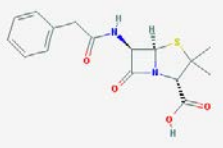
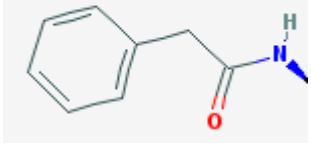
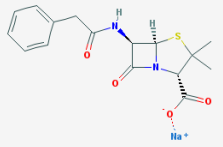
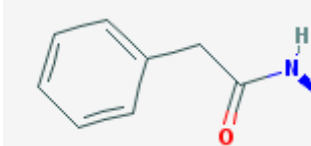
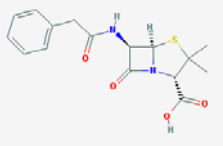
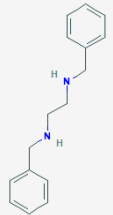
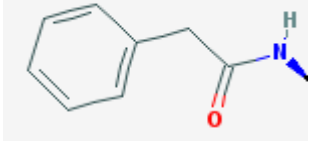
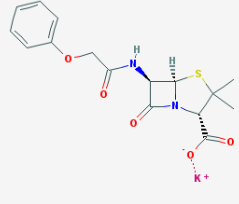
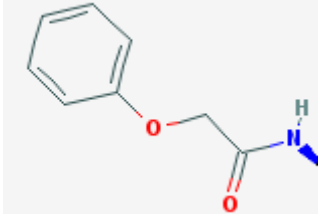
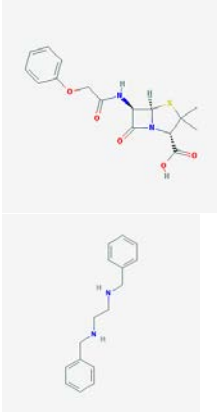
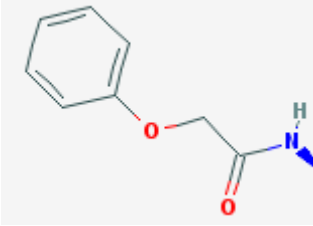
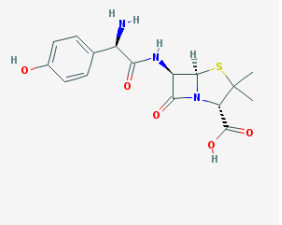
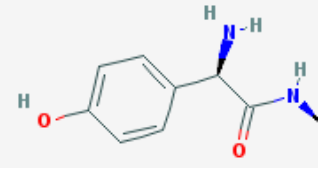
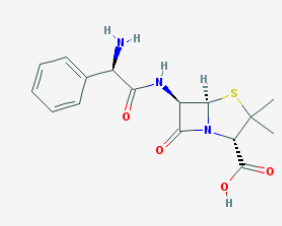
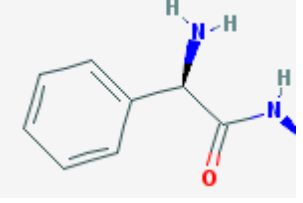
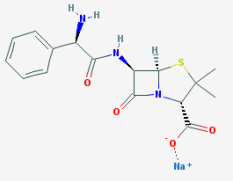
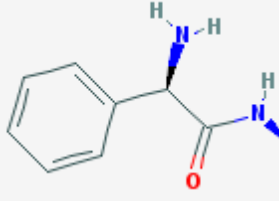
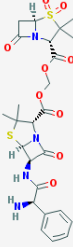
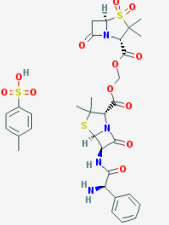
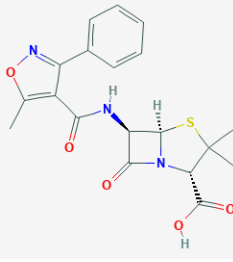
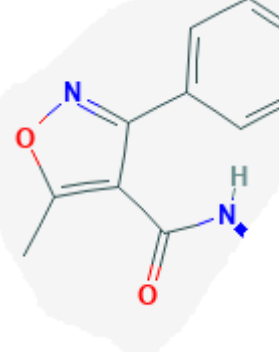
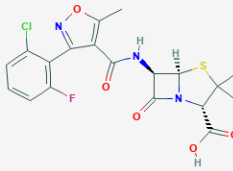
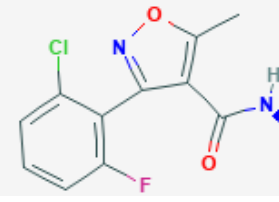

