

ATC-ICD10 Evaluation –Final Report–

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1. Introduction

In the project GAP-DRG a technology was developed to predict the ICD9 code from the ATC code. This prediction was based on diagnoses from hospitals and sick leaves as they were reported from the Austrian Social Security Institutions in the years 2006 and 2007 (ICD9 codes). Now the regional health insurance organisation of Lower Austria (NÖGKK) has provided new data from 2008 – 2011 and 2012. The ICD10 information is available from 2008 to 2011 for all quarters and in 2012 only for the first quarter. The prescription data exist from 2008 to 2011 except the first quarter of 2008. The data is available in 2012 for the first three quarters, where the data of the third quarter seem to be incomplete as the frequency is approximately 1/3 of the rest of the quarters. The frequency of prescription data is illustrated in figure 50. Based on this new homogeneous data set with improved data quality, the quality of the prediction of the ICD from the ATC should improve. In addition, the technology developed previously can be improved in order to reduce the probability of erroneous assignments.

The focus of this report is on the one hand on evaluation and quality assesment of the results of the ATC-ICD10 assignments on the other hand on the evaluation of expert opinions of the results of ATC-ICD10 assignments.

The results of the ATC-ICD10 project were implemented in three different ways:

- Without taking expert opinions into account
- With expert opinions and rescaling of the probabilities
- With expert opinions but without rescaling of probabilities

For a detailed description of the implementations we refer to the ATC-ICD9 report¹.

2. Evaluation of Expert Opinions of ATC-ICD10 Assignments

In this section, we analyse the expert evaluations of the ATC-ICD10 assignments.

Following the calculation of ATC-ICD10 assignment probabilities, the results were passed to the medical experts for the content review. In these ATC-ICD10 assignments, the ATC codes were considered at level 3 (4 digits) and the ICD10 codes have been summarized to groups, e.g., one group was I20 - I25. However, due to technical issues, this group was named according to the first ICD10 code of the associated group in the tool for the expert evaluation. I.e., group I20 - I25 (Ischemic Heart Diseases) was named as category I20 (Angina Pectoris) and thus for the experts the information of the rest of the group (I21 - I25) was not visible. For that reason one has to consider, that this may

¹ | <http://www.hauptverband.at/portal27/portal/hvbportal/content/contentWindow?contentid=10007.693979&action=2&viewmode=content> |

cause a certain bias for the expert evaluation of ATC-ICD10 assignments. Nonetheless, according to the experts' assessment, this bias should be negligible for major diseases like the mentioned Ischemic Heart Diseases vs. Angina Pectoris.

During the evaluation, six medical experts rated each ATC-ICD10 assignment as either true or false from a medical point of view. ICD10 groups were assigned to ATC codes for each of the defined age categories and by sex. As a result, an expert opinion for a given pair of ATC and ICD10 groups can differ for different demographic groups. For example, an assignment can be true for female patients but false for male patients. For that reason we define the quadruple (ATC,ICD10,age,sex) as one assignment, i.e., we count ATC-ICD10 assignments for different groups individually.

Based on these evaluations, we define an ATC-ICD10 assignment for a defined age and gender category to be correct, unless the majority considers it to be wrong. Thus, an assignment is defined as correct if at least 3 out of the 6 experts rated the assignment as correct.

Figure 1 shows an overview of the results of the expert opinions. We illustrate the total frequency of true and false assignments and show how these differ by age and sex. The results of Figure 1 are based on the raw data and do not include any aggregation. For example, a true value means that an expert has evaluated an ATC-ICD10 assignment for a defined age and gender category as true.

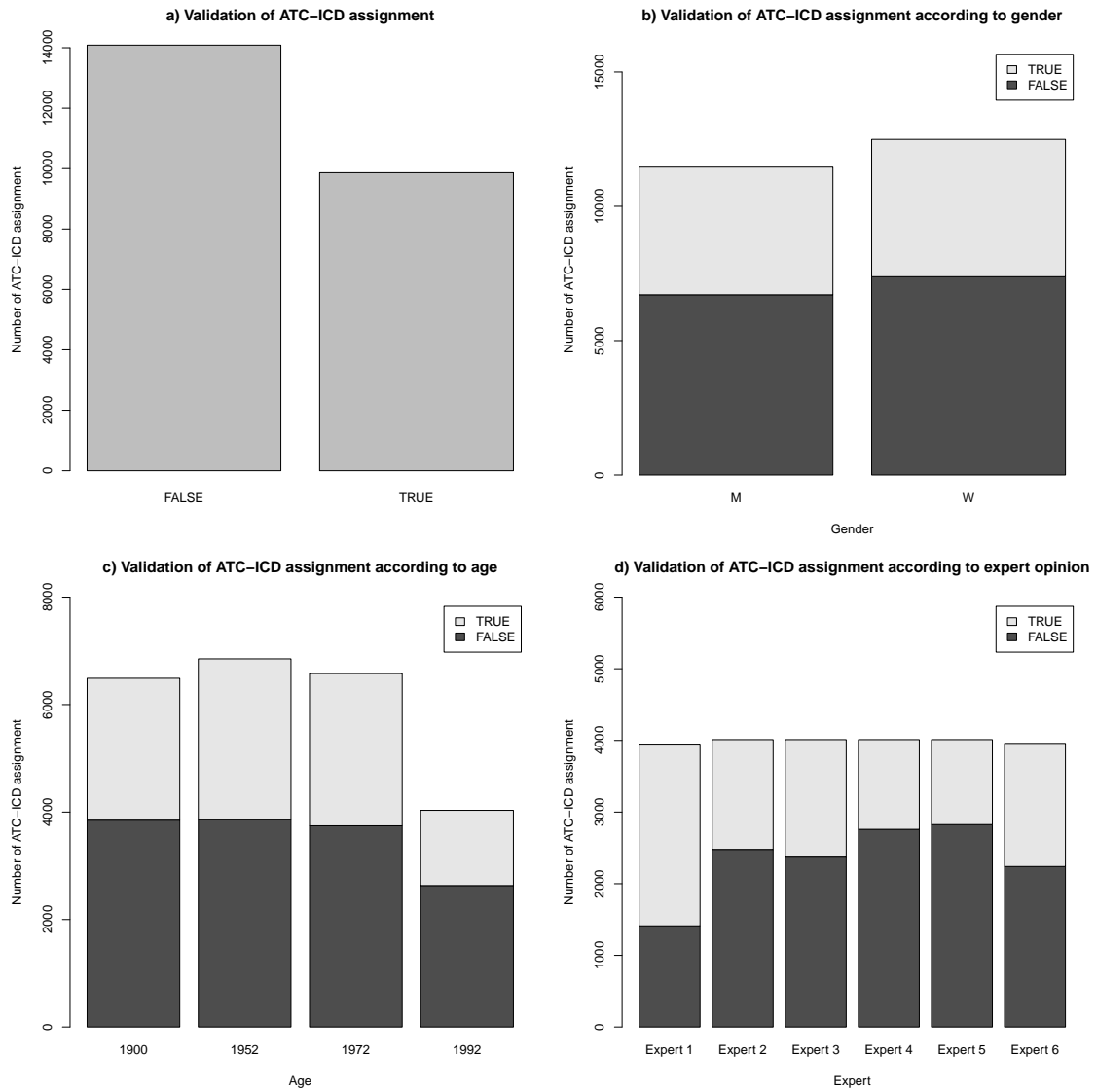


Figure 1: This figure illustrates experts' evaluation of the ATC-ICD10 assignments for defined age and gender categories. Plot a) shows a boxplot of the frequencies of correct and incorrect assignments. Plots b), c) show these frequencies for different sex and age groups. Plot d) illustrates the results of the evaluation by experts.

2.1. Correct Assignments by ICD10 Groups

In this section, we show the relative frequencies of assignments that were considered to be correct by the experts. As mentioned above, we treat assignments for the same ATC-ICD10 pair but different demographic groups individually. An assignment is counted as correct if the number C of assessments which consider the assignment to be correct is larger or equal than 3.

For each ICD10 group, the total number of assignments n_{icd}^t can be calculated by counting all assignments:

$$n_{icd}^t = \sum_{atc} \sum_{age} \sum_{sex} 1 \quad (1)$$

The number of correct assignments n_{icd}^c can be calculated by counting the number of assignments for which $C \geq 3$.

$$n_{icd}^c = \sum_{atc} \sum_{age} \sum_{sex} \mathbf{1}_{C \geq 3} \quad (2)$$

where $\mathbf{1}_{C \geq 3}$ is 1 if $C \geq 3$ and 0 otherwise. For each ICD10 group we can then calculate the relative frequency f_{icd} of correct assignments as

$$f_{icd} = \frac{n_{icd}^c}{n_{icd}^t} \quad (3)$$

Note that not all age groups exist for all ATC-ICD10 assignments but we do not show this dependence for ease of notation.

Table 1 shows the number of the agreements and disagreements of the expert opinions on an ATC-ICD10 assignment for different age and gender categories. This table shows a matrix $V_{i,j}$ of size 8×8 , where the following holds.

- $i \dots$ Number of age and gender combinations for an ATC-ICD10 assignment.
- $j \dots$ Number of age and gender combinations for an ATC-ICD10 assignment that is evaluated from experts as TRUE.
- $V_{i,j} \dots$ Number of ATC-ICD10 assignments where i out of j age and gender combinations were evaluated as TRUE.

With the help of the definitions of rows and columns above an arbitrary element of the matrix (we take $V_{4,3}$ as an example) can be interpreted as stated below.

- $V_{4,3} \dots$ There is one ATC-ICD10 assignment with 4 age and gender combinations where 3 of them are evaluated as TRUE and 1 as FALSE.

	1	2	3	4	5	6	7	8
1	157	0	0	0	0	0	0	0
2	3	61	0	0	0	0	0	0
3	1	3	65	0	0	0	0	0
4	1	1	0	49	0	0	0	0
5	0	0	1	0	36	0	0	0
6	0	1	0	0	1	61	0	0
7	1	0	1	0	0	0	31	0
8	0	0	0	0	0	1	1	35

Table 1: This table shows the agreement of the experts on the ATC-ICD10 assignments for different age and gender categories. The rows define the number of all age and gender categories available for an assignment. The columns define the number of the age and gender categories for an assignment that are evaluated by experts as TRUE. The diagonal elements show the number of ATC-ICD10 assignments where the experts agree for each age and gender category.

By construction of Table1, the upper half contains only zeros, since the experts cannot include new age/gender assignments, but only delete existing assignments. Overall, the experts agree with the vast majority of assignments. Only in 3% of the cases the experts disagree on the ATC-ICD10 assignments for different age and gender categories. These 3% of disagreement can be seen in the table as the proportion of the sum of values in the lower half on the overall sum. Figure 2 shows the distribution of f_{icd} for all ICD10 group.

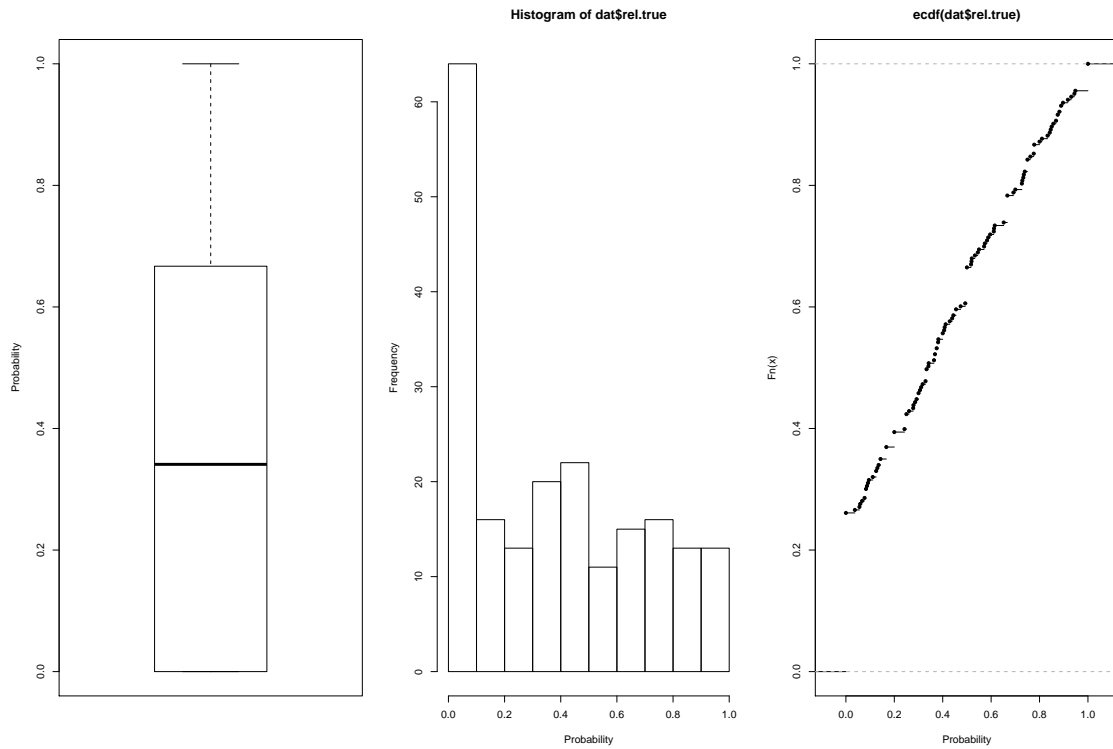


Figure 2: This figure illustrates the distribution of the relative frequency of a correct ATC-ICD10 assignment according to the experts' opinion for each ICD10 groups.

The following tables show the 20 “best” and “worst” ICD10 groups according to the evaluation of experts. Table 2 shows the 20 ICD10 groups, which have the highest relative frequency of correct assignments. Table 3 shows 20 ICD10 groups, which are among those with the lowest relative frequency of correct assignments. Table 4 shows the 20 ICD10 groups with the highest absolute frequency of assignments.

ICD10 Group	Description	Absolute TRUE (n_{icd}^c)	Relative TRUE (f_{icd})	Total (n_{icd}^t)
A65-A69	Sonstige Spirochätenkrankheiten	3	1.00	3
B50-B64	Protozoenkrankheiten	1	1.00	1
B65-B83	Helminthosen	7	1.00	7
G30-G32	Sonstige degenerative Krankheiten des Nervensystems	4	1.00	4
H00-H06	Affektionen des Augenlides	5	1.00	5
M65-M68	Krankheiten der Synovialis und der Sehnen	4	1.00	4
S50-S59	Verletzungen des Ellenbogens und des Unterarmes	1	1.00	1
T15-T19	Folgen des Eindringens eines Fremdkörpers durch eine natürliche Körperöffnung	3	1.00	3
T26-T28	Verbrennungen oder Verätzungen	2	1.00	2
I10-I15	Hypertonie [Hochdruckkrankheit]	55	0.95	58
H10-H13	Affektionen der Konjunktiva	17	0.94	18
L20-L30	Dermatitis und Ekzem	27	0.93	29
G50-G59	Krankheiten von Nerven	11	0.92	12
F40-F48	Neurotische, Belastungs- und somatoforme Störungen	26	0.90	29
M40-M43	Deformitäten der Wirbelsäule und des Rückens	8	0.89	9
T20-T25	Verbrennungen oder Verätzungen der äußeren Körperoberfläche	8	0.89	9
M80-M85	Veränderungen der Knochendichte und -struktur	15	0.88	17
F10-F19	Psychische und Verhaltensstörungen durch psychotrope Substanzen	35	0.88	40
L40-L45	Papulosquamöse Hautkrankheiten	28	0.88	32
C50-C50	Bösartige Neubildung der Brustdrüse [Mamma]	33	0.87	38

Table 2: This table shows the absolute and relative frequency of correct assignments for each ICD10 group according to the 20 highest proportions of right assignments.

ICD10 Group	Description	Absolute TRUE (n_{icd}^c)	Relative TRUE (f_{icd})	Total (n_{icd}^t)
A20-A28	Bestimmte bakterielle Zoonosen	0	0.000	2
A30-A49	Sonstige bakterielle Krankheiten	0	0.000	13
A50-A64	Infektionen	0	0.000	8
A70-A74	Sonstige Krankheiten durch Chlamydien	0	0.000	1
B20-B24	HIV-Krankheit [Humane Immundefizienz-Viruskrankheit]	0	0.000	4
B25-B34	Sonstige Viruskrankheiten	0	0.000	2
D00-D09	In-situ-Neubildungen	0	0.000	2
D10-D36	Gutartige Neubildungen	0	0.000	4
D70-D77	Sonstige Krankheiten des Blutes und der blutbildenden Organe	0	0.000	10
D80-D89	Bestimmte Störungen mit Beteiligung des Immunsystems	0	0.000	11
E40-E46	Mangelernährung	0	0.000	2
E50-E64	Sonstige alimentäre Mangelzustände	0	0.000	1
E65-E68	Adipositas und sonstige Überernährung	0	0.000	6
F70-F79	Intelligenzminderung	0	0.000	8
F80-F89	Entwicklungsstörungen	0	0.000	6
G00-G09	Entzündliche Krankheiten des Zentralnervensystems	0	0.000	8
H49-H52	Affektionen der Augenmuskeln	0	0.000	15
H53-H54	Sehstörungen und Blindheit	0	0.000	2
H55-H59	Sonstige Affektionen des Auges und der Augenanhangsgebilde	0	0.000	3
I05-I09	Chronische rheumatische Herzkrankheiten	0	0.000	1

Table 3: This table shows the absolute and relative frequency of correct assignments for each ICD10 group according to the 20 lowest proportions of right assignments.

ICD10 Group	Description	Absolute TRUE (n_{icd}^c)	Relative TRUE (f_{icd})	Total (n_{icd}^t)
J00-J06	Akute Infektionen der oberen Atemwege	77	0.33	234
M50-M54	Sonstige Krankheiten der Wirbelsäule und des Rückens	55	0.34	161
A00-A09	Infektiöse Darmkrankheiten	34	0.28	122
C81-C96	Bösartige Neubildungen des lymphatischen	42	0.38	110
J40-J47	Chronische Krankheiten der unteren Atemwege	72	0.73	98
I30-I52	Sonstige Formen der Herzkrankheit	0	0.00	88
N17-N19	Niereninsuffizienz	30	0.34	88
C15-C26	Bösartige Neubildungen der Verdauungsorgane	36	0.44	82
C30-C39	Bösartige Neubildungen der Atmungsorgane und sonstiger intrathorakaler Organe	37	0.49	75
N30-N39	Sonstige Krankheiten des Harnsystems	39	0.57	68
H30-H36	Affektionen der Aderhaut und der Netzhaut	19	0.31	61
H25-H28	Affektionen der Linse	12	0.20	60
I10-I15	Hypertonie [Hochdruckkrankheit]	55	0.95	58
J20-J22	Sonstige akute Infektionen der unteren Atemwege	47	0.81	58
I20-I25	Ischämische Herzkrankheiten	34	0.60	57
C69-C72	Bösartige Neubildungen des Auges	20	0.41	49
C76-C80	Bösartige Neubildungen ungenau bezeichneter	30	0.61	49
K70-K77	Krankheiten der Leber	38	0.78	49
K50-K52	Nichtinfektiöse Enteritis und Kolitis	35	0.73	48
E70-E90	Stoffwechselstörungen	4	0.09	46

Table 4: This table shows the absolute and relative frequency of correct assignments and proportions of right assignments for each ICD10 group according to the 20 highest frequency of assignments.

2.2. Correct Assignments by ATC Codes

In this section, we carry out a similar analysis as explained above, but instead of the ICD10 groups we show the results by ATC codes.

For each ATC code, the total number of assignments n_{atc}^t can be calculated by counting all assignments:

$$n_{atc}^t = \sum_{icd} \sum_{age} \sum_{sex} 1 \quad (4)$$

The number of correct assignments n_{atc}^c can be calculated by counting the number of

assignments for which $C \geq 3$.

$$n_{atc}^c = \sum_{icd} \sum_{age} \sum_{sex} \mathbf{1}_{C \geq 3} \quad (5)$$

where $\mathbf{1}_{C \geq 3}$ is 1 if $C \geq 3$ and 0 otherwise. For each ATC we can then calculate the relative frequency f_{atc} of correct assignments as

$$f_{atc} = \frac{n_{atc}^c}{n_{atc}^t} \quad (6)$$

Figure 3 shows the distribution of f_{atc} for all ATC codes.

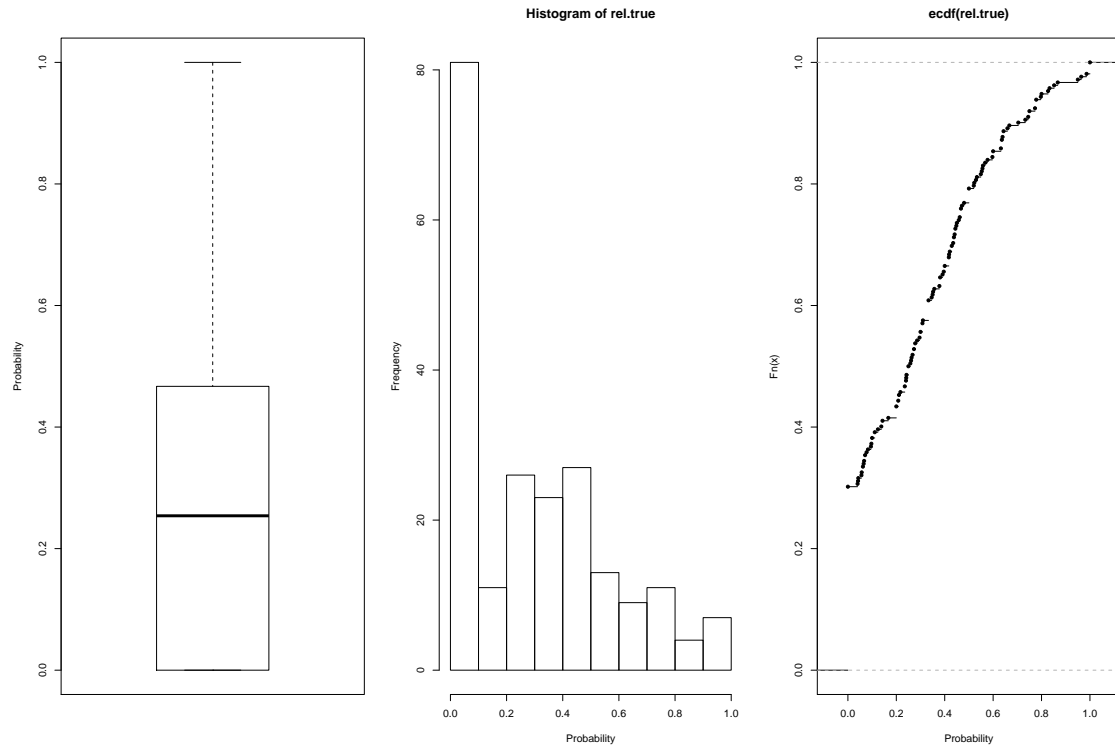


Figure 3: This figure illustrates the distribution of the relative frequencies of correct ATC-ICD10 assignments according to the expert opinions for each ATC code.

The following tables show the 20 “best” and “worst” ATC codes according to the evaluation of experts. Table 5 shows the 20 ATC codes, which have the highest relative frequency of correct assignments. Table 6 shows 20 ATC codes which are among those with the lowest relative frequency of correct assignments. Table 7 shows the 20 ATC codes with the highest absolute frequency of assignments.

ATC	Description	Absolute TRUE (n_{atc}^c)	Relative TRUE (f_{atc})	Total (n_{atc}^t)
L01B	ANTIMETABOLITEN	29	1.00	29
L01C	PFLANZLICHE ALKALOIDE UND ANDERE NATÜRLICHE MITTEL	10	1.00	10
L01D	ZYTOTOXISCHE ANTIBI- OTIKA UND VERWANDTE SUBSTANZEN	5	1.00	5
S02A	ANTIINFEKTIVA	15	1.00	15
M01A	NICHTSTEROIDALE AN- TIPHLOGISTIKA UND AN- TIRHEUMATIKA	72	0.99	73
L01X	ANDERE ANTINEOPLASTIS- CHE MITTEL	27	0.96	28
A04A	ANTIEMETIKA UND MITTEL GEGEN ÜBELKEIT	57	0.95	60
H03A	SCHILDDRÜSENPRÄPARATE	13	0.87	15
S01A	ANTIINFEKTIVA	23	0.85	27
N07X	ANDERE MITTEL FÜR DAS NERVENSYSTEM	5	0.83	6
N02A	OPIOIDE	43	0.83	52
B02B	VITAMIN K UND ANDERE HÄMOSTATIKA	12	0.80	15
L03A	IMMUNSTIMULANZIEN	47	0.80	59
A07C	ELEKTROLYTE MIT KOHLEN- HYDRATEN	7	0.78	9
D05A	ANTIPSORIATIKA ZUR TOPIS- CHEN ANWENDUNG	7	0.78	9
P03A	MITTEL GEGEN EKTOPARA- SITEN, INKL. ANTISCABIOSA	7	0.78	9
D07A	CORTICOSTEROIDE, REIN	17	0.77	22
M01B	ANTIPHLOGISTIKA/ANTIRHEUMATIKA IN KOMBINATION	9	0.75	12
R05X	ANDERE KOMBINATION- SPRÄPARATE GEGEN ERKÄLTUNGSKRANKHEITEN	6	0.75	8
S01B	ANTIPHLOGISTIKA	41	0.74	55

Table 5: This table shows the absolute and relative frequency of correct assignments for each ATC Code according to the 20 highest proportions of correct assignments.

ATC	Description	Absolute TRUE (n_{atc}^c)	Relative TRUE (f_{atc})	Total (n_{atc}^t)
A05	Gallen und Lebertherapie	0	0.000	1
A08A	ANTIADIPOSITA, EXKL. DIÄTETIKA	0	0.000	5
A11A	MULTIVITAMINE, KOMBINATIONEN	0	0.000	8
A11B	MULTIVITAMINE, REIN	0	0.000	6
A11G	ASCORBINSÄURE (VITAMIN C), INKL. KOMBINATIONEN	0	0.000	10
A11H	ANDERE VITAMINPRÄPARATE, REIN	0	0.000	9
A11J	ANDERE VITAMINPRÄPARATE, KOMBINATIONEN	0	0.000	2
A13A	TONIKA	0	0.000	8
A14A	ANABOLE STEROIDE	0	0.000	9
A15	Appetit stimulierende Mittel	0	0.000	9
B02A	ANTIFIBRINOLYTIKA	0	0.000	11
B05A	BLUT UND VERWANDTE PRODUKTE	0	0.000	11
B05B	I.V.-LÖSUNGEN	0	0.000	16
B05X	ADDITIVA ZU I.V.-LÖSUNGEN	0	0.000	20
B06A	ANDERE HÄMATOLOGIKA	0	0.000	9
C01A	HERZGLYKOSIDE	0	0.000	7
C01B	ANTIARRHYTHMIKA, KLASSE I UND III	0	0.000	10
C02K	ANDERE ANTIHYPERTONIKA	0	0.000	13
C03A	LOW-CEILING-DIURETIKA, THIAZIDE	0	0.000	7
C03B	LOW-CEILING-DIURETIKA, EXKL. THIAZIDE	0	0.000	14

Table 6: This table shows the absolute and relative frequency of correct assignments for each ATC Code according to the 20 lowest proportions of correct assignments.

ATC	Description	Absolute TRUE (n_{atc}^c)	Relative TRUE (f_{atc})	Total (n_{atc}^t)
B01A	ANTITHROMBOTISCHE MITTEL	12	0.12	97
M01A	NICHTSTEROIDALE ANTI- PHLOGISTIKA UND AN- TIRHEUMATIKA	72	0.99	73
J01C	BETALACTAM-ANTIBIOTIKA, PENICILLINE	25	0.35	71
H02A	CORTICOSTEROIDE ZUR SYS- TEMISCHEN ANWENDUNG, REIN	28	0.42	67
N05A	ANTIPSYCHOTIKA	40	0.60	67
A04A	ANTIEMETIKA UND MITTEL GEGEN ÜBELKEIT	57	0.95	60
L03A	IMMUNSTIMULANZIEN	47	0.80	59
S01B	ANTIPHLOGISTIKA	41	0.74	55
J01M	CHINOLONE	21	0.40	53
N03A	ANTIEPILEPTIKA	11	0.21	53
N02A	OPIOIDE	43	0.83	52
B03X	ANDERE ANTIANÄMIKA	28	0.55	51
L04A	IMMUNSUPPRESSIVA	20	0.43	46
N06A	ANTIDEPRESSIVA	24	0.56	43
N05B	ANXIOLYTIKA	27	0.66	41
V03A	ALLE ÜBRIGEN THERA- PEUTISCHEN MITTEL	21	0.55	38
J01F	MAKROLIDE, LINCOSAMIDE UND STREPTOGRAMINE	14	0.38	37
N02B	ANDERE ANALGETIKA UND ANTIPYRETIKA	23	0.64	36
A07A	INTESTINALE ANTIINFEK- TIVA	2	0.06	35
J01D	ANDERE BETA-LACTAM- ANTIBIOTIKA	16	0.47	34

Table 7: This table shows the absolute and relative frequency of correct assignments and proportions of right assignments for the 20 ATC codes with the highest number of assignments.

