a5f f16a9f33-45ca-4e16-0ebe-157b71abb8df d4a424f4-5661-41da-31ae-304d79fd16ad 001f22f8-a83d-495f-9196-d0264ef4d76e |
| 90 | Fluvoxamine Maleate | Luvox | 1 | 8 (ER tablets not approved for Ped) | N | | x | | x | | | | | | | | | | | | | | | e57814e3-9507-4a2f-858f-a845ad18f029 |

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|-----|----------------------------------|------------------|-----------|--|----------------------------------|---------------------------------------|---------------|-----------|----------------|-----------------------|-------------------|---------|-----------------|-------|------------|------------------------------------|-------------------------|--------|--------|---------|-------------|------------|---|
| 91 | Folic Acid | | 3 | 0 | N | | x | x | | | | | | | | | | | | | | | a37e08c3-92cb-4bfb-901f-219c6cdcffe2 |
| 92 | Fosamprenavir Calcium | Lexiva | 2 | 0.08 | Y | Oral Suspension | x | | | | x | | | | | | | | | | | | 24feb9be-32a6-45fd-a896-f3e202edd8a9 |
| 93 | Fosinopril Sodium | | 1or3? | 6 | N | | x | | | | | | | | | | | | | | | | 3c91edcd-b11a-4289-a1c5-d5054b18f54d |
| 94 | Furosemide | Lasix | 2 | 0 | Y | Oral Solution | x | x | | x | | | | | | | | | | | | | eadfe464-720b-4dcd-a0d8-45dba706bd33 |
| 95 | Gabapentin | Neurontin | 3 | 3 | Y | Oral Solution | x | | x | x | | | | | | | | | | | | | ee9ad9ed-6d9f-4ee1-9d7f-cfad438df388 |
| 96 | Gatifloxacin | Zymaxid | ? | 1 | Y | Ophthalmic | | | | | | | | | x | | | | | | | | 1160b16c-929a-4e85-9c0b-1d8c96a7678b |
| 97 | Glycerol Phenylbutyrate | Ravicti | | 2 | Y | Oral Solution | | | | x | | | | | | | | | | | | | 73bc6b83-2513-11e1-bfc2-0800200c9a66 |
| 98 | Glycopyrrolate | Cuvposa, Robinul | ? | 3/Solution (Tablet not approved for Ped) | Y | Oral Solution | x | x | | x | | | | | | | | | | | | | d200bd44-9856-4104-a29e-a4cca3db6737bd65ee5e-2000-423c-b0a6-72eb213455c4 |
| 99 | Griseofulvin | Gris-peg | 2 | 2 | Y | Oral Suspension | x | | | | x | | | | | | | | | | | | 20aa6571-ee10-4dc1-9be9-018aa0a680fc |
| 100 | Guanfacine | Intuniv | 1 | 6 | N | | x | | | | | | | | | | | | | | | | b972af81-3a37-40be-9fe1-3ddf59852528 |
| 101 | Human Papillomavirus Recombinant | Gardasil | | 9 | N | | | x | | | | | | | | | | | | | | | 30952400-0572-4431-9150-3a41afffb9a |
| 102 | Hydroxychloroquine Sulfate | Plaquenil | 2 | 0.08 | N | | x | | | | | | | | | | | | | | | | 1959d645-6b82-4f4d-b1f2-af644dec7c8f |
| 103 | Hydroxyzine | Atarax, Vistaril | 2 | 0.08 | Y | Oral Solution/ Syrup, Oral Suspension | x | x | x | x | x | | | | | | | | | | | | 7eaf5043-5c73-47af-904b-8e1fae02af2ec271f97f-040e-492b-9194- |

