

Table S3: Qualitative evaluation of textbook information missing in the German Wikipedia.

Textbook information not present in Wikipedia (keywords)	Evaluation by lecturers (A-F)						didactic relevance (yes if sum > 4)	
	A	B	C	D	E	F	sum	result
Acetylsalicylic acid								
Acute coronary syndrome	1	1	1	1	1	1	6	yes
Migraine attack	1	1	1	0	1	0	4	no
Inhibition of endothelial prostacyclin synthesis	1	1	0	0	1	1	4	no
CNS side effects (high doses)	0	1	0	0	1	0	2	no
Alendronate acid								
Osteoclast uptake	1	1	1	1	0	1	5	yes
Allopurinol								
Isomere of hypoxanthine	1	0	1	0	0	1	3	no
Oral application	0	1	0	0	1	1	3	no
Amoxicillin								
H. influenzae infections	0	1	1	1	0	1	4	no
High oral resorption when compared to Ampicillin	1	0	1	1	1	1	5	yes
Atropine								
Iridolysis	0	0	0	0	1	1	2	no
Mydriasis	1	1	0	1	1	1	5	yes
50% renal elimination	0	0	0	0	0	0	0	no
Benzylpenicillin								
Neurotoxicity (high doses)	1	1	0	0	1	0	3	no
Biperiden								
IND: M. Parkinson	1	1	1	1	1	1	6	yes
Bromocriptine								
Increased GH secretion	1	0	1	0	0	1	3	no
Pleural fibrosis	0	0	0	1	1	1	3	no
Caffeine								
Increase of catecholamine levels	0	1	1	0	1	1	4	no
Interactions with uric acid metabolism	0	0	0	0	0	0	0	no
Tremor	1	1	1	0	1	1	5	yes
Seizures	1	1	0	1	1	1	5	yes
Anxiety	0	1	0	0	0	1	2	no
Increased gastric acid production	1	1	1	0	0	1	4	no
Candesartan								
Long duration of action	1	1	0	0	1	0	3	no
Carbamazepine								
Use-dependent block of neuronal discharges	1	0	1	1	0	1	4	no
Cefepime								
IND: Pseudomonas infections	1	1	1	1	1	1	6	yes
IND: infections with gram negative bacteria	1	1	1	1	1	1	6	yes
IND: infections with gram positive bacteria	1	1	0	1	1	1	5	yes
Ciclosporin								
IND: autoimmune disorders, rheumatoid arthritis	1	0	1	1	1	1	5	yes
Variable oral bioavailability	1	1	1	1	0	1	5	yes
Predominant hepatic biotransformation	1	1	0	1	1	1	5	yes
Predominant hepatic elimination	0	0	0	0	0	1	1	no
Hyperglycemia	0	0	0	1	0	1	2	no
Ciprofloxacin								
Inhibition of topoisomerase II	1	1	1	0	0	1	4	no
Renal elimination	1	0	0	0	1	1	3	no
CNS adverse effects	1	0	0	0	1	0	2	no
Clarithromycin								
Alternative antibiotic for patients with penicillin allergy	1	1	0	1	0	1	4	no
Cyclophosphamide								
Immunosuppressive effect via inhibition of leucocytes	1	0	1	1	1	1	5	yes
Diazepam								
Dose-dependent anxiolytic, sedative, myotonolytic or anti-convulsant	1	1	1	1	1	1	6	yes
Conjugation of hydroxyl group during biotransformation	0	0	0	0	0	0	0	no
Reduced / slowed elimination in liver disease	1	0	1	1	0	1	4	no
Floppy infant syndrome	1	1	0	1	1	1	5	yes
Reduced libido	0	0	0	0	0	1	1	no
Domperidone								
IND: migraine attacks	0	1	0	0	1	1	3	no
Reflux	1	0	0	0	1	0	2	no
Doxazosin								
Tachycardia	1	1	0	0	1	1	4	no
Increased heart failure incidence	0	1	1	1	1	1	5	yes

Doxycycline								
IND: Proprioni bacteria infections	0	1	0	1	0	1	3	no
IND: Yersinia infections	0	0	0	1	0	1	2	no
IND: Protozoa infections	0	0	0	1	0	1	2	no