3. Descriptive Analysis of ATC-ICD10 Implementation

This section is based on the descriptive analysis of the ATC-ICD10 assignments for the three implementation methods. Thus, instead of analysing ATC-ICD10 assignments, we look at individual patients' diagnoses which were assigned using the results of the ATC-ICD10 project.

We focus our analysis on the following aspects.

- The distribution of the probabilities of the diagnoses and the impact of the rescaling procedure on these probabilities.
- The frequencies of the ATC codes that were used to assign diagnoses.

The descriptive analyses listed above give an overview of the probability and accuracy of the individual assignments. The histograms and cumulative distribution functions (ECDF) show the distribution of assignment probabilities. The frequency distributions of the ATC codes shows the relation between the drugs and the diagnoses. This shows in particular what medications are mainly relevant to the selected diagnoses. The evaluations refer to all of the associated diagnoses, regardless of the assignment probability. In order to give a clear overview of the distribution of the ATC codes behind an ICD10 group only the ATCs are shown, which represent the 95% of the cumulative frequency. Thus, in some ICD groups only the underlying ATC codes with high frequency are shown and some rare ATC codes are suppressed. As a further step, the ATC codes that were agreed by the experts, are forced into the graphical and tabular representation of the ATC-ICD associations.

At this stage, we focus on the 20 most frequent diagnoses.

3.1. Diagnose H30-H36: Affektionen der Aderhaut und der Netzhaut

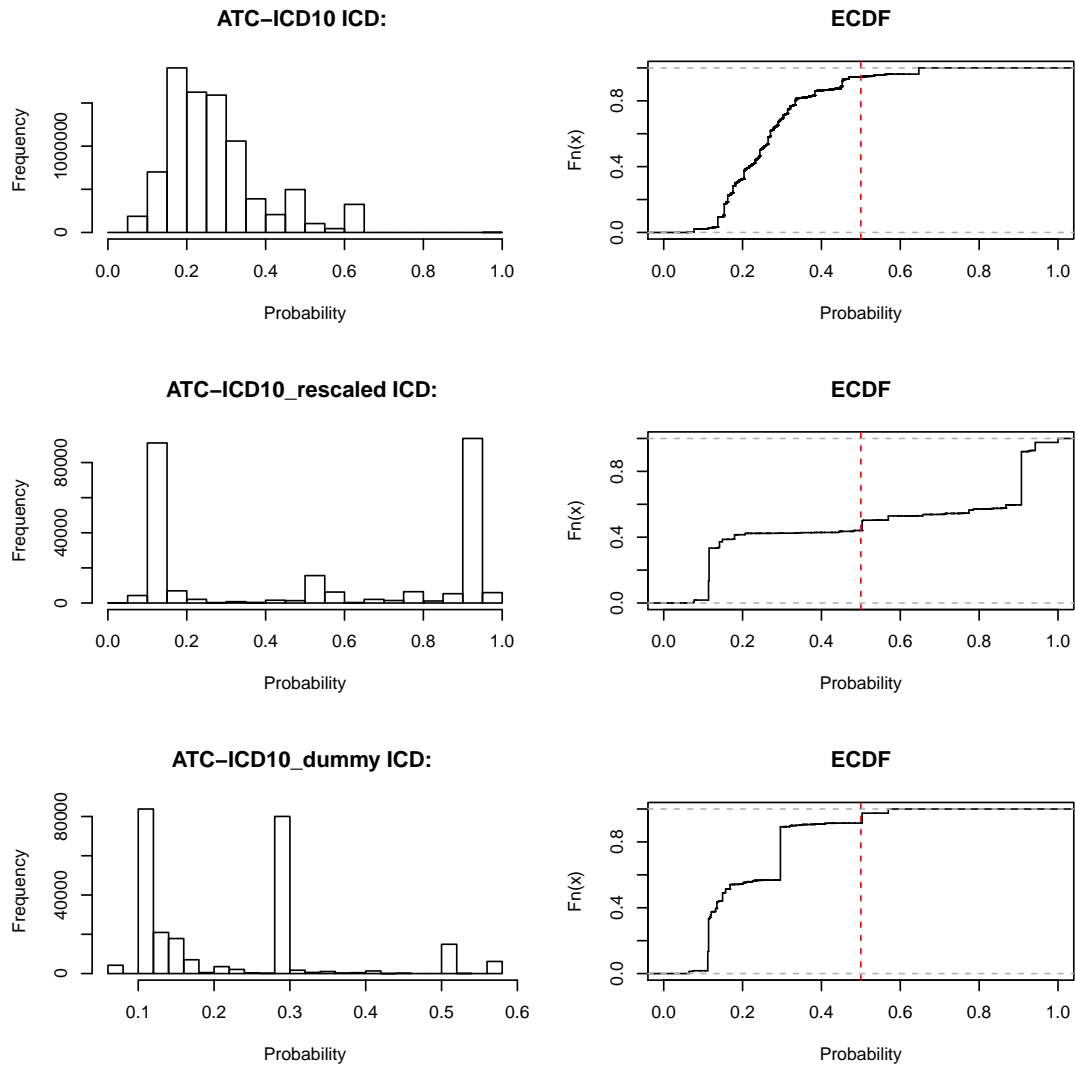
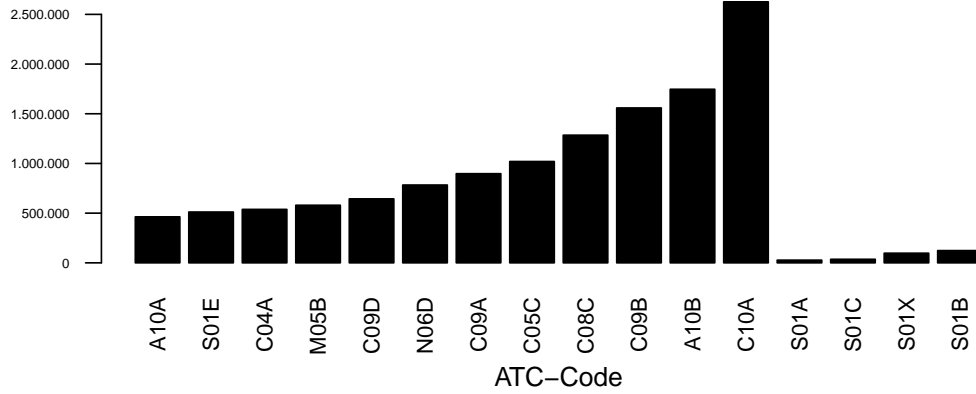


Figure 4: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD10 implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group H30-H36.

Number of ATC Codes for H30–H36



Number of ATC Codes for H30–H36

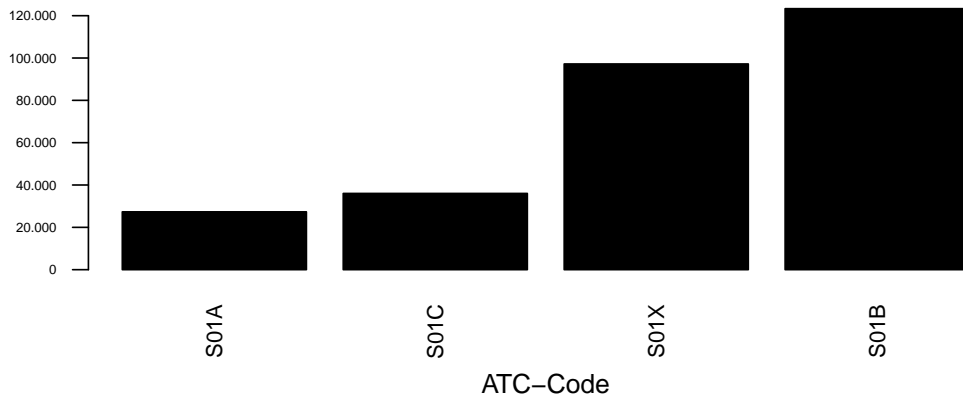


Figure 5: This figure shows the frequency of the underlying ATC codes for the given diagnose group H30-H36. The top figure shows the results for the ATC-ICD10 implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions. There are 25 ATC-Codes that related to the Diagnosis H30-H36. In order to give a clear overview of the distribution of the ATC codes behind an ICD10 group only the ATCs are shown, which represent the 95% of the cumulative frequency.

ATC	Description	Expert
A10A	INSULINE UND ANALOGA	FALSE
A10B	ORALE ANTIDIABETIKA, EXKL. INSULINE	FALSE
C04A	PERIPHERE VASODILATATOREN	FALSE
C05C	KAPILLARSTABILISIERENDE MITTEL	FALSE
C08C	SELEKTIVE CALCIUMKANALBLOCKER MIT VOR- WIEGENDER GEFÄSSWIRKUNG	FALSE
C09A	ACE-HEMMER, REIN	FALSE
C09B	ACE-HEMMER, KOMBINATIONEN	FALSE
C09D	ANGIOTENSIN-II-ANTAGONISTEN, KOMBINATIONEN	FALSE
C10A	MITTEL, DIE DEN LIPIDSTOFFWECHSEL BEEINFLUSSEN, REIN	FALSE
M05B	MITTEL MIT EINFLUSS AUF DIE KNOCHENSTRUKTUR UND DIE MINERALISATION	FALSE
N06D	ANTIDEMENTIVA	FALSE
S01A	ANTIINFJEKTIVA	TRUE
S01B	ANTIPHLOGISTIKA	TRUE
S01C	ANTIPHLOGISTIKA UND ANTIINFJEKTIVA IN KOMBINA- TION	TRUE
S01E	GLAUKOMMITTEL UND MIOTIKA	FALSE
S01X	ANDERE OPHTHALMIKA	TRUE

Table 8: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose H30-H36. There are 25 ATC-Codes that related to the Diagnosis H30-H36. In order to give a clear overview of the distribution of the ATC codes behind an ICD10 group only the ATCs are shown, which represent the 95% of the cumulative frequency.

3.2. Diagnose I20-I25: Ischämische Herzkrankheiten

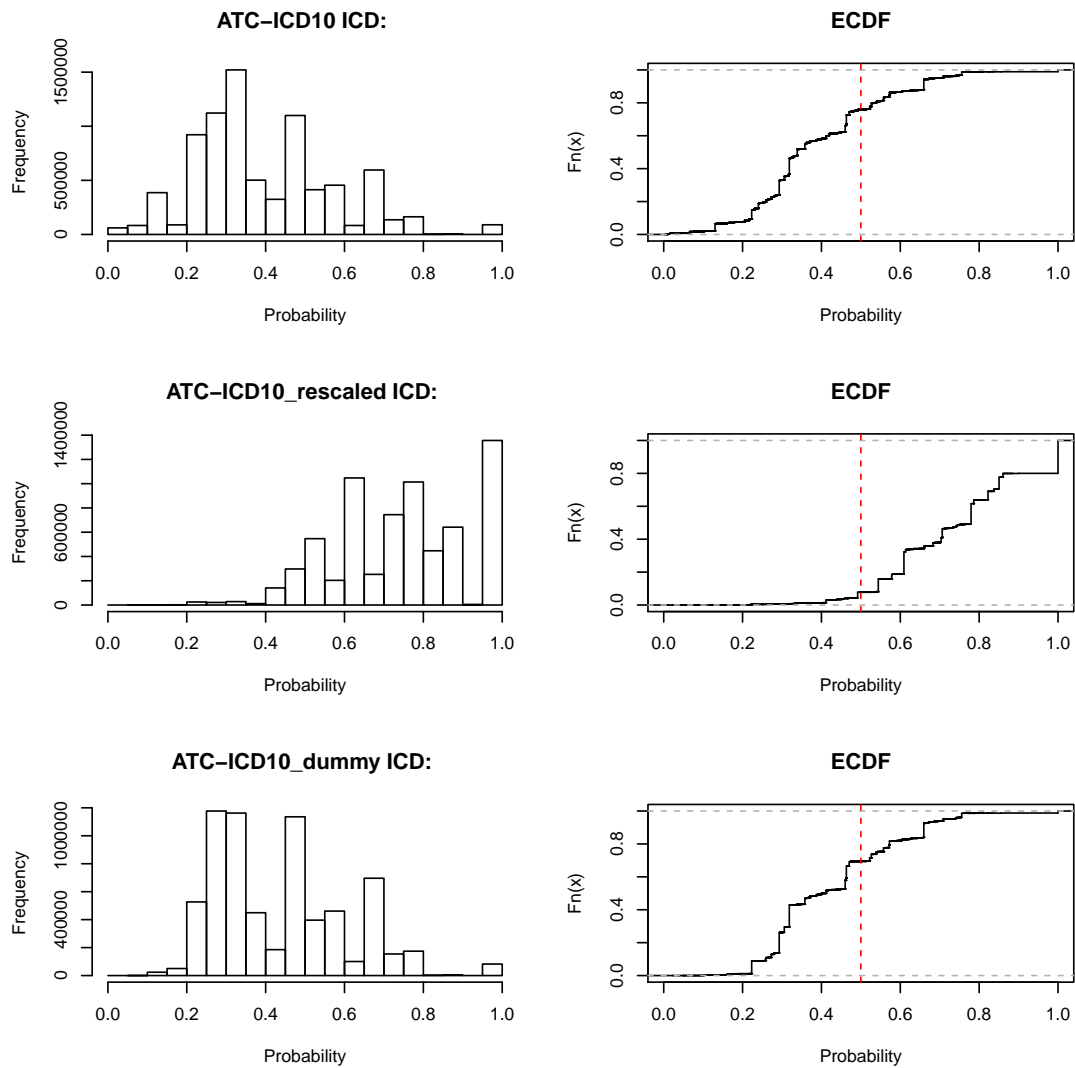


Figure 6: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD10 implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group I20-I25.

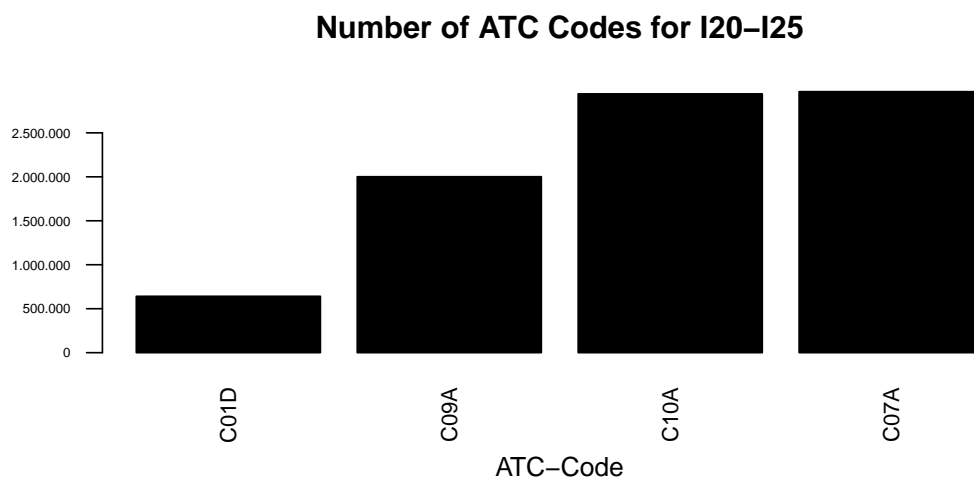
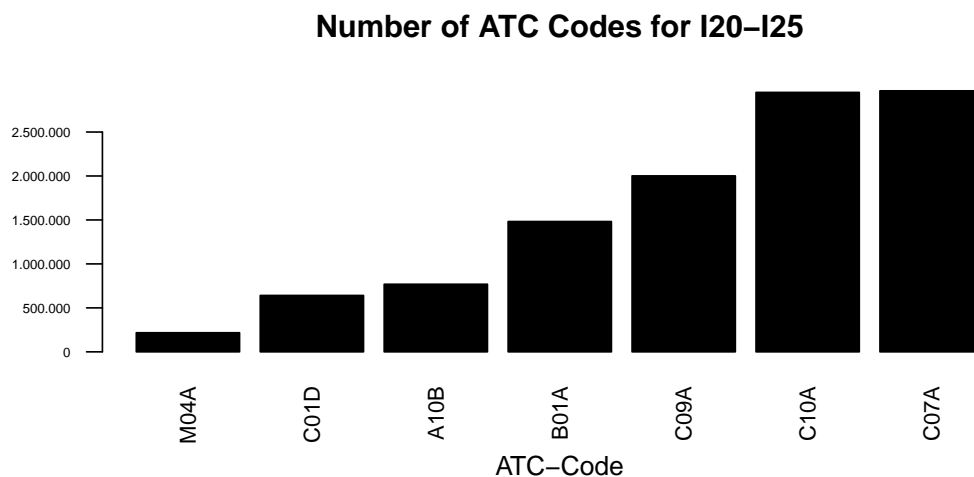


Figure 7: This figure shows the frequency of the underlying ATC codes for the given diagnose group I20-I25. The top figure shows the results for the ATC-ICD10 implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions. There are 25 ATC-Codes that related to the Diagnosis I20-I25. In order to give a clear overview of the distribution of the ATC codes behind an ICD10 group only the ATCs are shown, which represent the 95% of the cumulative frequency.

ATC	Description	Expert
A10B	ORALE ANTIDIABETIKA, EXKL. INSULINE	FALSE
B01A	ANTITHROMBOTISCHE MITTEL	FALSE
C01D	BEI HERZERKRANKUNGEN EINGESETZTE VASODILATA- TOREN	TRUE
C07A	BETA-ADRENOREZEPTOR-ANTAGONISTEN	TRUE
C09A	ACE-HEMMER, REIN	TRUE
C10A	MITTEL, DIE DEN LIPIDSTOFFWECHSEL BEEINFLUSSEN, REIN	TRUE
M04A	GICHTMITTEL	FALSE

Table 9: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose I20-I25. There are 25 ATC-Codes that related to the Diagnosis I20-I25. In order to give a clear overview of the distribution of the ATC codes behind an ICD10 group only the ATCs are shown, which represent the 95% of the cumulative frequency.

3.3. Diagnose I10-I15: Hypertonie [Hochdruckkrankheit]

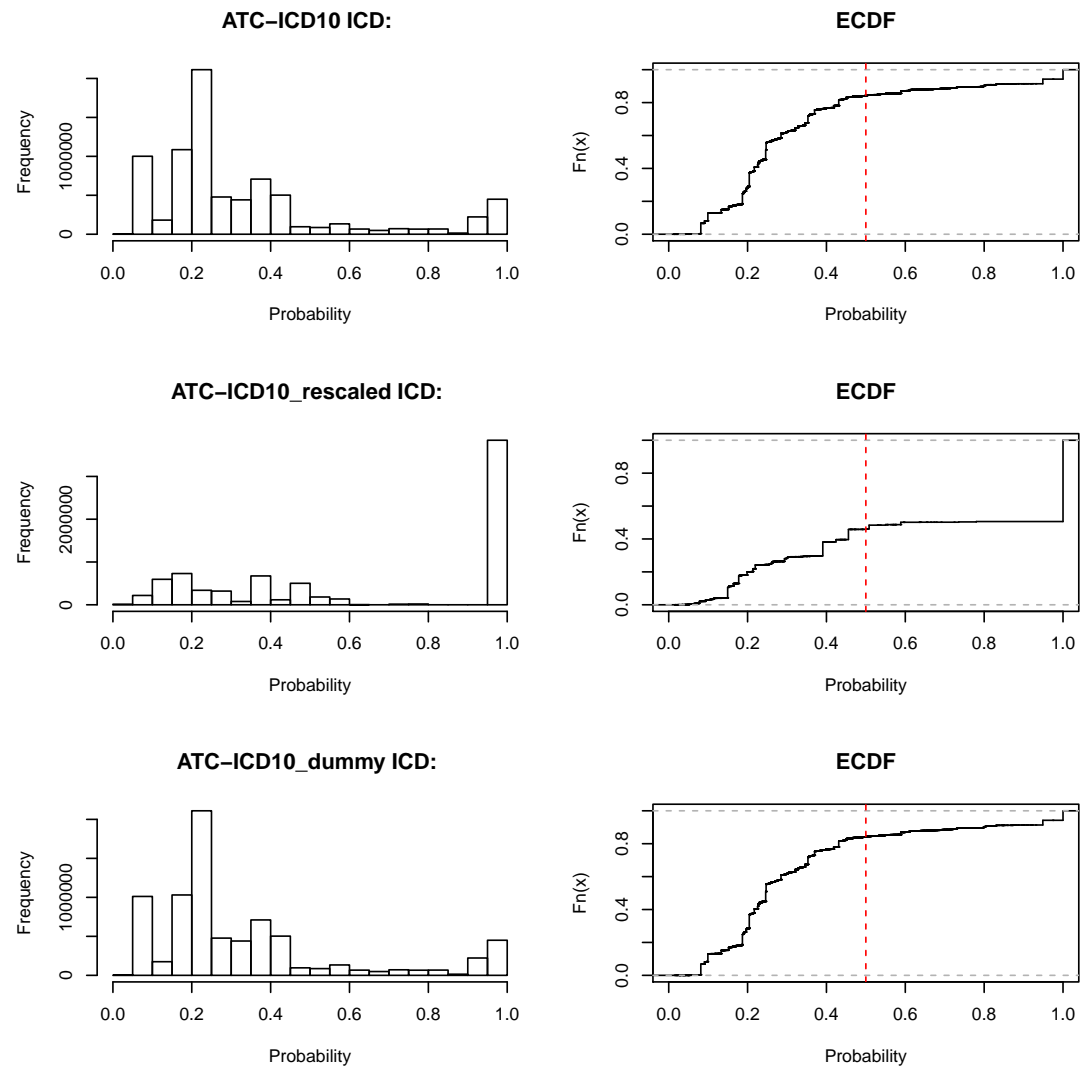


Figure 8: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD10 implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group I10-I15.

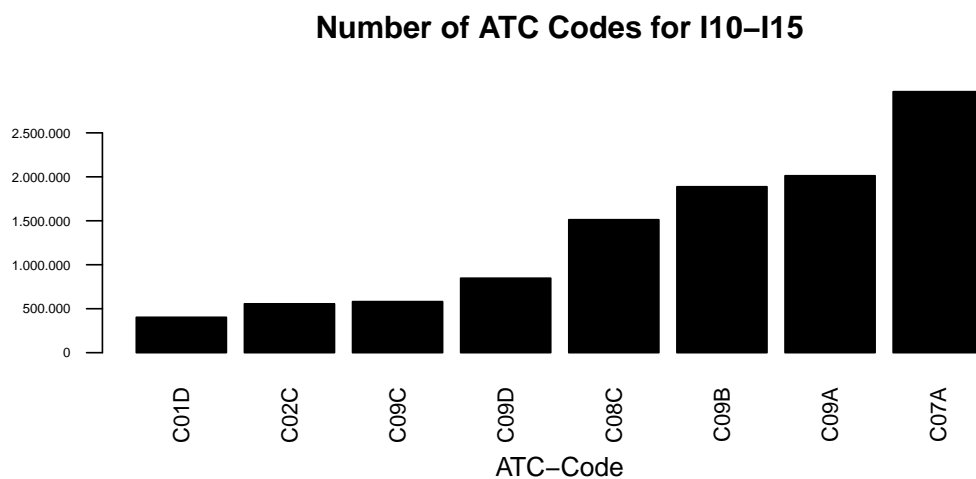
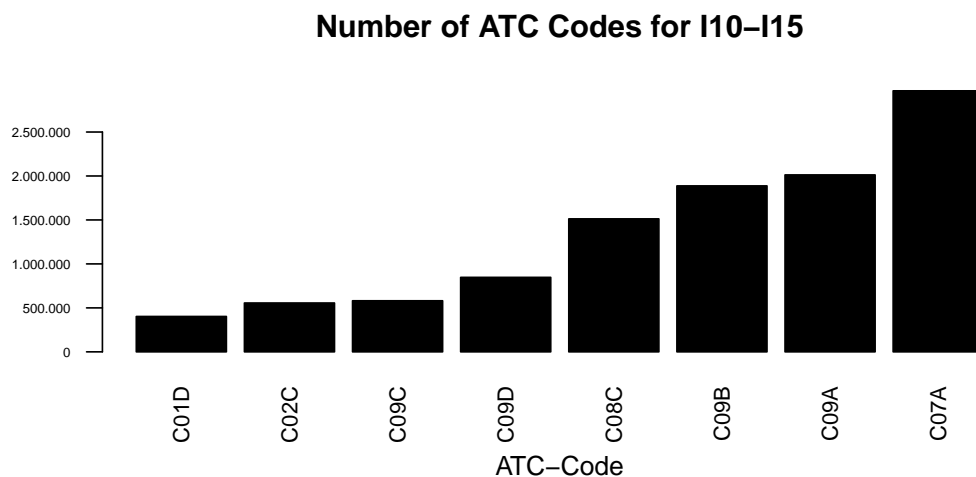


Figure 9: This figure shows the frequency of the underlying ATC codes for the given diagnose group I10-I15. The top figure shows the results for the ATC-ICD10 implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions. There are 16 ATC-Codes that related to the Diagnosis I10-I15. In order to give a clear overview of the distribution of the ATC codes behind an ICD10 group only the ATCs are shown, which represent the 95% of the cumulative frequency.

ATC	Description	Expert
C01D	BEI HERZERKRANKUNGEN EINGESETZTE VASODILATATOREN	TRUE
C02C	ANTIADRENERGE MITTEL, PERIPHER WIRKEND	TRUE
C07A	BETA-ADRENOREZEPTOR-ANTAGONISTEN	TRUE
C08C	SELEKTIVE CALCIUMKANALBLOCKER MIT VORWIEGENDER GEFÄSSWIRKUNG	TRUE
C09A	ACE-HEMMER, REIN	TRUE
C09B	ACE-HEMMER, KOMBINATIONEN	TRUE
C09C	ANGIOTENSIN-II-ANTAGONISTEN, REIN	TRUE
C09D	ANGIOTENSIN-II-ANTAGONISTEN, KOMBINATIONEN	TRUE

Table 10: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose I10-I15. There are 16 ATC-Codes that related to the Diagnosis I10-I15. In order to give a clear overview of the distribution of the ATC codes behind an ICD10 group only the ATCs are shown, which represent the 95% of the cumulative frequency.

3.4. Diagnose M50-M54: Sonstige Krankheiten der Wirbelsäule und des Rückens

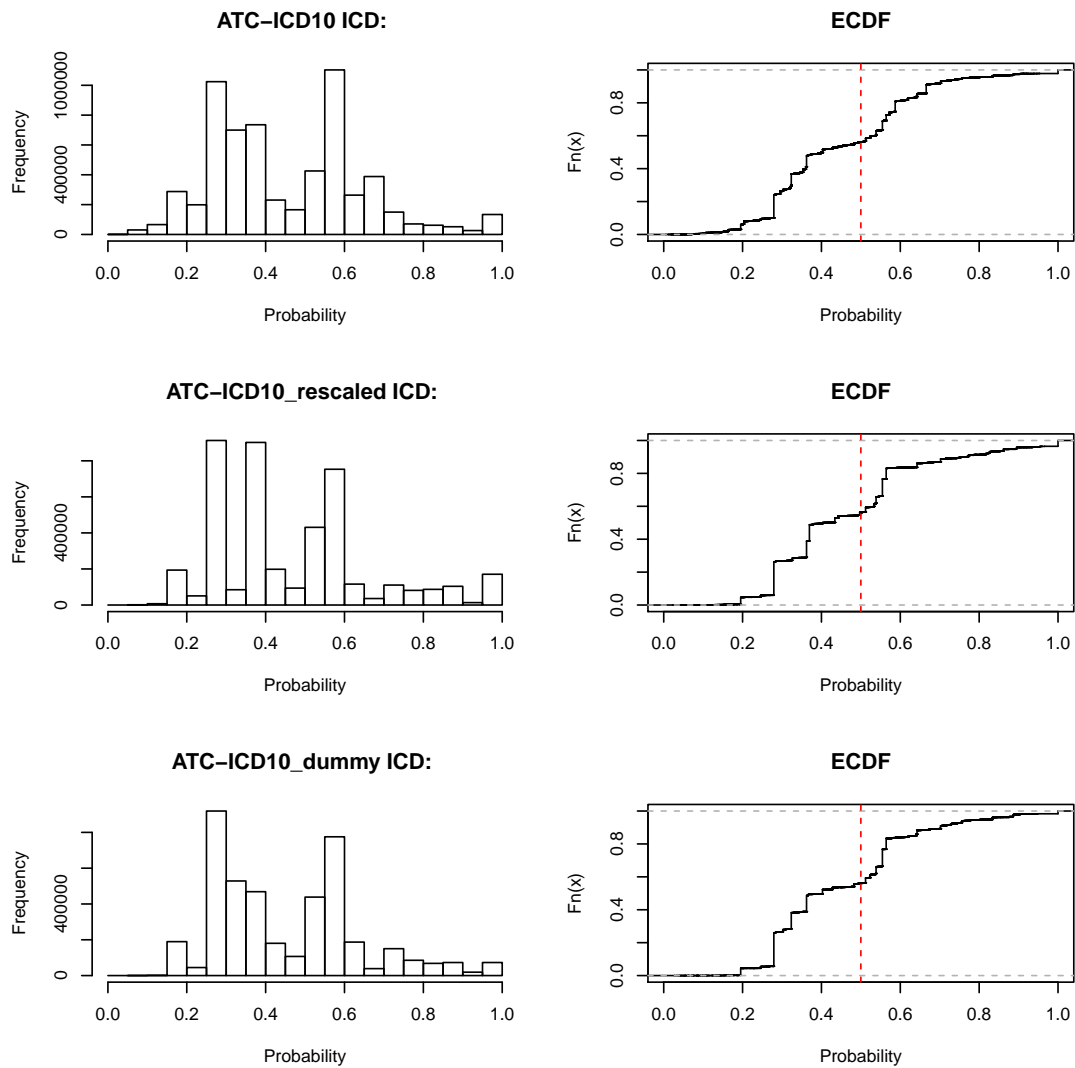
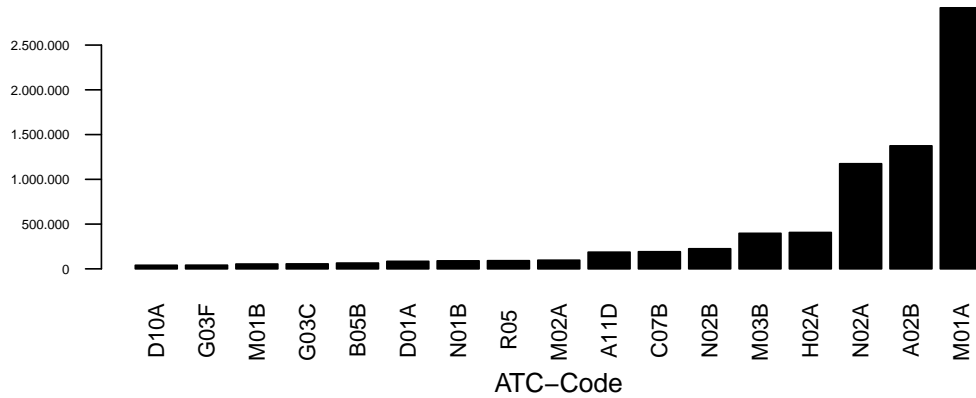


Figure 10: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD10 implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group M50-M54.