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|-----|-------------------|--|-----------|--|----------------------------------|-------------------------------------|---------------|-----------|----------------|-----------------------|-------------------|---------|-----------------|-------|------------|------------------------------------|-------------------------|--------|--------|---------|-------------|------------|--|
| | | | | | | | | | | | | | | | | | | | | | | | 2c8b74675a95 |
| 104 | Ibuprofen | Advil, Motrin | 2 | 0.5 | Y | Oral Suspension, Chewable Tablet | x | x | x | | x | | x | | | | | | | | | | db5ed801-7a7e-3c83-0172-77f914daaa5a c57f6ded-c0bd-45ae-823a-4c02ce334d98 |
| 105 | Idursulfase | Elaprase | | 1.33 | N | | | x | | | | | | | | | | | | | | | 60cba843-5aab-4dd7-96dc-66648d413be3 |
| 106 | Imatinib Mesylate | Gleevec | | 1 | N | | x | | | | | | | | | | | | | | | | 211ef2da-2868-4a77-8055-1cb2cd78e24b |
| 107 | Imipramine | Tofranil | 1 | 6 | N | | x | x | x | | | | | | | | | | | | | | 1827a5aa-733a-49d9-89d9-48ea0367b230 |
| 108 | Indomethacin | Indocin | 2 | 14 | Y | Oral Suspension | | x | x | | x | | | | | | | x | | | | | 06de3c9d-63bf-47c1-f78c-4fdd482928a |
| 109 | Infliximab | Remicade | | 6 | N | | | x | | | | | | | | | | | | | | | a0a046c1-056d-45a9-bfd9-13b47c24f257 |
| 110 | Insulin | Novolin R, Novolog, Humalog, Lantus, Levemir | | 2/(human,aspart,detemir) 3/(lispro) 6/(glargine) | N | | | x | | | | | | | | | | | | | | | aee7f1f3-612c-4027-8ce9-4fd1f41eed71 3a1e73a2-3009-40d0-876c-b4cb2be56fc5 d38d65c1-25bf-401d-9c7e-a2c3222da8af c8ecbd7a-0e22-4fc7-a503-faa58c1b6f3f d5e07a0c-7e14-4756-9152-9fea485d654a |
| 111 | Irbesartan | Avapro | 2 | 6 | N | | x | | | | | | | | | | | | | | | | b7f1a9ef-c7bb-465c-e4d7-a41395205cad |
| 112 | Isoniazid | Isoniazid | 3 | 0 | Y | Oral Solution | x | x | | x | | | | | | | | | | | | | db8a3ae7-fb5b-47a9-a9f7-f57cd90501c2 |
| 113 | Ivermectin | Sklice, Stromectol | 2/4 | 0.5/Topical 33 lb/Oral | Y | Topical | x | | | | | x | | | | | | | | | | | 4c5557cd-c4cf-11df-851a-0800200c9a66 |

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|-----|--------------------------------|-------------|-----------|---|----------------------------------|-------------------------------------|---------------|-----------|----------------|-----------------------|-------------------|---------|-----------------|-------|------------|------------------------------------|-------------------------|--------|--------|---------|-------------|------------|---|
| | | I | | | | | | | | | | | | | | | | | | | | | 681888c9-af79-4b7d-ae80-c3f4f6f1effd |
| 114 | Lactulose | Enulose | 2? | 0.25 | Y | Oral Solution | | | | x | | | | | | | | x | | | | | 00c42c5c-d19e-4130-aa08-a8bbd47d3e5b |
| 115 | Lamivudine | Epivir | 3 | 0.25 | Y | Oral Solution | x | | | x | | | | | | | | | | | | | 786992bd-13a0-4a00-dfb2-6c135ecd349b |
| 116 | Lamotrigine | Lamictal | 2 | 2 | Y | ODT, Chewable Tablet | x | | | | | x | | | | x | | | | | | | d7e3572d-56fe-4727-2bb4-013ccca22678 |
| 117 | Lansoprazole | Prevacid | 2 | 1 | Y | ODT | x | | x | | | | | | | x | | | | | | | 28ae35c3-bce3-4a63-a4e4-085ffca92aef |
| 118 | Laronidase | Aldurazyme | | 0.5 | N | | | x | | | | | | | | | | | | | | | a80ac249-cae4-41f3-88bb-344088b20e60 |
| 119 | Levalbuterol Hydrochloride | Xopenex HFA | ? | 4 | Y | Metered Nasal Aerosol | | | | | | | | x | | | | | | | | | 218ab3f0-4d1e-4c33-a7e8-27807f029d83 |
| 120 | Levetiracetam | Keppra | 3 | 0.08/ Oral (Injection not approved for Ped) | Y | Oral Solution | x | x | | x | | | | | | | | | | | | | 3ca9df05-a506-4ec8-a4fe-320f1219ab21 |
| 121 | Levocarnitine | Carnitor | ? | 0.25 | Y | Oral Solution | x | x | | x | | | | | | | | | | | | | b2cbc620-59fd-47b6-9e4b-7e3e31533a1c |
| 122 | Levocetirizine Dihydrochloride | Xyzal | 3 | 0.5 | Y | Oral Solution | x | | | x | | | | | | | | | | | | | 9cc60ce2-2806-4bdf-9b89-b630e8f3a159 |
| 123 | Levofloxacin | Levaquin | 3 | 0.5 | Y | Oral Solution, Ophthalmic | x | x | | x | | | | | x | | | | | | | | a1f01e8e-97e9-11de-b91d-553856d89593 |
| 124 | Levothyroxine Sodium | Synthroid | 1 | 0 | N | | x | x | | | | | | | | | | | | | | | 1e11ad30-1041-4520-10b0-8f9d30d30fcc |
| 125 | Lidocaine | Lidoderm | 1 | 0 (Patch not approved for Ped) | Y | Topical | | x | | | | x | | | | | | | | | x | | f1c40164-4626-4290-9012-c00e33420a33 |