IND: Lymphgranuloma venereum	0	0	0	0	0	1	1	no
Penetrates blood-placenta-barrier	0	1	0	1	1	1	4	no
Variable penetration of blood-brain-barrier	0	0	0	0	0	1	1	no
Plasma protein binding 90%	0	0	0	0	0	0	0	no
Onycholysis	0	0	0	0	0	1	1	no
Increase of intracranial pressure	0	0	0	0	0	1	1	no
Esophageal mucositis	0	1	0	1	0	0	2	no
Estradiol								
IND: hormone therapy in menopause	1	1	1	1	1	1	6	yes
Binding to estradiol response element	1	0	0	1	1	1	4	no
Suppression of ovulation	1	1	0	1	1	1	5	yes
Higher oral dose	0	1	0	0	0	0	1	no
Hepatic elimination	1	1	0	1	1	0	4	no
Elimination product estriol	0	0	0	0	0	1	1	no
Glucuronidation, sulphation	0	1	0	1	0	1	3	no
Role of renal elimination	1	1	0	0	0	1	3	no
Transdermal application	1	1	1	1	1	1	6	yes
Thrombosis	1	1	1	1	1	1	6	yes
Endometrial carcinoma	1	1	1	1	1	1	5	yes
Edema	1	1	1	1	0	1	5	yes
Cardiovascular complications	1	1	1	1	1	1	6	yes
Ethanol								
Increase in blood pressure	0	1	0	0	1	0	2	no
Hypoglycemia	1	1	1	0	1	0	4	no
Increased diuresis	1	1	0	1	0	1	4	no
Decreased sexual potency	1	1	0	0	0	1	3	no
Distribution in total body water	0	1	0	1	1	1	4	no
Elimination increased in alcoholics	1	1	0	0	0	1	3	no
CYP450 metabolism	0	1	0	1	0	0	2	no
Energy source	1	1	0	1	1	1	5	yes
Flucloxacillin								
Effectiveness against penicilline-sensitive bacteria	0	1	0	1	1	1	4	no
Oral application	1	1	0	1	1	1	5	yes
Half-life 30 bis 60 min	0	0	0	0	0	0	0	no
High plasma protein binding	0	0	0	0	0	0	0	no
Fluconazole								
High water solubility	0	1	0	0	0	0	1	no
Application oral or i.v.	1	1	0	1	1	1	5	yes
Oral bioavailability > 90%	0	1	0	1	0	1	3	no
High liquor concentration	1	1	0	1	1	1	5	yes
Halflife 30 h	1	1	0	1	0	0	3	no
Mainly unmodified renal elimination	1	1	0	0	1	1	4	no
Dose adaption in renal insufficiency	1	1	1	1	1	1	6	yes
Flumazenil								
Half-life 1 h	1	1	0	0	0	0	2	no
Furosemide								
Effective if GFR <30 ml/min	1	1	1	1	1	1	6	yes
Increased thrombosis risk	1	1	1	1	1	1	6	yes
Gentamicin								
Intracellular site of action	0	0	0	0	0	1	1	no
No penetration of blood-liquor-barrier	1	1	1	0	1	1	4	no
Low plasma protein binding	0	1	0	0	0	0	1	no
No metabolism	1	1	0	0	0	1	3	no
Renal elimination by glomerular filtration	1	1	0	1	1	1	5	yes
Reduced elimination in renal insufficiency	1	1	1	1	1	1	6	yes
Cl: pregnancy	1	1	0	1	1	1	4	no
Glyceryl trinitrate								
Duration of action 15-30 min	1	1	1	0	1	1	5	yes
Goserelin								
Regulation of GnRH-receptors	0	1	0	1	1	1	4	no
Reduction of sex hormone levels	1	1	1	1	1	1	6	yes
Hot flush	1	1	1	1	1	1	6	yes
Heparin, unfractionated								
Tissue irritation at injection site	0	0	0	0	0	1	1	no
Hydrochlorothiazide								
Hypercalcuria	0	1	0	1	1	1	4	no
Onset of action after 1-2 h	0	1	0	0	1	0	2	no
Loss of action if renal function is reduced	0	1	1	1	1	1	5	yes
Ibuprofen								
Oxidation as biotransformation process	0	0	0	0	0	0	0	no
Imipenem								
Beta-lactamase stable	1	1	1	1	1	1	6	yes
Insulin lispro								