Number of ATC Codes for M50–M54



Number of ATC Codes for M50–M54

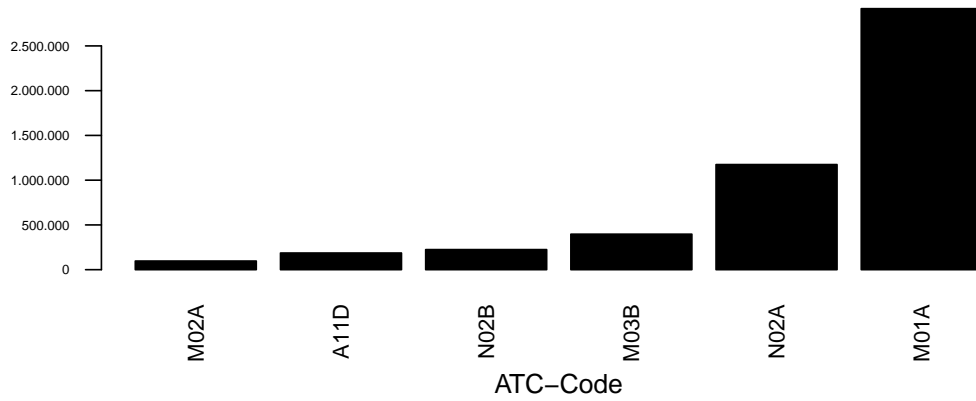


Figure 11: This figure shows the frequency of the underlying ATC codes for the given diagnose group M50-M54. The top figure shows the results for the ATC-ICD10 implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions. There are 63 ATC-Codes that related to the Diagnosis M50-M54. In order to give a clear overview of the distribution of the ATC codes behind an ICD10 group only the ATCs are shown, which represent the 95% of the cumulative frequency.

ATC	Description	Expert
A02B	MITTEL BEI PEPTISCHEM ULKUS UND GASTROE-SOPHAGEALER REFLUXKRANKHEIT	FALSE
A11D	VITAMIN-B1, REIN UND IN KOMBINATION MIT VITAMIN-B6 UND VITAMIN-B12	TRUE
B05B	I.V.-LÖSUNGEN	FALSE
C07B	BETA-ADRENOREZEPTOR-ANTAGONISTEN UND THI-AZIDE	FALSE
D01A	ANTIMYKOTIKA ZUR TOPISCHEN ANWENDUNG	FALSE
D10A	AKNEMITTEL ZUR TOPISCHEN ANWENDUNG	FALSE
G03C	ESTROGENE	FALSE
G03F	GESTAGENE UND ESTROGENE IN KOMBINATION	FALSE
H02A	CORTICOSTEROIDE ZUR SYSTEMISCHEN ANWENDUNG, REIN	FALSE
M01A	NICHTSTEROIDALE ANTIPHLOGISTIKA UND AN-TIRHEUMATIKA	TRUE
M01B	ANTIPHLOGISTIKA/ANTIRHEUMATIKA IN KOMBINA-TION	FALSE
M02A	TOPISCHE MITTEL GEGEN GELENK- UND MUSKELSCHMERZEN	TRUE
M03B	MUSKELRELAXANTIEN, ZENTRAL WIRKENDE MITTEL	TRUE
N01B	LOKALANÄSTHETIKA	FALSE
N02A	OPIOIDE	TRUE
N02B	ANDERE ANALGETIKA UND ANTIPYRETIKA	TRUE
R05	HUSTEN- UND ERKÄLTUNGSPRÄPARATE	FALSE

Table 11: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose M50-M54. There are 63 ATC-Codes that related to the Diagnosis M50-M54. In order to give a clear overview of the distribution of the ATC codes behind an ICD10 group only the ATCs are shown, which represent the 95% of the cumulative frequency.

3.5. Diagnose H25-H28: Affektionen der Linse

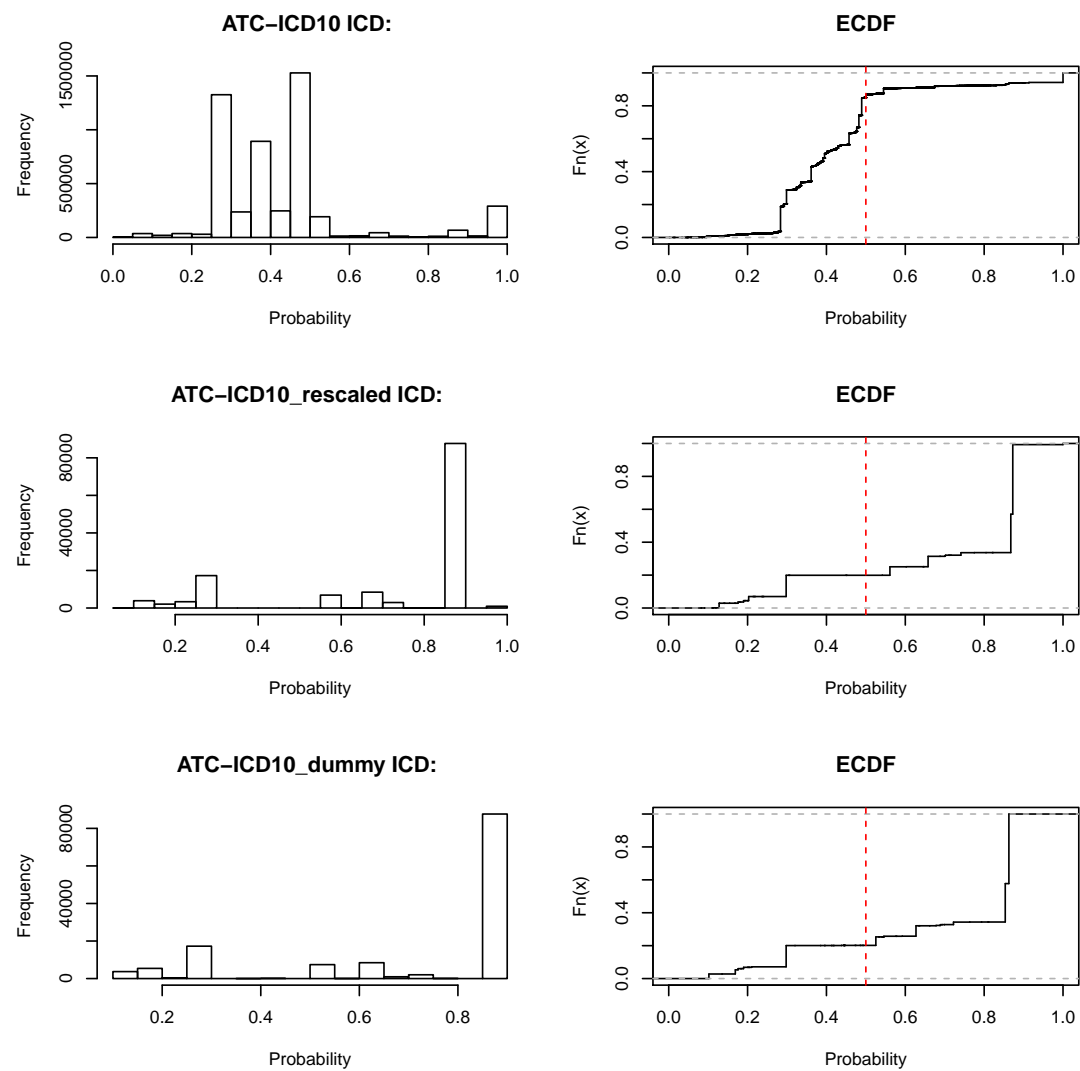


Figure 12: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD10 implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group H25-H28.

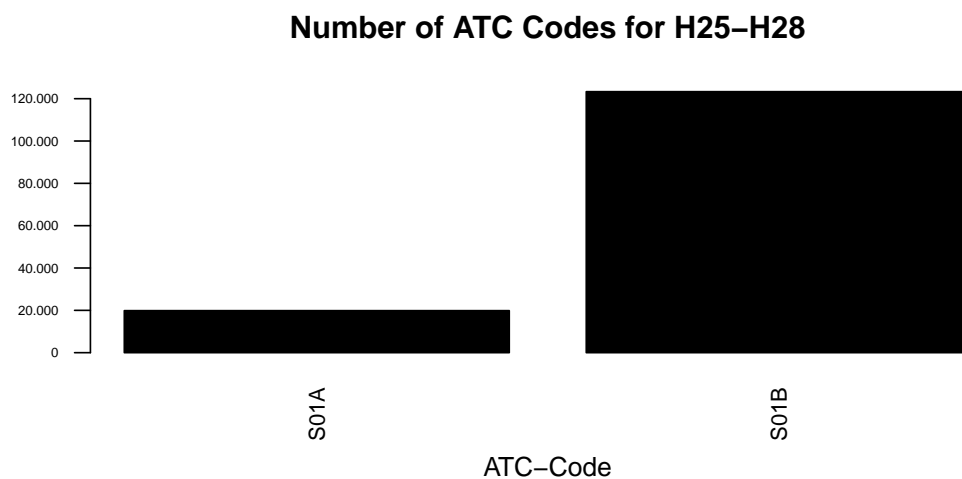
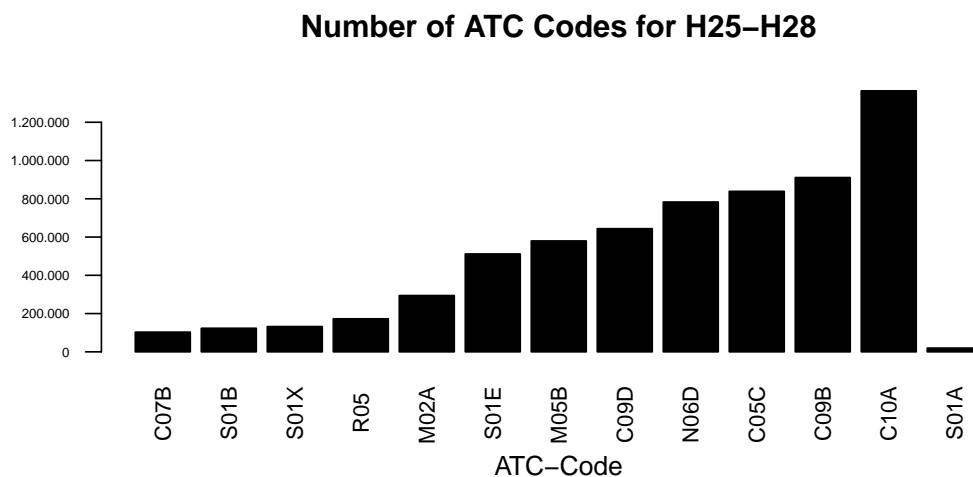


Figure 13: This figure shows the frequency of the underlying ATC codes for the given diagnose group H25-H28. The top figure shows the results for the ATC-ICD10 implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions. There are 32 ATC-Codes that related to the Diagnosis H25-H28. In order to give a clear overview of the distribution of the ATC codes behind an ICD10 group only the ATCs are shown, which represent the 95% of the cumulative frequency.

ATC	Description	Expert
C05C	KAPILLARSTABILISIERENDE MITTEL	FALSE
C07B	BETA-ADRENOREZEPTOR-ANTAGONISTEN UND THI-AZIDE	FALSE
C09B	ACE-HEMMER, KOMBINATIONEN	FALSE
C09D	ANGIOTENSIN-II-ANTAGONISTEN, KOMBINATIONEN	FALSE
C10A	MITTEL, DIE DEN LIPIDSTOFFWECHSEL BEEINFLUSSEN, REIN	FALSE
M02A	TOPISCHE MITTEL GEGEN GELENK- UND MUSKELSCHMERZEN	FALSE
M05B	MITTEL MIT EINFLUSS AUF DIE KNOCHENSTRUKTUR UND DIE MINERALISATION	FALSE
N06D	ANTIDEMENTIVA	FALSE
R05	HUSTEN- UND ERKÄLTUNGSPRÄPARATE	FALSE
S01A	ANTIINFEKTIVA	TRUE
S01B	ANTIPHLOGISTIKA	TRUE
S01E	GLAUKOMMITTEL UND MIOTIKA	FALSE
S01X	ANDERE OPHTHALMIKA	FALSE

Table 12: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose H25-H28. There are 32 ATC-Codes that related to the Diagnosis H25-H28. In order to give a clear overview of the distribution of the ATC codes behind an ICD10 group only the ATCs are shown, which represent the 95% of the cumulative frequency.

3.6. Diagnose K20-K31: Krankheiten des Ösophagus, des Magens und des Duodenums

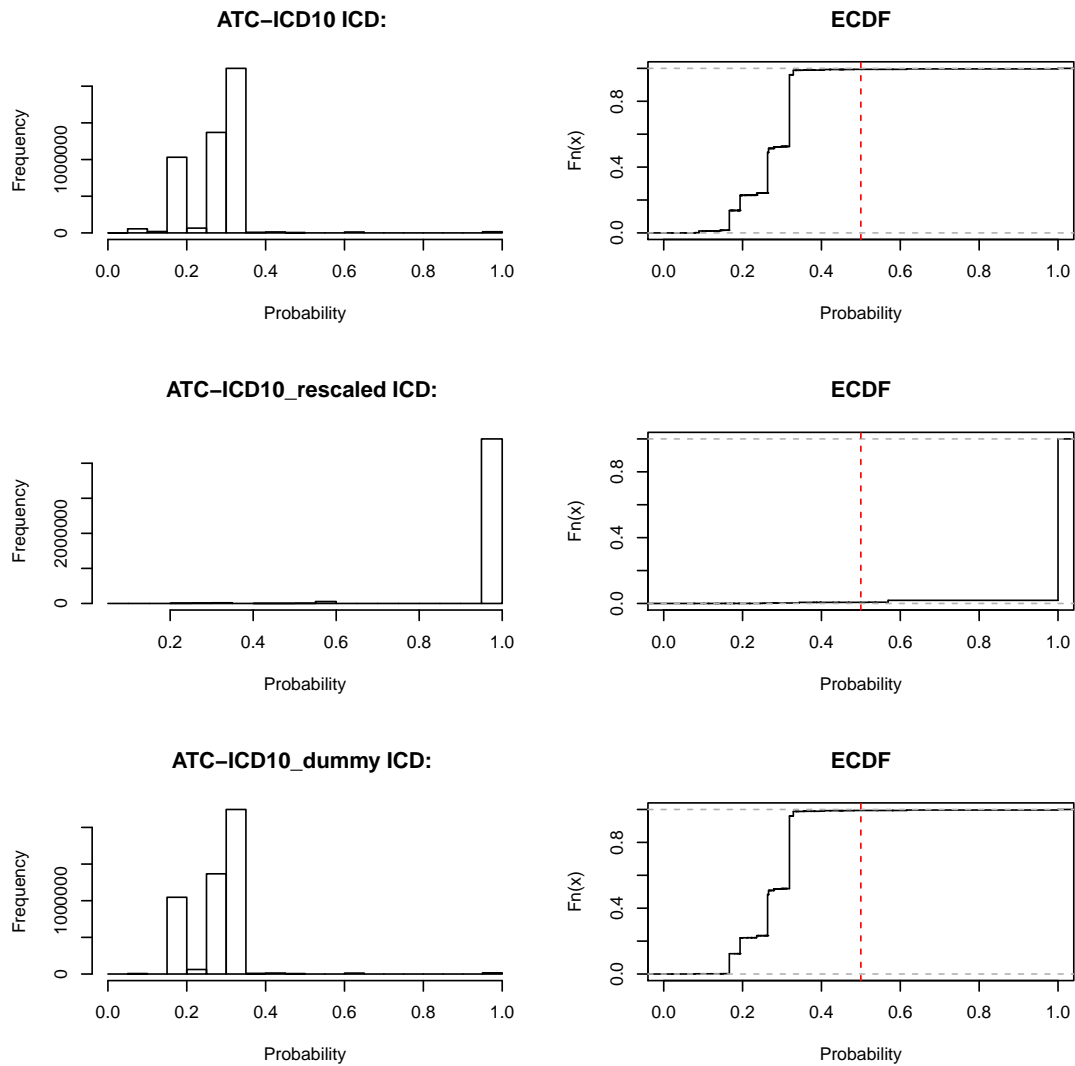


Figure 14: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD10 implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group K20-K31.

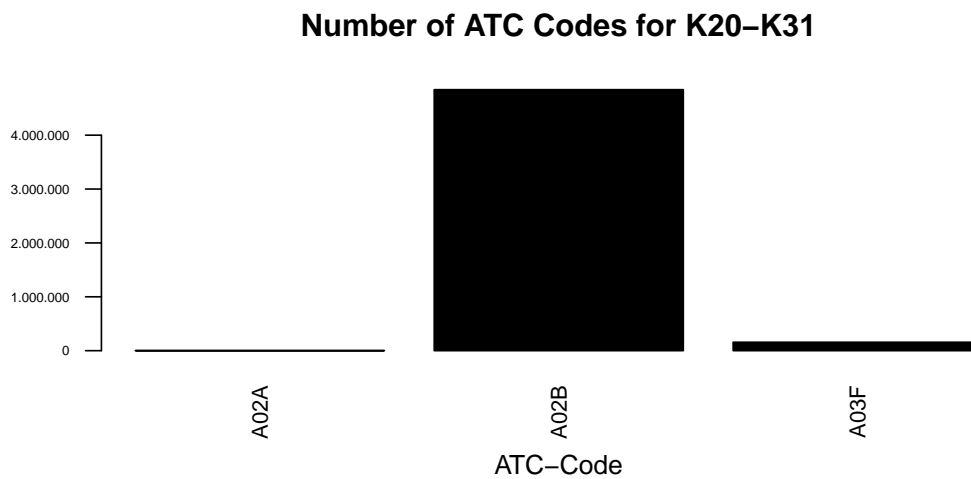
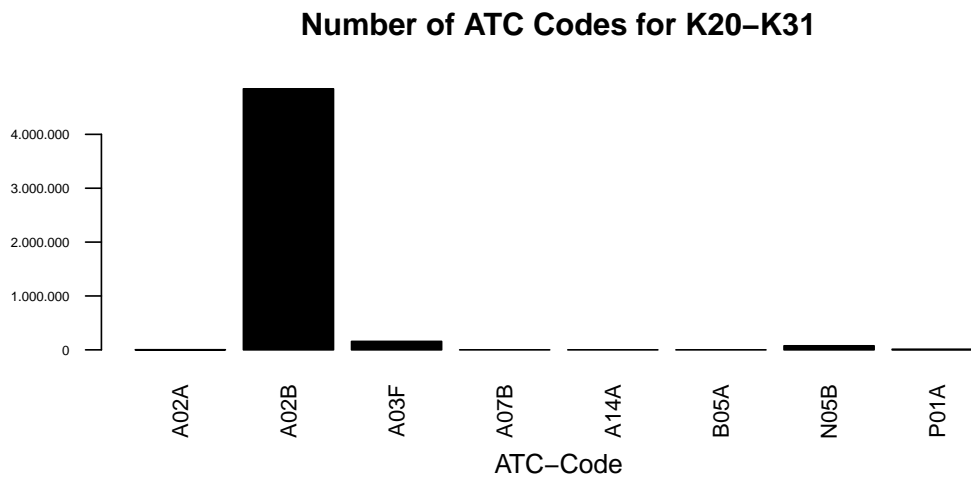


Figure 15: This figure shows the frequency of the underlying ATC codes for the given diagnose group K20-K31. The top figure shows the results for the ATC-ICD10 implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
A02A	ANTACIDA	TRUE
A02B	MITTEL BEI PEPTISCHEM ULKUS UND GASTROE- SOPHAGEALER REFLUXKRANKHEIT	TRUE
A03F	PROKINETIKA	TRUE
A07B	Intestinale Adsorbentien	FALSE
A14A	ANABOLE STEROIDE	FALSE
B05A	BLUT UND VERWANDTE PRODUKTE	FALSE
N05B	ANXIOLYTIKA	FALSE
P01A	MITTEL GEGEN AMÖBEN UND ANDERE PROTOZOEN- ERKRANKUNGEN	FALSE

Table 13: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose K20-K31.

3.7. Diagnose K80-K87: Krankheiten der Gallenblase, der Gallenwege und des Pankreas

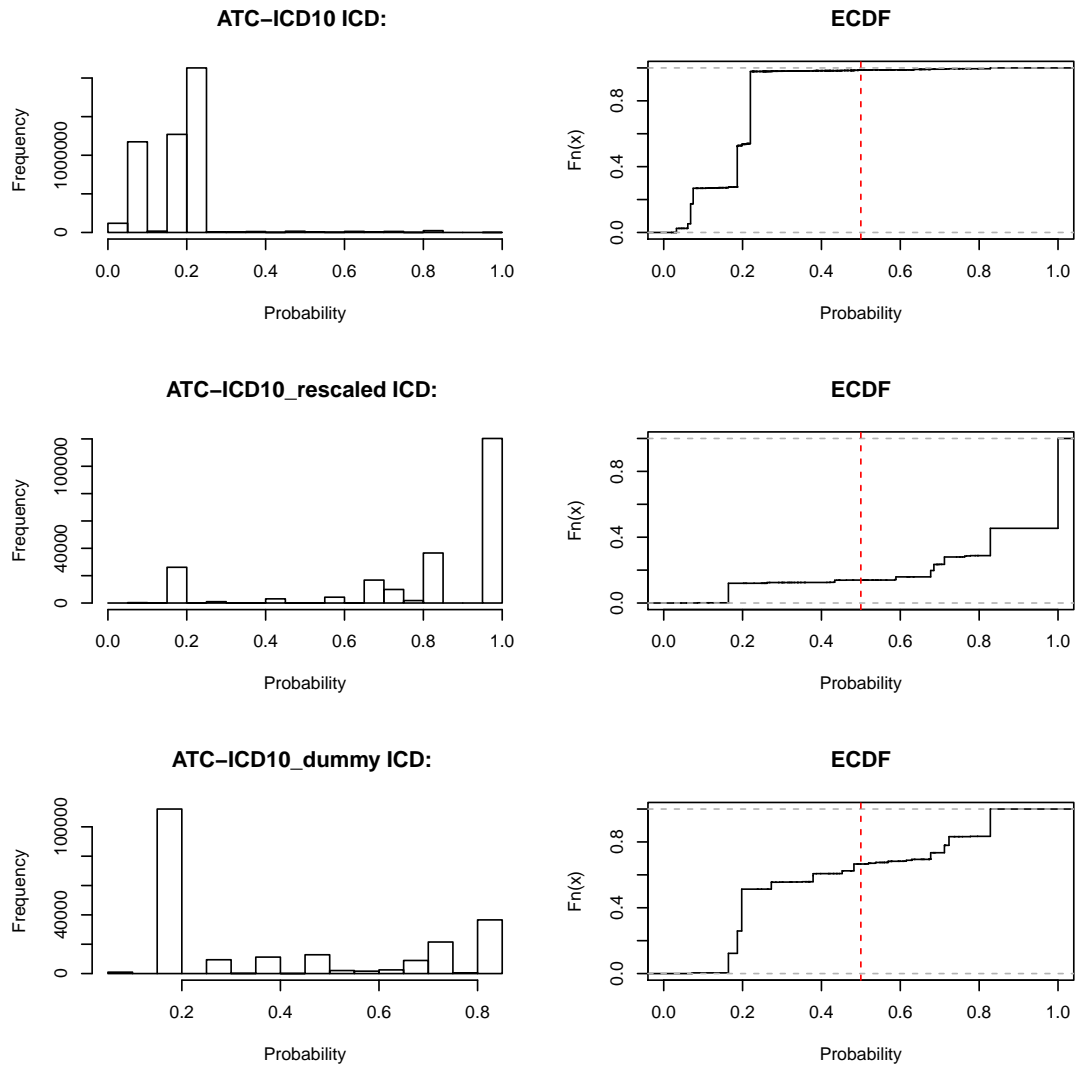


Figure 16: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD10 implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group K80-K87.

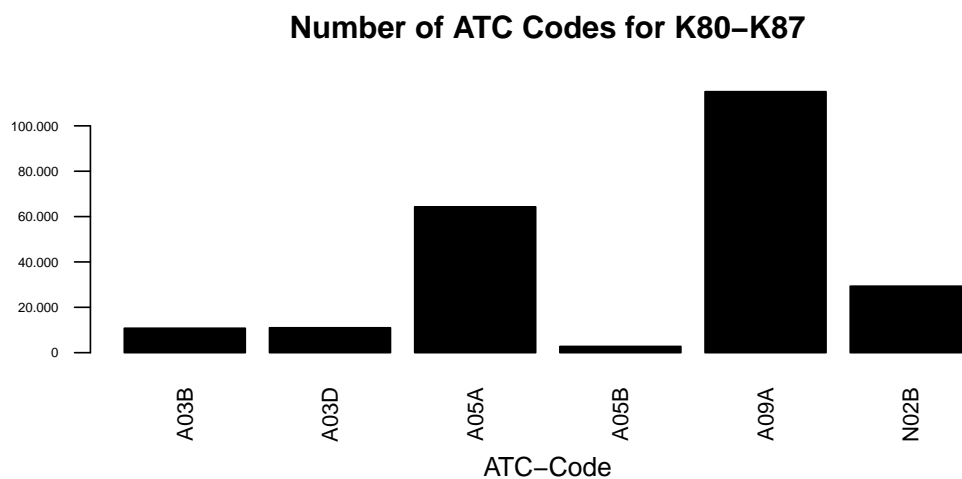
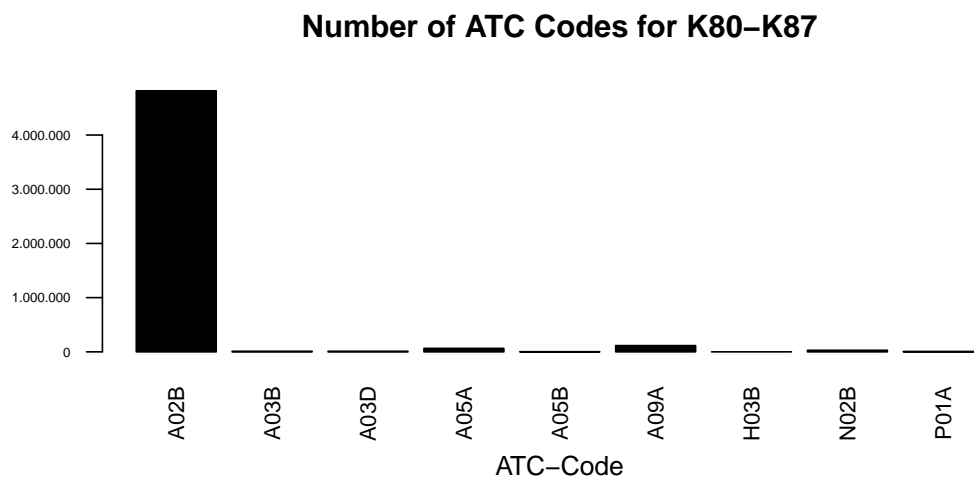


Figure 17: This figure shows the frequency of the underlying ATC codes for the given diagnose group K80-K87. The top figure shows the results for the ATC-ICD10 implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
A02B	MITTEL BEI PEPTISCHEM ULKUS UND GASTROE-SOPHAGEALER REFLUXKRANKHEIT	FALSE
A03B	BELLADONNA UND DERIVATE, REIN	TRUE
A03D	SPASMOLYTIKA IN KOMBINATION MIT ANALGETIKA	TRUE
A05A	GALLEN THERAPIE	TRUE
A05B	LEBERTHERAPIE, LIPOTROPE SUBSTANZEN	TRUE
A09A	DIGESTIVA, INKL. ENZYME	TRUE
H03B	THYREOSTATIKA	FALSE
N02B	ANDERE ANALGETIKA UND ANTIPYRETIKA	TRUE
P01A	MITTEL GEGEN AMÖBEN UND ANDERE PROTOZOEN-ERKRANKUNGEN	FALSE

Table 14: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose K80-K87.

