The EURO-FORTA (Fit fOR The Aged) List: International consensus validation of a clinical tool for improved drug treatment in older people

Drugs & Aging

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The EURO - F O R T A List

"Fit fOR The Aged"

Expert Consensus Validation

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Disclaimer

While building on an international foundation of medical evidence and experience for the medications listed, including already existing "negative lists" and classification systems, this FORTA List primarily reflects prescribing tendencies in seven European countries/regions. The FORTA labels themselves, being evidence-based, may possibly be subject to change during the course of further consensus evaluation procedures, depending on the state of evidence and clinical experience for a given substance[5]. Meanwhile, the FORTA principle has been validated in a randomized clinical trial (VALFORTA) showing a large improvement of medication quality and amelioration of clinical parameters[6].

With the goal of creating a user-friendly clinical tool, a summary of relevant comments is given directly in the EURO-FORTA List, drawing on the Delphi experts' extensive clinical experience. This is however by no means comprehensive and does not necessarily refer to specific evidence or sources. Therefore, the authors' selection of suggestions, comments and warnings may be subjective[5]. 'No comment' reflects the absence of noteworthy or relevant words of information or caution within the context of the expert evaluation. All information herein is believed to be true and accurate. Neither the authors nor the University of Heidelberg or affiliated institutions, as the publishers of this list, can accept legal responsibility for any errors or omissions made in the contents of this list[5].

We welcome all comments and criticism which may contribute to the quality, safety and usability of the EURO-FORTA List in daily clinical practice.

The FORTA Concept: initiators and expert panel for the FORTA classification system

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FORTA Expert Review Panel

The following 64 colleagues, representing seven European countries/regions, provided their expertise for purposes of evaluating the proposed FORTA List. They received no honoraria in connection with this project. All panel members contributed actively to the development of the content of the EURO-FORTA List.

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F O R T A – Physician's guide[1,2,5,7]

1. **FORTA is evidence-based + real-life-oriented (factors such as compliance issues, age-dependent tolerance and frequency of relative contraindications are considered).**
2. **Classifications are indication (or diagnosis)-dependent: a medication can receive different FORTA classifications based on differing indications.**
3. **Contraindications always take precedence over the FORTA-classification (for example, even Class A medications may not be given if allergies are present).**
4. **FORTA is designed to be a quick and user-friendly clinical tool to aid in the pharmacotherapy of older patients. The system is not intended to take the place of individual therapeutic considerations or decisions. As with any simplified model, it does allow for exceptions.**

F O R T A – Classification System A-D[1,2,3,4,7]

Class A	Class B	Class C	Class D
= Indispensable drug, clear-cut benefit in terms of efficacy/safety ratio proven in elderly patients for a given indication	= Drugs with proven or obvious efficacy in the elderly, but limited extent of effect and/or safety concerns	= Drugs with questionable efficacy/safety profiles in the elderly which should be avoided or omitted in the presence of too many drugs, absence of benefits or emerging side effects; explore alternatives	= Avoid if at all possible in the elderly, omit first and use alternative substances

The EURO-FORTA List[3,4,5]
Delphi Expert Consensus Validation

Classification of the most frequently used long-term medications†
for the pharmacotherapy of older patients
by indication/diagnosis, ranked according to FORTA classification
Newly proposed drugs are mentioned under the respective diagnosis and marked by *; they are listed in greater detail in the second part.

(† long-term defined as > 4 weeks. Please note that the distinction between acute/chronic may not always be clear-cut; exceptions are noted)

ARTERIAL HYPERTENSION	**Suggested FORTA class**	**France (N=5)** FORTA class / Consensus coefficient	**Italy (N=7)** FORTA class / Consensus coefficient	**Nordic countries (N=6)** FORTA class / Consensus coefficient	**Spain (N=8)** FORTA class / Consensus coefficient	**Poland (N=8)** FORTA class / Consensus coefficient	**UK/Ireland (N=9)** FORTA class / Consensus coefficient	**Germany /Austria (N=21)** FORTA class / Consensus coefficient	**Mean consensus coefficient**	**EURO-FORTA Class** (original FORTA class in parentheses if different from consensus results)
Substance/Group										
Renin-Angiotensin system inhibitors **ACE inhibitors**	**A**	A 0.875	A 1.000	A 1.000	A 1.000	A 1.000	A 0.938	A 0.975	0.970	**A**
Angiotensin receptor antagonists	**A**	B 0.750	A 1.000	A 0.900	A 1.000	A 0.938	A 0.938	A 0.975	0.929	**A**
Long-acting calcium antagonists, dihydropyridine type, for example amlodipine	**A**	A 0.875	A 1.000	A 0.900	A 1.000	A 0.938	A 1.000	A 0.950	0.952	A
Betablockers	**B**	B 1.000	B 0.929	B 0.900	B 0.929	B 0.875	B 0.875	B 1.000	0.930	B
Diuretics	**B**	B 0.875	B 0.810	B 0.917 (R2)	B 0.857 (R2)	B 0.875	B 0.813	B 1.000	0.878	B
Alpha blockers	**C**	C 0.875	C 0.929	C 0.875	C 0.929	C 0.938	C 0.875	C 1.000	0.917	C

Spironolactone	**C**	C 1.000	C 0.917	C 0.900	C 0.929	C 0.929 (R2)	C 0.875	C 0.972	0.932	C
Moxonidine	**C**	C 0.833	C 0.929	C 0.900	C 0.917	C 1.000	C 1.000	C 1.000	0.940	**C**
Aliskiren	**C**	C 0.875	C 0.917	C 1.000	C 1.000	C 1.000	C 0.900	C 0.973	0.952	**C**
Urapidil	**C**	C 0.625 (R2)	C 0.833	-	C 1.000	C 0.900	C 0.833	C 0.947	0.856	**C**
Clonidine	**D**	D 1.000	D 1.000	D 0.900	D 1.000	D 0.938	D 1.000	D 0.975	0.973	D
Minoxidil	**D**	D 1.000	D 1.000	D 1.000	D 1.000	D 1.000	D 1.000	D 1.000	1.000	D
Calcium antagonists, verapamil type	**D**	D 0.875	D 1.000	D 1.000	D 0.929	C 0.714 (R2)	D 0.875	D 1.000	0.913	**D**
CARDIAC INSUFFICIENCY	**Suggested FORTA class**	**France (N=5)** FORTA class / Consensus coefficient	**Italy (N=7)** FORTA class / Consensus coefficient	**Nordic countries (N=6)** FORTA class / Consensus coefficient	**Spain (N=8)** FORTA class / Consensus coefficient	**Poland (N=8)** FORTA class / Consensus coefficient	**UK/Ireland (N=9)** FORTA class / Consensus coefficient	**Germany /Austria (N=21)** FORTA class / Consensus coefficient	**Mean consensus coefficient**	**EURO-FORTA Class** (original FORTA class in parentheses if different from consensus results)
Substance/Group										
Renin-angiotensin system inhibitors										
ACE inhibitors	**A**	**A** **1.000**	**A** **1.000**	**A** **1.000**	**A** **1.000**	**A** **1.000**	**A** **1.000**	**A** **0.975**	0.996	A
Angiotensin receptor antagonists	**A**	**A** **0.875**	**A** **1.000**	**A** **1.000**	**A** **1.000**	**A** **0.929**	**A** **0.929**	**A** **0.975**	0.958	A

Betablockers (metoprolol, carvedilol, bisoprolol)	**A**	**A 1.000**	**A 1.000**	**A 0.900**	**A 0.929**	**A 1.000**	**A 1.000**	**A 0.975**	0.972	A
Diuretics	**B**	**B 0.875**	**B 0.833**	**A 0.667 (R2)**	**A 0.643 (R2)**	**B 0.833**	**B 0.750 (R2)**	**B 0.975**	0.797	**B**
Spironolactone	**B**	**B 0.875**	**B 0.833**	**C 0.750 (R2)**	**B 1.000**	**B 0.929**	**B 0.929**	**B 0.975**	0.899	**B**
Digitalis preparations	**C**	**C 0.833**	**C 0.833 (R2)**	**C 1.000**	**C 0.929 (R2)**	**C 0.929**	**C 1.000**	**C 0.947**	0.924	C
Ivabradine	**C**	**C 0.833**	**C 1.000**	**C 1.000**	**C 1.000**	**C 1.000**	**C 1.000**	**C 1.000**	0.976	C

ACUTE CORONARY SYNDROME	**Suggested FORTA class**	**France (N=5)** FORTA class / Consensus coefficient	**Italy (N=7)** FORTA class / Consensus coefficient	**Nordic countries (N=6)** FORTA class / Consensus coefficient	**Spain (N=8)** FORTA class / Consensus coefficient	**Poland (N=8)** FORTA class / Consensus coefficient	**UK/Ireland (N=9)** FORTA class / Consensus coefficient	**Germany /Austria (N=21)** FORTA class / Consensus coefficient	**Mean consensus coefficient**	**EURO-FORTA Class** (original FORTA class in parentheses if different from consensus results)
Substance/Group										
Renin-Angiotensin-System- Blocker: ACE inhibitors	**A**	**A 1.000**	**A 1.000**	**A 0.900**	**A 1.000**	**A 0.929**	**A 0.917**	**A 0.973**	**0.960**	**A**
Acetylsalicylic acid	**A**	**A 1.000**	**A 1.000**	**A 1.000**	**A 1.000**	**A 1.000**	**A 0.929**	**A 0.975**	**0.986**	**A**
Unfractionated heparin and low	**A**	**A 1.000**	**A 1.000**	**A 1.000**	**A 1.000**	**A 0.929**	**A 1.000**	**A 0.975**	**0.986**	**A**