| | Generic Name | Trade Name | BCS Class | Down to Age (years) ¹ | Pediatric Dosage Form Available? | Dosage Forms suitable for Pediatric | Tablet (Oral) | Injection | Capsule (Oral) | Solution/Syrup (Oral) | Suspension (Oral) | Topical | Chewable Tablet | Nasal | Ophthalmic | Orally Disintegrating Tablet (ODT) | Granules/Pellets/Powder | Rectal | Elixir | Vaginal | Transdermal | Sublingual | Dailymed Permanent Link to Prescribing Information (http://dailymed.nlm.nih.gov/dailymed/lookup.cfm?setid=) |
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| 126 | Linezolid | Zyvox | 4 | 0 | Y | Oral Suspension | x | x | | | x | | | | | | | | | | | | 6e70e63b-bfd5-478d-a8ee-8ba22c9efabd |
| 127 | Lisdexamfetamine Dimesylate | Vyvanse | ? | 6 | N | | | | x | | | | | | | | | | | | | | 704e4378-ca83-445c-8b45-3cfa51c1ecad |
| 128 | Lisinopril | Zestril | 3 | 6 | N | | x | | | | | | | | | | | | | | | | 46f17ba7-a78c-4a9e-7597-27654f097bd3 |
| 129 | Loperamide Hydrochloride | Imodium | 4 | 6 | Y | Oral Solution, Chewable Tablet | x | | x | x | | | x | | | | | | | | | | d011ae1a-680c-4476-a489-5407df13648f |
| 130 | Loratadine | Claritin | 2 | 2 | Y | ODT, Chewable Tablet, Oral Solution | x | | x | x | | | x | | | x | | | | | | | 3e267980-115b-4672-9c4c-0807e475034f |
| 131 | Losartan Potassium | Cozaar | 1 | 6 | N | | x | | | | | | | | | | | | | | | | 9199238d-8b24-4ca8-bd24-c200853416f6 |
| 132 | Lovastatin | Altoprev | 2 | 10 | N | | x | | | | | | | | | | | | | | | | 0a680e13-0356-4e08-a7fe-78b96ba51b9d |
| 133 | Mebendazole | Vermox | 2 | 2 | Y | Chewable Tablet | x | | | | | | x | | | | | | | | | | fa778759-2b9a-4446-ba06-d3c486019e79 |
| 134 | Mefenamic Acid | Ponstel | 2 | 14 | N | | x | | | | | | | | | | | | | | | | d77e13db-d1b1-4dbf-9de8-80827018cf43 |
| 135 | Meloxicam | Mobic | 2/4 | 2 | Y | Oral Suspension | x | | | | x | | | | | | | | | | | | 676e73fb-51d2-449a-8749-1a7bcc257b11 |
| 136 | Meperidine Hydrochloride | Demerol | 1 | Not established but may be used | Y | Oral Solution | x | x | | x | | | | | | | | | | | | | 6c2b41c3-732c-477f-8790-0eecea43b2da b31d1308-28c3-43f4-e0a6-2f3ed76b8975 |
| 137 | Mercaptopurine | Purinethol | 4 | 0.08 | N | | x | | | | | | | | | | | | | | | | f9af557d-37bf-4078-888e-37c086dfc6e9 |
| 138 | Meropenem | Merrem IV | | 0.25 | N | | | x | | | | | | | | | | | | | | | c15e88d3-d903-4e7a-f683-e29f51afa848 |
| 139 | Metaxalone | Skelaxin | 2 | 12 | N | | x | | | | | | | | | | | | | | | | 7a4163f2-c553-4d14-7e98- |