3.8. Diagnose C15-C26: Bösartige Neubildungen der Verdauungsorgane

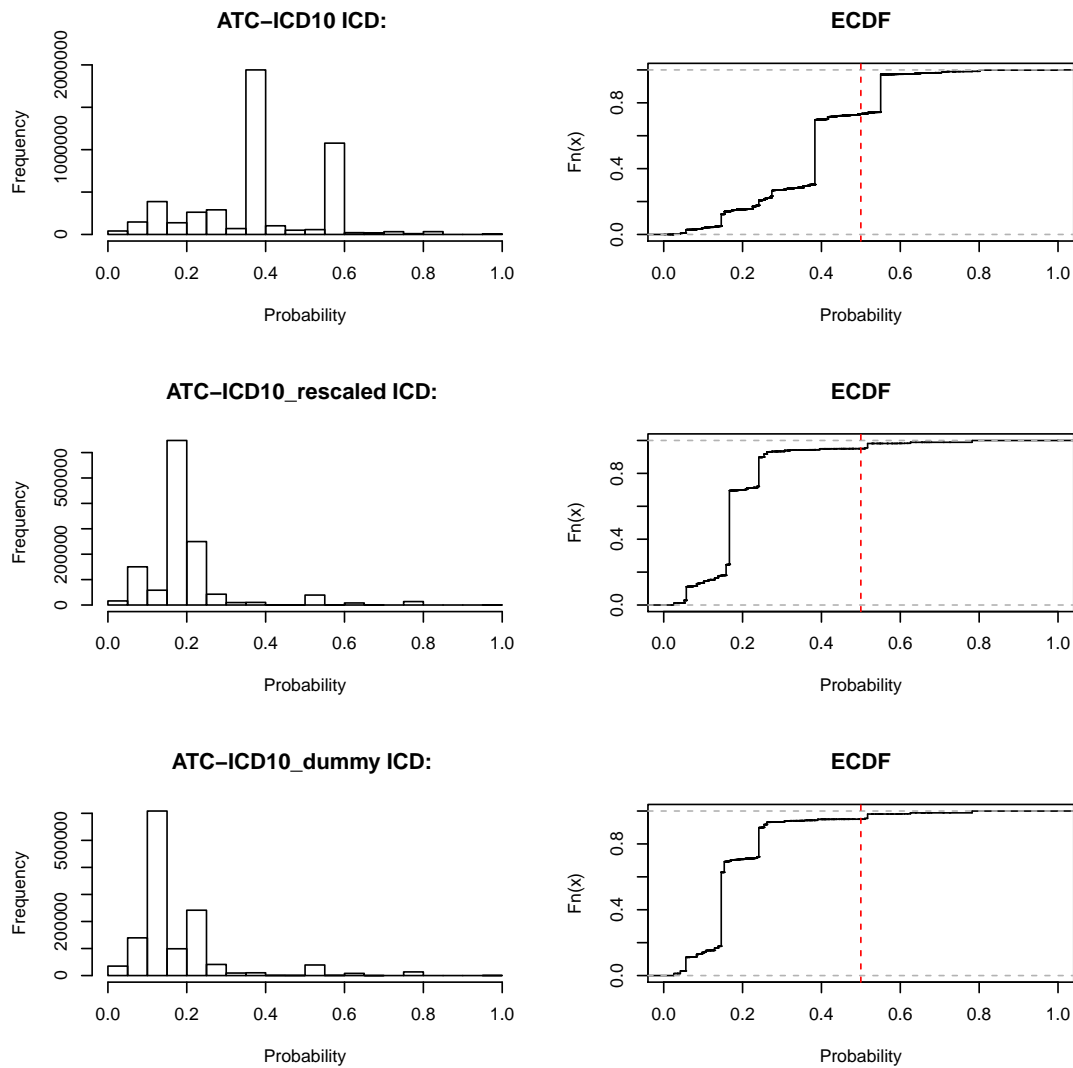


Figure 18: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD10 implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group C15-C26.

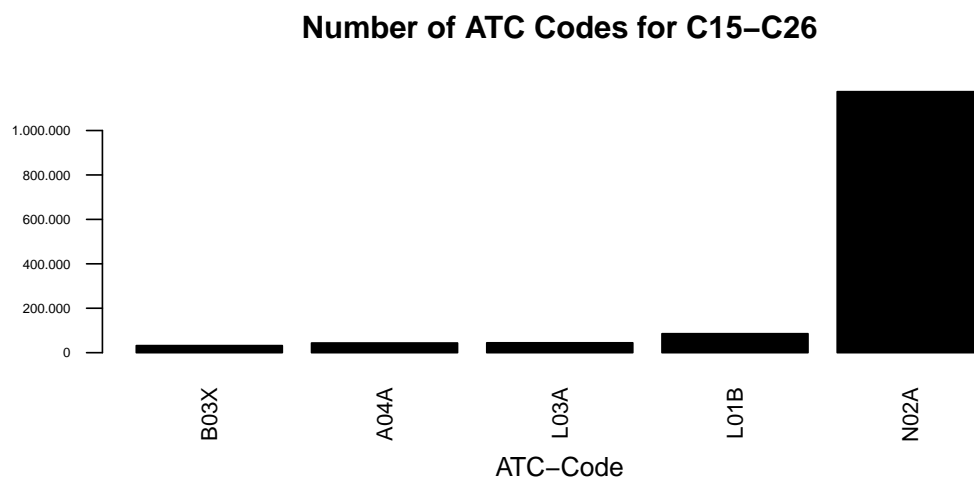
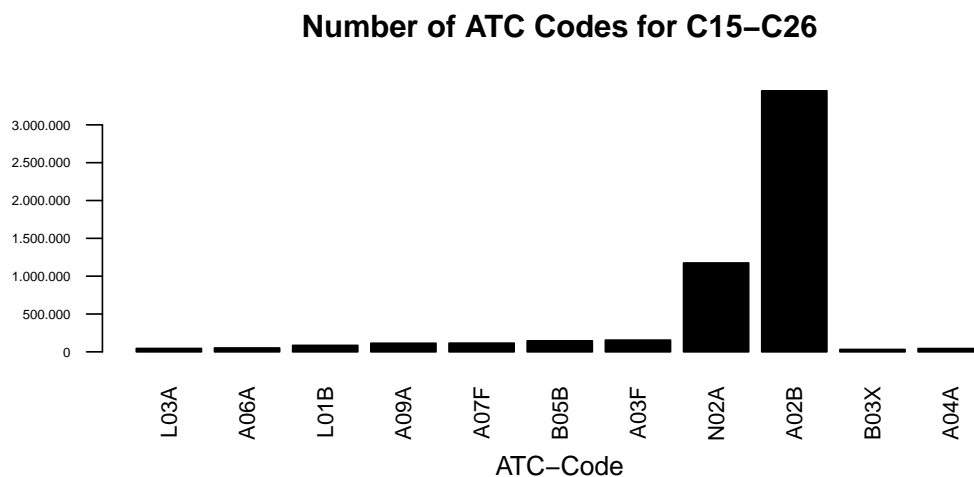


Figure 19: This figure shows the frequency of the underlying ATC codes for the given diagnose group C15-C26. The top figure shows the results for the ATC-ICD10 implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions. There are 36 ATC-Codes that related to the Diagnosis C15-C26. In order to give a clear overview of the distribution of the ATC codes behind an ICD10 group only the ATCs are shown, which represent the 95% of the cumulative frequency.

ATC	Description	Expert
A02B	MITTEL BEI PEPTISCHEM ULKUS UND GASTROE-SOPHAGEALER REFLUXKRANKHEIT	FALSE
A03F	PROKINETIKA	FALSE
A04A	ANTIEMETIKA UND MITTEL GEGEN ÜBELKEIT	TRUE
A06A	LAXANTIEN	FALSE
A07F	MIKROBIELLE ANTIDIARRHOIKA	FALSE
A09A	DIGESTIVA, INKL. ENZYME	FALSE
B03X	ANDERE ANTIANÄMIKA	TRUE
B05B	I.V.-LÖSUNGEN	FALSE
L01B	ANTIMETABOLITE	TRUE
L03A	IMMUNSTIMULANZIEN	TRUE
N02A	OPIOIDE	TRUE

Table 15: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose C15-C26. There are 36 ATC-Codes that related to the Diagnosis C15-C26. In order to give a clear overview of the distribution of the ATC codes behind an ICD10 group only the ATCs are shown, which represent the 95% of the cumulative frequency.

3.9. Diagnose M20-M25: Sonstige Gelenkkrankheiten

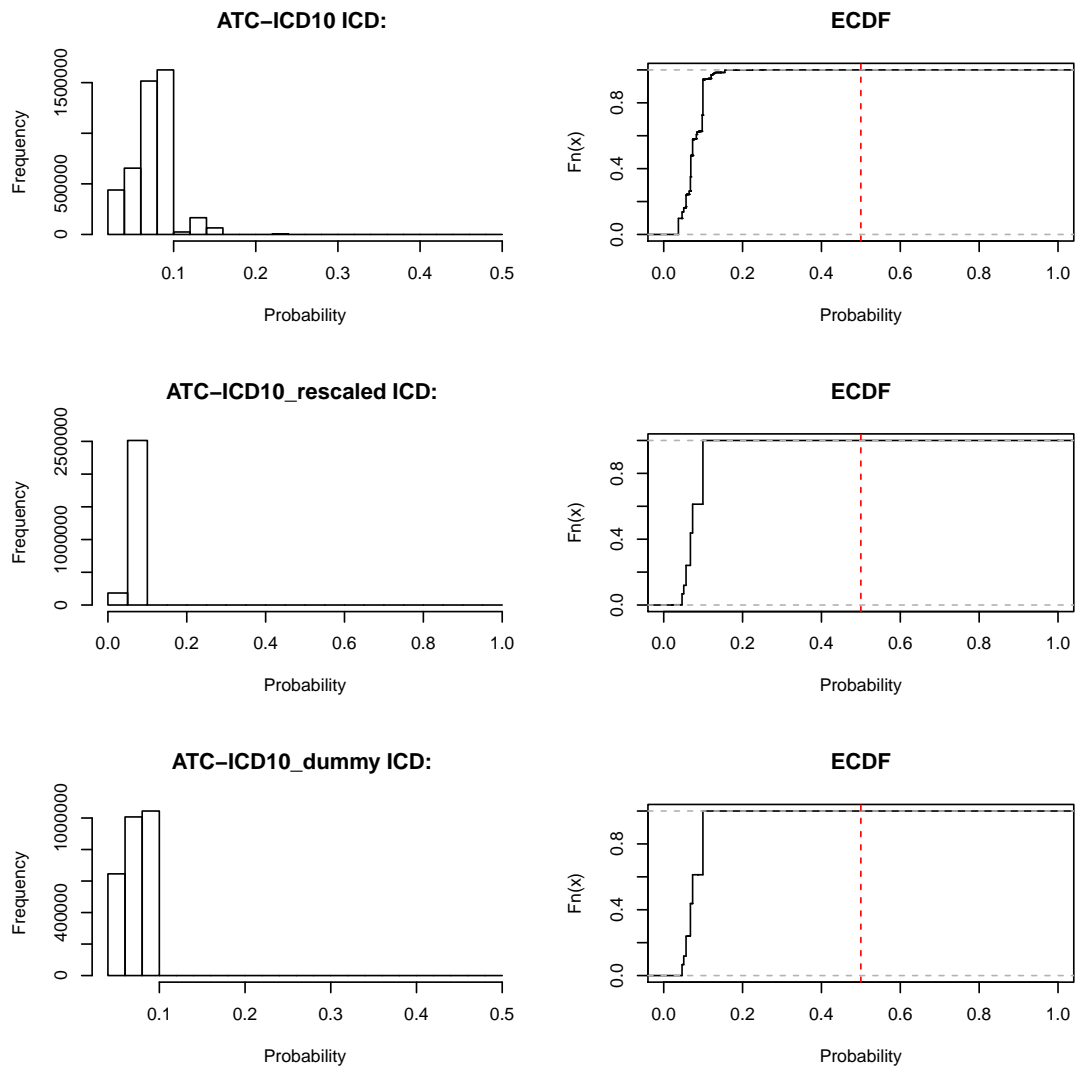


Figure 20: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD10 implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group M20-M25.

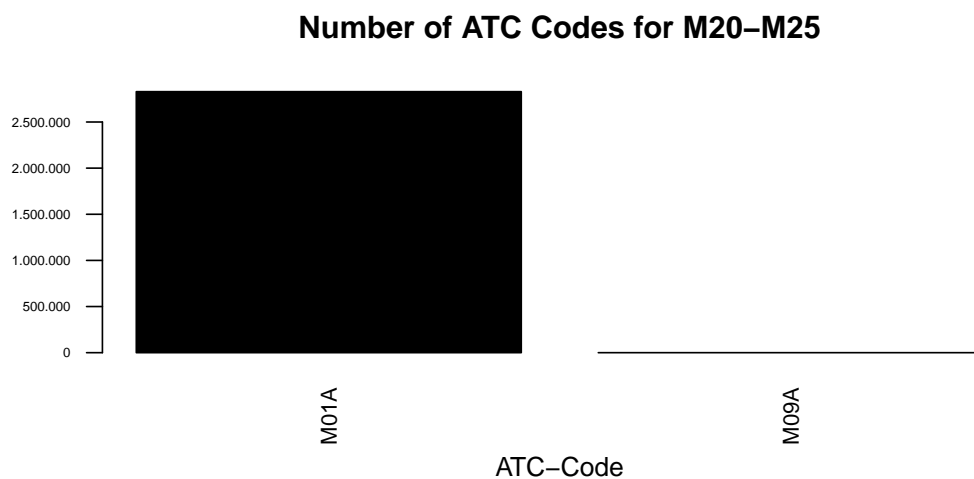
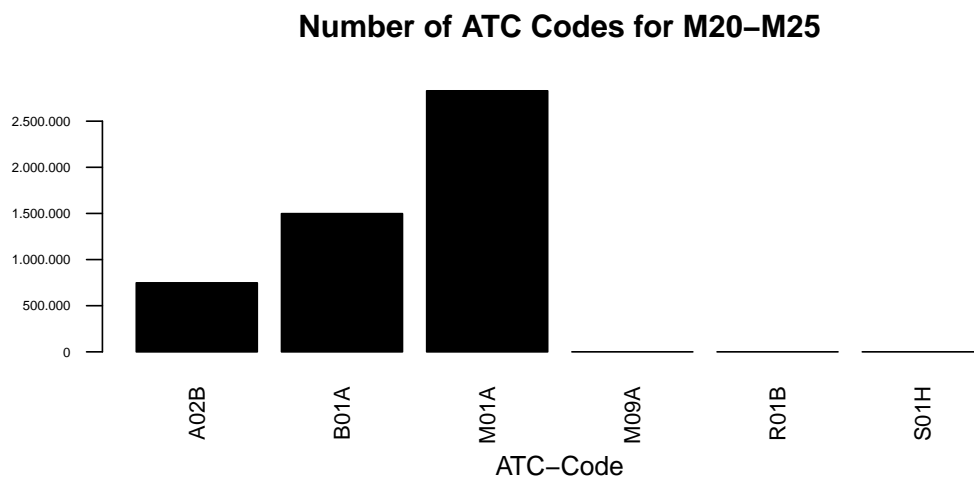


Figure 21: This figure shows the frequency of the underlying ATC codes for the given diagnose group M20-M25. The top figure shows the results for the ATC-ICD10 implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
A02B	MITTEL BEI PEPTISCHEM ULKUS UND GASTROESOPHAGEALER REFLUXKRANKHEIT	FALSE
B01A	ANTITHROMBOTISCHE MITTEL	FALSE
M01A	NICHTSTEROIDALE ANTIPHLOGISTIKA UND ANTI-RHEUMATIKA	TRUE
M09A	ANDERE MITTEL GEGEN STÖRUNGEN DES MUSKEL- UND SKELETTSYSTEMS	TRUE
R01B	NASALE DEKONGESTIVA ZUR SYSTEMISCHEN ANWENDUNG	FALSE
S01H	LOKALANÄSTHETIKA	FALSE

Table 16: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose M20-M25.

3.10. Diagnose M15-M19: Arthrose

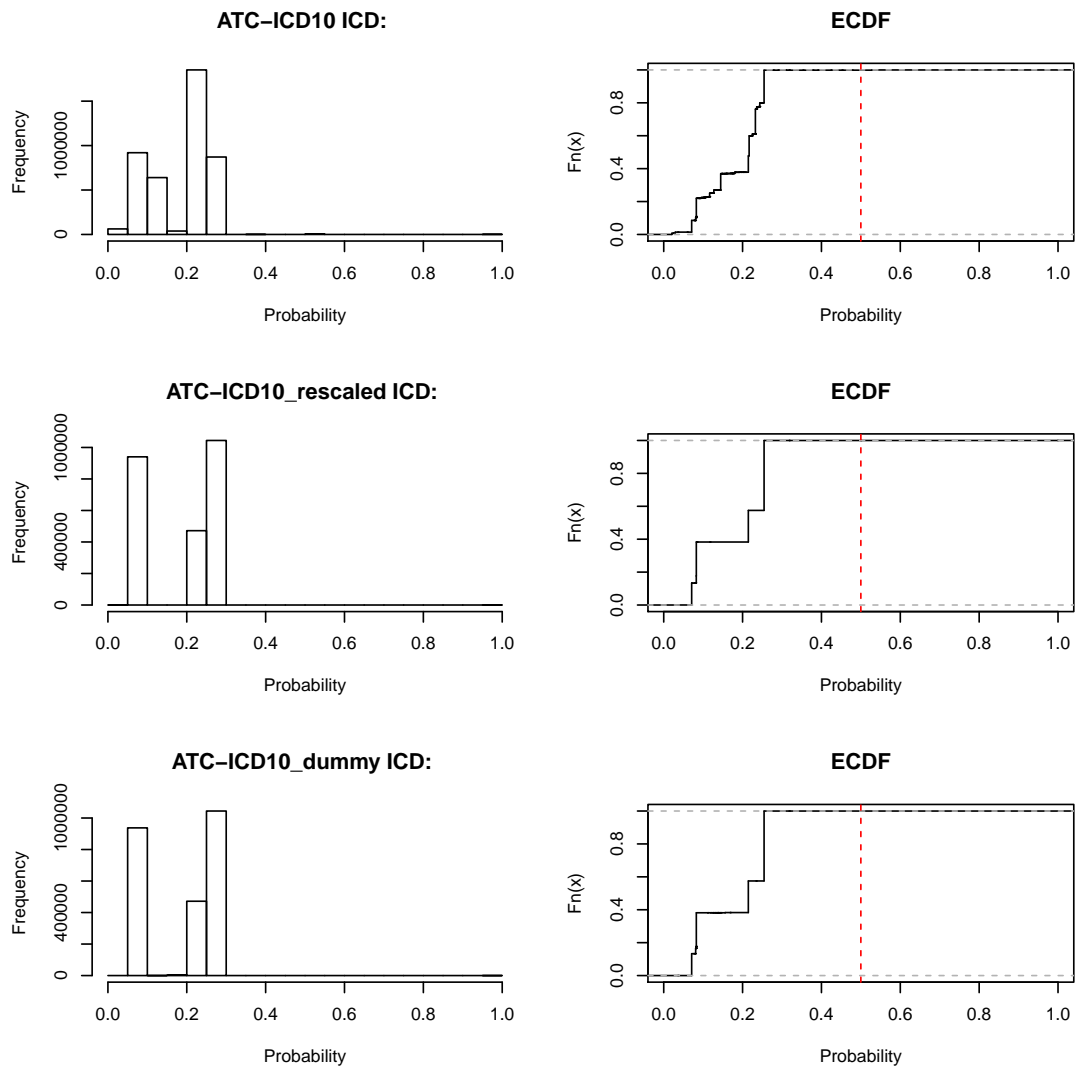


Figure 22: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD10 implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group M15-M19.

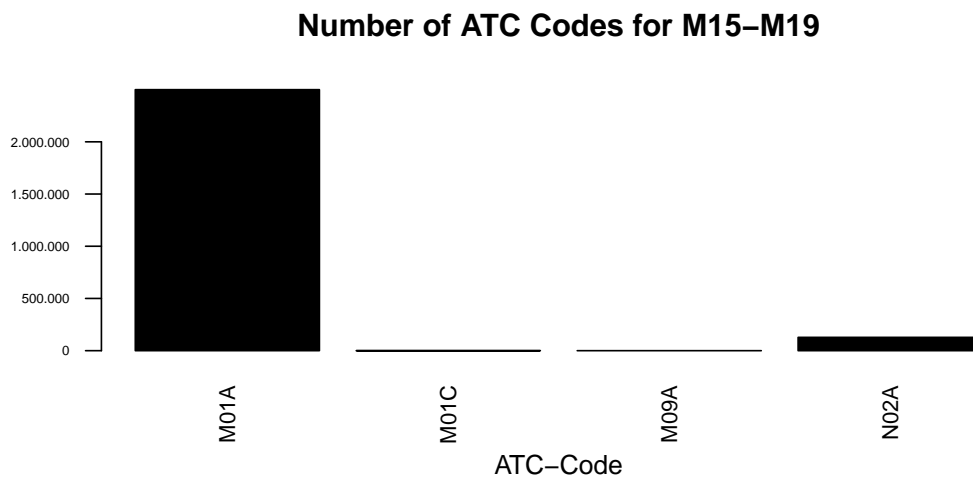
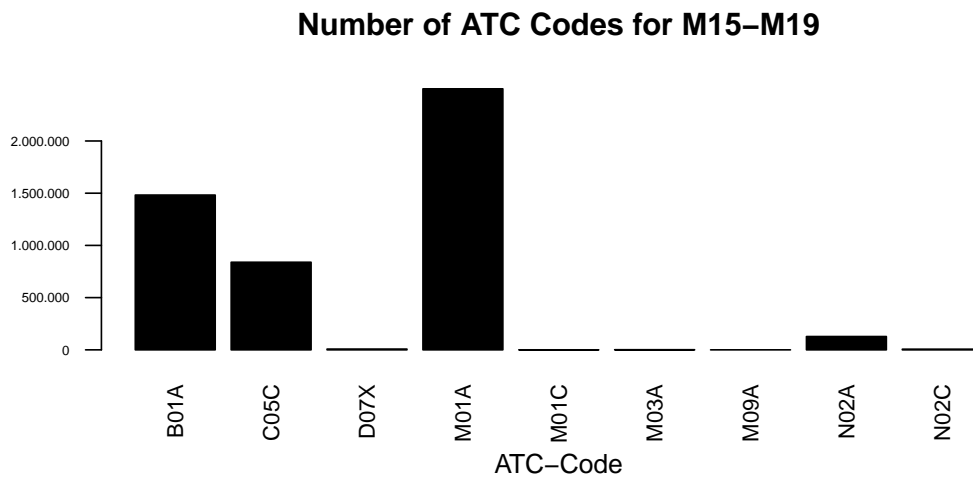


Figure 23: This figure shows the frequency of the underlying ATC codes for the given diagnose group M15-M19. The top figure shows the results for the ATC-ICD10 implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
B01A	ANTITHROMBOTISCHE MITTEL	FALSE
C05C	KAPILLARSTABILISIERENDE MITTEL	FALSE
D07X	CORTICOSTEROIDE, ANDERE KOMBINATIONEN	FALSE
M01A	NICHTSTEROIDALE ANTIPHLOGISTIKA UND AN-TIRHEUMATIKA	TRUE
M01C	SPEZIFISCHE ANTIRHEUMATIKA	TRUE
M03A	MUSKELRELAXANZIEN, PERIPHER WIRKENDE MITTEL	FALSE
M09A	ANDERE MITTEL GEGEN STÖRUNGEN DES MUSKEL-UND SKELETTSYSTEMS	TRUE
N02A	OPIOIDE	TRUE
N02C	MIGRÄNEMITTEL	FALSE

Table 17: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose M15-M19.

3.11. Diagnose S80-S89: Verletzungen des Knies und des Unterschenkels

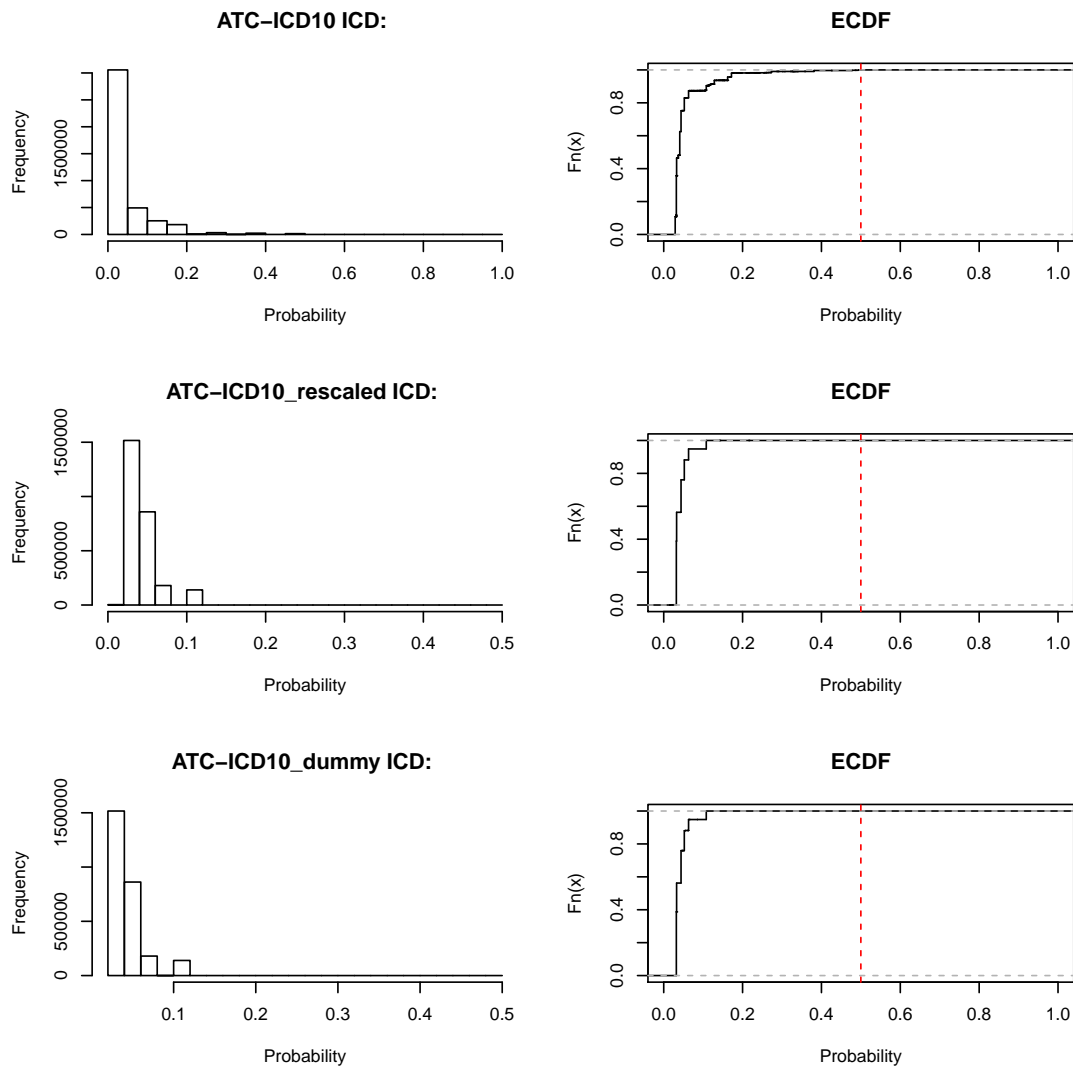


Figure 24: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD10 implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group S80-S89.