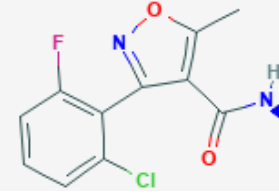
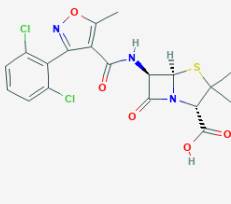
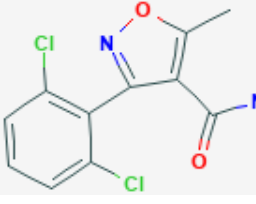
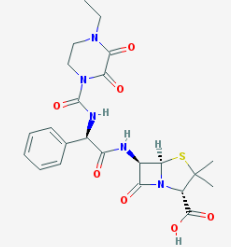
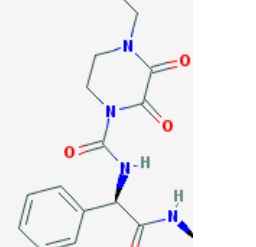
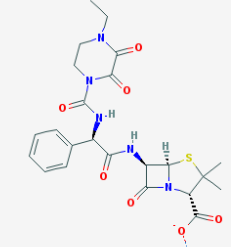
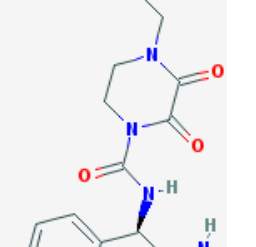
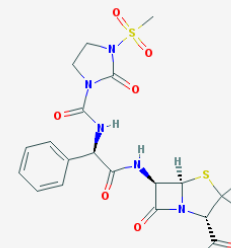
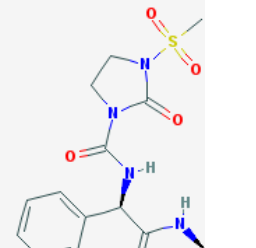
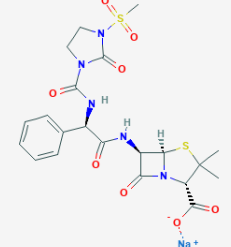
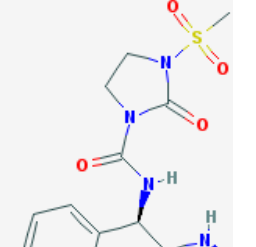


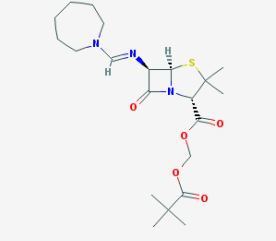
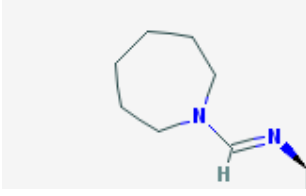
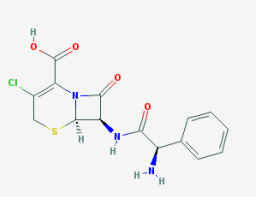
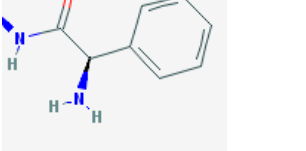
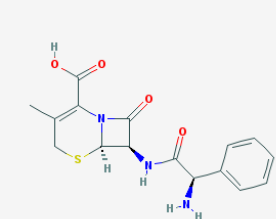
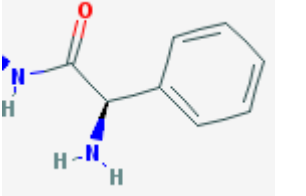
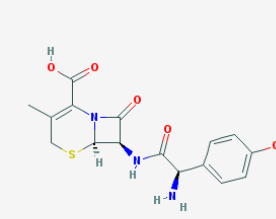
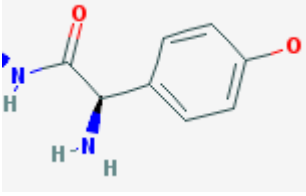