| | Generic Name | Trade Name | BCS Class | Down to Age (years) ¹ | Pediatric Dosage Form Available? | Dosage Forms suitable for Pediatric | Tablet (Oral) | Injection | Capsule (Oral) | Solution/Syrup (Oral) | Suspension (Oral) | Topical | Chewable Tablet | Nasal | Ophthalmic | Orally Disintegrating Tablet (ODT) | Granules/Pellets/Powder | Rectal | Elixir | Vaginal | Transdermal | Sublingual | Dailymed Permanent Link to Prescribing Information (http://dailymed.nlm.nih.gov/dailymed/lookup.cfm?setid=) |
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| | | | | | | | | | | | | | | | | | | | | | | | d14c5c7f772a |
| 140 | Metformin Hydrochloride | Glucophage, Riomet | 3 | 10 | Y | Oral Solution | x | | | x | | | | | | | | | | | | | 4a0166c7-7097-4e4a-9036-6c9a60d08fc6 05d4df4b-dfe8-4828-b423-a3d4f2c4114a |
| 141 | Methotrexate Hydrochloride | Trexall, Otrexup | 3 | 2 | N | | x | x | | | | | | | | | | | | | | | e942f8db-510f-44d6-acb5-b822196f5e8c |
| 142 | Methylidopa | | 3 | 2 | N | | x | | | | | | | | | | | | | | | | bb1c7c3f-9e6f-4d0e-aea1-6974558659ef |
| 143 | Methylphenidate Hydrochloride | Concerta, Daytrana, Metadate, Methylin, Quillivant XR, Retalin LA | 2 | 6 | Y | Oral Solution, Oral Suspension, Chewable Tablet, Transdermal | x | | x | x | x | | x | | | | | | | | x | | 1a88218c-5b18-4220-8f56-526de1a276cd 2c312c31-3198-4775-91ab-294e0b4b9e7f a6aedc40-5725-4bd3-9037-033746e8599e 09f13452-8f90-426e-9687-d30be75db9d7 e0157005-6e3e-4763-b910-9eb0937608c9 effd952d-ac94-47bb-b107-589a4934dcca |
| 144 | Metronidazole | Flagyl | 3 | 0 (Injection not approved for Ped) | Y | Topical | x | x | x | | | x | | | | | | | | | x | | a2883ca1-5a9a-4259-9d80-46ab67274384 |
| 145 | Midazolam Hydrochloride | Midazolam | 1 | 0.5 | Y | Syrup | | x | | x | | | | | | | | | | | | | a833c24b-6dca-44d7-a0d6-20012fa1ea77 |
| 146 | Minoxidil | Loniten | 3 | 1 | Y | Topical | | | | | | x | | | | | | | | | | | e29270d6-0a99-4161-918f-26b3fcad548d |
| 147 | Mometasone Furoate | Elocon, Asmanex | ? | 2/Topical 12/Aerosol | Y | Topical, Nasal Aerosol | | | | | | x | | x | | | | | | | | | 43f51e9d-8f80-4aba-9b2f-de36d302f8d6 |

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| | | HFA, Nasonex | | | | | | | | | | | | | | | | | | | | | 1f608abd-d414-41e9-89bd-32dd2ef33cb8 12df48a0-fd2e-4e1c-b135-e616a1f31f42 |
| 148 | Montelukast Sodium | Singulair | 1 | 0.5 | Y | Chewable Tablet, Granules | x | | | | | | x | | | | x | | | | | | 8c166755-7711-4df9-d689-8836a1a70885 |
| 149 | Mupirocin | Bactroban, Centany | ? | 0.17 | Y | Topical | | | | | | x | | | | | | | | | | | 6dd5868f-0bc2-48c8-238b-e857f5bd812f 90cfa2dc-3904-4bd3-b951-dcdb141883bf |
| 150 | Mycophenolate Mofetil | CellCept | 2 | 0.25 | Y | Oral Suspension | x | x | x | | x | | | | | | | | | | | | 37241e87-4af4-4dc3-a1aa-ea6f20d8dc40 |
| 151 | Mycophenolic Acid | Myfortic | 2 | 5 | N | | x | | | | | | | | | | | | | | | | eed26501-890d-4ff6-88e7-6dbea4726e53 |
| 152 | Naproxen | Naprosyn | 2 | 2 | Y | Oral Suspension | x | | x | | x | | | | | | | | | | | | 68848217-03c9-4377-9be6-6f567e629129 |
| 153 | Nedocromil Sodium | Tilade | | 3 | Y | Ophthalmic | | | | | | | | | x | | | | | | | | 2fe8d7ad-2158-4169-94b0-719ad20242b7 |
| 154 | Nelfinavir Mesylate | Viracept | 2 | 2 | Y | Oral Powder | x | | | | | | | | | | x | | | | | | e72c2bc6-9462-4a2e-8e1d-b97592376cbd |
| 155 | Nevirapine | Viramune | 2 | 0.04 | Y | Oral Suspension | x | | | | x | | | | | | | | | | | | 5ec05500-6333-4bd0-ac83-464fad0d5162 |
| 156 | Nitazoxanide | Alinia | | 1/Oral suspension 12/Oral Tablet | Y | Oral Suspension | | | | | x | | | | | | | | | | | | 56b1575a-dff4-4c5a-a159-2f858e7a0cb8 |
| 157 | Nitrofurantoin | Furandant in Macrobid, Macrobid in | 2 | 0.08 | Y | Oral Suspension | | | x | | x | | | | | | | | | | | | 6bdf87ae-daf1-4912-9d45-e06fa9eaaf1a 1971e893-5fdb-41e3-a1e9-5e52deed03d1 ec86b651-d77d-4a42-b493- |