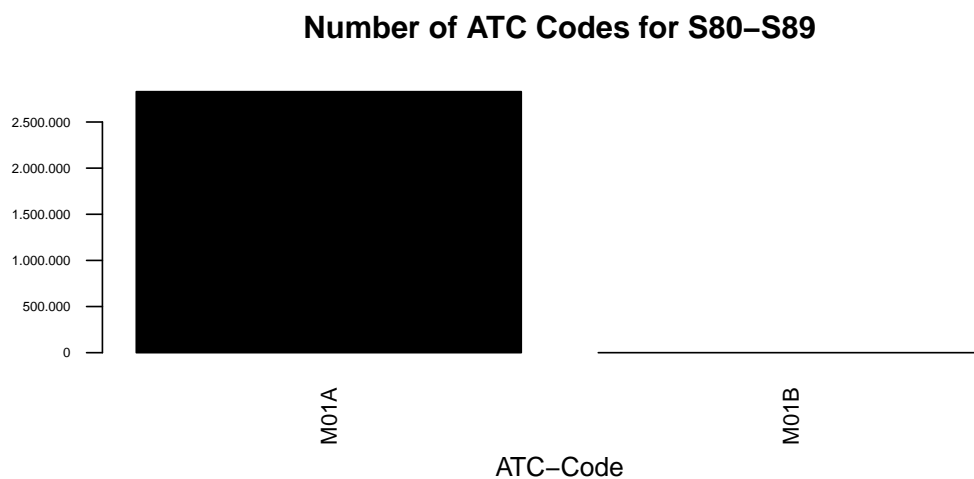
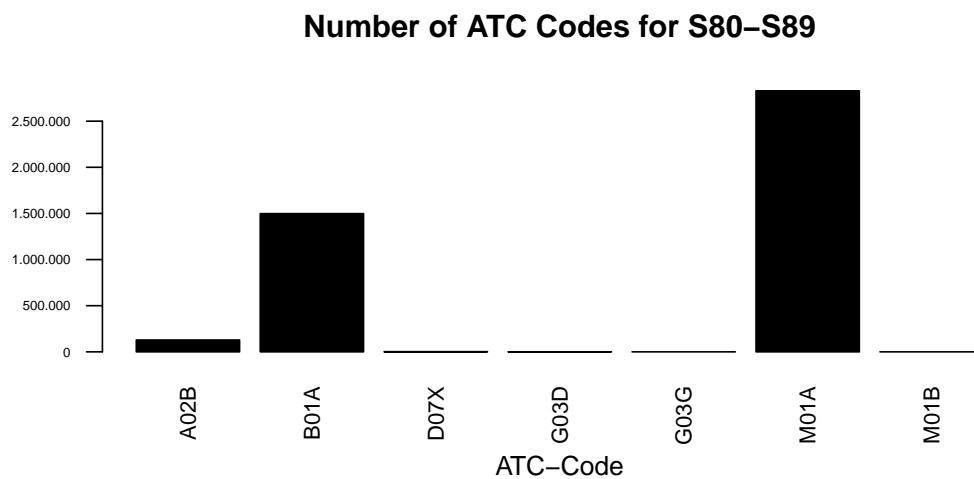


Figure 25: This figure shows the frequency of the underlying ATC codes for the given diagnose group S80-S89. The top figure shows the results for the ATC-ICD10 implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
A02B	MITTEL BEI PEPTISCHEM ULKUS UND GASTROE-SOPHAGEALER REFLUXKRANKHEIT	FALSE
B01A	ANTITHROMBOTISCHE MITTEL	FALSE
D07X	CORTICOSTEROIDE, ANDERE KOMBINATIONEN	FALSE
G03D	GESTAGENE	FALSE
G03G	GONADOTROPINE UND ANDERE OVULATION-SAUSLÖSER	FALSE
M01A	NICHTSTEROIDALE ANTIPHLOGISTIKA UND ANTIRHEUMATIKA	TRUE
M01B	ANTIPHLOGISTIKA/ANTIRHEUMATIKA IN KOMBINATION	TRUE

Table 18: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose S80-S89.

3.12. Diagnose J40-J47: Chronische Krankheiten der unteren Atemwege

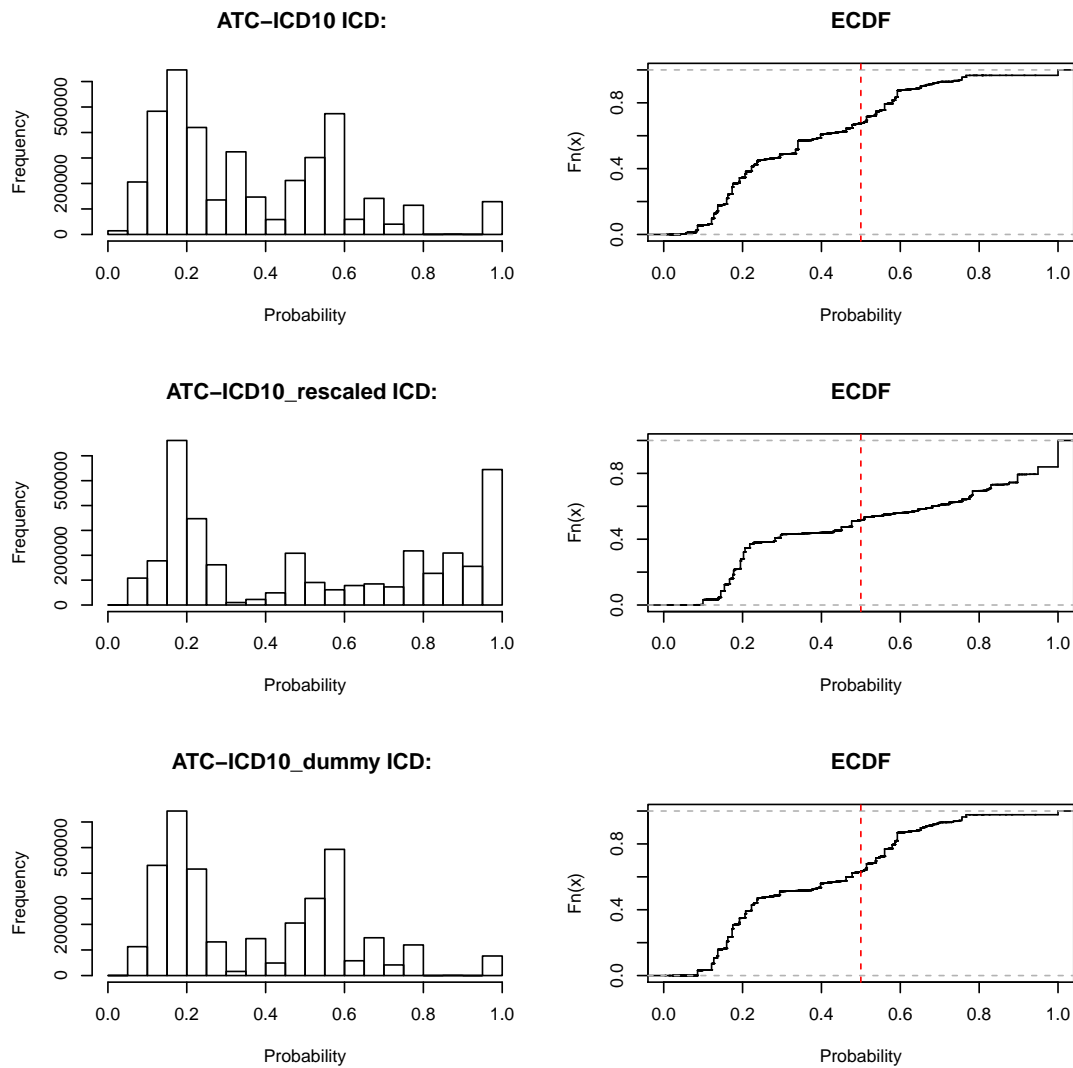
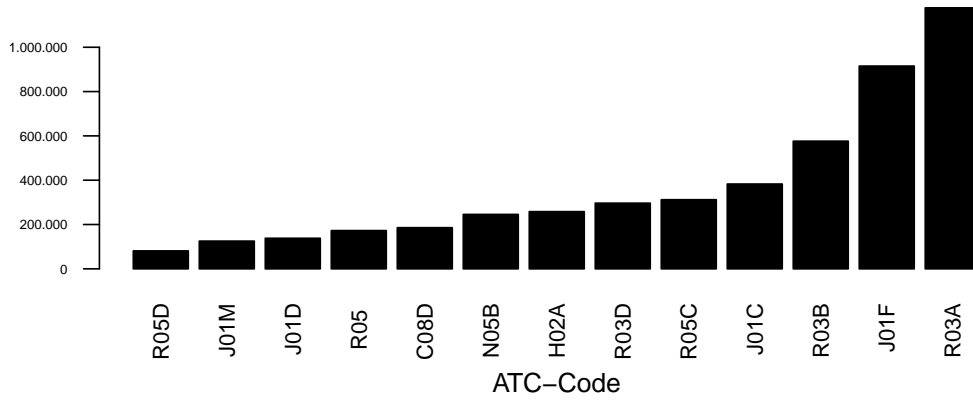


Figure 26: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD10 implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group J40-J47.

Number of ATC Codes for J40–J47



Number of ATC Codes for J40–J47

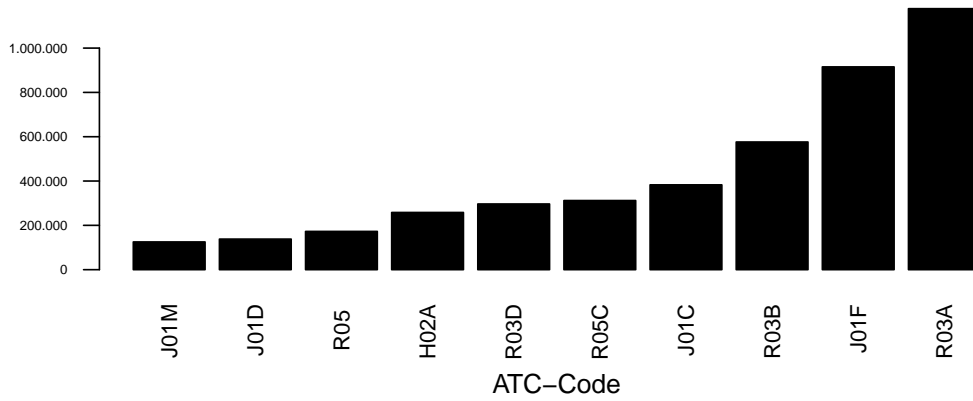


Figure 27: This figure shows the frequency of the underlying ATC codes for the given diagnose group J40-J47. The top figure shows the results for the ATC-ICD10 implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions. There are 36 ATC-Codes that related to the Diagnosis J40-J47. In order to give a clear overview of the distribution of the ATC codes behind an ICD10 group only the ATCs are shown, which represent the 95% of the cumulative frequency.

ATC	Description	Expert
C08D	SELEKTIVE CALCIUMKANALBLOCKER MIT DIREKTER HERZWIRKUNG	FALSE
H02A	CORTICOSTEROIDE ZUR SYSTEMISCHEN ANWENDUNG, REIN	TRUE
J01C	BETALACTAM-ANTIBIOTIKA, PENICILLINE	TRUE
J01D	ANDERE BETA-LACTAM-ANTIBIOTIKA	TRUE
J01F	MAKROLIDE, LINCOSAMIDE UND STREPTOGRAMINE	TRUE
J01M	CHINOLONE	TRUE
N05B	ANXIOLYTIKA	FALSE
R03A	Inhalative Sympathomimetika	TRUE
R03B	ANDERE INHALATIVE MITTEL BEI OBSTRUKTIVEN ATEMWEGSERKRANKUNGEN	TRUE
R03D	ANDERE MITTEL BEI OBSTRUKTIVEN ATEMWEGSERKRANKUNGEN Z.SYSTEM.ANWENDUNG	TRUE
R05	HUSTEN- UND ERKÄLTUNGSPRÄPARATE	TRUE
R05C	EXPEKTORANZIEN, EXKL. KOMBINATIONEN MIT ANTI-TUSSIVA	TRUE
R05D	ANTITUSSIVA, EXKL. KOMBINATIONEN MIT EXPEKTORANZIEN	FALSE

Table 19: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose J40-J47. There are 36 ATC-Codes that related to the Diagnosis J40-J47. In order to give a clear overview of the distribution of the ATC codes behind an ICD10 group only the ATCs are shown, which represent the 95% of the cumulative frequency.

3.13. Diagnose F30-F39: Affektive Störungen

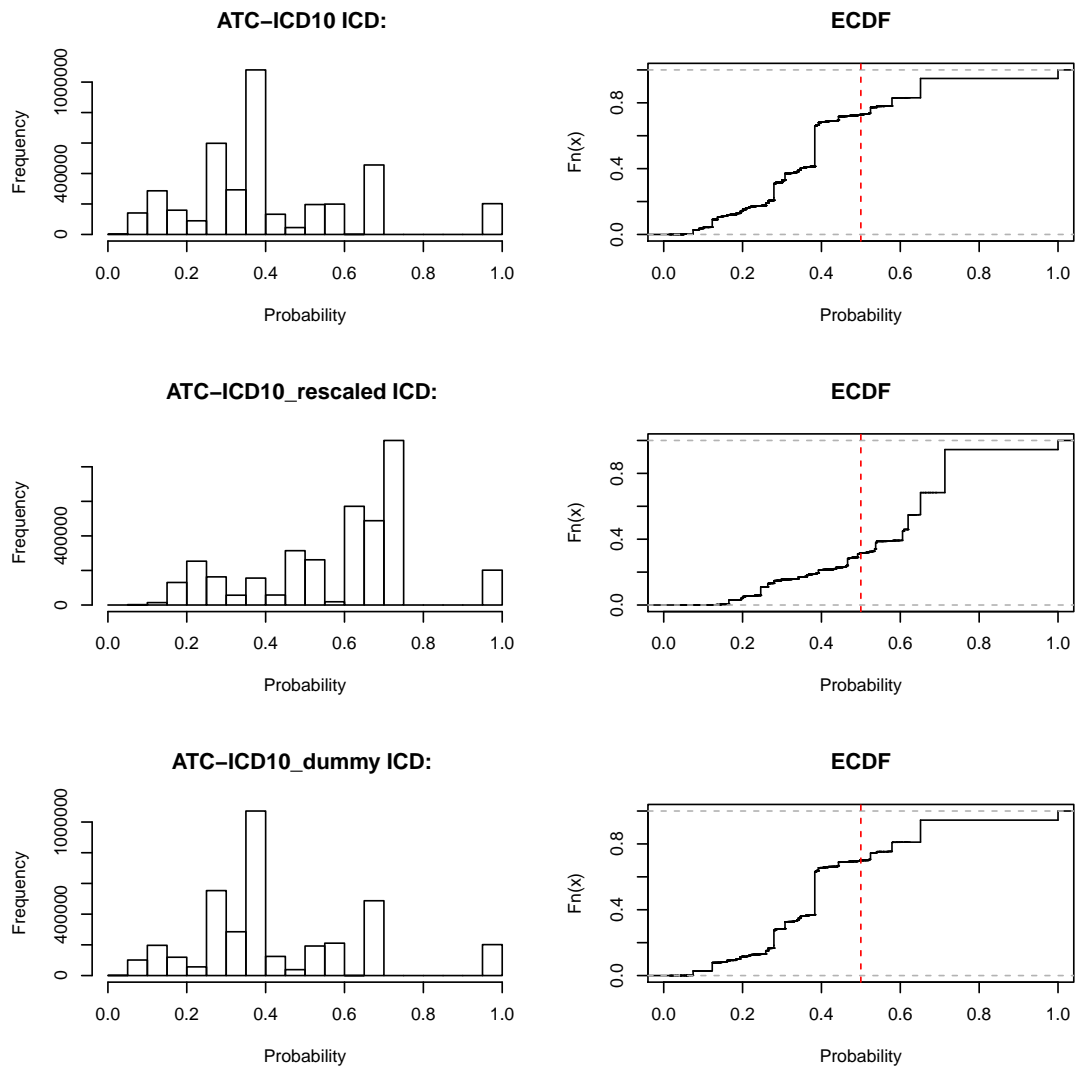
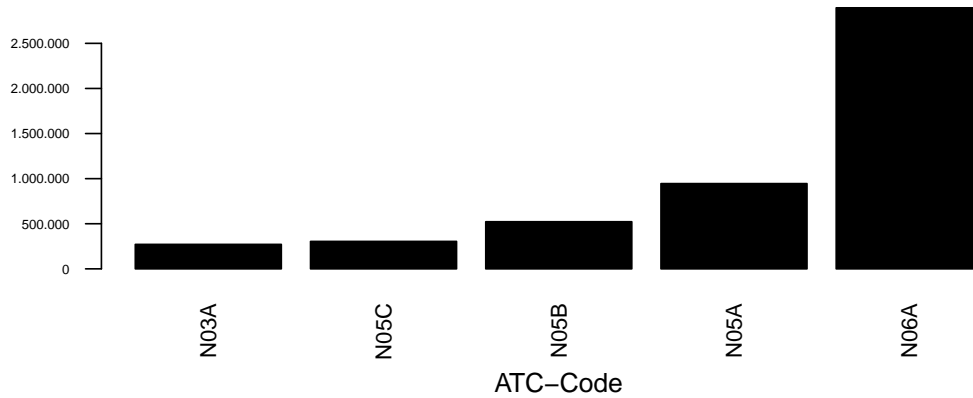


Figure 28: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD10 implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group F30-F39.

Number of ATC Codes for F30–F39



Number of ATC Codes for F30–F39

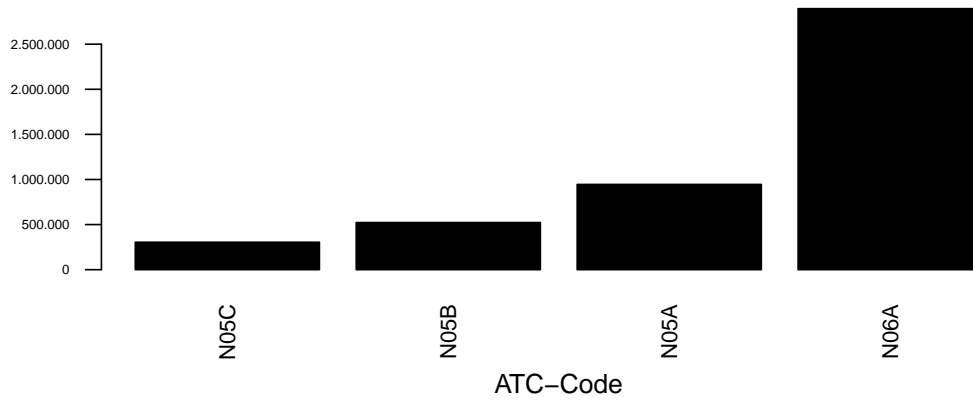


Figure 29: This figure shows the frequency of the underlying ATC codes for the given diagnose group F30-F39. The top figure shows the results for the ATC-ICD10 implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions. There are 20 ATC-Codes that related to the Diagnosis F30-F39. In order to give a clear overview of the distribution of the ATC codes behind an ICD10 group only the ATCs are shown, which represent the 95% of the cumulative frequency.

ATC	Description	Expert
N03A	ANTIEPILEPTIKA	FALSE
N05A	ANTIPSYCHOTIKA	TRUE
N05B	ANXIOLYTIKA	TRUE
N05C	HYPNOTIKA UND SEDATIVA	TRUE
N06A	ANTIDEPRESSIVA	TRUE

Table 20: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose F30-F39. There are 20 ATC-Codes that related to the Diagnosis F30-F39. In order to give a clear overview of the distribution of the ATC codes behind an ICD10 group only the ATCs are shown, which represent the 95% of the cumulative frequency.

3.14. Diagnose J00-J06: Akute Infektionen der oberen Atemwege

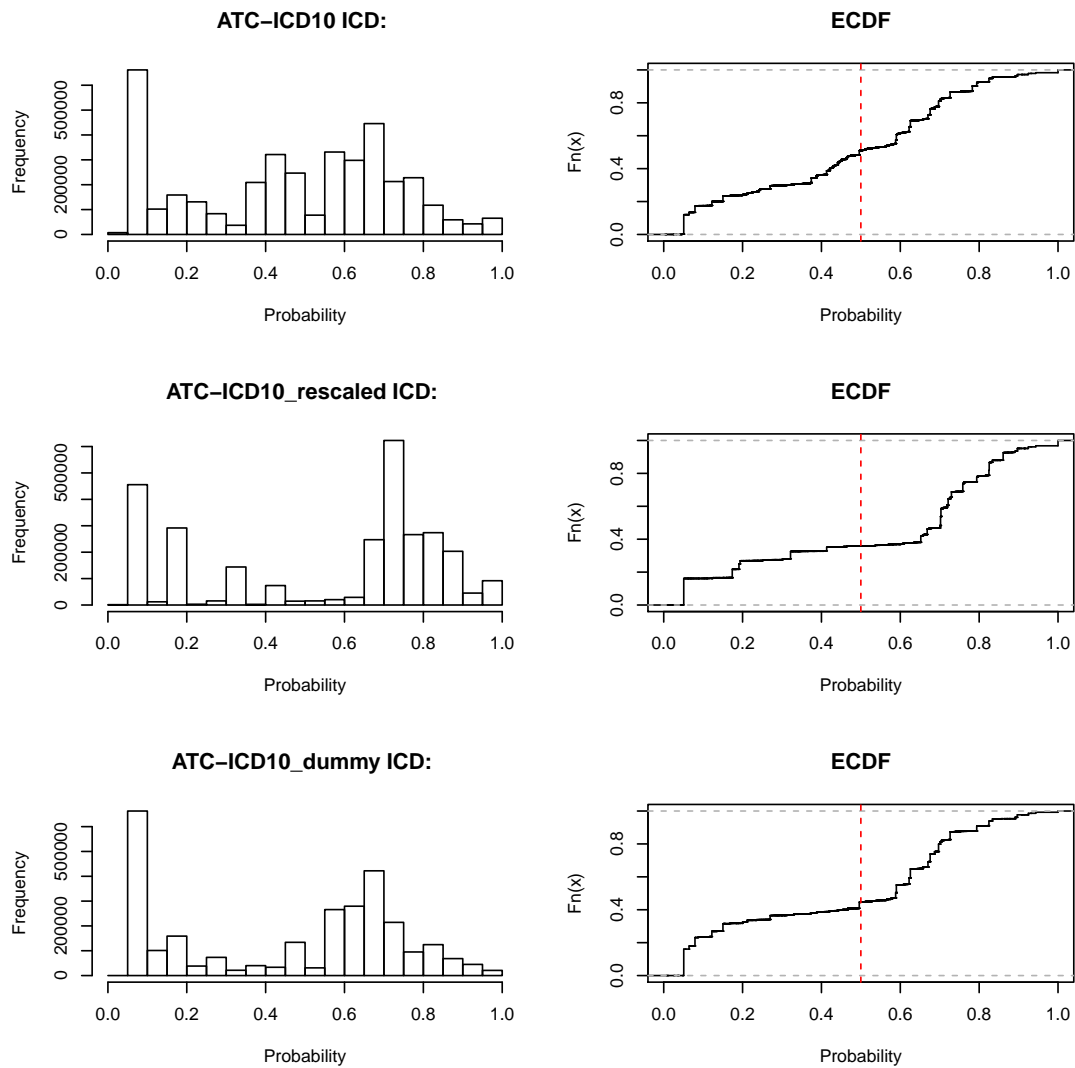
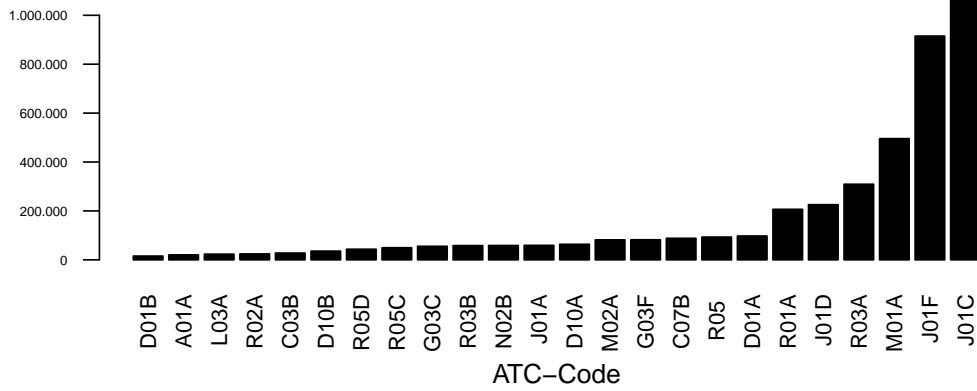


Figure 30: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD10 implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group J00-J06.

Number of ATC Codes for J00–J06



Number of ATC Codes for J00–J06

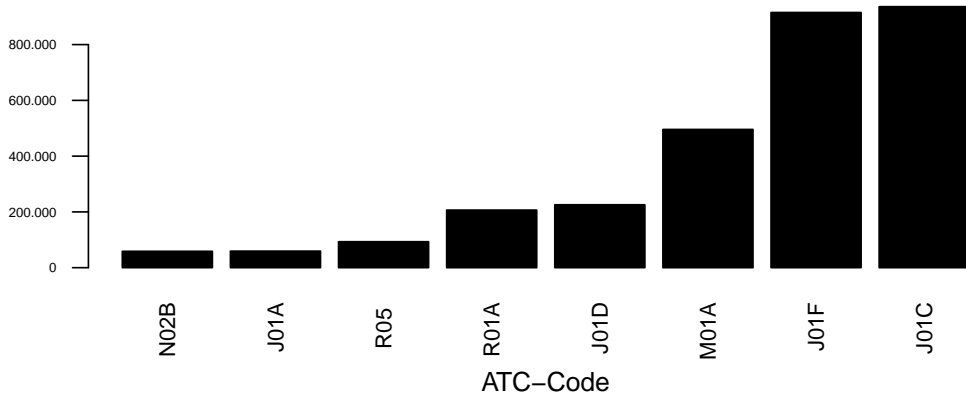


Figure 31: This figure shows the frequency of the underlying ATC codes for the given diagnose group J00-J06. The top figure shows the results for the ATC-ICD10 implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions. There are 101 ATC-Codes that related to the Diagnosis J00-J06. In order to give a clear overview of the distribution of the ATC codes behind an ICD10 group only the ATCs are shown, which represent the 95% of the cumulative frequency.

ATC	Description	Expert
A01A	STOMATOLOGIKA	FALSE
C03B	LOW-CEILING-DIURETIKA, EXKL. THIAZIDE	FALSE
C07B	BETA-ADRENOREZEPTOR-ANTAGONISTEN UND THI-AZIDE	FALSE
D01A	ANTIMYKOTIKA ZUR TOPISCHEN ANWENDUNG	FALSE
D01B	ANTIMYKOTIKA ZUR SYSTEMISCHEN ANWENDUNG	FALSE
D10A	AKNEMITTEL ZUR TOPISCHEN ANWENDUNG	FALSE
D10B	AKNEMITTEL ZUR SYSTEMISCHEN ANWENDUNG	FALSE
G03C	ESTROGENE	FALSE
G03F	GESTAGENE UND ESTROGENE IN KOMBINATION	FALSE
J01A	TETRACYCLINE	TRUE
J01C	BETALACTAM-ANTIBIOTIKA, PENICILLINE	TRUE
J01D	ANDERE BETA-LACTAM-ANTIBIOTIKA	TRUE
J01F	MAKROLIDE, LINCOSAMIDE UND STREPTOGRAMINE	TRUE
L03A	IMMUNSTIMULANZIEN	FALSE
M01A	NICHTSTEROIDALE ANTIPHLOGISTIKA UND AN-TIRHEUMATIKA	TRUE
M02A	TOPISCHE MITTEL GEGEN GELENK- UND MUSKELSCHMERZEN	FALSE
N02B	ANDERE ANALGETIKA UND ANTIPYRETIKA	TRUE
R01A	DEKONGESTIVA UND ANDERE RHINOLOGIKA ZUR TOPISCHEN ANWENDUNG	TRUE
R02A	HALS- UND RACHENTHERAPEUTIKA	FALSE
R03A	Inhalative Sympathomimetika	FALSE
R03B	ANDERE INHALATIVE MITTEL BEI OBSTRUKTIVEN ATEMWEGSERKRANKUNGEN	FALSE
R05	HUSTEN- UND ERKÄLTUNGSPRÄPARATE	TRUE
R05C	EXPEKTORANZIEN, EXKL. KOMBINATIONEN MIT ANTI-TUSSIVA	FALSE
R05D	ANTITUSSIVA, EXKL. KOMBINATIONEN MIT EXPEKTORANZIEN	FALSE

Table 21: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose J00-J06. There are 101 ATC-Codes that related to the Diagnosis J00-J06. In order to give a clear overview of the distribution of the ATC codes behind an ICD10 group only the ATCs are shown, which represent the 95% of the cumulative frequency.