molecular weight heparin										
Frequency-lowering betablockers	**A**	**A** **1.000**	**A** **1.000**	**A** **1.000**	**A** **1.000**	**A** **1.000**	**A** **1.000**	**A** **0.975**	**0.996**	**A**
Atorvastatin	**A**	**A** **0.833**	**A** **0.929**	**A** **1.000**	**A** **1.000**	**A** **0.929**	**A** **0.833**	**A** **0.925**	**0.921**	**A**
Nitroglycerin spray, single use, acute as on-demand medication	**A**	**A** **0.875**	**A** **1.000**	**A** **1.000**	**A** **1.000**	**A** **0.929**	**A** **0.929**	**A** **0.975**	**0.958**	**A**
Clopidogrel, prasugrel	**B** **A** for stent	**B** **1.000** **A for stent** **1.000**	**B** **0.929** **A for stent** **1.000**	**B** **1.000** **A for stent** **1.000**	**B** **0.929** **A for stent** **1.000**	**B** **0.857** **A for stent** **1.000**	**A** **0.625 (R2)** **A for stent** **1.000**	**B** **0.975** **A for stent** **0.975**	**0.902** **0.996**	**B** **A for stent**
Thrombolytics, especially rTPA (recombinant tissue-type plasminogen activator)	**B**	**B** **1.000**	**B** **0.952**	**B** **0.875**	**B** **1.000**	**B** **0.929**	**B** **1.000**	**B** **1.000**	**0.965**	**B**
Nitrates, long-term	**C**	**C** **0.833**	**C** **1.000**	**C** **1.000**	**C** **1.000**	**C** **1.000**	**C** **0.929**	**C** **0.947**	**0.958**	**C**
Gp IIb/IIIa antagonists (glycoprotein 2b/3a inhibitors)	**C**	**C** **1.000**	**C** **1.000**	**C** **1.000**	**C** **1.000**	**C** **1.000**	**C** **0.929**	**C** **1.000**	**0.990**	**C**
Ivabradine	**C**	**-**	**C** **1.000**	**C** **1.000**	**C** **1.000**	**C** **0.929**	**C** **0.929**	**C** **0.973**	**0.972**	**C**
CHRONIC THERAPY FOLLOWING MYOCARDIAL	**Suggested FORTA class**	**France (N=5)** FORTA class / Consensus coefficient	**Italy (N=7)** FORTA class / Consensus coefficient	**Nordic countries (N=6)** FORTA class / Consensus coefficient	**Spain (N=8)** FORTA class / Consensus coefficient	**Poland (N=8)** FORTA class / Consensus coefficient	**UK/Ireland (N=9)** FORTA class / Consensus coefficient	**Germany /Austria (N=21)** FORTA class / Consensus coefficient	**Mean consensus coefficient**	**EURO-FORTA Class** (original FORTA class in parentheses if different from

INFARCTION										consensus results)
Substance/group										
Renin angiotensin system blockers ACE Inhibitors	**A**	**A 1.000**	**A 1.000**	**A 0.900**	**A 1.000**	**A 1.000**	**A 0.938**	**A 0.975**	**0.973**	**A**
Acetylsalicylic acid (100 mg/d)	**A**	**A 1.000**	**A 1.000**	**A 1.000**	**A 1.000**	**A 1.000**	**A 0.929**	**A 0.975**	**0.986**	**A**
Frequency-lowering beta blockers up to 3 years	**A**	**A 1.000**	**A 1.000**	**A 0.900**	**A 1.000**	**A 1.000**	**A 0.938**	**A 0.975**	**0.973**	**A**
Frequency-lowering beta blockers longer than 3 years	**C**	**C 0.833**	**C 0.833**	**C 1.000**	**C 0.857**	**C 0.786 (R2)**	**B 0.688 (R2)**	**B 0.700 (R2)**	**0.814**	**C**
Nitroglycerin spray, single use as on-demand medication	**A**	**A 0.875**	**A 1.000**	**A 1.000**	**A 1.000**	**A 0.929 (R2)**	**A 1.000**	**A 0.975**	**0.968**	**A**
Influenza vaccination (inactivated subunit vaccines)	**A**	**A 1.000**	**A 0.929**	**A 1.000**	**A 1.000**	**B 0.714 (R2)**	**A 0.875**	**A 0.975**	**0.928**	**A**
Statins	**A** **B** for very old (>85 years) patients	**A 1.000** **B** for very old (>85 years) patients **1.000**	**A 0.929** **B** for very old (>85 years) patients 0.917 (R2)	**A 0.833** **B** for very old (>85 years) patients 0.875	**A 0.857** **B** for very old (>85 years) patients 1.000	**A 0.881** **B** for very old (>85 years) patients 0.861	**A 0.875** **B** for very old (>85 years) patients 1.000	**A 0.894** **B** for very old (>85 years) patients 0.944	**0.896** **0.942**	**A** **B for very old (>85 years) patients**

Clopidogrel (12 months after acute coronary syndrome)	**A** with aspirin intoleran ce	**A** with aspirin intolerance **1.000**	**A** with aspirin intolerance 1.000	**A** with aspirin intolerance 1.000	**A** with aspirin intolerance 1.000	**A** with aspirin intolerance 1.000	**A** with aspirin intolerance 0.875	**A** with aspirin intolerance 0.975	**0.979**	**A with aspirin intolerance**
Nitrates, long-term	**C**	**C 1.000**	**C 1.000**	**C 0.900**	**C 1.000**	**C 1.000**	**C 1.000**	**C 0.975**	**0.982**	**C**
Fibrates	**C**	**C 1.000**	**C 0.857**	**C 1.000**	**C 1.000**	**C 0.857**	**C 0.938**	**C 0.947**	**0.943**	**C**
Ezetimibe	**C**	**C 0.833**	**C 1.000**	**C 1.000**	**C 0.929**	**C 0.917**	**C 0.938**	**C 0.970**	**0.941**	**C**
Amiodarone	**C**	**C 1.000**	**C 1.000**	**C 0.900**	**C 1.000**	**C 0.929**	**C 1.000**	**C 1.000**	**0.976**	**C**
All other class-I-III antiarrhythmic agents	**D**	**D 1.000**	**D 1.000**	**D 1.000**	**D 1.000**	**D 1.000**	**D 1.000**	**D 0.975**	**0.996**	**D**
Dihydropyridine antagonists (if no hypertension)	**D**	**D 1.000**	**D 1.000**	**D 1.000**	**D 1.000**	**D 1.000**	**D 0.813**	**D 1.000**	**0.973**	**D**
Niacin	**D**	**-**	**D 1.000**	**D 1.000**	**D 1.000**	**D 0.929**	**D 0.929**	**D 0.947**	**0.968**	**D**

STROKE	**Suggested FORTA class**	**France (N=5)** FORTA class / Consensus coefficient	**Italy (N=7)** FORTA class / Consensus coefficient	**Nordic countries (N=6)** FORTA class / Consensus coefficient	**Spain (N=8)** FORTA class / Consensus coefficient	**Poland (N=8)** FORTA class / Consensus coefficient	**UK/Ireland (N=9)** FORTA class / Consensus coefficient	**Germany /Austria (N=21)** FORTA class / Consensus coefficient	**Mean consensus coefficient**	**EURO-FORTA Class** (original FORTA class in parentheses if different from consensus results)
Substance/Group										
Acetylsalicylic acid	**A**	**A 1.000**	**A 1.000**	**A 1.000**	**A 1.000**	**A 1.000**	**A 0.889**	**A 1.000**	0.984	A
Atorvastatin	**A**	**A**	**A**	**A**	**A**	**A**	**B**	**A**	0.882	**A**

		1.000	**0.929**	**0.833**	**0.929**	**0.938**	**0.625 (R2)**	**0.921**		
rTPA (recombinant tissue-type plasminogen activator)	**A**	**A 1.000**	**A 1.000**	**A 1.000**	**A 0.857**	**A 0.875**	**A 0.889**	**A 0.972**	0.942	A
Simvastatin	**A**	**A 1.000**	**A 0.929**	**A 0.833**	**A 0.857**	**A 0.896**	**A 0.875**	**A 0.925**	0.902	**A**
Anticoagulants including new oral anticoagulants	**A**	**A 1.000**	**A 0.917**	**A 0.833**	**A 1.000**	**A 0.875**	**A 1.000 (R2)**	**A 0.921**	0.935	A
Clopidogrel	**A**	**B 0.750**	**A 0.857**	**A 1.000**	**A 0.929**	**A 0.896**	**A 0.944**	**A 1.000**	0.911	A
Dipyridamole plus acetylsalicylic acid	**B**	**C 0.500**	**B 0.857**	**B 1.000**	**B 0.929**	**B 0.917**	**C 0.625 (R2)**	**B 0.875**	0.815	**B**

ATRIAL FIBRILLATION	**Suggested FORTA class**	**France (N=5)** FORTA class / Consensus coefficient	**Italy (N=7)** FORTA class / Consensus coefficient	**Nordic countries (N=6)** FORTA class / Consensus coefficient	**Spain (N=8)** FORTA class / Consensus coefficient	**Poland (N=8)** FORTA class / Consensus coefficient	**UK/Ireland (N=9)** FORTA class / Consensus coefficient	**Germany /Austria (N=21)** FORTA class / Consensus coefficient	**Mean consensus coefficient**	**EURO-FORTA Class** (original FORTA class in parentheses if different from consensus results)
Substance/group										
Frequency-lowering betablockers	**A**	A 0.875	A 0.929	**A 0.833**	A 1.000	A 0.938	A 0.944	A 1.000	0.931	**A**
New Oral Anticoagulants (NOACs)	**B**	B 0.875	B 0.750 (R2)	**B 0.833**	B 0.929	B 0.813	B 0.833	B 0.829 (R2)	0.837	**B**
Except dabigatran	**C**	C 0.625 (R2)	C 0.944	**C 0.900 (R2)**	C 0.857	C 0.813	C 0.813 (R2)	C 0.815	0.824	**C**