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| | | | | | | | | | | | | | | | | | | | | | | | 24244456b3f6 |
| 158 | Nystatin | Nystain | 4 | 0 | Y | Oral Suspension, Topical | x | | | | x | x | | | | | | | | x | | | c9e28323-21fa-4547-b70c-27dc13a5bd7e |
| 159 | Olanzapine | Zyprexa | 2 | 13 | Y | ODT | x | x | | | | | | | | x | | | | | | | d5051fbc-846b-4946-82df-341fb1216341 |
| 160 | Olmesartan Medoxomil | Benicar | ? | 6 | N | | x | | | | | | | | | | | | | | | | 33770d80-754f-11de-8dba-0002a5d5c51b |
| 161 | Olopatadine Hydrochloride | Pataday, Patanase, | 3/1 | 2/Ophthalmic 6/Inhalation | Y | Metered Nasal Spray, Ophthalmic | | | | | | | | x | x | | | | | | | | e1eb5130-e59d-4590-8b04-7b1a6adae5bd c4cffabd-774b-4cfd-b312-c86cf5206402 |
| 162 | Omalizumab | Xolair | | 12 | N | | | x | | | | | | | | | | | | | | | 7f6a2191-adfb-48b9-9bfa-0d9920479f0d |
| 163 | Omeprazole | Prilosec | 2 | 1 | Y | Granules, Oral Suspension | x | | x | | x | | | | | | x | | | | | | a1b077e6-b070-43f2-a98e-380cc635419d |
| 164 | Ondansetron Hydrochloride | Zofran | 3/1 | 4/Oral 0.08/Injection | Y | Oral Solution, ODT | x | x | | x | | | | | | x | | | | | | | c7d61d98-fe86-4340-9b86-47eb92acaa0e d9a71b42-ddfc-49d5-7280-0fc0041dba41 |
| 165 | Oseltamivir Phosphate | Tamiflu | 1/3 | 1 | Y | Oral Suspension | | | x | | x | | | | | | | | | | | | ee3c9555-60f2-4f82-a760-11983c86e97b |
| 166 | Oxaprozin | Daypro | 2 | 6 | N | | x | | | | | | | | | | | | | | | | ea1de47e-3101-4414-817c-0a098af8988c |
| 167 | Oxcarbazepine | Trileptal | 4 | 2 | Y | Oral Suspension | x | | | | x | | | | | | | | | | | | 4c5c86c8-ab7f-4fcf-bc1b-5a0b1fd0691b |
| 168 | Oxcarbazepine | Oxtellar XR | 4 | 6 | N | | x | | | | | | | | | | | | | | | | aa610e56-1d1d-11e1-8bc2-0800200c9a66 |
| 169 | Paliperidone | Invega | | 12/Oral (Injection not approved for | N | | x | x | | | | | | | | | | | | | | | 7b8e5b26-b9e4-4704-921b-3c3c0d159916 1af14e42-951d-414d-8564- |

| | Generic Name | Trade Name | BCS Class | Down to Age (years) ¹ | Pediatric Dosage Form Available? | Dosage Forms suitable for Pediatric | Tablet (Oral) | Injection | Capsule (Oral) | Solution/Syrup (Oral) | Suspension (Oral) | Topical | Chewable Tablet | Nasal | Ophthalmic | Orally Disintegrating Tablet (ODT) | Granules/Pellets/Powder | Rectal | Elixir | Vaginal | Transdermal | Sublingual | Dailymed Permanent Link to Prescribing Information (http://dailymed.nlm.nih.gov/dailymed/lookup.cfm?setid=) |
|-----|----------------------------------|--|-----------|---|----------------------------------|---|---------------|-----------|----------------|-----------------------|-------------------|---------|-----------------|-------|------------|------------------------------------|-------------------------|--------|--------|---------|-------------|------------|---|
| | | | | Ped) | | | | | | | | | | | | | | | | | | | 5d5fce138554 |
| 170 | Pancrelipase | Creon, Pancreaze (Not interchangeable) | ? | 0.33/Creon 0.5/Pancreaze (Tablets not approved for Ped) | N | | x | | x | | | | | | | | | | | | | | 073201aa-556d-4a70-918e-84e9616fd88de1431edd-0fc5-4ebc-8c10-53deb0db0d23d85c7e20-4e1d-43cd-a64b-ced3bda70eed |
| 171 | Pantoprazole Sodium | Protonix | 3 | 1/ Oral (Injection not approved for Ped) | Y | Oral Suspension | x | x | | | x | | | | | | | | | | | | 08098cb2-c048-4640-f387-6beec4a38936 |
| 172 | Penicillin vK | Betapen-VK, Pen-Vee K | 3/1 | 0 | N | | x | | | | | | | | | | | | | | | | 012d46f1-d0a0-4676-a879-cd320297ab16 |
| 173 | Perampanel | Fycompa | | 12 | N | | x | | | | | | | | | | | | | | | | 71cf3309-e182-473c-8b0b-280cabd0e122 |
| 174 | Phenytoin Sodium | Dilantin | 2 | 0.08 | Y | Oral Suspension, Chewable Tablet | x | x | x | | x | | x | | | | | | | | | | 051742b5-b0f0-44a5-8d31-3288527b0638 |
| 175 | Pneumococcal 13-Valent Conjugate | Prevnar 13 | | 0.12 | N | | | x | | | | | | | | | | | | | | | 5d49181b-b974-a5da-3b38-12a3a87bb96b |
| 176 | Pravastatin Sodium | Pravachol | 1 | 8 | N | | x | | | | | | | | | | | | | | | | 897ad8b7-921d-eb02-a61c-3419e662a2da |
| 177 | Prednisolone | Orapred | 1 | 2 | Y | Syrup, ODT, Oral Suspension, Ophthalmic | x | x | | x | x | | | | x | x | | | | | | | 1e379543-c4cf-4e72-953b-db15b7f0c2a1 |
| 178 | Prednisone | Rayos | 1? | 2 | Y | Oral Solution | x | | | x | | | | | | | | | | | | | 281ab967-7565-4bef-9c0c-a646589c671e |
| 179 | Primidone | Mysoline | 2 | 0.08 | N | | x | | | | | | | | | | | | | | | | af593171-dabb-4ea3-b44c-89ed457b2c46 |
| 180 | Prochlorperazine | Compazine | 2 | 2 | N | | x | x | | | | | | | | | | x | | | | | 95b54f0a-5e38-4bfa-8c5e-f9c826774da0 |