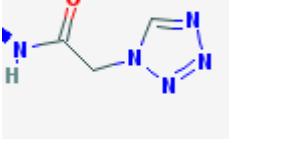
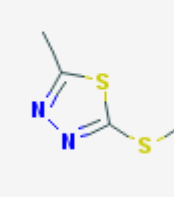
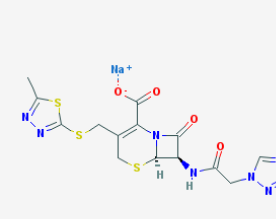
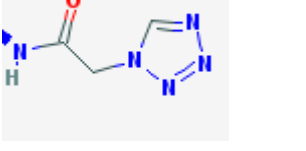
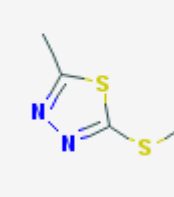
**Abbildung 1: Betalaktamantibiotika – Strukturformeln/R1- und R2-Seitenkette**

Penicilline			
<p>Benzylpenicillin (Penicillin G) und Depotformen</p>			
<p>Benzylpenicillin-Natrium Synonym: Penicillin G Natrium Handelsname: Infectocillin® (D), Penicillin G INFECTOPHARM® (D), Penicillin G-Natrium Sandoz® (A)</p>			
<p>Benzylpenicillin-Benzathin Synonym: Penicillin G Benzathin Handelsname: Pendysin® (D), Retarpen® (A), Tardocillin® (D)</p>	<p>Benzylpenicillin und Benzathin</p>  		
Penicillinaseleibale Oralpenicilline			
<p>Phenoxyethylpenicillin-Kalium Synonym: Penicillin V Handelsnamen: Arcasin® (D), Infectocillin® (D), Isocillin® (D), OSPEN® (A), Penbene® (A), Penicillin V Heumann (D), Penicillin V AbZ (D), Penicillin V acis (D), Penicillin V-CT (D), Penicillin V-ratiopharm (D), Phenoxyethylpenicillin Kalium Sandoz® (A), Penstad V® (A), Pen-V Genericon (A), Pen V G.L.® (A), Star-Pen® (A)</p>			

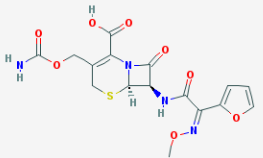
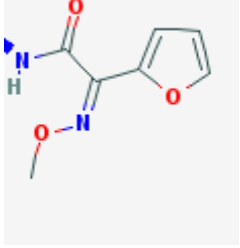
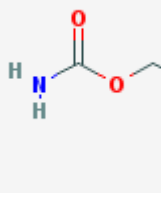
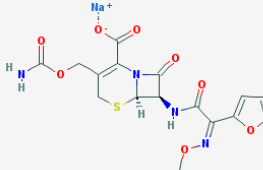
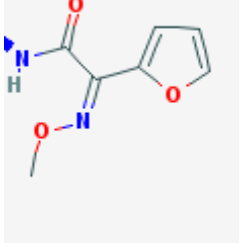
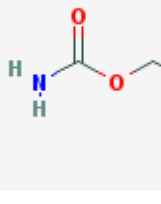
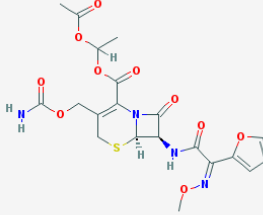
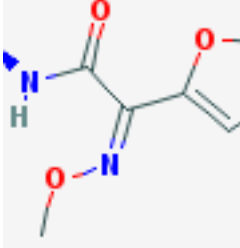
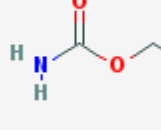
<p>Phenoxymethylpenicillin-Benzathin          Synonym:          Handelsname:          InfectoBicillin® (D), Ospen® (A)</p>	<p>Phenoxymethylpenicillin und Benzathin</p> 		
<p>Breitspektrumpenicilline aus der Gruppe der Aminopenicilline</p>			
<p>Amoxicillin          Synonym:          Handelsname: Amoxi-CT® (D), Amoxisaar® (D), Amoxicillin AbZ (D), Amoxicillin Heumann (D), Amoxicillin Hexal® (A), Amoxillin-MIP® (A), Amoxicillin-ratiopharm® (A, D), Amoxicillin Sandoz® (A), Amoxicillin 1A Pharma® (A), Amoxilan® (A), Amoxistad® (A), InfectoMox (D), Ospamox® (A)</p> <p>Kombinationspräparate mit Clavulansäure:          Amoxillin/Clavulansäure Actavis® (A), Amoxicillin/Clavulansäure A.Med (A), Amoxicillin/Clavulansäure Krka® (A), Amoxicillin/Clavulansäure Mikro Labs® (A), Amoxiclavan 1A Pharma® (A), Amoxicomp Genericon® (A), AmoxiPlus "ratiopharm"® (A), Amoxisaar® plus (D), Amoxillin plus Heumann (D), Amoxillin-ratiopharm comp (D), Amoxicillin-Clavulansäure Heumann (D), Amoxiclav-CT (D), Amoxistad plus® (A), Augmentan® (D), Augmentin® (A), Clavamox® (A), Curam® (A), InfectoSupramox® (D), Xiclav (A)®</p> <p>Kombinationspräparat mit Flucloxacillin-Natrium: Flanamox® (D)</p>			
<p>Ampicillin</p>			