Oral anticoagulation by vitamin-K-antagonists (e.g. phenprocoumon, warfarin)	**B**	B 0.875	B 0.833 (R2)	**A** **0.583 (R2)**	B 0.857	B 0.938	B 0.833	A 0.725 (R2)	0.806	**B**
Alternative: low molecular weight heparin	**C**	D 0.750 (R2)	C 1.000	**C** **1.000**	C 0.929	C 1.000	C 0.813	C 0.975	0.924	**C**
Digoxin	**B**	C 0.500 (R2)	B 0.857	**C** **0.750 (R2)**	B 1.000	B 0.938	B 0.889	B 0.850	0.826	**B**
Digitoxin	**C**	C 1.000	C 1.000	**C** **1.000**	C 1.000	C 1.000	C 0.900	C 0.900	0.971	**C**
Diltiazem, verapamil	**C**	C 1.000	C 0.929	**C** **0.833 (R2)**	C 0.929	C 1.000	C 0.889	C 0.950	0.933	**C**
Class III antiarrhythmic agent amiodarone	**C**	C 0.875	C 0.857	**C** **1.000**	C 1.000	C 0.938	C 0.833	C 0.975	0.925	**C**
All other class I-III antiarrhythmic agents	**D**	D 1.000	D 1.000	**D** **1.000**	D 1.000	D 1.000	D 1.000	D 1.000	1.000	**D**
Acetylsalicylic acid (100 mg/d)	**D**	D 0.875	D 0.929	**D** **0.900 (R2)**	C 0.714 (R2)	D 0.786 (R2)	D 1.000	D 0.975	0.883	**D**
Class III antiarrhythmic agent dronedarone	**D**	D 1.000	D 1.000	**D** **1.000**	D 1.000	D 1.000	D 0.929	D 1.000	0.990	**D**

0.957										
CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD)	**Suggested FORTA class**	**France (N=5)** FORTA class / Consensus coefficient	**Italy (N=7)** FORTA class / Consensus coefficient	**Nordic countries (N=6)** FORTA class / Consensus coefficient	**Spain (N=8)** FORTA class / Consensus coefficient	**Poland (N=8)** FORTA class / Consensus coefficient	**UK/Ireland (N=9)** FORTA class / Consensus coefficient	**Germany /Austria (N=21)** FORTA class / Consensus coefficient	**Mean consensus coefficient**	**EURO-FORTA Class** (original FORTA class in parentheses if different from consensus results)
Substance/group										
Inhalative long-acting parasympatholytic agents	**A**	**A** **0.833**	**A** **0.929**	**A** **1.000**	**A** **1.000**	**A** **0.929**	**A** **0.875**	**A** **1.000**	**0.938**	**A**
Systemic glucocorticoids, acute, short-term use in cases of exacerbation	**A**	**A** **0.875**	**A** **1.000**	**A** **1.000**	**A** **1.000**	**A** **0.857**	**A** **1.000**	**A** **1.000**	**0.962**	**A**
Antibiotics (acute) in cases of exacerbation, after calculated selection and, if necessary, according to antibiogram	**A**	**A** **1.000**	**A** **1.000**	**A** **0.900**	**A** **1.000**	**A** **0.929**	**A** **1.000**	**A** **1.000**	**0.976**	**A**
Long-term administration of oxygen	**A**	**A** **1.000**	**A** **1.000**	**A** **1.000**	**A** **1.000**	**A** **1.000**	**A** **1.000**	**A** **1.000**	**1.000**	**A**
Annual influenza immunizations	**A**	**A** **1.000**	**A** **1.000**	**A** **1.000**	**A** **1.000**	**A** **1.000**	**A** **1.000**	**A** **0.975**	**0.996**	**A**
Pneumococcal immunizations for persons ≥ 65 years	**A**	**A** **1.000**	**A** **1.000**	**A** **1.000**	**A** **1.000**	**A** **1.000**	**A** **1.000**	**A** **1.000**	**1.000**	**A**

Inhalative beta 2 mimetic agents	**B**	**B** **0.750 (R2)**	**B** **1.000**	**B** **1.000**	**B** **0.857**	**B** **0.857**	**B** **0.929**	**B** **0.975**	**0.962**	**B**
Inhalative glucocorticoids	**C**	**C** **0.833**	**C** **0.929**	**C** **0.900**	**C** **0.857**	**B** **0.714 (R2)**	**C** **0.938**	**C** **0.833**	**0.858**	**C**
Theophylline	**C**	**D** **0.750 (R2)**	**C** **0.833 (R2)**	**C** **1.000**	**C** **0.786 (R2)**	**C** **0.953**	**C** **0.938**	**C** **0.925**	**0.884**	**C**
Mucolytic agents, e,g, acetyl cysteine, bromhexine	**C**	**D** **0.750 (R2)**	**C** **0.929**	**C** **1.000**	**C** **1.000**	**C** **1.000**	**C** **0.813**	**C** **0.950**	**0.920**	**C**
Roflumilast	**C**	**D** **0.500 (R2)**	**C** **0.900**	**C** **1.000**	**C** **0.929**	**C** **1.000**	**C** **1.000**	**C** **0.941**	**0.896**	**C**
Systemic glucocorticoids, chronic use	**D**	**D** **1.000**	**D** **0.929**	**D** **1.000**	**D** **1.000**	**D** **0.929**	**D** **1.000**	**D** **0.975**	**0.976**	**D**
Antitussives: opioid A., e.g. codein; non-opioid A., e.g. butamirate	**D**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**D** **0.875**	**D** **1.000**	**0.982**	**D**
OSTEOPOROSIS	**Suggested FORTA class**	**France (N=5)** FORTA class / Consensus coefficient	**Italy (N=7)** FORTA class / Consensus coefficient	**Nordic countries (N=6)** FORTA class / Consensus coefficient	**Spain (N=8)** FORTA class / Consensus coefficient	**Poland (N=8)** FORTA class / Consensus coefficient	**UK/Ireland (N=9)** FORTA class / Consensus coefficient	**Germany /Austria (N=21)** FORTA class / Consensus coefficient	**Mean consensus coefficient**	**EURO-FORTA Class** (original FORTA class in parentheses if different from consensus results)
Substance/Group										
Calcium and vitamin D supplements (as prophylaxis for persons ≥65 years)	**A**	**A** **0.833**	A 1.000	A 1.000	**A** **0.929**	**A** **0.857**	A 0.813	**A** **1.000**	**0.919**	**A**

Parenteral bisphosphonates (e.g. ibandronate, IV every 3 months)	**A**	**A** **0.833**	A 0.857	A 1.000	**B** **0.643 (R2)**	**A** **0.857**	A 0.889	**A** **1.000**	**0.868**	A
Denosumab	**A**	**B** **0.333 (R2)**	A 1.000	A 0.900	**B** **0.571 (R2)**	**A** **0.929**	A 0.857	**A** **0.947**	**0.791**	A
Raloxifene for women	**A**	**B** **0.625 (R2)**	B 0.600 (R2)	B 0.600 (R2)	**B** **0.643 (R2)**	**A** **0.929 (R2)**	B 0.500 (R2)	**A** **0.973**	**0.696**	**(A)** **B**
Bisphosphonates, oral	**B**	**B** **0.750 (R2)**	B 0.857	B 0.750 (R2)	**B** **0.857 (R2)**	**B** **0.857 (R2)**	B 0.813 (R2)	**B** **0.775 (R2)**	**0.808**	**B**
Teriparatide	**C**	**C** **1.000**	B 0.375 (R2)	C 1.000	**C** **0.857**	**C** **1.000**	C 0.938	**C** **0.894**	**0.866**	C
Alfacalcidol	**C**	**C** **0.875**	C 0.929	C 1.000	**C** **1.000**	**C** **0.929**	C 0.938	**C** **1.000**	**0.953**	**C**
Parathormone	**C**	**C** **0.833**	C 1.000	C 1.000	**C** **1.000**	**C** **1.000**	C 1.000	**C** **0.921**	**0.965**	C
Strontium ranelate	**D**	**D** **1.000**	**D** **0.857**	**D** **1.000**	**D** **0.929**	**D** **0.857**	**D** **1.000**	**D** **0.947**	**0.941**	D
Nandrolone decanoate	**D**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**1.000**	D
Fluoride	**D**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**1.000**	D
Hormone replacement therapy (HRT): estrogen, except for perimenopausal)	**D**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**D** **0.857**	**D** **0.950**	**0.972**	D

TYPE II DIABETES MELLITUS	Suggested FORTA class	France (N=5) FORTA class / Consensus coefficient	Italy (N=7) FORTA class / Consensus coefficient	Nordic countries (N=6) FORTA class / Consensus coefficient	Spain (N=8) FORTA class / Consensus coefficient	Poland (N=8) FORTA class / Consensus coefficient	UK/Ireland (N=9) FORTA class / Consensus coefficient	Germany /Austria (N=21) FORTA class / Consensus coefficient	Mean consensus coefficient	EURO-FORTA Class (original FORTA class in parentheses if different from consensus results)
Substance/group										
DPP4 (Dipeptidylpeptidase) Inhibitors	**A**	**B** **0.625 (R2)**	**A** **0.929**	**B** **0.667 (R2)**	**A** **0.857**	**B** **0.643 (R2)**	**B** **0.357 (R2)**	**A** **0.900**	0.711	**(A)** **B**
Insulin and insulin analogs (if absolutely necessary)	**B**	**A** **0.625 (R2)**	**B** **0.857**	**A** **0.667 (R2)**	**B** **0.857**	**B** **0.929**	**B** **0.813**	**B** **0.825**	0.796	**B**
Metformin	**B**	**B** **0.875**	**A** **0.583 (R2)**	**B** **0.900**	**A** **0.571 (R2)**	**B** **0.810**	**B** **0.813**	**B** **0.900**	0.779	**B**
GLP1 (Glucagon-Like Peptide-1) analogs	**B**	**B** **0.875 (R2)**	**B** **0.833**	**B** **1.000**	**B** **0.929**	**B** **1.000**	**B** **0.929**	**B** **0.916**	0.926	**B**
Acarbose	**B**	**C** **0.625 (R2)**	**B** **0.833 (R2)**	**B** **0.833**	**B** **0.786 (R2)**	**B** **0.929**	**C** **0.286 (R2)**	**C** **0.579 (R2)**	0.696	**B**
3rd generation sulfonylureas (for example, glimepiride)	**C**	**C** **0.875**	**C** **0.881**	**C** **1.000**	**C** **1.000**	**B** **0.643 (R2)**	**C** **0.813**	**C** **0.875**	0.870	**C**
Glinides (for example, nateglinide)	**C**	**C** **0.833**	**C** **0.917**	**C** **1.000**	**C** **1.000**	**C** **1.000**	**C** **1.000**	**C** **0.950**	0.957	**C**
PPAR-ɣ Ligands (Peroxisomal										**C**