3.15. Diagnose F10-F19: Psychische und Verhaltensstörungen durch psychotrope Substanzen

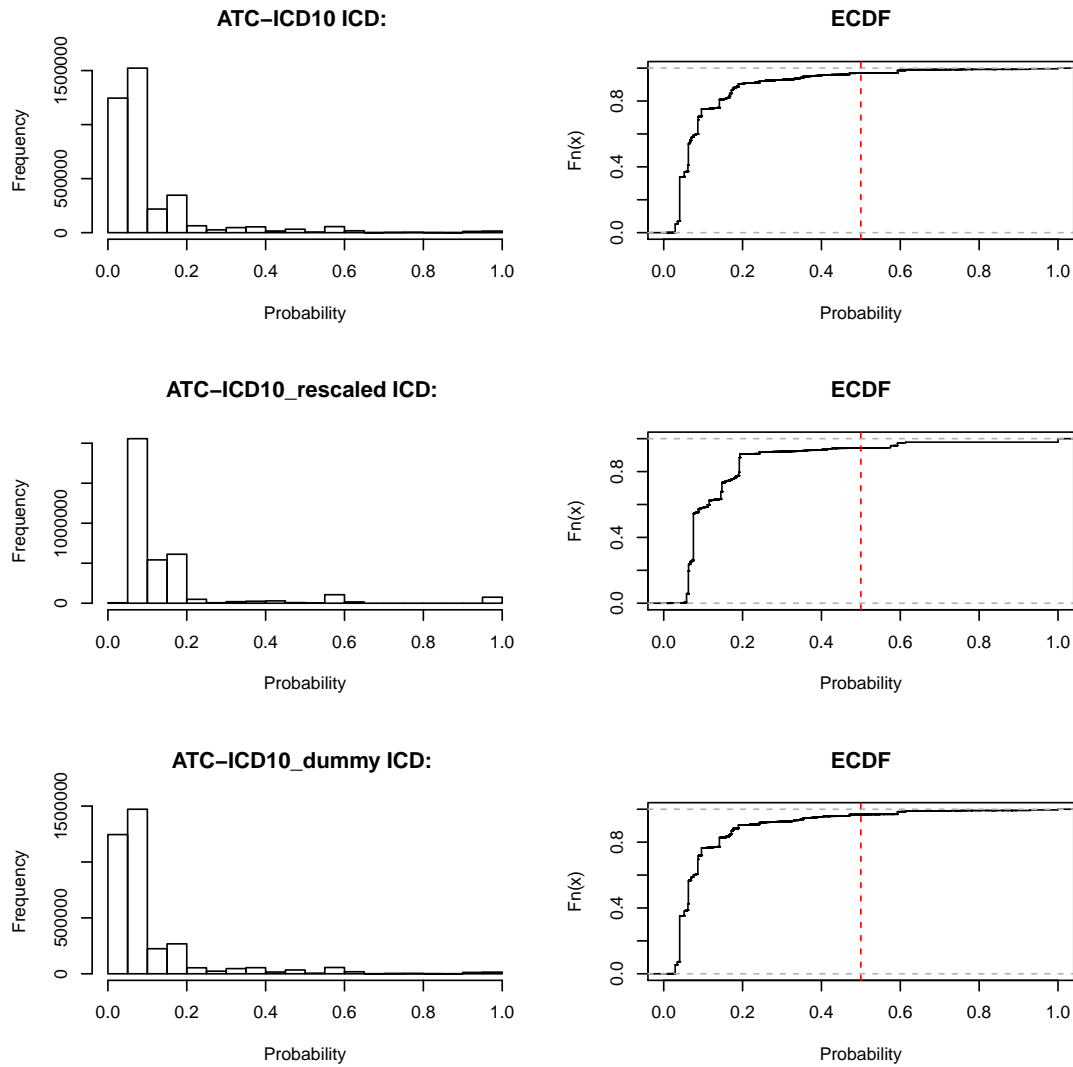


Figure 32: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD10 implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group F10-F19.

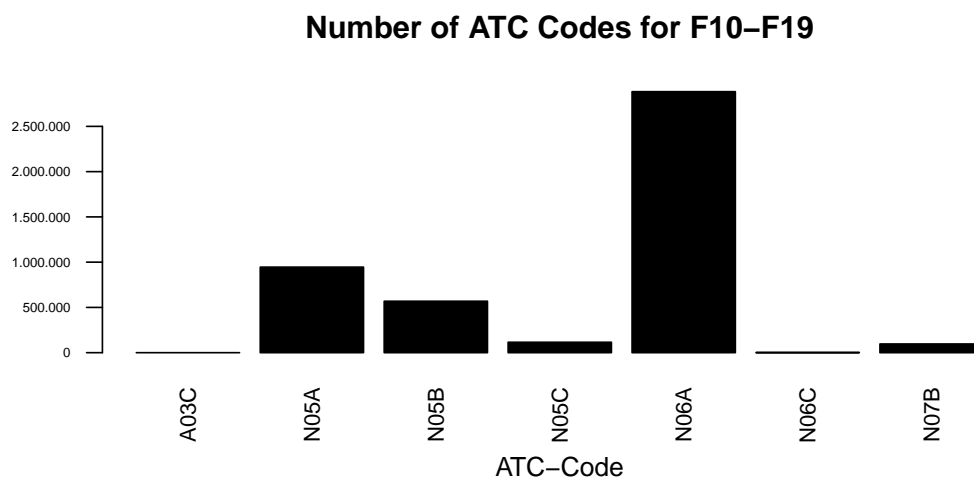
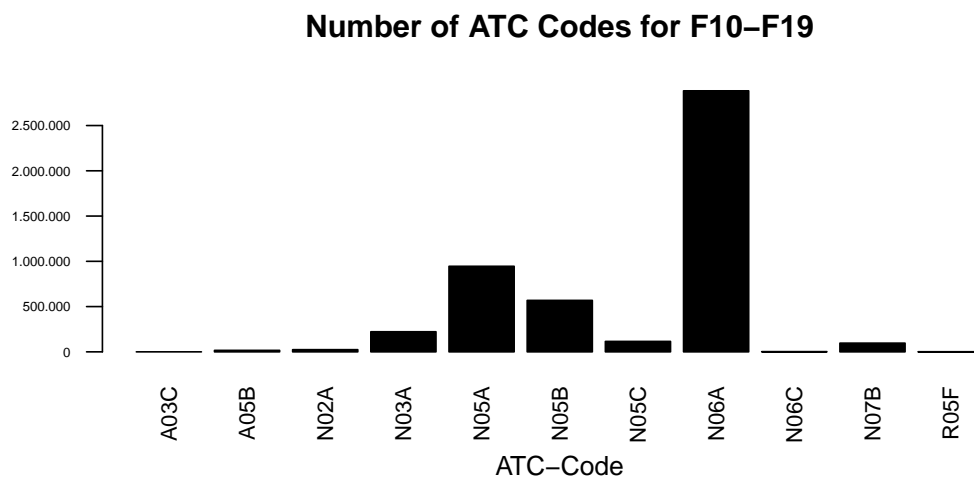


Figure 33: This figure shows the frequency of the underlying ATC codes for the given diagnose group F10-F19. The top figure shows the results for the ATC-ICD10 implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
A03C	SPASMOLYTIKA IN KOMBINATION MIT PSYCHOLEPTIKA	TRUE
A05B	LEBERTHERAPIE, LIPOTROPE SUBSTANZEN	FALSE
N02A	OPIOIDE	FALSE
N03A	ANTIEPILEPTIKA	FALSE
N05A	ANTIPSYCHOTIKA	TRUE
N05B	ANXIOLYTIKA	TRUE
N05C	HYPNOTIKA UND SEDATIVA	TRUE
N06A	ANTIDEPRESSIVA	TRUE
N06C	PSYCHOLEPTIKA UND PSYCHOANALEPTIKA IN KOMBINATION	TRUE
N07B	MITTEL ZUR BEHANDLUNG VON SUCHTERKRANKUNGEN	TRUE
R05F	ANTITUSSIVA UND EXPEKTORANZIEN, KOMBINATIONEN	FALSE

Table 22: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose F10-F19.

3.16. Diagnose J09-J18: Grippe und Pneumonie

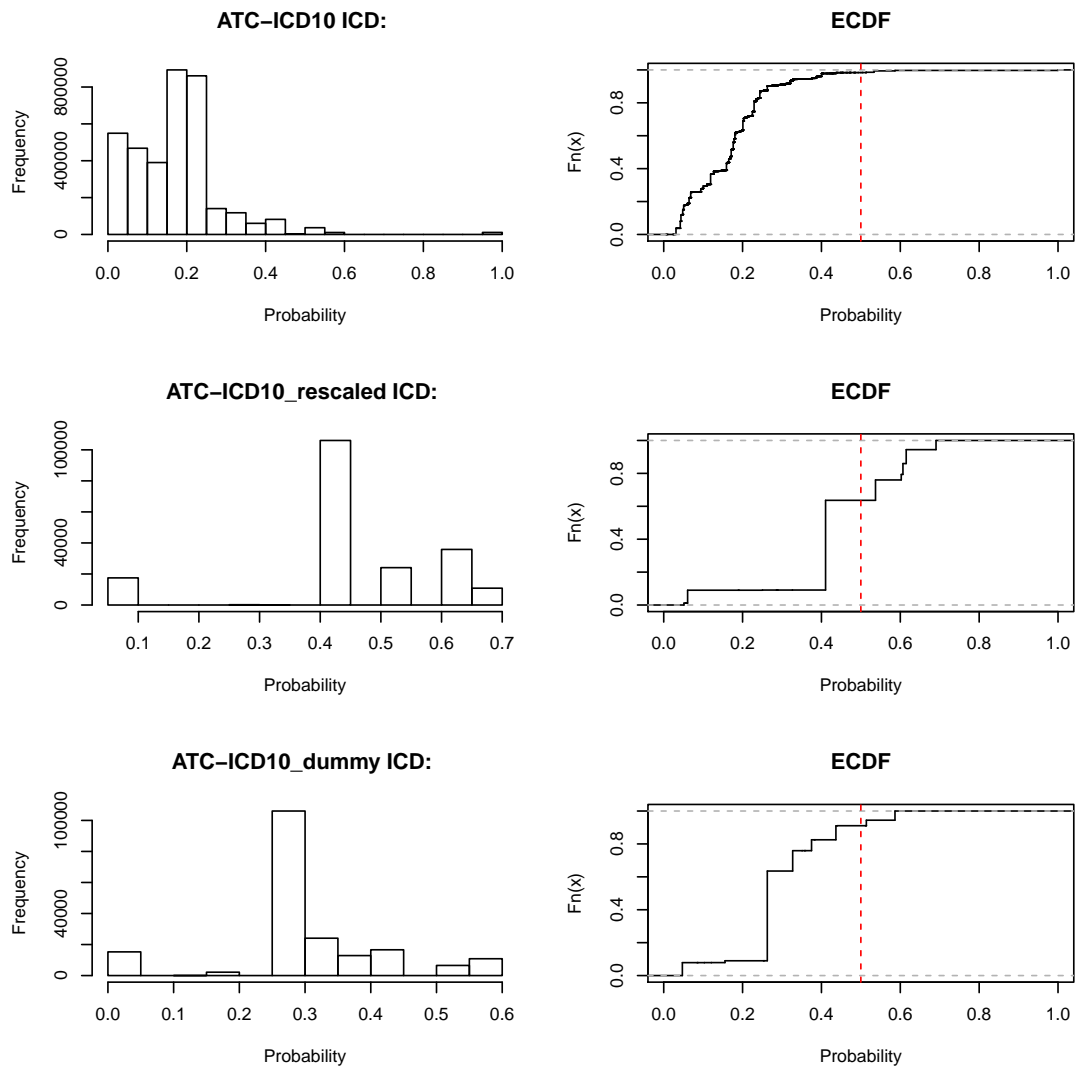
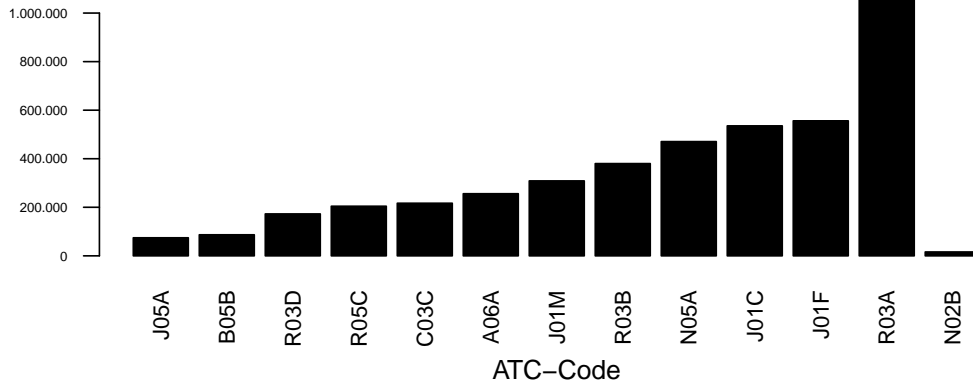


Figure 34: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD10 implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group J09-J18.

Number of ATC Codes for J09–J18



Number of ATC Codes for J09–J18

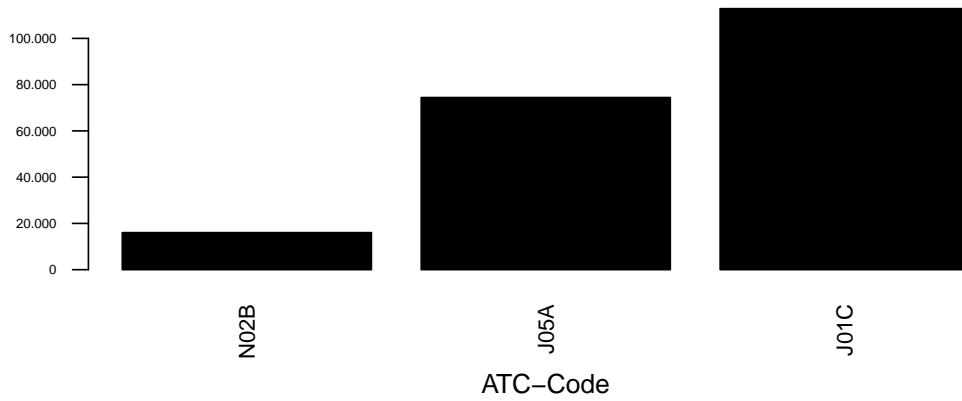


Figure 35: This figure shows the frequency of the underlying ATC codes for the given diagnose group J09-J18. The top figure shows the results for the ATC-ICD10 implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions. There are 26 ATC-Codes that related to the Diagnosis J09-J18. In order to give a clear overview of the distribution of the ATC codes behind an ICD10 group only the ATCs are shown, which represent the 95% of the cumulative frequency.

ATC	Description	Expert
A06A	LAXANTIEN	FALSE
B05B	I.V.-LÖSUNGEN	FALSE
C03C	HIGH-CEILING-DIURETIKA	FALSE
J01C	BETALACTAM-ANTIBIOTIKA, PENICILLINE	TRUE
J01F	MAKROLIDE, LINCOSAMIDE UND STREPTOGRAMINE	FALSE
J01M	CHINOLONE	FALSE
J05A	DIREKT WIRKENDE ANTIVIRALE MITTEL	TRUE
N02B	ANDERE ANALGETIKA UND ANTIPYRETIKA	TRUE
N05A	ANTIPSYCHOTIKA	FALSE
R03A	Inhalative Sympathomimetika	FALSE
R03B	ANDERE INHALATIVE MITTEL BEI OBSTRUKTIVEN ATEMWEGSERKRANKUNGEN	FALSE
R03D	ANDERE MITTEL BEI OBSTRUKTIVEN ATEMWEGSERKRANKUNGEN Z.SYSTEM.ANWENDUNG	FALSE
R05C	EXPEKTORANZIEN, EXKL. KOMBINATIONEN MIT ANTI- TUSSIVA	FALSE

Table 23: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose J09-J18. There are 26 ATC-Codes that related to the Diagnosis J09-J18. In order to give a clear overview of the distribution of the ATC codes behind an ICD10 group only the ATCs are shown, which represent the 95% of the cumulative frequency.

3.17. Diagnose F00-F09: Organische, einschließlich symptomatischer psychischer Störungen

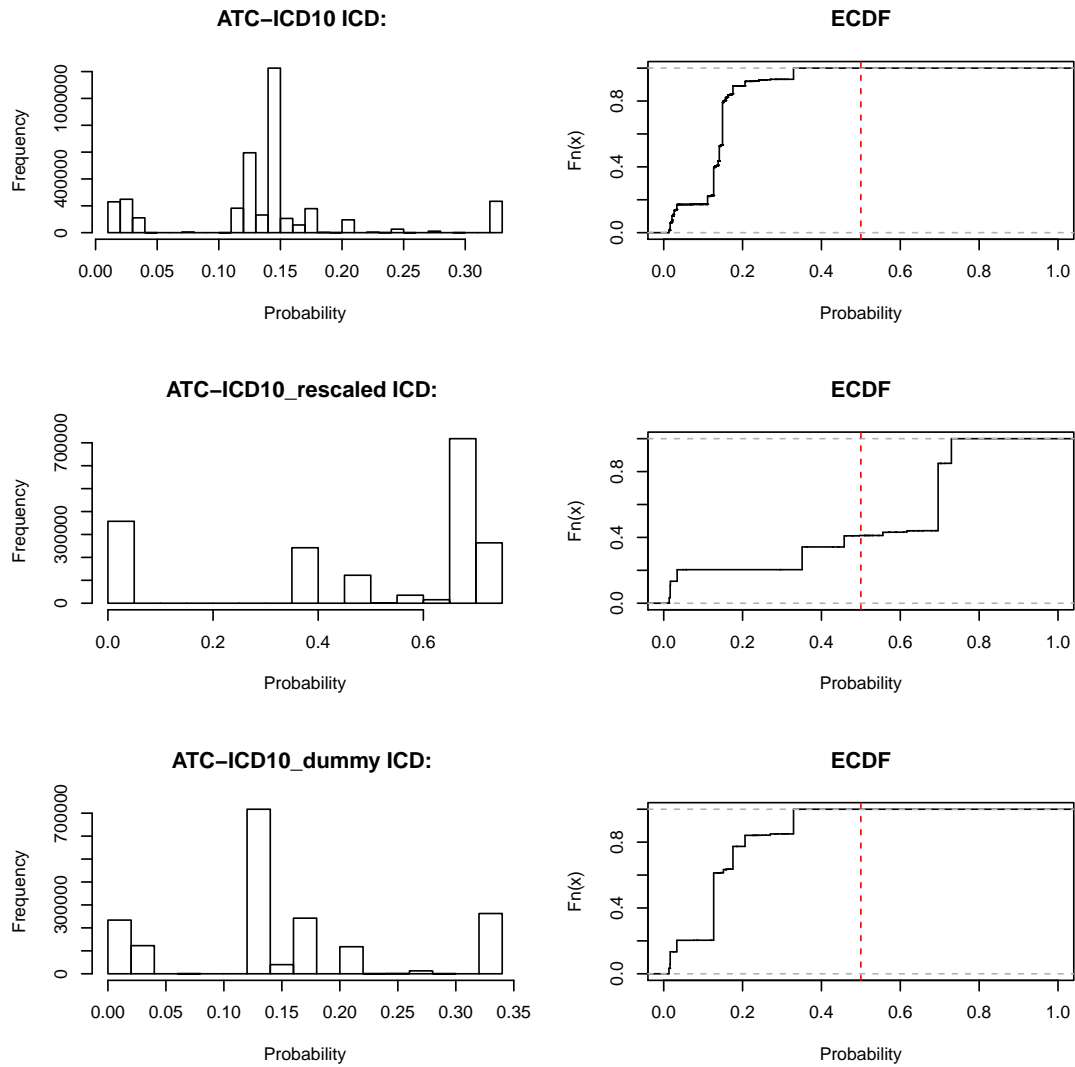


Figure 36: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD10 implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group F00-F09.

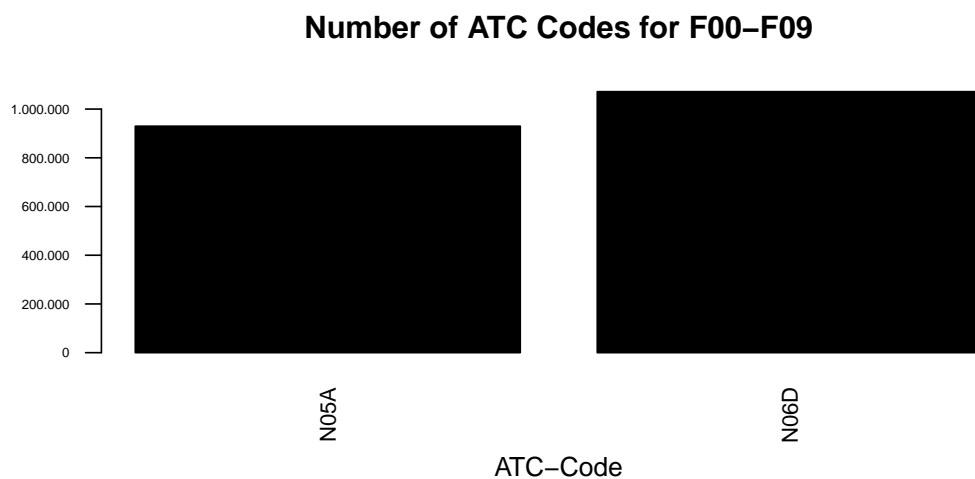
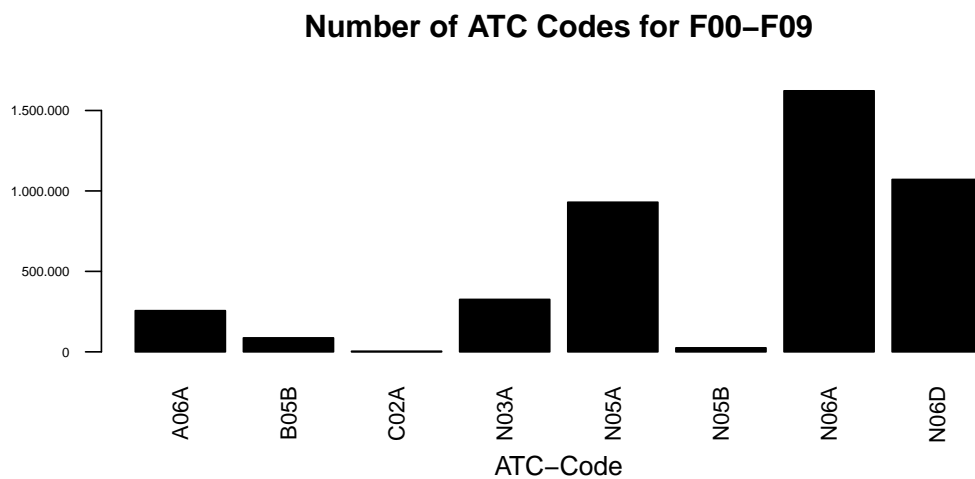


Figure 37: This figure shows the frequency of the underlying ATC codes for the given diagnose group F00-F09. The top figure shows the results for the ATC-ICD10 implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
A06A	LAXANTIEN	FALSE
B05B	I.V.-LÖSUNGEN	FALSE
C02A	ANTIADRENERGE MITTEL, ZENTRAL WIRKEND	FALSE
N03A	ANTIEPILEPTIKA	FALSE
N05A	ANTIPSYCHOTIKA	TRUE
N05B	ANXIOLYTIKA	FALSE
N06A	ANTIDEPRESSIVA	FALSE
N06D	ANTIDEMENTIVA	TRUE

Table 24: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose F00-F09.

3.18. Diagnose F40-F48: Neurotische, Belastungs- und somatoforme Störungen

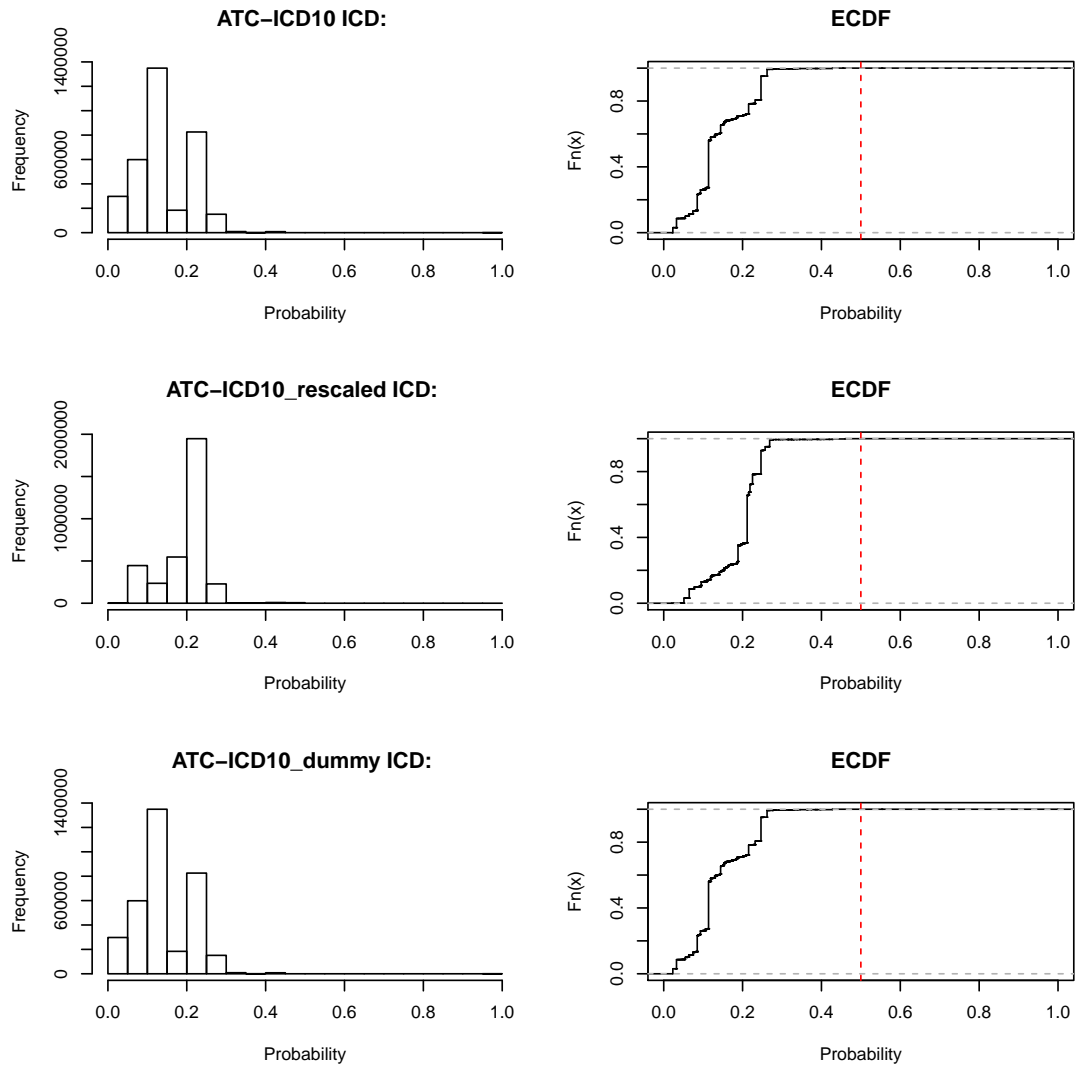


Figure 38: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD10 implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group F40-F48.