<p>Ampicillin-Natrium Handelsname: Ampicillin-ratiopharm® (D), Standacillin (A) Kombinationspräparate mit Sulbactam: Ampicillin und Sulbactam IBI (D), Ampicillin/Sulbactam Kabi (D), Unacid® (D), Unasyn® (A)</p>			
<p>Sultamicillin</p>			
<p>Sultamicillintosilat Handelsname: Sultamicillin-ratiopharm® (D) Sultamicillintosilatdihydrat Handelsname: Unacid® PD oral (D), Unasyn FTbl® (A)</p>	<p>Sultamicillin und Tosilat</p> 		
<p>Penicillinaseresistente Penicilline aus der Gruppe der Isoxazolypenicilline</p>			
<p>Oxacillin In A/D nicht im Handel</p>			
<p>Flucloxacillin</p>			
<p>Flucloxacillin-Natrium Handelsname: Floxapen® (A), Fluclo Stragen® (D), Flucloxacillin Altamedics (D), Flucloxacillin GSB® (A) In Kombination mit Amoxicillin: Flanamox® (D)</p>			

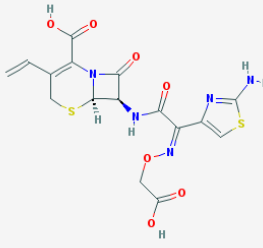
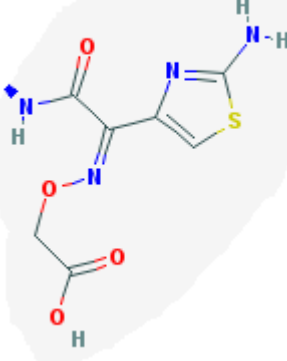

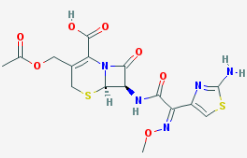
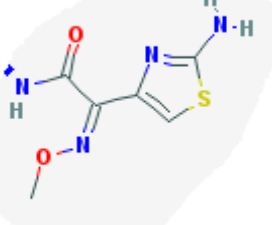
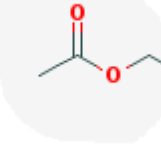
Dicloxacillin			
<b>Acylaminopenicilline mit Wirkung auch gegen Pseudomonas Aeruginosa</b>			
Piperacillin			
<p>Piperacillin-Natrium  Handelsnamen: Piperacillin ibisqus (D)  In Kombination mit Tazobactam-Natrium: Piperacillin/Tazobactam Arcana® (A), Piperacillin/Tazobactam Astro® (A), Piperacillin + Tazobactam Eberth® (D), Piperacillin/Tazobactam Ibigen® (A), Piperacillin/Tazobactam IBISQUS (D), Piperacillin/Tazobactam Kabi (D), Piperacillin/Tazobactam Noriderm® (A), Piperacillin/Tazobactam Pfizer® (A), Piperacillin/Tazobactam Sandoz® (A), Piperacillin/Tazobactam Stragen (D), Piperacillin/Tazobactam Stravencon® (A), Piperacillin/Tazobactam-Teva® (D), Pipetazan® (A)</p>			
Mezlocillin			
<p>Mezlocillin-Natrium  Handelsname: Mezlocillin Carino (D)</p>			