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|-----|----------------------------|-----------------------------|-----------|---|----------------------------------|-------------------------------------|---------------|-----------|----------------|-----------------------|-------------------|---------|-----------------|-------|------------|------------------------------------|-------------------------|--------|--------|---------|-------------|------------|---|
| 181 | Promethazine Hydrochloride | Phenergan | 1 | 2 | Y | Syrup | x | x | | x | | | | | | | | x | | | | | 6f7e47cc-f823-4336-8107-f980e3049617 |
| 182 | Pyrazinamide | Pyrazinamide | 3 | 2 | N | | x | | | | | | | | | | | | | | | | 257bd8cf-74d7-45db-bf25-354a8d26634e |
| 183 | Pyrimethamine | Daraprim | 4/2 | 0 | N | | x | | | | | | | | | | | | | | | | 3e4d5027-7939-480f-ae19-82e764d9fa97 |
| 184 | Quetiapine Fumarate | Seroquel | 2 | 10 | N | | x | | | | | | | | | | | | | | | | 0584dda8-bc3c-48fe-1a90-79608f78e8a0 |
| 185 | Quinidine | | 1 | 0.08 | N | | x | x | | | | | | | | | | | | | | | 11d14362-8f69-4c30-b487-5d05f6462bd7 |
| 186 | Rabeprazole Sodium | Aciphex | 1/3 | 1 | Y | Granules | x | | x | | | | | | | | x | | | | | | 5d103551-978f-472a-9c62-51e6e4dea068 |
| 187 | Raltegravir | Isentress | 2/4 | 0.08 | Y | Oral Suspension, Chewable Tablet | x | | | | x | | x | | | | | | | | | | 89a5ec53-d956-4329-8004-0f40f51c88a3 |
| 188 | Ranitidine Hydrochloride | Zantac | 3 | 0.08 | Y | Syrup | x | x | x | x | | | | | | | | | | | | | 08010bf7-1f61-48b3-e1b5-7cecb72ba863 |
| 189 | Retapamulin | Altabax | | 0.75 | Y | Topical | | | | | | x | | | | | | | | | | | 7acc17e7-7041-46bf-f2b2-a615cbf99da6 |
| 190 | Ribavirin | Virazole, Rebetrol, Copegus | 3 | 0/Inhalation 3/Capsule and Solution 5/Tablet | Y | Inhalation Solution, Oral Solution | x | | x | x | | | | x | | | | | | | | | adf16e64-345f-469a-b987-3fbd17e0ac204d2b6f4-bd9b-4871-9527-92c81aa2d4d0d370635f-5530-4d42-a019-d76b61639787 |
| 191 | Rifampin | Rifadin | 2 | 0.08 | N | | | x | x | | | | | | | | | | | | | | 036ab68e-5085-4edc-bd83-784b43d64eab |
| 192 | Rifaximin | Xifaxan | | 12 | N | | x | | | | | | | | | | | | | | | | c5e8e2fd-7087-4b78-9181-cc259c0be2f1 |
| 193 | Risperidone | Risperdal | 2 | 5 (Injection not | Y | Oral Solution, ODT | x | x | | x | | | | | | x | | | | | | | 7e117c7e-02fc-4343-92a1-230061dfc5e0 |