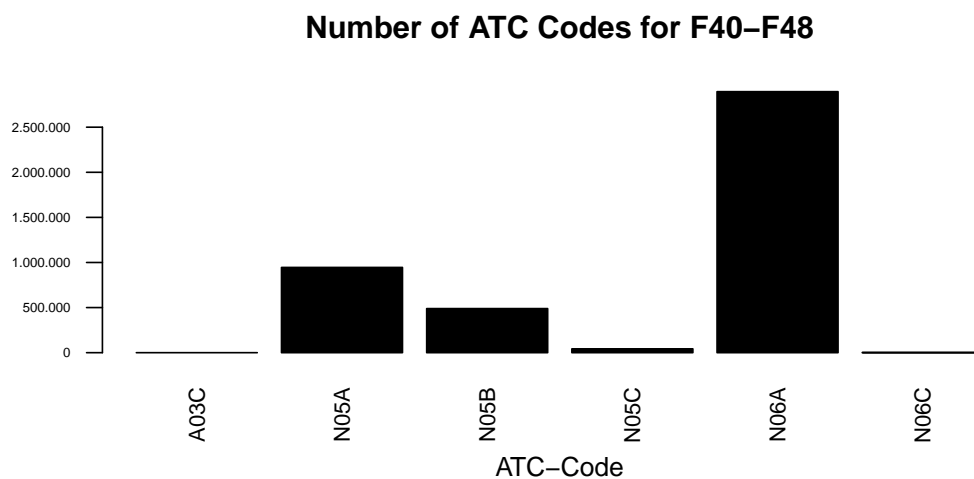
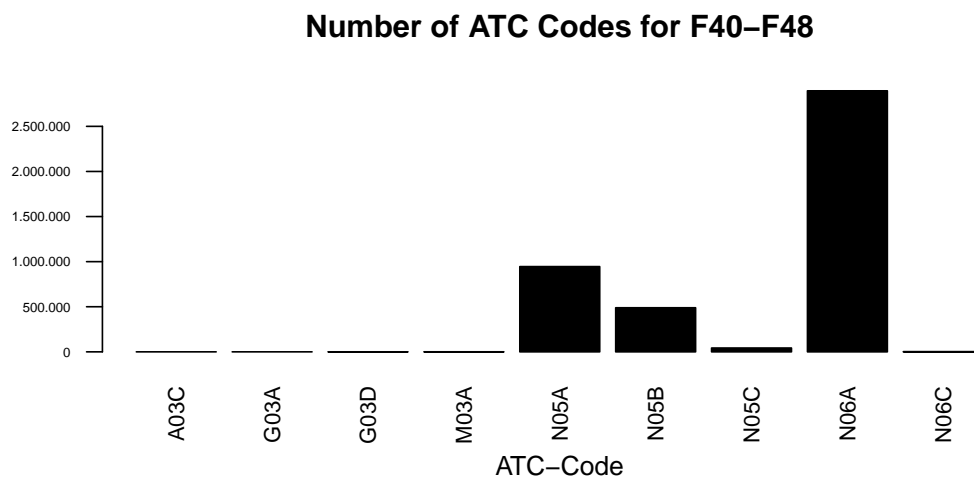


Figure 39: This figure shows the frequency of the underlying ATC codes for the given diagnose group F40-F48. The top figure shows the results for the ATC-ICD10 implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
A03C	SPASMOLYTIKA IN KOMBINATION MIT PSYCHOLEPTIKA	TRUE
G03A	HORMONELLE KONTRAZEPTIVA ZUR SYSTEMISCHEN ANWENDUNG	FALSE
G03D	GESTAGENE	FALSE
M03A	MUSKELRELAXANZIEN, PERIPHER WIRKENDE MITTEL	FALSE
N05A	ANTIPSYCHOTIKA	TRUE
N05B	ANXIOLYTIKA	TRUE
N05C	HYPNOTIKA UND SEDATIVA	TRUE
N06A	ANTIDEPRESSIVA	TRUE
N06C	PSYCHOLEPTIKA UND PSYCHOANALEPTIKA IN KOMBINATION	TRUE

Table 25: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose F40-F48.

3.19. Diagnose I70-I79: Krankheiten der Arterien, Arteriolen und Kapillaren

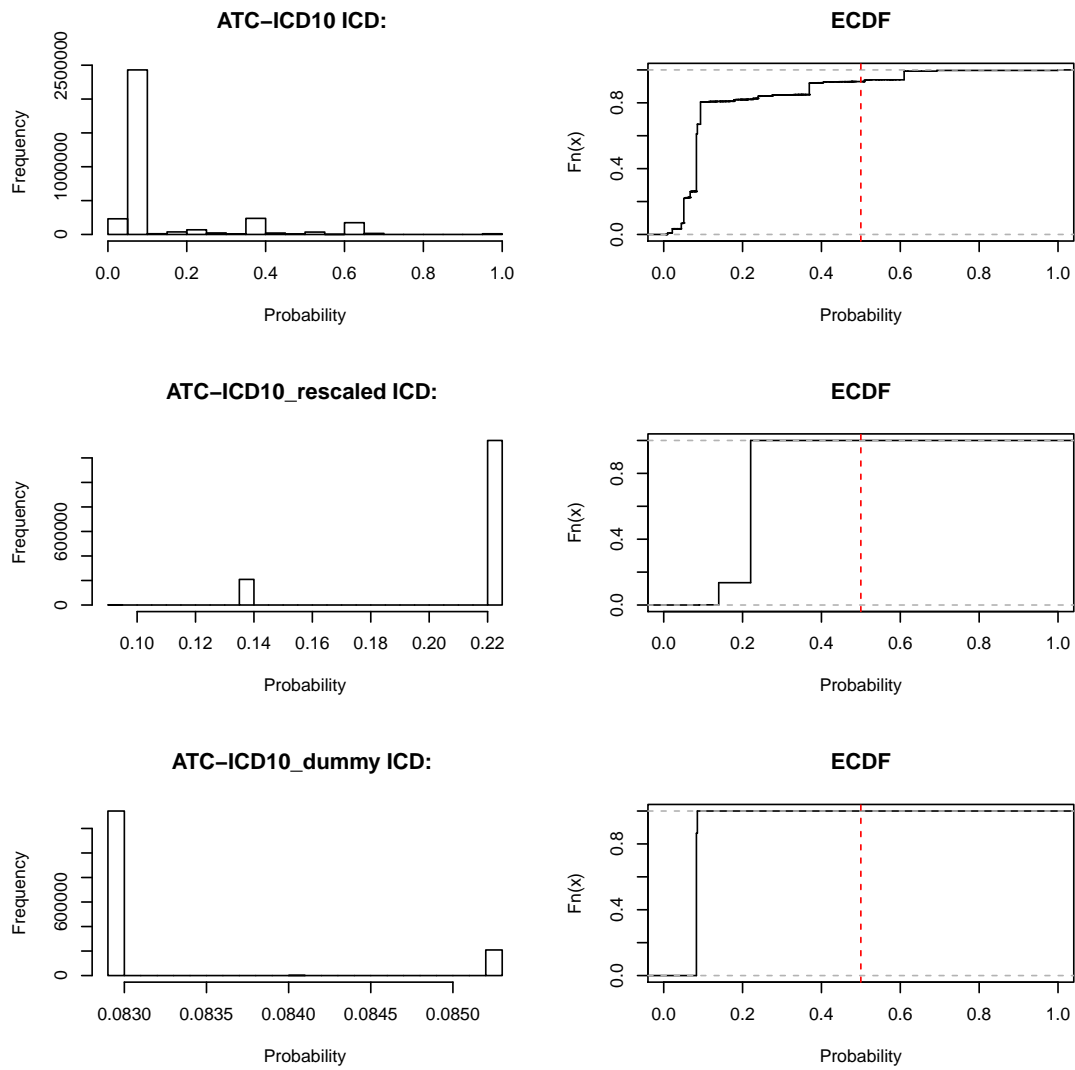


Figure 40: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD10 implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group I70-I79.

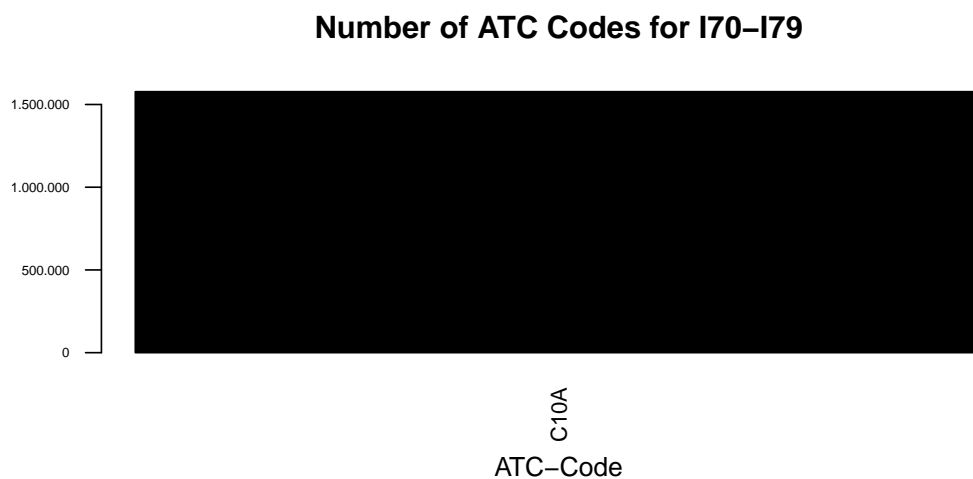
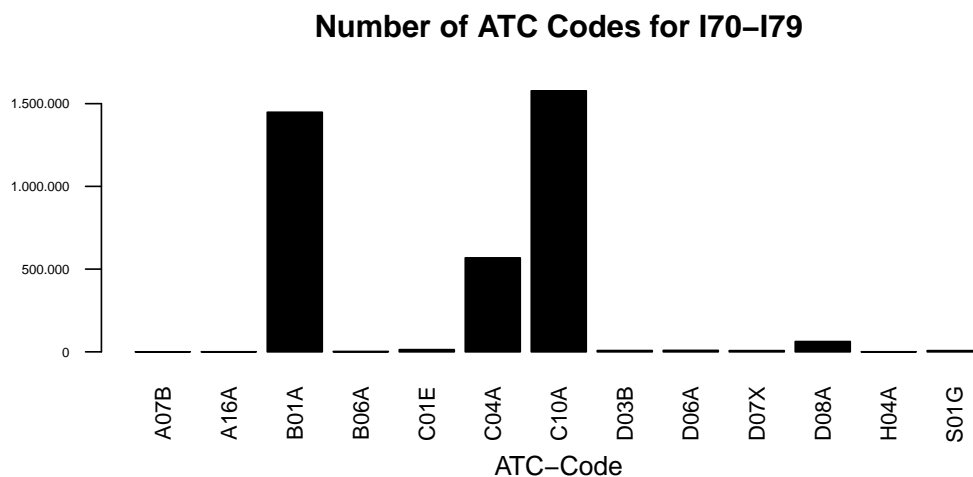


Figure 41: This figure shows the frequency of the underlying ATC codes for the given diagnose group I70-I79. The top figure shows the results for the ATC-ICD10 implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
A07B	Intestinale Adsorbenzien	FALSE
A16A	ANDERE MITTEL FÜR DAS ALIMENTÄRE SYSTEM UND DEN STOFFWECHSEL	FALSE
B01A	ANTITHROMBOTISCHE MITTEL	FALSE
B06A	ANDERE HÄMATOLOGIKA	FALSE
C01E	ANDERE HERZMITTEL	FALSE
C04A	PERIPHERE VASODILATATOREN	FALSE
C10A	MITTEL, DIE DEN LIPIDSTOFFWECHSEL BEEINFLUSSEN, REIN	TRUE
D03B	ENZYME	FALSE
D06A	ANTIBIOTIKA ZUR TOPISCHEN ANWENDUNG	FALSE
D07X	CORTICOSTEROIDE, ANDERE KOMBINATIONEN	FALSE
D08A	ANTISEPTIKA UND DESINFEKTIONSMITTEL	FALSE
H04A	GLYKOGENOLYTISCHE HORMONE	FALSE
S01G	DEKONGESTIVA UND ANTIALLERGIKA	FALSE

Table 26: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose I70-I79.

3.20. Diagnose M05-M14: Entzündliche Polyarthropathien

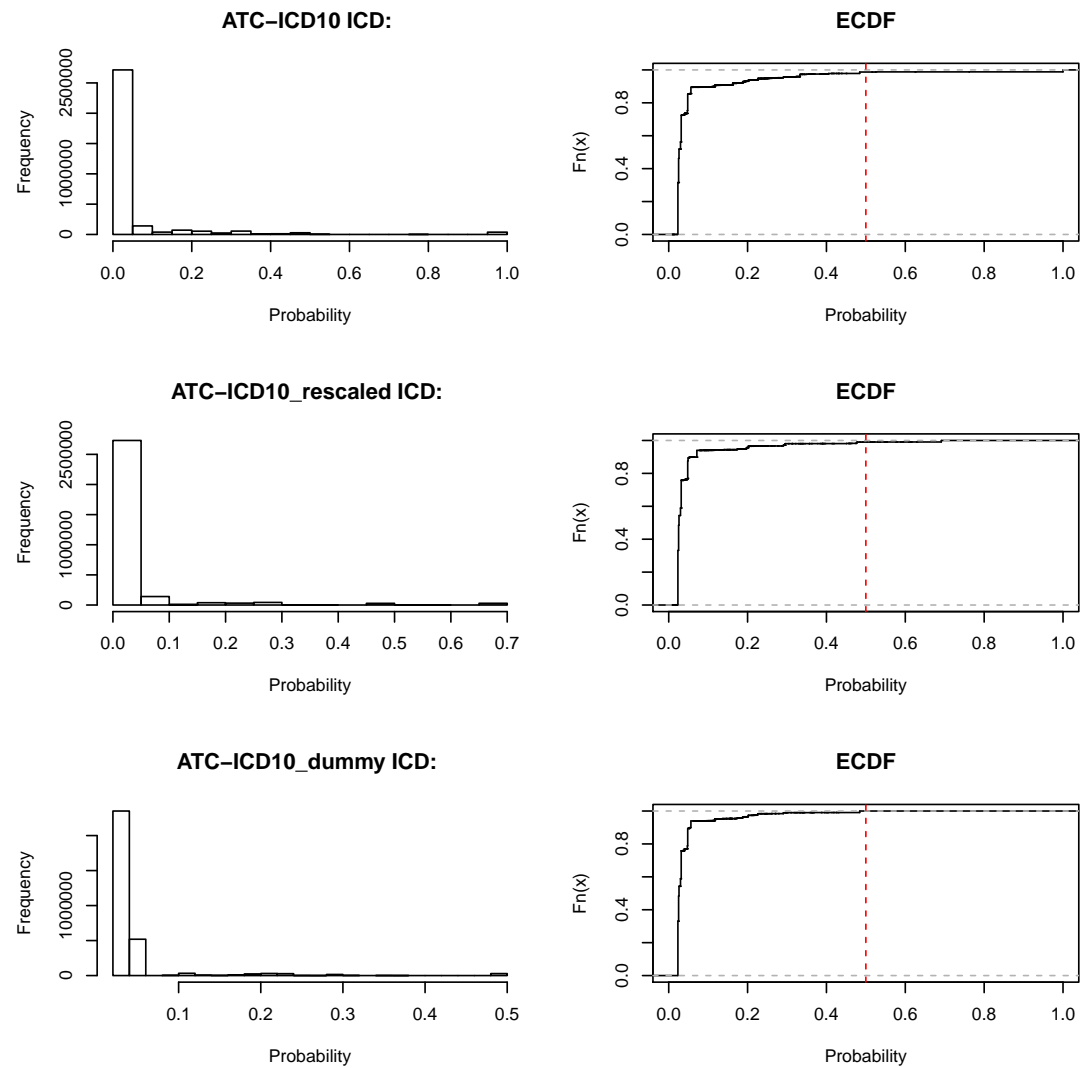
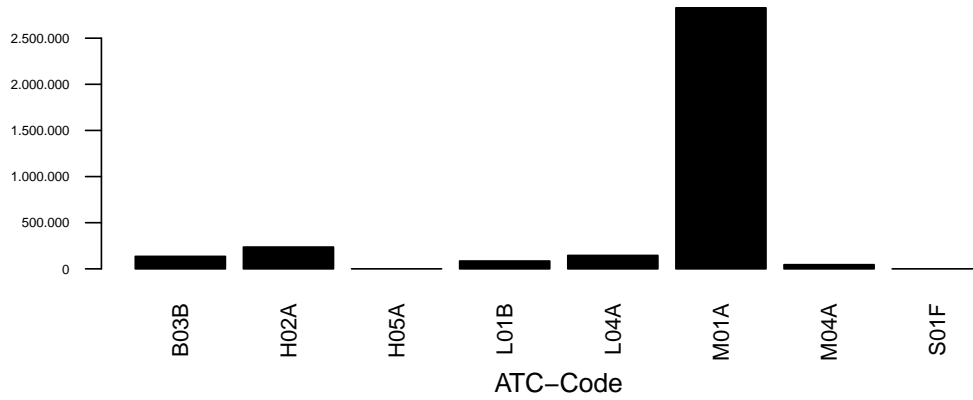


Figure 42: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD10 implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group M05-M14.

Number of ATC Codes for M05–M14



Number of ATC Codes for M05–M14

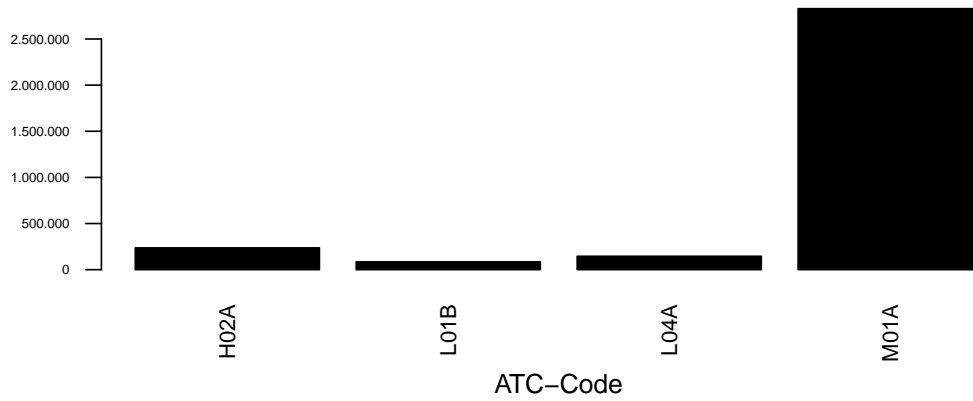


Figure 43: This figure shows the frequency of the underlying ATC codes for the given diagnose group M05-M14. The top figure shows the results for the ATC-ICD10 implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
B03B	VITAMIN-B12 UND FOLSÄURE	FALSE
H02A	CORTICOSTEROIDE ZUR SYSTEMISCHEN ANWENDUNG, REIN	TRUE
H05A	NEBENSCHILDDRÜSENHORMONE UND ANALOGA	FALSE
L01B	ANTIMETABOLITE	TRUE
L04A	IMMUNSUPPRESSIVA	TRUE
M01A	NICHTSTEROIDALE ANTIPHLOGISTIKA UND AN- TIRHEUMATIKA	TRUE
M04A	GICHTMITTEL	FALSE
S01F	MYDRIATIKA UND ZYKLOPLEGIKA	FALSE

Table 27: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose M05-M14.

4. Appendix

A. Analysis of ATC Codes

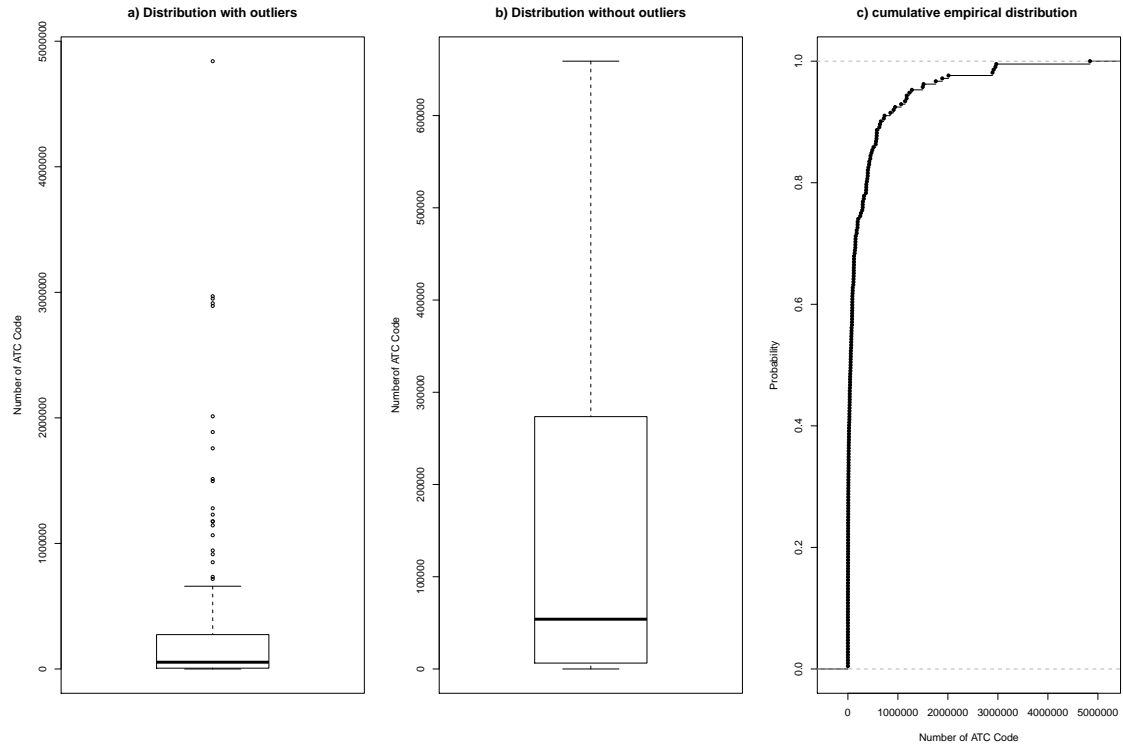


Figure 44: This figure illustrates the distribution of the frequency of each ATC. Figure a) shows the frequencies with outliers as boxplot. Figure b) illustrates the frequencies without outliers. Figure c) shows the empirical cumulative distribution of the frequencies of each ATC.

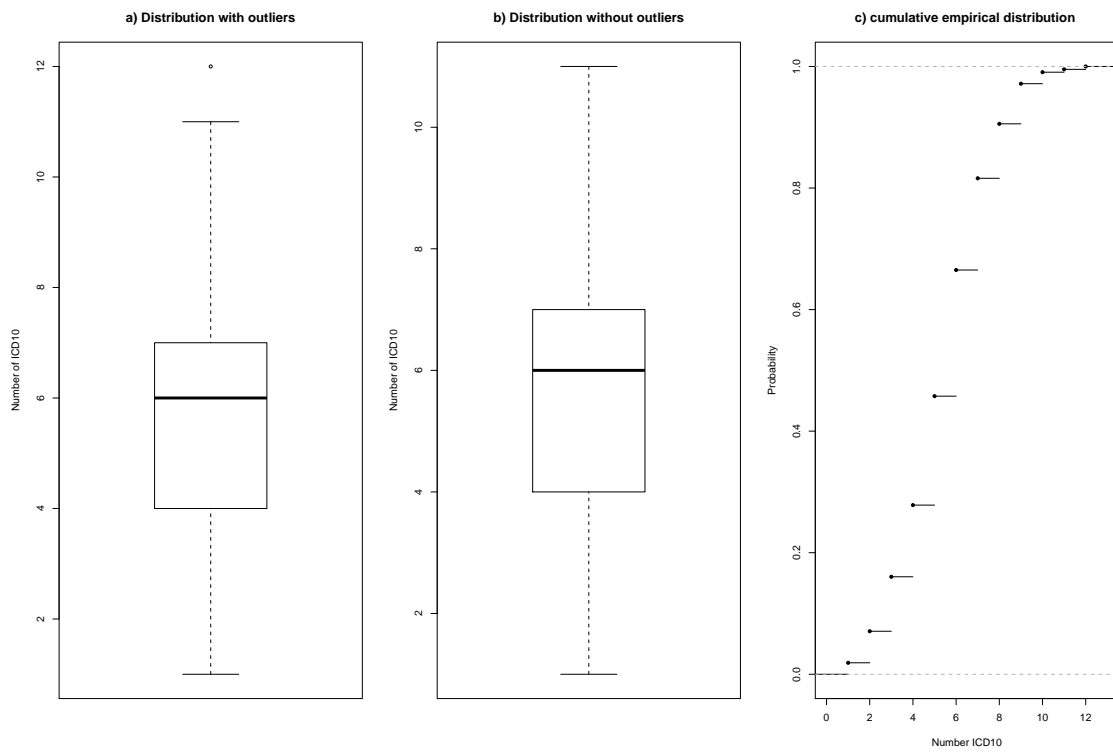


Figure 45: This figure illustrates the distribution of the number of distinct ICD10s for each ATC. Figure a) shows the frequencies with outliers as boxplot. Figure b) shows a histogram of the ICD10. Figure c) shows the empirical cumulative distribution of the frequencies.

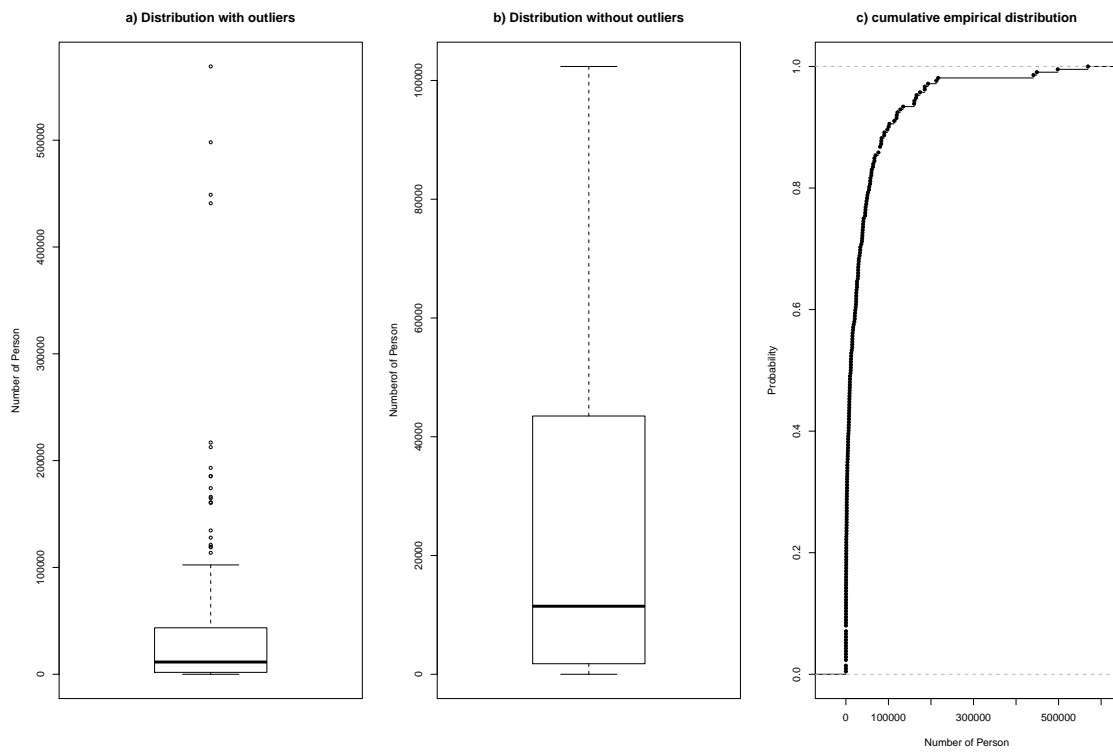


Figure 46: This figure illustrates the distribution of the number of persons for each ATC. Figure a) shows the frequencies with outliers as boxplot. Figure b) illustrates the frequencies without outliers. Figure c) shows the empirical cumulative distribution of the frequencies.

A.1. Analysis of ATC Codes with a Wrong Assignment According to Expert Opinion

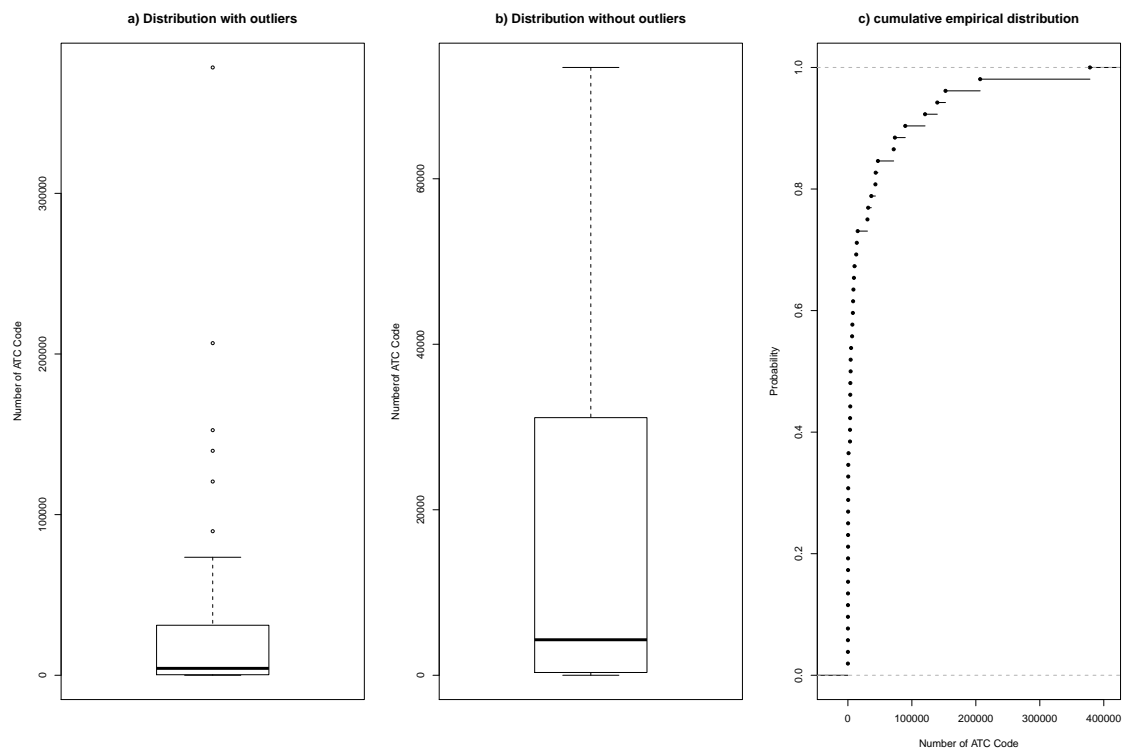


Figure 47: This figure illustrates the distribution of the frequency of each ATC with a wrong assignment according to the expert opinion. Figure a) shows the frequencies with outliers as boxplot. Figure b) illustrates the frequencies without outliers. Figure c) shows the empirical cumulative distribution of the frequencies of each ATC.