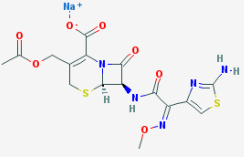
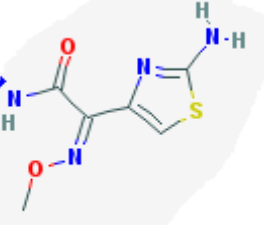
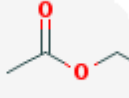
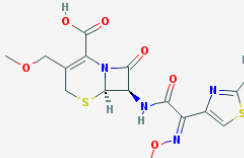
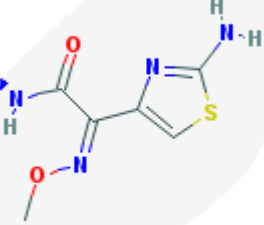

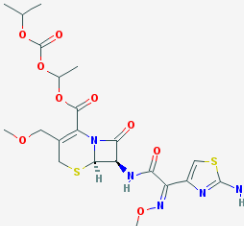
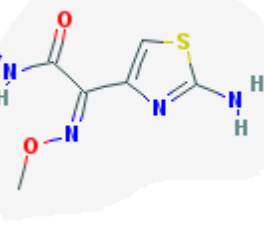


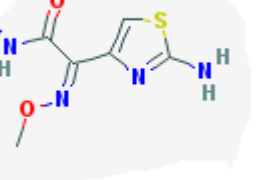
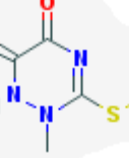
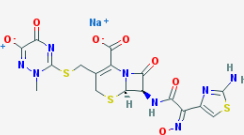
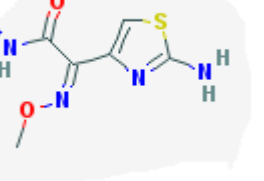
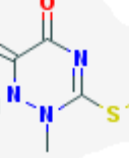
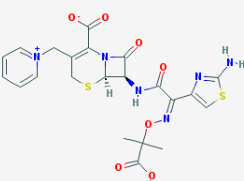
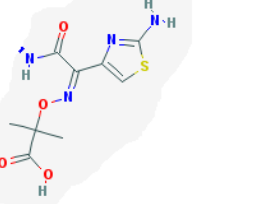
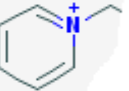
Amidinopenicilline			
<p>Pivmecillinam Handelsname: Pivmelam® (D), Selexid® (A), X-Systo® (D)</p>			
Cephalosporine			
Gruppe I (penicillinase stabil, hauptsächlich gegen grampositive Keime wirksam)			
<p>Cefaclor Handelsnamen: Cec Sandoz® (A), Ceclor® (A), Cefaclor Heumann (D), Cefaclor-ratiopharm® (D), Cefaclor ratiopharm TS (D), Cefastad® (A), Infectocef® (D)</p>			
<p>Cefalexin Handelsname: Cephalex CT (D), Cephalexin-ratiopharm® (D), Cephalobene® (A), Keflex® (A), Ospexin® (A), Sanaxin® (A)</p>			
<p>Cefadroxil Handelsname: Biodroxil® (A), Grüncef® (D)</p>			
<p>Cefazolin</p>			
<p>Cefazolin-Natrium Handelsname: Cefazolin Sandoz® (A), Cefazolin-MIP® (A), Cefazolin-saar® (D), Cephalozin Fresenius (D), Kefzol® (A), Servazolin® (A)</p>			