Duration of action 2 h	1	1	0	0	1	1	4	no
Max. drug action after 40 min	1	1	0	0	1	1	4	no

Isoflurane								
MAC-value 1.2%	0	1	0	0	1	0	2	no
Metabolisation 0.2%	0	1	0	1	0	1	3	no
Quick onset of drug action	1	1	0	0	1	1	4	no
Isoniazid								
High tissue distribution	1	1	0	1	1	1	5	yes
Lamotrigine								
IND: focal seizures	1	1	1	1	0	1	5	yes
IND: Lennox-Gastaut-syndrome	0	0	0	1	1	0	2	no
Levodopa								
Metabolization to dopamin by dopa-decarboxylase	1	1	1	1	1	1	6	yes
Loss of efficacy after longtime use	1	1	0	1	1	1	5	yes
Lithium								
Hyperthyreotic metabolic state	0	1	0	0	0	1	2	no
Therapeutic effect after 1-2 weeks	1	1	1	1	1	1	6	yes
Prophylactic effects after 6-12 months	1	1	1	1	1	1	6	yes
Maximal plasma concentration after 2 h	0	1	0	0	0	0	1	no
Euthyrot struma	1	1	1	1	1	1	6	yes
ECG abnormalities	1	1	0	1	1	1	5	yes
Renal diabetes insipidus	1	1	0	1	1	1	5	yes
Loperamide								
Inhibition of propulsive peristalsis	1	1	1	1	1	1	6	yes
Reduction of fluid loss	1	1	1	1	1	1	6	yes
CNS AE in children	1	1	1	1	1	1	6	yes
Metformin								
Unmodified renal elimination	1	1	1	0	1	1	5	yes
Half-life 2-5 h	0	1	0	0	0	0	1	no
Caution if used in elderly patients	1	1	1	1	0	0	4	no
Methotrexate								
Direct inhibition of enzymes	1	1	0	0	1	0	3	no
Drug resistance	0	1	0	0	1	0	2	no
Metoclopramide								
Antiemetic effect	1	1	1	1	1	1	6	yes
Increased tonus of lower esophagus sphincter	1	1	0	1	1	1	5	yes
Higher risk for AE in children	1	1	0	1	1	0	4	no
Metoprolol								
Blood pressure reduction after weeks	1	1	0	0	1	1	4	no
Metronidazole								
HP triple therapy	1	1	1	0	0	0	3	no
Mirtazapine								
Agitated depression	1	0	0	0	0	0	1	no
Morphine								
Sedation	1	1	1	1	1	1	6	yes
Oral bioavailability 15%	1	1	0	1	1	1	5	yes
Hepatic glucuronidation	1	0	0	0	0	0	1	no
Half-life: several hours	1	0	1	0	0	1	3	no
AE: increased GI-tonus	1	1	1	1	1	1	6	yes
AE: bradycardia	0	1	0	1	1	1	4	no
AE: miosis	1	1	0	1	1	1	5	yes
AE: effect on hypophyseal hormones	0	0	0	1	1	1	3	no
AE: delayed gastric emptying	0	1	0	1	1	1	4	no
AE: spastic constipation	1	1	1	1	1	1	6	yes
CI: lung diseases	0	0	0	0	1	0	1	no
Use during birth	1	0	0	1	1	1	4	no
Naloxone								
Use in neonatal medicine	0	1	0	0	1	0	2	no
Half-life approx. 1 h	1	1	1	0	1	0	4	no
Nifedipine								
Rapid onset of action	1	1	1	1	1	1	6	yes
Oral bioavailability 50%	0	1	0	0	0	0	1	no
Half-life 2 h	1	1	0	0	0	0	2	no
Nicotine								
Intoxication: excitation, followed by depolarisation block	1	1	0	1	1	1	5	yes
Absorption pH-dependent	0	1	0	1	0	0	2	no
Elimination: 10% unmodified renal elimination	0	1	0	1	0	0	2	no
Increase of plasma lipids	1	0	0	1	1	1	4	no
GI-ulcera	1	0	0	0	1	1	3	no
Norepinephrine								
α_2 -mediated inhibition of noradrenalin release	1	1	1	0	1	1	5	yes
Effect on β_2 receptors	0	1	0	1	1	1	4	no
Renale elimination	1	1	0	0	0	1	3	no
Omeprazole								
Duration of action until re-synthesis of proton pump	1	1	1	0	1	1	5	yes