Proliferator-Activated Receptor gamma) **pioglitazone**	**C**	**D** **0.625 (R2)**	**C** **0.929**	**C** **1.000**	**C** **1.000**	**C** **1.000**	**C** **0.929**	**C** **0.925**	0.915	
rosiglitazone	**D**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**D** **1.000**	1.000	**D**
Gliflozins	**D**	**D** **1.000**	**D** **0.861**	**D** **0.833**	**D** **0.929**	**D** **1.000**	**C** **0.643 (R2)**	**D** **0.973**	0.891	**D**
1st generation sulfonylureas (for example, glibenclamide)	**D**	**D** **1.000**	**D** **0.929**	**D** **1.000**	**D** **1.000**	**D** **0.833**	**D** **0.813**	**D** **0.900**	0.925	**D**
DEMENTIA	**Suggested FORTA class**	**France (N=5)** FORTA class / Consensus coefficient	**Italy (N=7)** FORTA class / Consensus coefficient	**Nordic countries (N=6)** FORTA class / Consensus coefficient	**Spain (N=8)** FORTA class / Consensus coefficient	**Poland (N=8)** FORTA class / Consensus coefficient	**UK/Ireland (N=9)** FORTA class / Consensus coefficient	**Germany /Austria (N=21)** FORTA class / Consensus coefficient	**Mean consensus coefficient**	**EURO-FORTA Class** (original FORTA class in parentheses if different from consensus results)
Substance/group										
Acetylcholinesterase inhibitors e.g. donepezil, galantamine, rivastigmine (Only if indicated for the present stage of the disease)	**B**	**B** **0.875**	**B** **0.929**	**B** **1.000**	**B** **0.938**	**B** **0.875**	**B** **0.944**	**B** **0.868**	**0.918**	**B**
Memantine	**C**	**B** **0.500 (R2)**	**C** **0.929**	**C** **0.833 (R2)**	**C** **0.875**	**B** **0.571 (R2)**	**C** **0.750 (R2)**	**B** **0.548 (R2)**	**0.715**	**C**
Ginkgo biloba	**C**	**C** **0.875 (R2)**	**D** **0.582 (R2)**	**D** **0.500 (R2)**	**D** **0.563 (R2)**	**D** **0.643 (R2)**	**D** **0.563 (R2)**	**C** **0.825**	**0.650**	**(C)** **D**

Statins	**D**	**D** **0.833**	**D** **0.810**	**D** **1.000 (R2)**	**D** **0.875**	**D** **0.857 (R2)**	**D** **0.938**	**D** **0.950**	**0.895**	**D**
Selegiline	**D**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**D** **1.000**		**D**
Nimodipine	**D**	**D** **1.000**	**D** **0.917**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**0.988**	**D**
Ergoline derivatives	**D**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**1.000**	**D**
Piracetam	**D**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**D** **0.917**	**D** **1.000**	**D** **1.000**	**0.988**	**D**
Pyritinol	**D**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**1.000**	**D**
Antioxidants: vitamin E, selenium, vitamin C	**D**	**D** **0.875**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**D** **0.975**	**0.979**	**D**
Phytotherapeutic agents, e.g. ginseng	**D**	**D** **0.875**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**0.982**	**D**
Hormone preparations, e.g. DHEA (Dehydroepiandrosterone), testosterone	**D**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**1.000**	**D**
Antiphlogistics, e.g. indomethacin	**D**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**1.000**	**D**
Desferrioxamine	**D**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**1.000**	**D**
	Suggested FORTA class	**France (N=5)** FORTA class / Consensus coefficient	**Italy (N=7)** FORTA class / Consensus coefficient	**Nordic countries (N=6)** FORTA class / Consensus coefficient	**Spain (N=8)** FORTA class / Consensus coefficient	**Poland (N=8)** FORTA class / Consensus coefficient	**UK/Ireland (N=9)** FORTA class / Consensus coefficient	**Germany /Austria (N=21)** FORTA class / Consensus coefficient	**Mean consensus coefficient**	**EURO-FORTA Class** (original FORTA class in parentheses if different from consensus

BEHAVIORAL AND PSYCHOLOGICAL SYMPTOMS OF DEMENTIA (BPSD)										results)
DEPRESSION										
Substance/group										
SSRI (Selective Serotonin Reuptake Inhibitors) citalopram/escitalopram, sertraline, fluoxetine in the usual dosages	**C**	B 0.625 (R2)	C 0.810	C 0.833 (R2)	C 0.813 (R2)	B 0.500 (R2)	C 0.875 (R2)	**C** **0.868**	**0.761**	**C**
Mirtazapine (15-45mg/d)	**C**	C 0.875 (R2)	C 0.857	C 0.750 (R2)	C 0.813	C 0.786 (R2)	C 0.833	**C** **0.850**	**0.823**	**C**
SNRI (Serotonin-Noradrenalin-Reuptake-Inhibitors) venlafaxine, duloxetine	**D**	C 0.500 (R2)	C 0.600 (R2)	C 0.500 (R2)	C 0.500 (R2)	C 0.286 (R2)	C 0.625 (R2)	**D** **0.809**	**0.546**	**(D)** **C**
BPSD: PARANOIA, HALLUCINATION	**Suggested FORTA class**	**France (N=5)** FORTA class / Consensus coefficient	**Italy (N=7)** FORTA class / Consensus coefficient	**Nordic countries (N=6)** FORTA class / Consensus coefficient	**Spain (N=8)** FORTA class / Consensus coefficient	**Poland (N=8)** FORTA class / Consensus coefficient	**UK/Ireland (N=9)** FORTA class / Consensus coefficient	**Germany /Austria (N=21)** FORTA class / Consensus coefficient	**Mean consensus coefficient**	**EURO-FORTA Class** (original FORTA class in parentheses if different from consensus results)
Substance/group										

Risperidone (initially 0.5-1 mg/d)	**C**	**C** **1.000**	C 1.000	C 1.000	C 0.813	C 0.857	C 0.857 (R2)	**C** **0.833**	**0.909**	**C**
Melperone (25-150mg/d)	**C**	**D** **0.500 (R2)**	C 1.000	C 1.000	C 0.900	C 1.000	C 1.000	**C** **0.880**	**0.897**	**C**
Quetiapine (25-200 mg/d)	**C**	**C** **0.875**	C 0.929	C 1.000	C 0.938	B 0.643 (R2)	C 0.944	**C** **0.925**	**0.893**	**C**
Aripiprazole (2-15 mg/d)	**D**	**D** **0.875**	C 0.625 (R2)	C 0.700 (R2)	D 0.813	D 0.833 (R2)	C 0.667 (R2)	**D** **0.900**	**0.773**	**D**
Haloperidol (initially 0.5 mg/d, max. 3 mg/d)	**D**	**D** **0.875**	C 0.500 (R2)	C 0.583 (R2)	C 0.563 (R2)	C 0.571 (R2)	C 0.563 (R2)	**D** **0.833**	**0.641**	**(D)** **C**
Clozapine (10-50 mg/d)	**D**	**D** **0.750 (R2)**	D 0.917	D 1.000	D 0.938	D 1.000	D 0.917	**D** **0.976**	**0.928**	**D**
BPSD: RESTLESSNESS, AGITATION, (AGGRESSIVENESS)	**Suggested FORTA class**	**France (N=5)** FORTA class / Consensus coefficient	**Italy (N=7)** FORTA class / Consensus coefficient	**Nordic countries (N=6)** FORTA class / Consensus coefficient	**Spain (N=8)** FORTA class / Consensus coefficient	**Poland (N=8)** FORTA class / Consensus coefficient	**UK/Ireland (N=9)** FORTA class / Consensus coefficient	**Germany /Austria (N=21)** FORTA class / Consensus coefficient	**Mean consensus coefficient**	**EURO-FORTA Class** (original FORTA class in parentheses if different from consensus results)
Substance/group										
Trazodone (50-200 mg/d)	**C**	**C** **1.000**	**C** **1.000**	**C** **1.000**	**C** **0.875**	**C** **0.929**	**C** **1.000**	**C** **0.928**	**0.962**	**C**
Risperidone (initiallly 0.5-1 mg/d, Maximum 3 mg/d)	**C**	**C** **1.000**	**C** **1.000**	**C** **1.000**	**C** **0.813**	**C** **0.857 (R2)**	**C** **0.889**	**C** **0.880**	**0.920**	**C**
Quetiapine (25-200 mg/d)	**C**	**C** **1.000**	**C** **0.929**	**C** **1.000**	**C** **1.000**	**B** **0.642 (R2)**	**C** **1.000**	**C** **0.976**	**0.935**	**C**
Melperone (25-150	**C**	**-**	**C**	**C**	**C**	**C**	**C**	**C**	**0.970**	**C**

mg/d)			**1.000**	**1.000**	**0.917**	**1.000**	**1.000**	**0.904**		
Citalopram (10-30mg)	**C**	**C** **1.000**	**C** **1.000**	**C** **1.000**	**C** **1.000**	**C** **0.857**	**C** **0.944**	**C** **0.921**	**0.960**	**C**
Clomethiazole (5-15 mg/d)	**D**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**D** **0.875**	**D** **1.000**	**D** **0.938**	**D** **0.950**	**0.966**	**D**
Pipamperone (20-120 mg/d)	**C**	**D** **0.667 (R2)**	**C** **1.000**	-	**D** **0.625 (R2)**	**D** **0.667 (R2)**	**D** **0.750 (R2)**	**C** **0.894**	**0.767**	**(C)** **D**
BPSD: SLEEP DISORDERS	**Suggested FORTA class**	**France (N=5)** FORTA class / Consensus coefficient	**Italy (N=7)** FORTA class / Consensus coefficient	**Nordic countries (N=6)** FORTA class / Consensus coefficient	**Spain (N=8)** FORTA class / Consensus coefficient	**Poland (N=8)** FORTA class / Consensus coefficient	**UK/Ireland (N=9)** FORTA class / Consensus coefficient	**Germany /Austria (N=21)** FORTA class / Consensus coefficient	**Mean consensus coefficient**	**EURO-FORTA Class** (original FORTA class in parentheses if different from consensus results)
Substance/group										
Slow-release melatonin (2-4 mg)	**C**	C 0.875	C 0.929	C 1.000	C 1.000	C 1.000	C 1.000	C 0.925	**0.961**	**C**
Tetracyclic antidepressant mirtazapine (15-30mg)	**C**	C 1.000	C 0.929	C 1.000	C 1.000	C 1.000	C 0.875	C 0.925	**0.961**	**C**
Tricyclic antidepressant doxepine (25-50 mg)	**C**	D 0.600 (R2)	C 0.917	C 1.000	C 0.875	D 0.571 (R2)	C 0.875	D 0.550 (R2)	**0.770**	**C**
Zopiclone (3.75-7.5 mg)	**D**	C 0.600 (R2)	C 0.625 (R2)	C 0.583 (R2)	C 0.643 (R2)	C 0.643 (R2)	C 0.688 (R2)	D 0.825	**0.658**	**(D)** **C**
Zolpidem*										