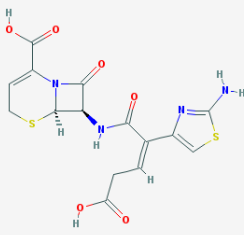
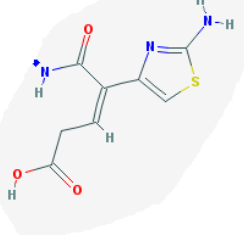
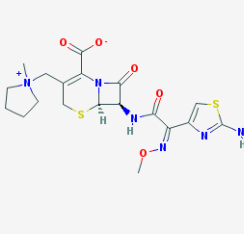
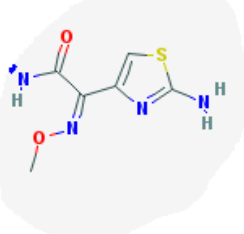
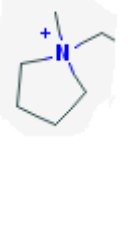
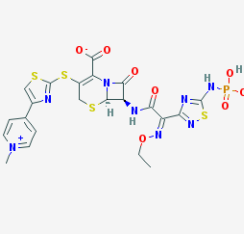
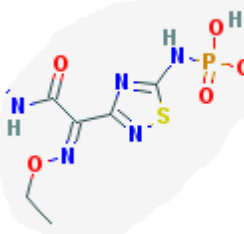
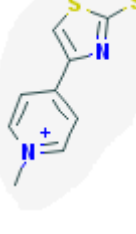
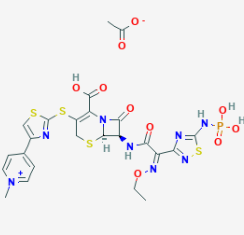
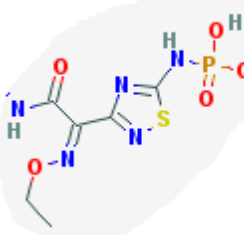
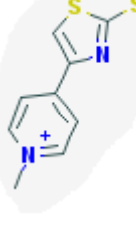
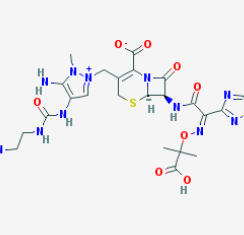
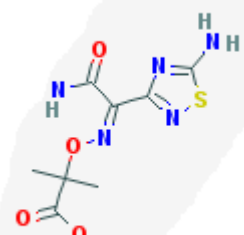
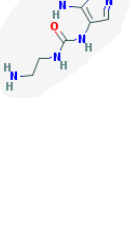
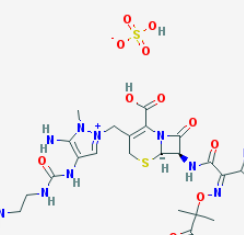
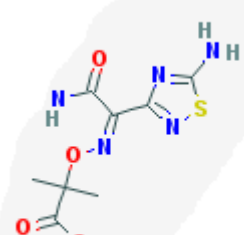
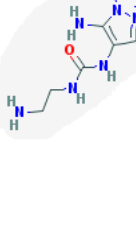
**Gruppe II (stärker gegen gramnegative Bakterien wirksam, noch ausreichend gegen grampositive Bakterien wirksam)**

<p>Cefuroxim</p>			
<p>Cefuroxim-Natrium Handelsnamen: Aprokam® (A, D), Cefuroxim "Astro"® (A), Cefuroxim Dr. Eberth® (A), Cefuroxim Fresenius (A, D), Cefuroxim Hikma® (A), Cefuroxim-ratiopharm p.i (D), Cefuroxim-MIP® (A), Cefuroxim-saar® (D), Cefuroxim Sandoz® (A), Cefuroxim Stravencon® (A), Curocef® (A), Ximaract® (A, D)</p>			
<p>Cefuroximaxetil Handelsnamen: Cefuroxim AbZ (D), Cefuroxim Heumann (D), Cefuroxim Hexal (A), Cefuroxim Krka® (A), Cefuroxim Sandoz® (A), Cefuroxim 1APharma® (A), Cefuroxim-CT (D), Cefuroxim-ratiopharm® TS (D), Cefuroxim-ratiopharm® Filmtabletten (D), Cefuroxim-saar® Filmtabletten (D), Elobact® (D), Zinnat® (A)</p>			

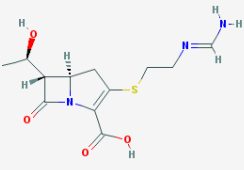
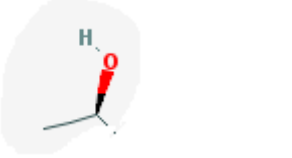
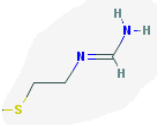
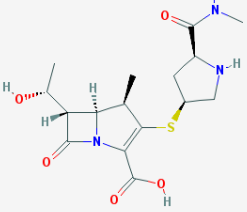
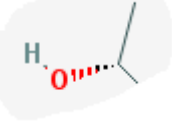
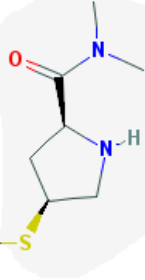
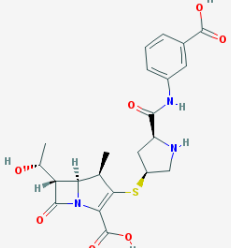
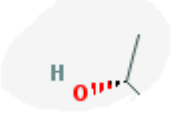
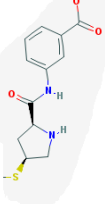
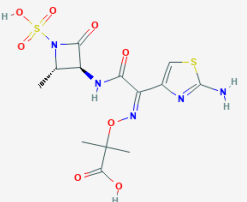
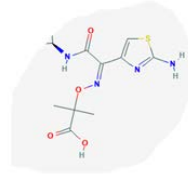
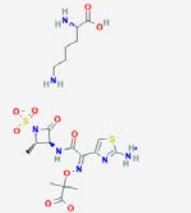
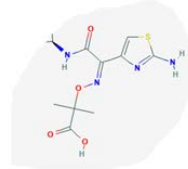
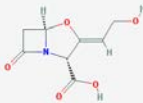
**Gruppe III (sehr gut im gramnegativen Bereich wirksam, schwach im grampositiven Bereich)**