Duration of action > half-time (irreversible inhibition of proton pump)	1	1	0	0	1	1	4	no
Hypergastrinemia	1	0	0	0	1	0	2	no

Ondansetron								
Co-medication with steroids results in increased efficacy	0	1	1	1	1	1	5	yes
Halflife 3.5 h	0	0	0	0	0	0	0	no
Duration several hours	0	0	0	1	1	1	3	no
Pancuronium								
IND: intoxications with elevated muscle tension	1	0	0	0	1	1	3	no
Perchlorate								
Aplastic anemia	1	1	1	1	1	0	5	yes
Physostigmine								
Carbamylation of ACh-esterase	0	0	1	0	0	0	1	no
Pilocarpine								
Accomodation errors	1	1	0	1	1	1	5	yes
Reduced twilight vision	0	1	0	1	1	1	4	no
Systemic actions	0	0	0	0	1	1	2	no
Prednisolone								
IND: leucemia	1	1	1	1	1	0	5	yes
Decreased cytokine synthesis	1	1	1	1	1	1	6	yes
Inhibition of all inflammation phases	1	0	1	1	1	1	5	yes
Negative feedback mechanisms	1	1	1	1	1	1	6	yes
Affinity to mineral corticoid receptor	1	1	1	1	1	1	6	yes
Oral application	0	1	0	0	1	1	3	no
Glucuronidation, sulphatation	0	1	0	0	0	0	1	no
Sodium retention, potassium excretion via mineral corticoid receptor action	1	1	1	0	1	1	5	yes
Muscle weakness	1	1	0	1	1	1	5	yes
Euphoria	1	1	1	1	1	1	6	yes
Adrenal cortex atrophy	1	1	1	1	1	1	6	yes
Glaucoma, cataract	0	1	1	1	1	1	5	yes
Cl: osteoporosis	1	1	1	1	1	1	6	yes
Cl: GI-ulcera	1	1	1	1	1	1	6	yes
Cl: hypertonus	1	1	1	0	1	1	5	yes
Cl: diabetes mellitus	1	1	0	1	1	1	5	yes
Cl: infectious diseases	1	1	1	1	1	1	6	yes
Cl: pregnancy	1	1	0	1	1	1	5	yes
Propofol								
Drug action after 1 min	0	1	0	0	1	1	3	no
Duration of action 10 min	1	1	0	0	1	1	3	no
Half-time 30 min	0	1	0	0	0	0	1	no
Hepatic metabolism	1	1	0	0	0	1	3	no
Pyrazinamide								
Inhibition of fatty acid synthesis by pyrazincarbone acid	0	0	0	0	0	0	0	no
Inhibition of mycolic acid synthesis	1	1	1	1	1	1	6	yes
High tissue distribution	0	1	0	0	1	1	2	no
Ranitidine								
Dizziness	1	0	0	0	1	1	3	no
Rifampicin								
Application p.o.	0	1	0	0	0	1	2	no
Plasma protein binding 80%	0	1	0	0	0	0	1	no
High organ distribution	1	1	0	1	0	1	4	no
Half-life 2-5 h	0	1	0	0	0	0	1	no
After longtime use reduction of half-life	0	1	0	1	1	1	4	no
GI-tract side effects	0	1	0	0	1	1	3	no
Adverse effects of the skin	1	1	0	0	1	1	4	no
Neurological side effects	1	0	0	0	0	1	2	no
Flu symptoms	0	1	0	0	1	1	3	no
Use in pregnancy	0	1	0	0	1	1	3	no
Use during lactation	0	1	0	0	1	1	3	no
Suxamethonium								
Blockade of action potentials	1	1	0	0	1	1	4	no
Longlasting paralysis	1	1	0	1	1	0	4	no
Tazobactam								
IND: Severe infections	0	1	0	0	1	1	3	no
Thiamazole (Methimazol)								
Inhibition of iodine incorporation to tyrosines	1	1	1	0	1	1	5	yes
Delayed thyreostatic effect	1	1	1	1	1	1	6	yes
Valproic acid								
IND: focal seizures	1	0	1	1	0	1	4	no
Inhibition of T-type-calcium channels	0	0	0	0	0	1	1	no
High plasma protein binding	1	1	0	1	0	0	3	no
Vancomycin								
No penetration of outer membrane in gram negative bacteria	0	0	1	1	1	1	4	no
No hemodialysis	0	0	0	1	0	0	1	no
Irritation of veins after i.v. application	0	1	0	1	1	1	4	no