DEPRESSION Prophylaxis and therapy for patients with moderate to major depression	**Suggested FORTA class**	**France (N=5)** FORTA class / Consensus coefficient	**Italy (N=7)** FORTA class / Consensus coefficient	**Nordic countries (N=6)** FORTA class / Consensus coefficient	**Spain (N=8)** FORTA class / Consensus coefficient	**Poland (N=8)** FORTA class / Consensus coefficient	**UK/Ireland (N=9)** FORTA class / Consensus coefficient	**Germany /Austria (N=21)** FORTA class / Consensus coefficient	**Mean consensus coefficient**	**EURO-FORTA Class** (original FORTA class in parentheses if different from consensus results)
Substance/group										
SSRIs (Selective Serotonin Reuptake Inhibitor) **sertraline**	**B**	**B 1.000**	**B 0.929**	**B 1.000**	**B 0.938**	**B 0.786 (R2)**	**B 0.813**	**B 0.880**	**0.907**	**B**
escitalopram **citalopram**	**B**	**B 1.000**	**B 1.000**	**B 1.000**	**B 0.875**	**B 0.813**	**B 0.938 (R2)**	**B 0.904**	**0.933**	**B**
	B	**B 1.000**	**B 0.929**	**B 1.000**	**B 0.875**	**B 0.813**	**B 0.938 (R2)**	**B 0.928**	**0.926**	**B**
Tricyclic antidepressant nortriptyline	**C**	**C 0.800 (R2)**	**C 0.857**	**C 1.000**	**D 0.688 (R2)**	**D 0.583 (R2)**	**C 0.813**	**C 0.904**	**0.806**	**C**
Tetracyclic antidepressant mirtazapine	**C**	**C 0.875**	**C 0.857**	**C 0.917**	**C 0.938**	**C 0.938**	**B 0.688 (R2)**	**C 0.857**	**0.867**	**C**
SNRIs (Serotonin-Noradrenalin Reuptake Inhibitors) **venlafaxine**	**C**	**C 0.875**	**C 0.857**	**C 1.000**	**C 1.000**	**C 0.813**	**C 0.813**	**C 0.952**	**0.901**	**C**
duloxetine	**C**	**C 0.875**	**C 0.810**	**C 1.000**	**C 1.000**	**C 0.938**	**C 0.875**	**C 0.904**	**0.915**	**C**
Monoamine oxidase A (MAO) inhibitor moclobemide	**C**	**C 0.875**	**C 0.917**	**C 1.000**	**C 0.813**	**C 0.875**	**C 0.917**	**C 0.904**	**0.900**	**C**

Dopamine and norepinephrine reuptake inhibitor bupropion	**C**	**C** **0.800 (R2)**	**C** **1.000**	**C** **1.000**	**C** **0.938**	**C** **0.938**	**C** **1.000**	**C** **0.904**	**0.940**	**C**
Vortioxetine	**C**	**-**	**C** **0.875**	**C** **0.875**	**C** **0.875**	**C** **0.875**	**C** **0.833**	**C** **0.888**	**0.870**	**C**
Trazodone	**C**	**C** **1.000**	**C** **0.857**	**-**	**C** **0.938**	**C** **0.813**	**C** **0.833**	**C** **0.904**	**0.891**	**C**
Olanzapine	**C**	**C** **1.000**	**C** **0.929**	**C** **0.875**	**C** **0.929**	**C** **1.000**	**D** **0.625 (R2)**	**C** **0.904**	**0.895**	**C**
Quetiapine	**C**	**C** **1.000**	**C** **0.929**	**D** **0.583 (R2)**	**C** **0.875**	**C** **0.875**	**D** **0.750 (R2)**	**C** **0.928**	**0.849**	**C**
Benzodiazepines: General	**D**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**1.000**	**D**
Long-acting,	**D**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**1.000**	**D**
Short-acting	**C**	**C** **1.000**	**C** **0.857**	**D** **0.500 (R2)**	**D** **0.500 (R2)**	**C** **0.917**	**D** **0.625 (R2)**	**C** **0.976**	**0.768**	**C**
St. John's Wort	**D**	**-**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**D** **0.875**	**D** **1.000**	**D** **1.000**	**0.980**	**D**
Agomelatine	**D**	**D** **0.833**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**D** **0.900**	**0.962**	**D**
Selective noradrenaline re-uptake inhibitor reboxetine	**D**	**D** **1.000**	**D** **0.917**	**D** **1.000**	**D** **1.000**	**D** **0.929**	**D** **1.000**	**D** **0.952**	**0.971**	**D**

BIPOLAR DISORDER	Suggested FORTA class	France (N=5) FORTA class / Consensus coefficient	Italy (N=7) FORTA class / Consensus coefficient	Nordic countries (N=6) FORTA class / Consensus coefficient	Spain (N=8) FORTA class / Consensus coefficient	Poland (N=8) FORTA class / Consensus coefficient	UK/Ireland (N=9) FORTA class / Consensus coefficient	Germany /Austria (N=21) FORTA class / Consensus coefficient	Mean consensus coefficient	EURO-FORTA Class (original FORTA class in parentheses if different from consensus results)
Substance/group										
Quetiapine	**B**	B 1.000	B 1.000	B 1.000	B 1.000	B 1.000	B 0.857	B 0.976	**0.976**	**B**
Lithium	**B**	C 0.750 (R2)	C 0.600 (R2)	C 0.583 (R2)	B 0.857	C 0.583 (R2)	B 0.813 (R2)	B 0.875	**0.723**	**(B) C**
Valproic acid	**C**	C 1.000	C 0.929	C 1.000	C 1.000	C 1.000	C 1.000	C 0.952	**0.983**	**C**
Lamotrigine	**C**	C 1.000 (R2)	C 0.929	C 1.000	C 0.929	C 1.000	C 1.000	C 0.975	**0.976**	**C**
Carbamazepine	**D**	D 0.833	D 0.810	D 1.000	D 0.929	C 0.643 (R2)	D 1.000	D 1.000	**0.888**	**D**

INSOMNIA / SLEEP DISORDERS	Suggested FORTA class	France (N=5) FORTA class / Consensus coefficient	Italy (N=7) FORTA class / Consensus coefficient	Nordic countries (N=6) FORTA class / Consensus coefficient	Spain (N=8) FORTA class / Consensus coefficient	Poland (N=8) FORTA class / Consensus coefficient	UK/Ireland (N=9) FORTA class / Consensus coefficient	Germany /Austria (N=21) FORTA class / Consensus coefficient	Mean consensus coefficient	EURO-FORTA Class (original FORTA class in parentheses if different from consensus results)
Substance/group										
Melatonin (slow-release)	**B**	**-**	**B 0.857**	**C 0.700 (R2)**	**B 0.875**	**B 0.813**	**B 0.833**	**B 0.875**	**0.826**	**B**

ω1-Benzodiazepine agonists zolpidem	**C**	**C 0.900 (R2)**	**C 1.000**	**C 0.917**	**C 0.938**	**C 0.875**	**C 0.929**	**C 0.904**	**0.923**	**C**
zaleplone	**C**	**-**	**C 1.000**	**C 0.875**	**C 0.938**	**C 0.875**	**C 0.929**	**C 0.928**	**0.924**	**C**
Non-benzodiazepine hypnotic zopiclone	**C**	**C 0.800 (R2)**	**C 0.929**	**C 0.917**	**C 1.000**	**C 0.875**	**C 0.875**	**C 0.904**	**0.900**	**C**
Butyrophenone derivative pipamperone	**C**	**D 0.500 (R2)**	**C 1.000**	**-**	**C 0.917**	**C 1.000**	**C 1.000**	**C 0.975**	**0.899**	**C**
Melperone	**C**	**-**	**C 1.000**	**-**	**C 1.000**	**C 1.000**	**C 1.000**	**C 0.976**	**0.995**	**C**
Tetracyclic antidepressant Mirtazapine	**C**	**C 1.000**	**C 0.929**	**C 0.917**	**C 1.000**	**C 1.000**	**C 0.857**	**C 0.900**	**0.943**	**C**
Tricyclic antidepressant doxepine	**C**	**D 0.600 (R2)**	**D 0.500 (R2)**	**D 0.500 (R2)**	**D 0.563 (R2)**	**D 0.583 (R2)**	**D 0.688 (R2)**	**D 0.600 (R2)**	**0.576**	**(C) D**
Benzodiazepines, e.g. oxazepam	**D**	**C 0.600 (R2)**	**D 0.881**	**C 0.700 (R2)**	**D 0.813**	**D 1.000**	**D 1.000**	**D 0.952**	**0.849**	**D**
(medium half- life) triazolam (very short half-life)	**D**	**D 0.833**	**D 0.929**	**D 1.000**	**D 1.000**	**D 1.000**	**D 0.929**	**D 0.857**	**0.935**	**D**
Antihistamine diphenhydramin	**D**	**D 1.000**	**D 1.000**	D 1.000	**D 0.938**	**D 1.000**	**D 0.875**	**D 1.000**	**0.973**	**D**
Sigma receptor agonist opipramole	**D**	**D 1.000**	**D 1.000**	-	**D 1.000**	**D 1.000**	**D 1.000**	**D 0.976**	**0.996**	**D**