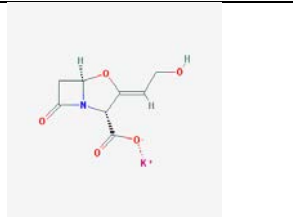
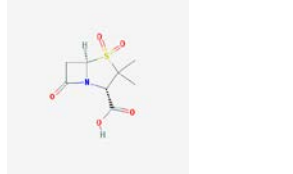
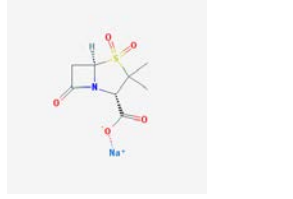
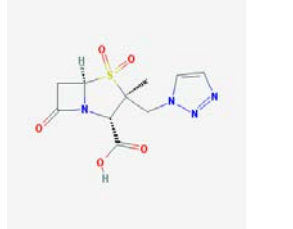
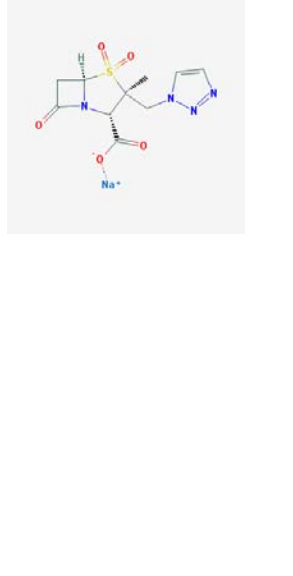
<p>Cefixim Handelsname: Aerocef® (A), Cefixim Incef® (A), InfectoOptcef Soft (D), Tricef® (A)</p>			
<p>Cefotaxim</p>			

<p>Cefotaxim-Natrium Handelsname: Cefotaxim Eberth® (A), Cefotaxim-Fresenius (D), Cefotaxim-MIP® (A), Cefotaxim Stragen (D), Cefotaxim-ratiopharm (D), Cefotaxim-saar® (D), Cefotaxim Sandoz® (A), Claforan® (D), Tirotax® (A)</p>			
<p>Cefpodoxim</p>			
<p>Cefpodoximproxetil Handelsname: Biocef® (A), Cefpodoxim-ratiopharm® (D), Otreon® (A), Orelox® (D), Podomexef® (D), Prodoxsef® (A)</p>			
<p>Ceftriaxon</p>			
<p>Ceftriaxon-Dinatrium Handelsnamen: Cefotrix® (A), Ceftriaxon Bradex® (A), Ceftriaxon Eberth® (A, D), Ceftriaxon Kabi® (A, D), Ceftriaxon Sandoz® (A), CEFTRIAxon Stragen (D), Ceftriaxon-MIP® (A), Ceftriaxon-ratiopharm® (D), Ceftriaxon-saar (D), Rocephin® (D)</p>			
<p>Ceftazidim Handelsname: Ceftazidim Dr. Eberth (D), Ceftazidim Hikma® (A), Ceftazidim Kabi® (A, D), Ceftazidim Sandoz® (A), Ceftazidim-MI®P (A, D), Fortum® (A), Kefazim® (A) In Kombination mit Avibactam: Zavicefta® (D)</p>			