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| | | | | approved for Ped) | | | | | | | | | | | | | | | | | | | bb34ee82-d2c2-43b8-ba21-2825c0954691 |
| 194 | Ritonavir | Norvir | 2 | 0.08 | Y | Oral Solution | x | | x | x | | | | | | | | | | | | | 2849298e-de6e-47bb-8194-56e075b33fc3 |
| 195 | Rosuvastatin Calcium | Crestor | 3 | 10 | N | | x | | | | | | | | | | | | | | | | bb0f3b5e-4bc6-41c9-66b9-6257e2513512 |
| 196 | Rufinamide | Banzel | | 4 | Y | Oral Suspension | x | | | | x | | | | | | | | | | | | 0a3fa925-1abd-458a-bd57-4ae780a1ef2d |
| 197 | Sertraline Hydrochloride | Zoloft | 1 | 6 | Y | Oral Solution | x | | | x | | | | | | | | | | | | | fe9e8b7d-61ea-409d-84aa-3ebd79a046b5 |
| 198 | Simvastatin | Zocor | 2 | 10 | N | | x | | | | | | | | | | | | | | | | fdbfe194-b845-42c5-bb87-a48118bc72e7 |
| 199 | Sodium Bicarbonate | | 1 | 2 | Y | Oral Powder | x | x | | | | | | | | | x | | | | | | 79ddec3b-ef04-425d-478f-76f6b54a22a5 |
| 200 | Sotalol Hydrochloride | Betapace | 1 | 0 | N | | x | | | | | | | | | | | | | | | | c4caf469-f684-4f6d-98e8-b6a2fff1de98 |
| 201 | Stavudine | Zerit | 1,3 | 0 | Y | Oral Solution | | | x | x | | | | | | | | | | | | | 7745cad8-720d-4755-87c7-9147c0915b0f |
| 202 | Sulfasalazine | Azulfidine | 2,4 | 2 | N | | x | | | | | | | | | | | | | | | | ddbe69f3-bd55-45f3-a64f-f60226c744c4 |
| 203 | Tacrolimus | Prograf, Protopic | 2 | 2 | Y | Topical | | x | x | | | x | | | | | | | | | | | 7f667de1-9dfa-4bd6-8ba0-15ee2d78873b 8c2e5036-5f1b-4e71-bf87-5faef295fa96 |
| 204 | Tenofovir Disoproxil Fumarate | Viread | 3 | 2 | Y | Oral Powder | x | | | | | | | | | | x | | | | | | 33fd6418-fbdc-42ca-a50d-ce2a476a5418 |
| 205 | Terbinafine Hydrochloride | Lamisil | 1 | 4/Granules 12/Topical | Y | Granules, Topical | x | | | | | x | | | | | x | | | | | | bc7d43f0-8a4a-4d40-b0fd-70a37dc5faad de5def4a-f77f-4ea6-a497-24f041c1f123 |