CHRONIC PAIN	Suggested FORTA class	France (N=5) FORTA class / Consensus coefficient	Italy (N=7) FORTA class / Consensus coefficient	Nordic countries (N=6) FORTA class / Consensus coefficient	Spain (N=8) FORTA class / Consensus coefficient	Poland (N=8) FORTA class / Consensus coefficient	UK/Ireland (N=9) FORTA class / Consensus coefficient	Germany /Austria (N=21) FORTA class / Consensus coefficient	Mean consensus coefficient	EURO-FORTA Class (original FORTA class in parentheses if different from consensus results)
Substance/group										
Paracetamol (acetaminophen)	**A**	**A** **1.000**	**A** **1.000**	**A** **1.000**	**A** **1.000**	**A** **0.875**	**A** **1.000**	A 0.950	**0.975**	**A**
Opioids, e.g. buprenorphine, oxycodone, hydromorphone	**B**	**B** **1.000**	**B** **0.929**	**B** **1.000**	**B** **0.938**	**B** **0.875**	**B** **0.944**	**B** **0.975**	**0.952**	**B**
Tilidine/naloxone	**C**	-	**C** **0.900**	**C** **1.000**	**C** **1.000**	**C** **0.917**	**C** **0.900**	C 0.900	**0.936**	**C**
Oxycodone/naloxone	**C**	**C** **0.833**	**B** **0.750 (R2)**	**C** **1.000**	**C** **1.000**	**C** **0.857**	**C** **0.813**	C 0.900	**0.879**	**C**
Morphine	**C**	**C** **0.875**	**C** **0.860**	**C** **0.917**	**C** **0.938**	**C** **0.813**	**C** **0.875 (R2)**	C 0.900	**0.883**	**C**
SSRI (Selective Serotonin Reuptake Inhibitors) / SNRI (Serotonin-Norepinephrine-Reuptake Inhibitor), e.g. venlafaxine (only if absolutely necessary)	**C**	**C** **0.833**	**C** **0.881**	**C** **0.875**	**C** **1.000**	**C** **1.000**	**C** **0.857**	C 0.916	**0.909**	**C**

Antiepileptic agents (only for neuropathic pain) **Pregabalin/gabapentin**	**C**	**B** **0.625 (R2)**	**C** **0.857**	**C** **1.000**	**C** **0.875**	**C** **0.813**	**C** **0.857**	C 0.950	**0.854**	**C**
Carbamazepine	**D**	**D** **0.833**	**D** **0.929**	**D** **1.000**	**D** **0.813**	**D** **0.813**	**D** **0.875 (R2)**	D 1.000	**0.895**	**D**
Metamizole	**B**	**-**	**C** **0.750 (R2)**	**-**	**B** **0.938**	**B** **0.875**	**D** **0.250 (R2)**	B 0.916	**0.746**	**(B)** **C**
Tricyclic antidepressant amitriptyline	**D**	**D** **1.000**	**D** **1.000**	**D** **0.917**	**D** **0.813**	**D** **0.938**	**D** **0.750 (R2)**	D 0.900	**0.903**	**D**
NSAIDs (nonsteroidal anti-inflammatory drugs, for long-term use), e.g. **naproxen**	**D**	**D** **1.000**	**D** **0.857**	**D** **1.000**	**D** **0.938**	**D** **0.857 (R2)**	**D** **0.929**	D 0.947	**0.933**	**D**
cox-2 inhibitors, e.g. celecoxib	**D**	**D** **1.000**	**D** **0.750 (R2)**	**D** **1.000**	**D** **1.000**	**D** **0.813**	**D** **0.929**	D 0.921	**0.916**	**D**
Tramadol*										
EPILEPSY	**Suggested FORTA class**	**France (N=5)** FORTA class / Consensus coefficient	**Italy (N=7)** FORTA class / Consensus coefficient	**Nordic countries (N=6)** FORTA class / Consensus coefficient	**Spain (N=8)** FORTA class / Consensus coefficient	**Poland (N=8)** FORTA class / Consensus coefficient	**UK/Ireland (N=9)** FORTA class / Consensus coefficient	**Germany /Austria (N=21)** FORTA class / Consensus coefficient	**Mean consensus coefficient**	**EURO-FORTA Class** (original FORTA class in parentheses if different from

										consensus results)
Substance/group										
Levetiracetam	**B**	**B** **1.000**	**B** **1.000**	**B** **1.000**	**B** **1.000**	**B** **0.929**	**B** **0.929**	**B** **0.950**	**0.973**	**B**
Lamotrigine	**B**	**B** **1.000**	**B** **1.000**	**B** **1.000**	**B** **0.938**	**B** **1.000**	**B** **1.000**	**B** **0.925**	**0.980**	**B**
Gabapentin	**B**	**B** **1.000**	**B** **1.000**	**B** **0.875**	**B** **0.938**	**B** **1.000**	**B** **0.813**	**B** **0.921**	**0.935**	**B**
Pregabalin	**C**	**C** **0.833**	**B** **0.700 (R2)**	**B** **0.700 (R2)**	**C** **0.813**	**C** **0.813**	**C** **0.938 (R2)**	**C** **0.888**	**0.812**	**C**
Lorazepam (emergency use) **Lorazepam (long-term use)**	**B**	**C** **0.750 (R2)**	**B** **1.000**	**B** **1.000**	**B** **1.000**	**B** **1.000**	**B** **1.000**	**B** **0.944**	**0.956**	**B**
	D	**D** **1.000**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**D** **0.900**	**D** **0.917**	**D** **1.000**	**0.983**	**D**
Topiramate	**B**	**B** **0.833**	**B** **0.933**	**C** **0.500 (R2)**	**B** **0.938**	**B** **1.000**	**B** **1.000**	**B** **0.884**	**0.870**	**B**
Valproic acid	**C**	**C** **1.000**	**C** **0.929**	**C** **0.875**	**C** **1.000**	**C** **0.938**	**C** **0.813**	**C** **0.973**	**0.933**	**C**
Eslicarbazepine	**C**	-	**C** **1.000**	**C** **1.000**	**C** **1.000**	**C** **1.000**	**C** **0.900**	**C** **1.000**	**0.983**	**C**
Lacosamide	**C**	-	**C** **1.000**	**C** **1.000**	**C** **1.000**	**C** **1.000**	**C** **0.917**	**C** **1.000**	**0.986**	**C**
Zonisamide	**C**	-	**C** **1.000**	**C** **1.000**	**C** **0.900**	**C** **1.000**	**C** **0.917**	**C** **1.000**	**0.970**	**C**
Carbamazepine	**C**	**C** **1.000**	**C** **1.000**	**C** **0.875**	**C** **0.938**	**C** **0.938**	**C** **0.875**	**C** **0.972**	**0.943**	**C**

Diazepam (emergency use)	**C**	**C 1.000**	**C 0.857**	**B 0.500 (R2)**	**C 1.000**	**C 1.000**	**C 0.833**	**C 0.894**	**0.869**	**C**
Diazepam (long-term use)	**D**	**D 1.000**	**D 0.857**	**D 1.000**	**D 1.000**	**D 1.000**	**D 1.000**	**D 1.000**	**0.980**	**D**
Midazolam (emrgency use)	**C**	**C 1.000**	**C 1.000**	**C 0.875**	**C 0.938**	**C 1.000**	**C 0.857**	**C 0.947**	**0.945**	**C**
Midazolam (long-term use)	**D**	**-**	**D 1.000**	**D 1.000**	**D 1.000**	**D 1.000**	**D 1.000**	**D 0.916**	**0.970**	**D**
Oxcarbazepine	**C**	**C 1.000**	**C 0.800 (R2)**	**D 0.667 (R2)**	**C 0.813**	**C 0.833**	**C 0.875 (R2)**	**C 0.944**	**0.847**	**C**
Phenytoin	**D**	**D 0.833**	**D 1.000**	**D 1.000**	**D 0.938**	**D 0.929**	**D 0.813 (R2)**	**D 1.000**	**0.930**	**D**
Phenobarbital	**D**	**D 0.833**	**D 1.000**	**D 1.000**	**D 1.000**	**D 1.000**	**D 0.938**	**D 1.000**	**0.967**	**D**
Ethosuximide	**D**	**D 1.000**	**D 1.000**	**D 1.000**	**D 1.000**	**D 1.000**	**D 1.000**	**D 1.000**	**1.000**	**D**

PARKINSON'S DISEASE	**Suggested FORTA class**	**France (N=5)** FORTA class / Consensus coefficient	**Italy (N=7)** FORTA class / Consensus coefficient	**Nordic countries (N=6)** FORTA class / Consensus coefficient	**Spain (N=8)** FORTA class / Consensus coefficient	**Poland (N=8)** FORTA class / Consensus coefficient	**UK/Ireland (N=9)** FORTA class / Consensus coefficient	**Germany /Austria (N=21)** FORTA class / Consensus coefficient	**Mean consensus coefficient**	**EURO-FORTA Class** (original FORTA class in parentheses if different from consensus results)
Substance/group										
L-DOPA	**A**	**A 0.875**	**A 0.857**	**A 0.917 (R2)**	**A 0.875**	**A 0.833**	**A 0.889**	**A 1.000**	**0.892**	**A**
COMT (Catechol-O-Methyltransferase) Inhibitor	**B**	**B 0.833**	**B 1.000**	**B 0.900**	**B 1.000**	**B 1.000**	**B 0.875**	**B 0.973**	**0.940**	**B**