<p>Ceftibuten In A/D nicht im Handel</p>			
<b>Gruppe IV</b>			
<p>Cefepim Handelsname: Cefepim Rotexmedica (D), Cefepim Sandoz® (A), Cefepim Stragen® (A, D), Cefepim-MIP® (A, D), Maxipime® (A, D)</p>			
<b>Gruppe IVb bzw. V (gegen grampositive und gramnegative Bakterien)</b>			
<p>Ceftarolinosamil</p>			
<p>Ceftarolinosamilacetat Handelsname: Zinforo™ (A, D)</p>			
<p>Ceftolozan</p>			
<p>Ceftolozansulfat Handelsname: Zerbaxa® (A, D)</p>			



Carbapeneme			
<p>Imipenem In Kombination mit Cilastin-Natrium: Handelsnamen: Imipenem/Cilastin AptaPharma® (A), Imipenem/Cilastin Eberth® (A), Imipenem/Cilastin Hikma® (A), Imipenem/Cilastin Kabi® (A, D), Imipenem/Cilastin Pfizer® (A), Imipenem/Cilastin Stravencon® (A), Imipenem/Cilastin Rotexmedica (D), ZIENAM® (A, D)</p>			
<p>Meropenem Handelsnamen: Merinfec® (A), Meronem® (D), Meropenem Accord® (A), Meropenem ActaPharma® (A), Meropenem Dr. Eberth® (D), Meropenem Dr. F. Eberth® (A), Meropenem Eberth® (A), Meropenem Hikma® (A), Meropenem Hospira (D), Meropenem Inresa (D), Meropenem Kabi® (A, D), Meropenem Noriderm (A), Meropenem Pfizer® (A), Meropenem Rotexmedica (D), Meropenem Sandoz® (A)</p>			
<p>Ertapenem Handelsname: Invanz® (A, D), Ertapenem® (A)</p>			
Monobactame			
<p>Aztreonam</p>			
<p>Aztreonam-Lysin Handelsname: Azactam® (A), Cayston® (A, D)</p>	<p>Aztreonam und Lysin</p> 		
Betalaktamaseinhibitoren			
<p>Clavulansäure</p>			

<p>Kalium-Clavulanat Handelsnamen in Kombination mit Amoxicillin: Amoxillin/Clavulansäure Actavis® (A), Amoxicillin/Clavulansäure A.Med® (A), Amoxicillin/Clavulansäure Krka® (A), Amoxicillin/Clavulansäure Mikro Labs® (A), Amoxiclavulan 1A Pharma® (A), Amoxicomp Genericon® (A), AmoxiPlus "ratiopharm"® (A), Amoxisaar® plus (D), Amoxillin plus Heumann (D), Amoxillin-ratiopharm comp (D), Amoxicillin-Clavulansäure Heumann (D), Amoxiclav-CT (D), Amoxistad plus® (A), Augmentan® (D), Augmentin® (A), Clavamox® (A), Curam® (A), InfectoSupramox® (D), Xiclav® (A)</p>			
<p>Sulbactam</p>			
<p>Sulbactam-Natrium Handelsname: Combactam® (A, D) Handelsnamen in Kombination mit Ampicillin-Natrium: Ampicillin Sulbactam IBI (D), Ampicillin/Sulbactam Kabi (D), Unacid® (D), Unasyn® (A)</p>			
<p>Tazobactam</p>			
<p>Tazobactam-Natrium: Handelsnamen: In Kombination mit Piperacillin/Tazobactam Arcana® (A), Piperacillin/Tazobactam Astro® (A), Piperacillin-Natrium: Piperacillin + Tazobactam Eberth® (D), Piperacillin/Tazobactam Ibigen® (A), Piperacillin/Tazobactam IBISQUS (D), Piperacillin/Tazobactam Kabi® (A, D), Piperacillin/Tazobactam Noriderm® (A), Piperacillin/Tazobactam Pfizer® (A), Piperacillin/Tazobactam Sandoz® (A), Piperacillin/Tazobactam Stragen (D), Piperacillin/Tazobactam Stravencon® (A), Piperacillin/Tazobactam-Teva® (D), Pipetazan® (A), Pipitaz® (A), In Kombination mit Ceftolozansulfat: Zerbaxa® (A, D)</p>			

Bezugsquellen: [www.rote-liste.de](http://www.rote-liste.de), [www.fachinfo.de](http://www.fachinfo.de), <https://pubchem.ncbi.nlm.nih.gov/>  
<https://asprezister.basg.gv.at/asprezister/> Ohne Anspruch auf Vollständigkeit.