| | Generic Name | Trade Name | BCS Class | Down to Age (years) ¹ | Pediatric Dosage Form Available? | Dosage Forms suitable for Pediatric | Tablet (Oral) | Injection | Capsule (Oral) | Solution/Syrup (Oral) | Suspension (Oral) | Topical | Chewable Tablet | Nasal | Ophthalmic | Orally Disintegrating Tablet (ODT) | Granules/Pellets/Powder | Rectal | Elixir | Vaginal | Transdermal | Sublingual | Dailymed Permanent Link to Prescribing Information (http://dailymed.nlm.nih.gov/dailymed/lookup.cfm?setid=) |
|-----|----------------------------|---------------------------------|-----------|---|----------------------------------|--|---------------|-----------|----------------|-----------------------|-------------------|---------|-----------------|-------|------------|------------------------------------|-------------------------|--------|--------|---------|-------------|------------|---|
| 206 | Tetracycline Hydrochloride | Achromycin V, Acnecycline | 3 | 8/Oral ?/Topical | Y | Topical | | | x | | | x | | | | | | | | | | | eaecd9a1-e13e-49b1-8b3c-8e1ef016cacd 3a5e4a8e-20bb-4bf8-8a2e-8dfd7f2afb49 |
| 207 | Theophylline | Elixophyllin | 3,1 | 0 | Y | Oral Solution, Oral Suspension, Elixir | x | x | x | x | | | | | | | | | x | | | | 2676f761-4fe5-40a9-a07d-ed2542847883 |
| 208 | Thiamine Hydrochloride | | 3 | 0 | N | | | x | | | | | | | | | | | | | | | c3c9db74-95d4-487c-90c3-c810786fbaec |
| 209 | Tinidazole | Tindamax | | 3 | N | | x | | | | | | | | | | | | | | | | a0d01539-8413-4703-94cc-d221918630a1 |
| 210 | Tipranavir | Aptivus | 2 | 2 | Y | Oral Solution | | | x | x | | | | | | | | | | | | | 08982e49-d2eb-4b25-b01a-1be52fd669ef |
| 211 | Tobramycin | Tobi | ? | 6 | Y | Inhalation Solution/ Powder | | | | | | | | x | | | | | | | | | 94f9e516-6bf6-4e30-8dde-8833c25c2560 |
| 212 | Tocilizumab | Actemra | | 2 | N | | | x | | | | | | | | | | | | | | | 2e5365ff-cb2a-4b16-b2c7-e35c6bf2de13 |
| 213 | Tolmetin Sodium | | 2 | 2 | N | | x | | x | | | | | | | | | | | | | | 6e0228a8-e3d3-4ae9-8873-d7aa3e0dcfee |
| 214 | Topiramate | Topamax, Qudexy XR, Trokendi XR | 3 | 2 | Y | Pellets | x | | x | | | | | | | | x | | | | | | 21628112-0c47-11df-95b3-498d55d89593 46f54677-3a22-4c38-9b92-923020164e15 2dc7957e-a3e5-46bb-aa66-f3250f872f5e |
| 215 | Triamcinolone Acetonide | Kenalog-40, Kenalog, Nasacort | 4 | 0.08/Injection 2/Inhalation (Not Established for Topical) | Y | Nasal Aerosol, Metered Nasal Spray | | x | | | | x | | x | | | | | | | | | ec04ecbb-2896-3feb-85fd-a64aba93b289 cdf6c80c-ddbd-498f-8897-3c0feebafe31 f0dbc2a3-ca5e-428f-a2e5-0ce0bf954dd1 |

| | Generic Name | Trade Name | BCS Class | Down to Age (years) ¹ | Pediatric Dosage Form Available? | Dosage Forms suitable for Pediatric | Tablet (Oral) | Injection | Capsule (Oral) | Solution/Syrup (Oral) | Suspension (Oral) | Topical | Chewable Tablet | Nasal | Ophthalmic | Orally Disintegrating Tablet (ODT) | Granules/Pellets/Powder | Rectal | Elixir | Vaginal | Transdermal | Sublingual | Dailymed Permanent Link to Prescribing Information (http://dailymed.nlm.nih.gov/dailymed/lookup.cfm?setid=) |
|-----|----------------------------|------------|-----------|----------------------------------|----------------------------------|-------------------------------------|---------------|-----------|----------------|-----------------------|-------------------|---------|-----------------|-------|------------|------------------------------------|-------------------------|--------|--------|---------|-------------|------------|---|
| 216 | Trifluridine | Viroptic | | 6 | Y | Ophthalmic | | | | | | | | | x | | | | | | | | f3a14d86-0ff2-4535-318c-ac8bc8ede42c |
| 217 | Valacyclovir Hydrochloride | Valtrex | 3 | 2 | N | | x | | | | | | | | | | | | | | | | f8e0d8f8-cb73-4206-a484-88f5c4fbd719 |
| 218 | Valganciclovir | Valcyte | 3 | 0.25 | Y | Oral Solution | x | | | x | | | | | | | | | | | | | dc548ff9-e8ea-4d6e-b9b4-e31f53ac4078 |
| 219 | Valproic Acid | Depakene | 1,2 | 1 | Y | Syrup | | | x | x | | | | | | | | | | | | | 6b4331f5-4475-417a-6a9d-09c2f8334235 |
| 220 | Valsartan | Diovan | 2 | 6 | N | | x | | | | | | | | | | | | | | | | 5ddba454-f3e6-43c2-a7a6-58365d297213 |
| 221 | Vigabatrin | Sabril | | 10 | Y | Oral Solution | x | | | x | | | | | | | | | | | | | a88ac1b4-e2c9-45c0-b321-4785902172e3 |
| 221 | Vigabatrin | Sabril | | 10 | Y | Oral Solution | x | | | x | | | | | | | | | | | | | a88ac1b4-e2c9-45c0-b321-4785902172e3 |
| 222 | Zidovudine | Retrovir | 1,3 | 0.08 | Y | Syrup | x | x | x | x | | | | | | | | | | | | | 6df09f15-b102-431c-adde-d7aeef6f5d84 |

Table last updated on: Dec 28, 2014

¹?: Minimum age not established but may be used in pediatrics; 0.04: 2 weeks; 0.08: 4 weeks or 1 month; 0.12: 6 weeks; 0.17: 2 months;

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