entacapone										
Dopamine agonists, e.g.										
ropinirole	**B**	**B** **0.833**	**C** **0.700 (R2)**	**B** **0.875 (R2)**	**B** **0.857**	**B** **0.813**	**B** **0.833**	**B** **0.921**	**0.833**	**B**
pramipexole	**B**	**B** **0.833**	**C** **0.625 (R2)**	**B** **0.833 (R2)**	**B** **0.857**	**C** **0.714 (R2)**	**B** **0.833**	**B** **0.925**	**0.803**	**B**
Piribedil, quinagolide, rotigotine	**B**	**B** **0.833**	**B** **0.917**	**B** **1.000**	**B** **0.929**	**B** **1.000**	**B** **0.857**	**B** **0.968**	**0.929**	**B**
MAO-B inhibitors										
rasagiline	**C**	**C** **1.000**	**C** **0.917**	**C** **0.900**	**C** **1.000**	**C** **1.000**	**C** **0.875**	**C** **1.000**	**0.956**	**C**
selegiline	**D**	**D** **0.833 (R2)**	**C** **0.600 (R2)**	**C** **0.625 (R2)**	**C** **0.500 (R2)**	**D** **0.786 (R2)**	**C** **0.625 (R2)**	**D** **0.975**	**0.706**	**(D)** **C**
Glutamate antagonists amantadine	**D**	**D** **0.833**	**D** **0.833**	**C** **0.500 (R2)**	**D** **0.929**	**D** **0.857 (R2)**	**D** **0.833**	**D** **0.921**	**0.815**	**D**
Bromocriptine, cabergoline	**D**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**1.000**	**D**
Anticholinergics										
biperidene	**D**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**D** **1.000**	**D** **0.917**	**D** **0.975**	**0.985**	**D**
INCONTINENCE **Drug therapy for urge incontinence**	**Suggested FORTA class**	**France (N=5)** FORTA class / Consensus coefficient	**Italy (N=7)** FORTA class / Consensus coefficient	**Nordic countries (N=6)** FORTA class / Consensus coefficient	**Spain (N=8)** FORTA class / Consensus coefficient	**Poland (N=8)** FORTA class / Consensus coefficient	**UK/Ireland (N=9)** FORTA class / Consensus coefficient	**Germany /Austria (N=21)** FORTA class / Consensus coefficient	**Mean consensus coefficient**	**EURO-FORTA Class** (original FORTA class in parentheses if different from consensus results)
Substance/group										
Fesoterodine	**B**	D	**B**	**B**	**B**	**B**	**C**	**B**	**0.837**	**B**

		0.500 (R2)	**0.833**	**1.000**	**0.833 (R2)**	**1.000**	**0.750 (R2)**	**0.944**		
Tolterodine	**C**	D 0.666 (R2)	**C** **1.000**	**C** **1.000**	**C** **1.000**	**C** **1.000**	**C** **1.000**	**C** **0.975**	**0.949**	**C**
Trospium chloride	**C**	C 0.625 (R2)	**C** **1.000**	**C** **1.000**	**C** **0.929**	**C** **0.917**	**C** **1.000**	**C** **0.875**	**0.907**	**C**
Extended-release oxybutynin	**C**	C 0.833	**C** **1.000**	**C** **0.917**	**C** **1.000**	**C** **1.000**	**C** **1.000**	**C** **1.000**	**0.964**	**C**
Immediate-release oxybutynin	**D**	D 1.000	**D** **1.000**	**D** **1.000**	**D** **1.000**	**D** **0.929**	**D** **1.000**	**D** **1.000**	**0.990**	**D**

GASTROINTESTINAL ILLNESSES/ CONCOMITANT THERAPY WITH NSAIDs	**Suggested FORTA class**	**France (N=5)** FORTA class / Consensus coefficient	**Italy (N=7)** FORTA class / Consensus coefficient	**Nordic countries (N=6)** FORTA class / Consensus coefficient	**Spain (N=8)** FORTA class / Consensus coefficient	**Poland (N=8)** FORTA class / Consensus coefficient	**UK/Ireland (N=9)** FORTA class / Consensus coefficient	**Germany /Austria (N=21)** FORTA class / Consensus coefficient	**Mean consensus coefficient**	**EURO-FORTA Class** (original FORTA class in parentheses if different from consensus results)
Substance/group										
Proton pump inhibitors (PPI), only if absolutely necessary	**B**	**B** **0.875**	**B** **1.000**	**B** **1.000**	**B** **0.929**	**B** **1.000**	**B** **0.907**	**B** **0.916**	**0.947**	**B**
H_2 receptor antagonists	**C**	**C** **0.875**	**C** **1.000**	**C** **1.000**	**C** **1.000**	**C** **0.875**	**C** **0.889**	**C** **0.975**	**0.945**	**C**

	Suggested FORTA	France (N=5) **FORTA class / Consensus coefficient**	Italy (N=7) **FORTA class / Consensus coefficient**	Nordic countries (N=6) **FORTA class / Consensus coefficient**	Spain (N=8) **FORTA class / Consensus coefficient**	Poland (N=8) **FORTA class / Consensus coefficient**	UK/Ireland (N=9) **FORTA class / Consensus coefficient**	Germany /Austria (N=21) **FORTA class / Consensus coefficient**	Mean consensus coefficient	EURO-FORTA Class **(original FORTA class in parentheses if**

Anemia	class								**different from consensus results)**
Substance/group									
Substitution (iron, vitamin B12, folic acid in cases of deficiency)	**A**	**A 1.000**	**A 1.000**	**A 1.000**	**A 1.000**	**A 1.000**	**A 1.000**	**A 1.000**	**1.000**	**A**
Erythropoetin-stimulating agents (ESA) in patients with renal insufficiency	**A**	**A 1.000**	**A 1.000**	**A 0.900**	**A 0.929**	**A 1.000**	**A 0.875**	**A 0.947**	**0.950**	**A**
Iron substitution in patients with cardiac insufficiency **Proof of iron deficiency**	**A**	**A 0.875**	**A 1.000**	**A 1.000**	**A 1.000**	**A 0.929**	**A 1.000**	**A 0.921**	**0.961**	**A**
No proof of iron deficiency	**B**	**B 0.875 (R2)**	**B 0.917**	**B 0.833**	**B 0.857 (R2)**	**B 0.833**	**C 0.375 (R2)**	**B 0.842**	**0.790**	**B**

ONCOLOGICAL DISEASES: SOLID TUMORS	**Suggested FORTA class**	**France (N=5)** FORTA class / Consensus coefficient	**Italy (N=7)** FORTA class / Consensus coefficient	**Nordic countries (N=6)** FORTA class / Consensus coefficient	**Spain (N=8)** FORTA class / Consensus coefficient	**Poland (N=8)** FORTA class / Consensus coefficient	**UK/Ireland (N=9)** FORTA class / Consensus coefficient	**Germany /Austria (N=21)** FORTA class / Consensus coefficient	**Mean consensus coefficient**	**EURO-FORTA Class** (original FORTA class in parentheses if different from consensus results)
INDICATION Substance/group										

BREAST CANCER Adjuvant therapy										
Hormone therapy, e.g. **tamoxifen**	**B**	**B** **1.000**	**B** **1.000**	**B** **1.000**	**B** **1.000**	**B** **1.000**	**B** **1.000**	**B** **0.888**	**0.984**	**B**
aromatase inhibitors	**B**	**B** **1.000**	**B** **1.000**	**B** **1.000**	**B** **0.917**	**B** **1.000**	**B** **1.000**	**B** **0.888**	**0.972**	**B**
Immunotherapy / "Targeted" therapy Trastuzumab	**B**	**B** **1.000**	**B** **1.000**	**B** **1.000**	**B** **1.000**	**B** **1.000**	**B** **0.875**	**B** **0.857**	**0.960**	**B**
Chemotherapy, e.g. **CMF (Combination cyclophosphamide, methotrexate, 5-Fluorouracil)**	**C**	**C** **-**	**C** **1.000**	**C** **1.000**	**C** **1.000**	**C** **0.833**	**C** **1.000**	**C** **0.928**	**0.960**	**C**
AC/EC Regimen (anthracycline/ epirubicin, cyclophosphamide)	**C**	**C** **-**	**C** **1.000**	**C** **1.000**	**C** **1.000**	**C** **0.833**	**C** **1.000**	**C** **0.928**	**0.960**	**C**
BREAST CANCER Advanced Stage										
Hormone therapy, e.g. tamoxifen, aromatase inhibitors	**B**	**B** **1.000**	**B** **1.000**	**B** **1.000**	**B** **1.000**	**B** **1.000**	**B** **1.000**	**B** **0.857**	**0.980**	**B**
Immunotherapy/ Targeted Therapy Trastuzumab/ lapatinib	**B**	**B** **1.000**	**B** **1.000**	**B** **1.000**	**B** **1.000**	**B** **1.000**	**B** **0.875**	**B** **1.000**	**0.982**	**B**

Chemotherapy, e.g. anthracyclins, taxanes	**C**	**C -**	**C 1.000**	**C 1.000**	**C 1.000**	**C 0.875**	**C 1.000**	**C 0.916**	**0.965**	**C**
VEGF (Vascular Endothelial Growth Factor) Inhibition Bevacizumab	**D**	**D -**	**D 1.000**	**D 1.000**	**D 1.000**	**D 1.000**	**D 1.000**	**C 0.666 (R2)**	**0.944**	**D**
COLORECTAL CARCINOMA Adjuvant Therapy										
FOLFOX Regimen (Folinic acid, Fluorouracil, Oxaliplatin)	**C**	**C -**	**C 1.000**	**C 1.000**	**C 0.900**	**C 1.000**	**C 1.000**	**C 0.250 (R2)**	**0.858**	**C**
5-Fluorouracil based infusion regimen	**C**	**C -**	**C 1.000**	**C 1.000**	**C 0.900**	**C 1.000**	**C 1.000**	**C 0.900**	**0.967**	**C**
Capecitabine	**C**	**C -**	**C 1.000**	**C 1.000**	**C 0.900**	**C 1.000**	**C 1.000**	**C 0.900**	**0.967**	**C**
COLORECTAL CARCINOMA Advanced stage										
Chemotherapy FOLFOX (Folinic acid, Fluorouracil, Oxaliplatin)	**C**	**C -**	**C 1.000**	**C 1.000**	**C 1.000**	**C 1.000**	**C 1.000**	**C 0.900**	**0.983**	**C**
VEGF (Vascular Endothelial Growth Factor) Inhibition Bevacizumab	**C**	**C -**	**C 1.000**	**C 1.000**	**C 1.000**	**C 1.000**	**C 1.000**	**C 0.900**	**0.983**	**C**
EGFR (Epidermal-Growth-Factor-Receptor) Inhibition Cetuximab	**C**	**C -**	**C 1.000**	**C 1.000**	**C 1.000**	**C 1.000**	**C 1.000**	**C 1.000**	**1.000**	**C**
	C	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**0.983**	**C**

Panitumumab		**-**	**1.000**	**1.000**	**1.000**	**1.000**	**1.000**	**0.900**		
BRONCHIAL CARCINOMA Adjuvant therapy										
Adjuvant chemotherapy (cisplatin-based)	**C**	**C -**	**C 1.000**	**C 1.000**	**C 1.000**	**C 1.000**	**C 1.000**	**C 0.900**	**0.983**	**C**
BRONCHIAL CARCINOMA Advanced Stage										
Docetaxel	**B**	**B -**	**B -**	**B 1.000**	**B 1.000**	**B 1.000 (R2)**	**B 0.875**	**B 1.000**	**0.975**	**B**
Vinorelbin	**B**	**B -**	**B 1.000**	**B 1.000**	**B 1.000**	**B 1.000 (R2)**	**B 0.833**	**B 1.000**	**0.967**	**B**
Primary combination therapy cisplatin/gemcitabin, or cisplatin/vinorelbin	**C**	**C -**	**C 1.000**	**C 1.000**	**C 1.000**	**C 1.000**	**C 1.000**	**C 0.916**	**0.986**	**C**
GASTRIC CANCER										
ECF Regime (Epirubicin, Cisplatin, 5-Fluorouracil)	**B**	**B -**	**B 1.000**	**B 1.000**	**B 1.000**	**B 0.833**	**C 0.500 (R2)**	**B 1.000**	**0.889**	**B**
ONCOLOGICAL DISEASES HEMATOLOGICAL	**Suggested FORTA class**	**France (N=5)** FORTA class / Consensus coefficient	**Italy (N=7)** FORTA class / Consensus coefficient	**Nordic countries (N=6)** FORTA class / Consensus coefficient	**Spain (N=8)** FORTA class / Consensus coefficient	**Poland (N=8)** FORTA class / Consensus coefficient	**UK/Ireland (N=9)** FORTA class / Consensus coefficient	**Germany /Austria (N=21)** FORTA class / Consensus coefficient	**Mean consensus coefficient**	**EURO-FORTA Class** (original FORTA class in parentheses if

NEOPLASIAS										different from consensus results)
INDICATION Substance/group										
MDS (Myelodysplastic syndrome) Azacytidine	**B**	**B 1.000**	**B 1.000**	**B 1.000**	**B 1.000**	**B 0.833**	**B 1.000**	**B 0.916**	**0.964**	**B**
AML (Acute myeloid leukemia) Anthracyclines + cytosine arabinoside (cytarabine)	**B**	**B -**	**B 1.000**	**B 1.000**	**B 1.000**	**B 1.000**	**C 0.667 (R2)**	**B 0.900**	**0.928**	**B**
CLL (Chronic lymphatic leukemia) Chlorambucil, Fludarabin, Bendamustin	**B**	**B -**	**B 1.000**	**B 1.000**	**B 1.000**	**B 1.000**	**B 0.900**	**B 0.857**	**0.960**	**B**
CLL Obinutuzumab	**B**	**B -**	**B 1.000**	**B 1.000**	**B 1.000**	**B 1.000**	**B 1.000**	**B 0.928**	**0.988**	**B**
CLL Rituximab	**B**	**B 1.000**	**B 1.000**	**B 1.000**	**B 1.000**	**B 1.000**	**B 0.875**	**B 0.916**	**0.970**	**B**
Multiple myeloma Primary therapy with prednisolone	**B**	**B 1.000**	**B 1.000**	**B 1.000**	**B 1.000**	**B 1.000**	**B 1.000**	**B 0.928**	**0.990**	**B**

thalidomide	**B**	**B** **1.000**	**B** **1.000**	**B** **1.000**	**B** **1.000**	**B** **1.000 (R2)**	**B** **0.900**	**B** **0.928**	**0.975**	**B**
melphalan	**B**	**B** **1.000**	**B** **1.000**	**B** **1.000**	**B** **1.000**	**B** **1.000**	**B** **0.900**	**B** **1.000**	**0.986**	**B**
Bortezomib	**B**	**B** **1.000**	**B** **1.000**	**B** **1.000**	**B** **1.000**	**B** **1.000**	**B** **0.875**	**B** **0.916**	**0.970**	**B**
Lenalidomide	**B**	**B** **1.000**	**B** **-**	**B** **1.000**	**B** **1.000**	**B** **1.000**	**B** **0.875**	**B** **1.000**	**0.980**	**B**
CLL **Ibrutinib**	**C**	**C** **-**	**C** **1.000**	**C** **1.000**	**C** **1.000**	**C** **1.000**	**C** **1.000**	**C** **0.916**	**0.986**	**C**
CLL **Idelalisib**	**C**	**C** **-**	**C** **1.000**	**C** **1.000**	**C** **1.000**	**C** **1.000**	**C** **1.000**	**C** **1.000**	**1.000**	**C**
ONCOLOGICAL SUPPORTIVE THERAPY	**Suggested FORTA class**	**France (N=5)** FORTA class / Consensus coefficient	**Italy (N=7)** FORTA class / Consensus coefficient	**Nordic countries (N=6)** FORTA class / Consensus coefficient	**Spain (N=8)** FORTA class / Consensus coefficient	**Poland (N=8)** FORTA class / Consensus coefficient	**UK/Ireland (N=9)** FORTA class / Consensus coefficient	**Germany /Austria (N=21)** FORTA class / Consensus coefficient	**Mean consensus coefficient**	**EURO-FORTA Class** (original FORTA class in parentheses if different from consensus results)
Substance/group										
G-CSF (Granulocyte Colony Stimulation Factor)	**A**	**A** **1.000**	**A** **1.000**	**A** **1.000**	**A** **1.000**	**A** **0.833**	**A** **1.000**	**A** **1.000**	0.976	**A**
Antiemetic agents (e.g. 5-HT receptor inhibitors)	**A**	**A** **0.875**	**A** **1.000**	**A** **1.000**	**A** **0.929**	**A** **0.833**	**A** **1.000**	**A** **1.000**	0.948	**A**

Erythropoesis Stimulating Agents, ESA	**B**	**B 0.833**	**B 1.000**	**B 1.000**	**B 1.000**	**B 0.833**	**B 1.000**	**B 0.954**	0.946	**B**

*This substance or indication was suggested by the participating experts during the course of Round 1 and evaluated by the experts during Round 2, see second table below.

R1= Round 1, R2= Round 2

All FORTA classes and consensus coefficients for Germany/Austria were previously published [8,9].

Delphi Expert Consensus Validation[5]

F	O	R	T	A
A	B	C	D	

NEW SUBSTANCES/INDICATIONS SUGGESTED BY EXPERTS
Results to be corroborated in future consensus/research projects

Classification of long-term medications†
for the pharmacotherapy of older patients
by indication/diagnosis, ranked according to FORTA classification
(†long-term defined as > 4 weeks. Please note that the distinction between acute/chronic may not always be clear-cut; exceptions are noted)

EXISTING INDICATION BPSD: SLEEP DISORDERS	Rater-based FORTA Class (bold if: mean κ > 0.500)	Nr. of countries	Mean κ-Index	Expert ratings on a numerical scale: A=1, B=2, C=3, D=4 Mean	Selection of pertinent comments given by participating experts during the consensus procedure
Substance/group					
Zolpidem	C	4	0.490	3.25	

EXISTING INDICATION CHRONIC PAIN	Rater-based FORTA Class (bold if: mean κ > 0.500)	Nr. of countries	Mean κ-Index	Expert ratings on a numerical scale: A=1, B=2, C=3, D=4 Mean	Selection of pertinent comments given by participating experts during the consensus procedure
Substance/group					
Tramadol	**C**	5	0.644	3.0	

REFERENCES

1. Wehling M. Drug therapy in the elderly: too much or too little, what to do? A new assessment system: fit for the aged FORTA. Dtsch Med Wochenschr 2008; 133: 2289-91.
2. Wehling M. Multimorbidity and polypharmacy: how to reduce the harmful drug load and yet add needed drugs in the elderly? Proposal of a new drug classification: fit for the aged. J Am Geriatr Soc 2009; 57: 560-561.
3. Wehling M, Burkhardt H. Arzneitherapie für Ältere. Springer-Verlag, Heidelberg, 3. Auflage 2013.
4. Wehling M, Ed., Drug Therapy for the Elderly. Springer-Verlag, Wien 2013
5. Kuhn-Thiel AM. et al. Consensus validation of the FORTA (Fit fOR The Aged) List: a clinical tool for increasing the appropriateness of pharmacotherapy in the elderly. Drugs Aging. 2014; 31(2): 131-140.
6. Wehling M. et al. VALFORTA: a randomized trial to validate the FORTA (Fit fOR The Aged) classification. Age Ageing Jan 18, 2016, doi: 10.1093/ageing/afv200 [Epub ahead of print]
7. Wehling M. How to Use the FORTA ("Fit fOR The Aged") List to Improve Pharmacotherapy in the Elderly. Drug Res 2015, ePub
8. Pazan F. et al. The FORTA (Fit fOR The Aged) List 2015: Update of a validated clinical tool for improved pharmacotherapy in the elderly. Drugs Aging. 2016; 33(6): 447-9.
9. https://www.umm.uni-heidelberg.de/ag/forta/

Calculations/Explanations:

We calculated the EURO-FORTA labels by converting the country-specific FORTA labels into numerical values and the mean numerical value was reconverted to FORTA labels.

Mean was calculated according to the numerical scale shown below:

A → 1
B → 2
C → 3
D → 4

If $1 \leq m < 1.5$ → FORTA Class **A**

If $1.5 \leq m < 2.5$ → FORTA Class **B**

If $2.5 \leq m < 3.5$ → FORTA Class **C**

If $m \geq 3.5$ → FORTA Class **D**

m= arithmetic mean based on the grades 1-4

Asterisks in the first table mark substances or indications suggested by 4 ≥ countries/regions

- 2 substances were added to the EURO-FORTA List
- 1 of the 2 substances had a kappa index higher than 0.500.