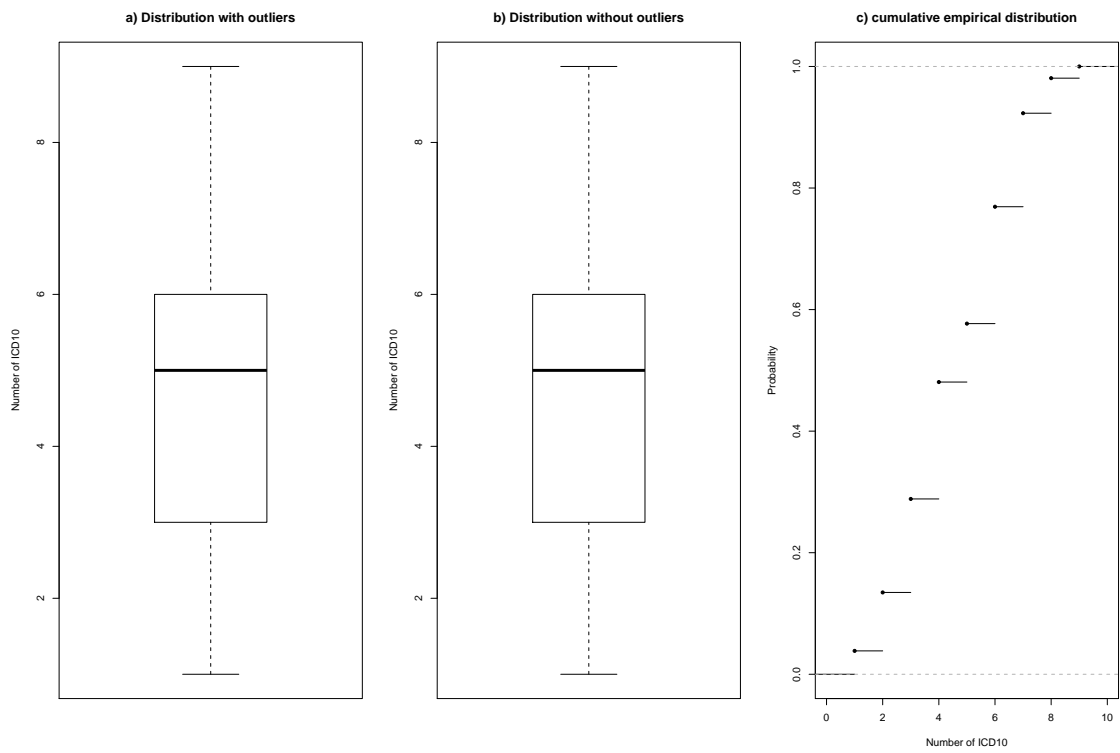


Figure 48: This figure illustrates the distribution of the number of distinct ICD10s for each ATC with a wrong assignment according to the expert opinion. Figure a) shows the frequencies with outliers as boxplot. Figure b) shows histogram of ICD10. Figure c) shows the empirical cumulative distribution of the frequencies.

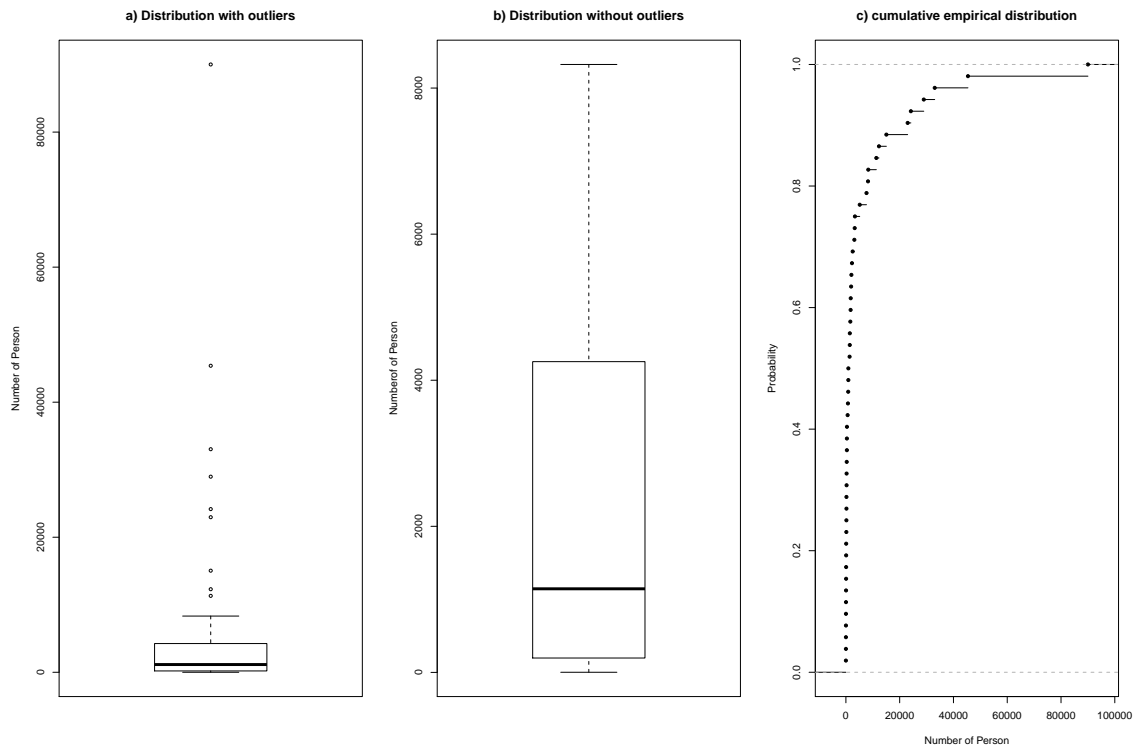


Figure 49: This figure illustrates the distribution of the number of persons for each ATC with a wrong assignment according to the expert opinion. Figure a) shows the frequencies with outliers as boxplot. Figure b) illustrates the frequencies without outliers. Figure c) shows the empirical cumulative distribution of the frequencies.

B. Frequency of ICD10-Chapters

Chapter	Code	Description	2008			2009			2010			2011		
			Freq.	Dist.Pers	Freq.	Dist.Pers	Freq.	Dist.Pers	Freq.	Dist.Pers	Freq.	Dist.Pers		
I.	A00-B99	Bestimmte infektiöse und parasitäre Krankheiten	566.954	245.797	798.363	310.432	775.895	298.349	758.309	284.468				
II.	C00-D48	Neubildungen	3.271.859	328.967	4.360.759	370.548	4.423.589	366.424	4.498.174	363.789				
III.	D50-D89	Krankheiten des Blutes und der blutbildenden Organe sowie bestimmte Störungen mit Beteiligung des Immunsystems	837.945	133.507	1.088.758	149.022	1.071.857	145.741	1.072.851	142.455				
IV.	E00-E90	Endokrine, Ernährungs- und Stoffwechsellkrankheiten	960.273	185.495	1.307.002	206.354	1.359.873	210.284	1.416.168	214.357				
IX.	I00-I99	Krankheiten des Kreislaufsystems	6.231.239	307.572	8.264.775	320.966	8.290.776	323.498	8.406.507	325.494				
V.	F00-F99	Psychische und Verhaltensstörungen	3.176.735	156.894	4.323.041	172.663	4.463.539	175.729	4.701.278	178.948				
VI.	G00-G99	Krankheiten des Nervensystems	2.142.486	310.685	2.867.662	344.102	2.887.515	334.577	2.949.965	334.953				
VII.	H00-H59	Krankheiten des Auges und der Augenanhangsgebilde	2.802.687	239.203	3.682.832	253.619	3.679.902	253.695	3.663.034	253.637				
VIII.	H60-H95	Krankheiten des Ohres und des Warzenfortsatzes	833.898	183.117	1.123.097	231.557	1.089.917	225.098	1.054.060	218.800				
X.	J00-J99	Krankheiten des Atmungssystems	2.158.730	394.318	3.076.970	483.111	2.983.498	466.708	2.893.248	455.293				
XI.	K00-K93	Krankheiten des Verdauungssystems	2.393.994	380.436	3.234.514	452.107	3.190.925	436.450	3.226.345	426.272				
XII.	L00-L99	Krankheiten der Haut und der Unterhaut	830.717	246.323	1.135.585	305.211	1.152.915	303.581	1.158.601	298.687				
XIII.	M00-M99	Krankheiten des Muskel-Skelettsystems und des Bindegewebes	5.645.737	398.952	7.383.138	442.432	7.194.333	423.677	7.248.377	424.724				
XIV.	N00-N99	Krankheiten des Urogenitalsystems	1.704.475	266.489	2.247.325	307.155	2.244.335	304.170	2.224.563	297.528				
XIX.	S00-T98	Verletzungen, Vergiftungen und bestimmte andere Folgen äußerer Ursachen	4.632.645	396.661	6.107.933	447.260	5.987.412	434.323	6.077.377	432.314				
XV.	O00-O99	Schwangerschaft, Geburt und Wochenbett	189.068	52.334	199.156	53.331	201.778	54.189	196.824	52.777				
XVI.	P00-P96	Bestimmte Zustände, die ihren Ursprung in der Perinatalperiode haben	12.274	3.724	15.784	4.722	14.717	4.378	14.260	4.301				
XVII.	Q00-Q99	Angeborene Fehlbildungen, Deformitäten und Chromosomenanomalien	98.992	47.059	137.044	60.463	133.647	57.651	132.276	55.746				
XVIII.	R00-R99	Symptome und abnorme klinische Laborbefunde, die anderenorts nicht klassifiziert sind	1.068.022	246.862	1.434.276	283.293	1.442.353	279.130	1.469.699	278.721				

Table 28: This table shows the frequency of ICD10-Chapters and number of distinct persons for each year.

C. Frequency of Prescription Data

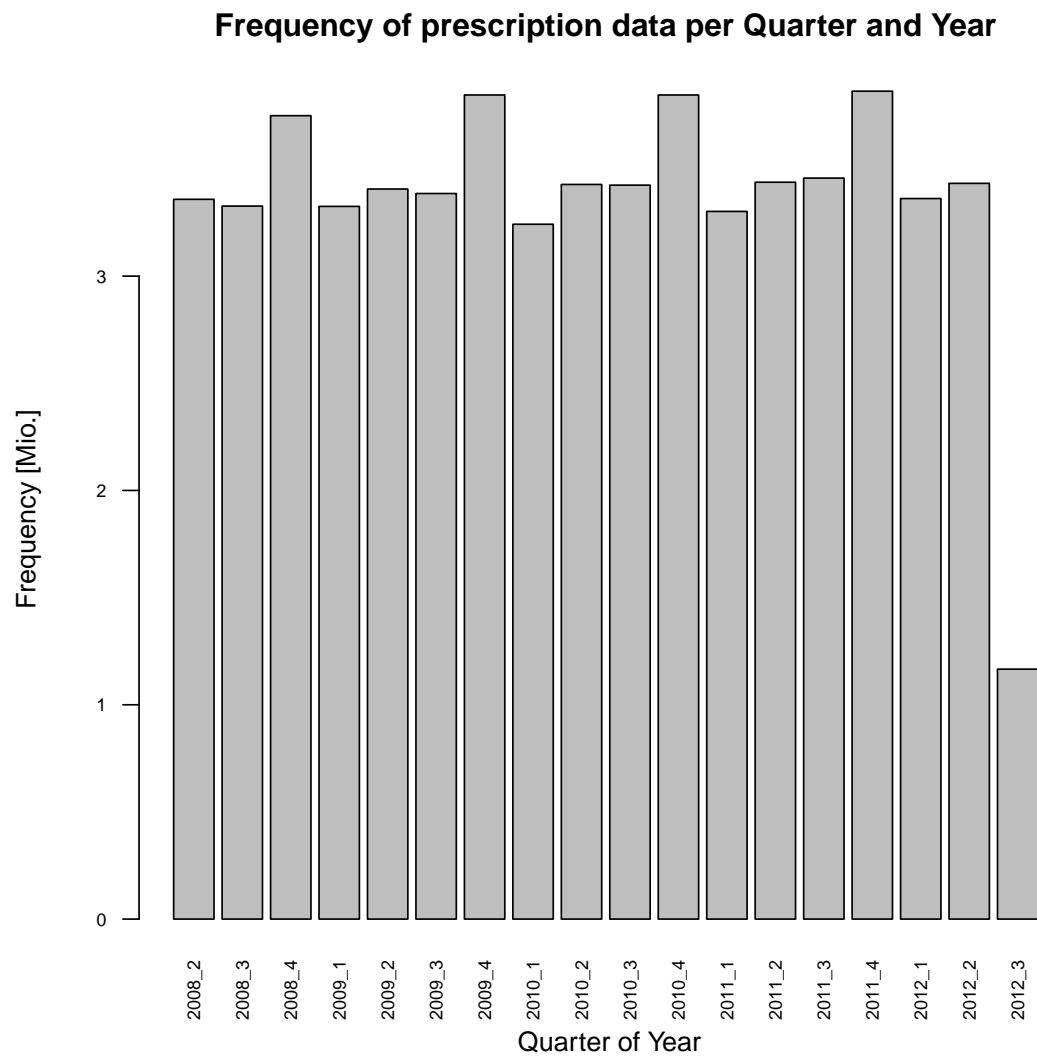


Figure 50: This figure illustrates the frequency of prescription data per quarter and year from 2008 to 2012.

D. Descriptive Analysis of ATC-ICD10 Implementations

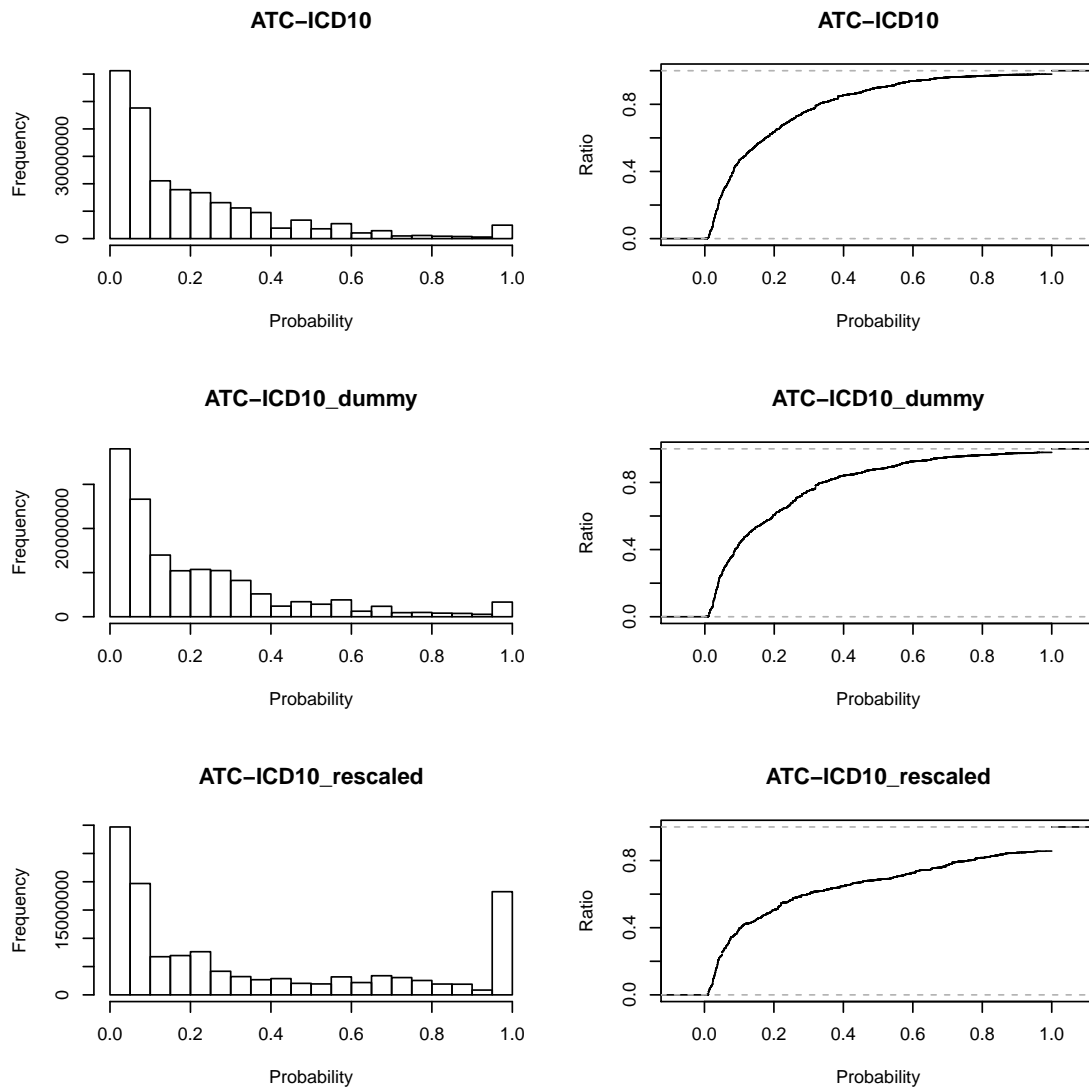


Figure 51: This figure compares the distribution of the probability of ATC-ICD10 assignments for the three ATC-ICD10 implementations.

ICD10 Group	Description	Freq. ICD10	Freq. Pers.	Freq. ICD10	Freq. Pers.	Freq. ICD10	Freq. Pers.	ATC_ICD10_rescaled
H30-H36	Affektionen der Aderhaut und der Netzhaut	8.638.805	306.869	247.047	70.758	247.047	70.758	
I20-I25	Ischämische Herzkrankheiten	8.049.232	382.539	6.784.312	300.029	6.784.312	300.029	
I10-I15	Hypertonie [Hochdruckkrankheit]	7.833.667	304.335	7.782.632	300.899	7.782.632	300.899	
M50-M54	Sonstige Krankheiten der Wirbelsäule und des Rückens	6.113.796	704.067	4.348.488	620.156	4.348.488	620.156	
H25-H28	Affektionen der Linse	5.020.204	215.868	133.548	54.064	133.548	54.064	
K20-K31	Krankheiten des Ösophagus, des Magens und des Duodenums	4.839.656	453.087	4.783.778	450.279	4.783.778	450.279	
K80-K87	Krankheiten der Gallenblase, der Gallenwege und des Pankreas	4.814.435	430.961	220.388	29.446	220.388	29.446	
C15-C26	Bösartige Neubildungen der Verdauungsorgane	4.685.035	294.090	1.247.566	138.107	1.247.566	138.107	
M20-M25	Sonstige Gelenkkrankheiten	4.496.520	604.765	2.696.924	525.368	2.696.924	525.368	
M15-M19	Arthrose	4.390.017	469.237	2.457.065	397.446	2.457.065	397.446	
S80-S89	Verletzungen des Knies und des Unterschenkels	4.061.252	593.562	2.696.986	525.407	2.696.986	525.407	
J40-J47	Chronische Krankheiten der unteren Atemwege	3.906.463	730.866	3.388.177	706.172	3.388.177	706.172	
F30-F39	Affektive Störungen	3.880.470	237.162	3.641.929	213.329	3.641.929	213.329	
J00-J06	Akute Infektionen der oberen Atemwege	3.836.067	833.051	2.829.600	765.505	2.829.600	765.505	
F10-F19	Psychische und Verhaltensstörungen durch psychotrope Substanzen	3.683.717	219.144	3.550.364	209.480	3.550.364	209.480	
J09-J18	Grippe und Pneumonie	3.620.917	576.478	194.471	97.394	194.471	97.394	
F00-F09	Organische, einschließlich symptomatischer psychischer Störungen	3.444.967	182.932	1.753.300	105.782	1.753.300	105.782	
F40-F48	Neurotische, Belastungs- und somatoforme Störungen	3.423.689	206.590	3.423.147	206.419	3.423.147	206.419	
I70-I79	Krankheiten der Arterien, Arterien und Kapillaren	3.305.823	260.886	1.552.802	87.937	1.552.802	87.937	
M05-M14	Entzündliche Polyarthropathien	3.184.185	542.793	3.054.194	538.210	3.054.194	538.210	

Table 29: This table shows the frequency of ICD10 groups and number of distinct persons per ICD10 group for the three ATC-ICD10 implementations. The first 20 ICD10-Groups, which have the highest frequency according to the implementation without expert opinions, are listed in this table. The implementation 'rescaled' yields the same frequencies as 'dummy' as both implementations take expert opinions into account. The only difference between those two implementations is that the rescaled version rescales the probabilities and the dummy version does not. However, rescaling the probabilities does not affect the frequencies of the assignments. Looking at those three implementations above for certain diagnoses, such as H30, one observes that the frequencies decrease considerably. The underlying cause is that on the basis of expert opinions certain ATC-ICD10 assignments are excluded. Taking the diagnosis H30 as an example, one can see in figure 9 that, due to involving the expert opinions assignments with high frequencies (e.g. C09B, A10B) are excluded, while only the assignments with low frequencies (S03C, S01A, S01B) remain.

E. Rest of the ICD10 Diagnoses

E.1. Diagnose M70-M79: Sonstige Krankheiten des Weichteilgewebes

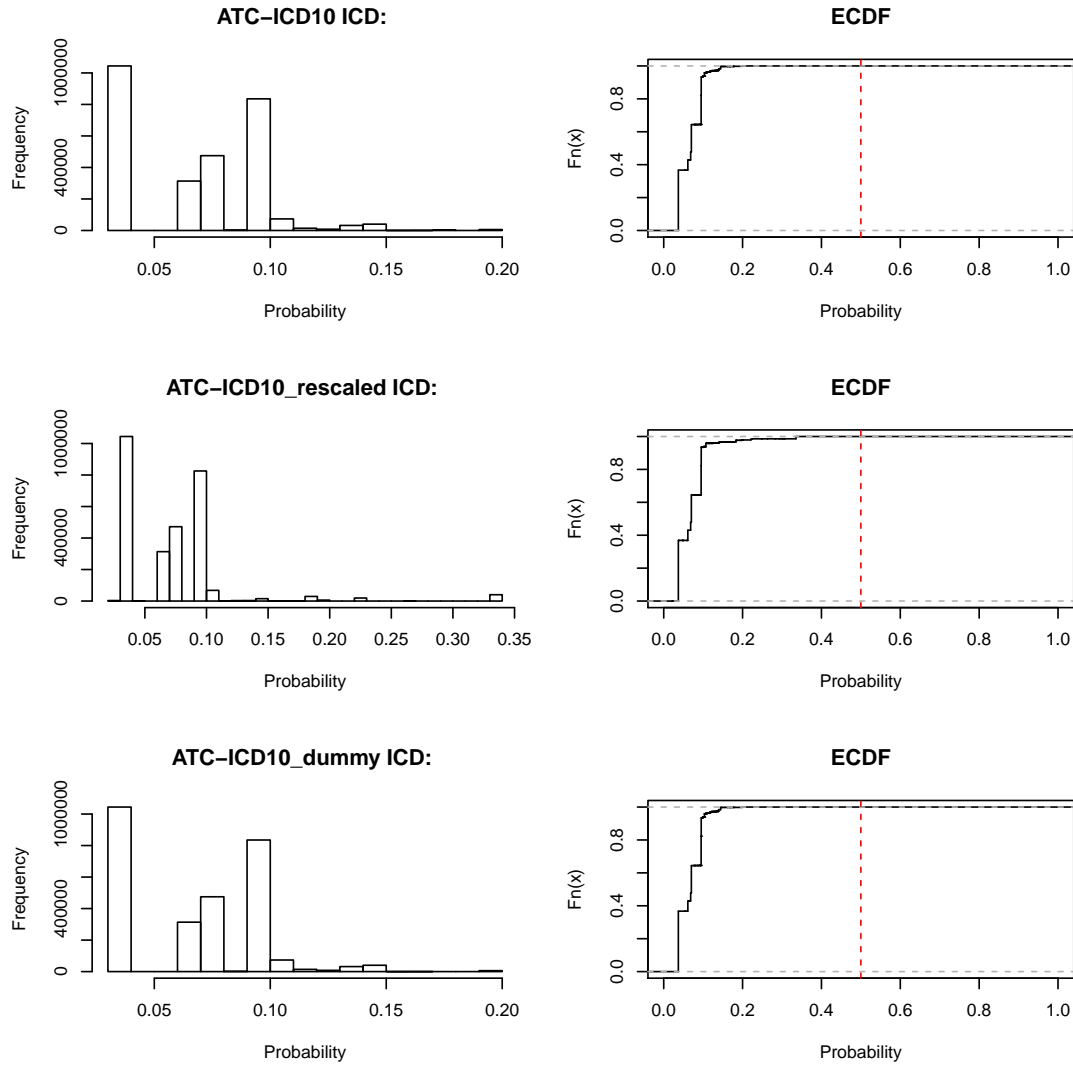


Figure 52: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group M70-M79.

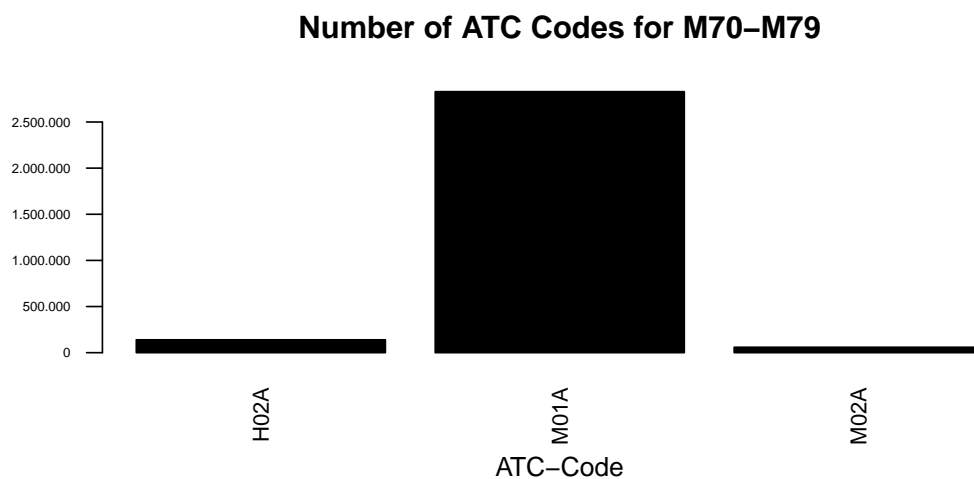
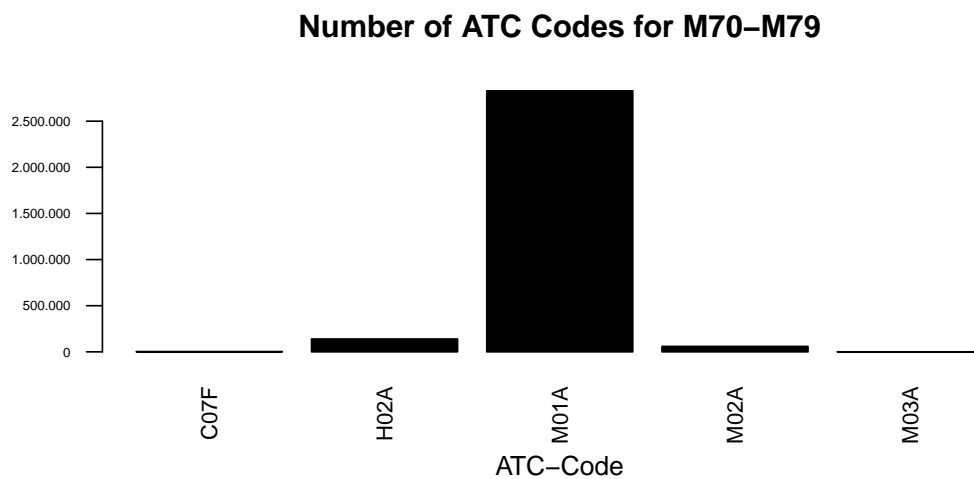


Figure 53: This figure shows the frequency of the underlying ATC codes for the given diagnose group M70-M79. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
C07F	BETA-ADRENOREZEPTOR-ANTAGONISTEN UND AN- DERE ANTIHYPERTONIKA	FALSE
H02A	CORTICOSTEROIDE ZUR SYSTEMISCHEN ANWENDUNG, REIN	TRUE
M01A	NICHTSTEROIDALE ANTIPHLOGISTIKA UND AN- TIRHEUMATIKA	TRUE
M02A	TOPISCHE MITTEL GEGEN GELENK- UND MUSKELSCHMERZEN	TRUE
M03A	MUSKELRELAXANZIEN, PERIPHER WIRKENDE MITTEL	FALSE

Table 30: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose M70-M79.

E.2. Diagnose C30-C39: Bösartige Neubildungen der Atmungsorgane und sonstiger intrathorakaler Organe

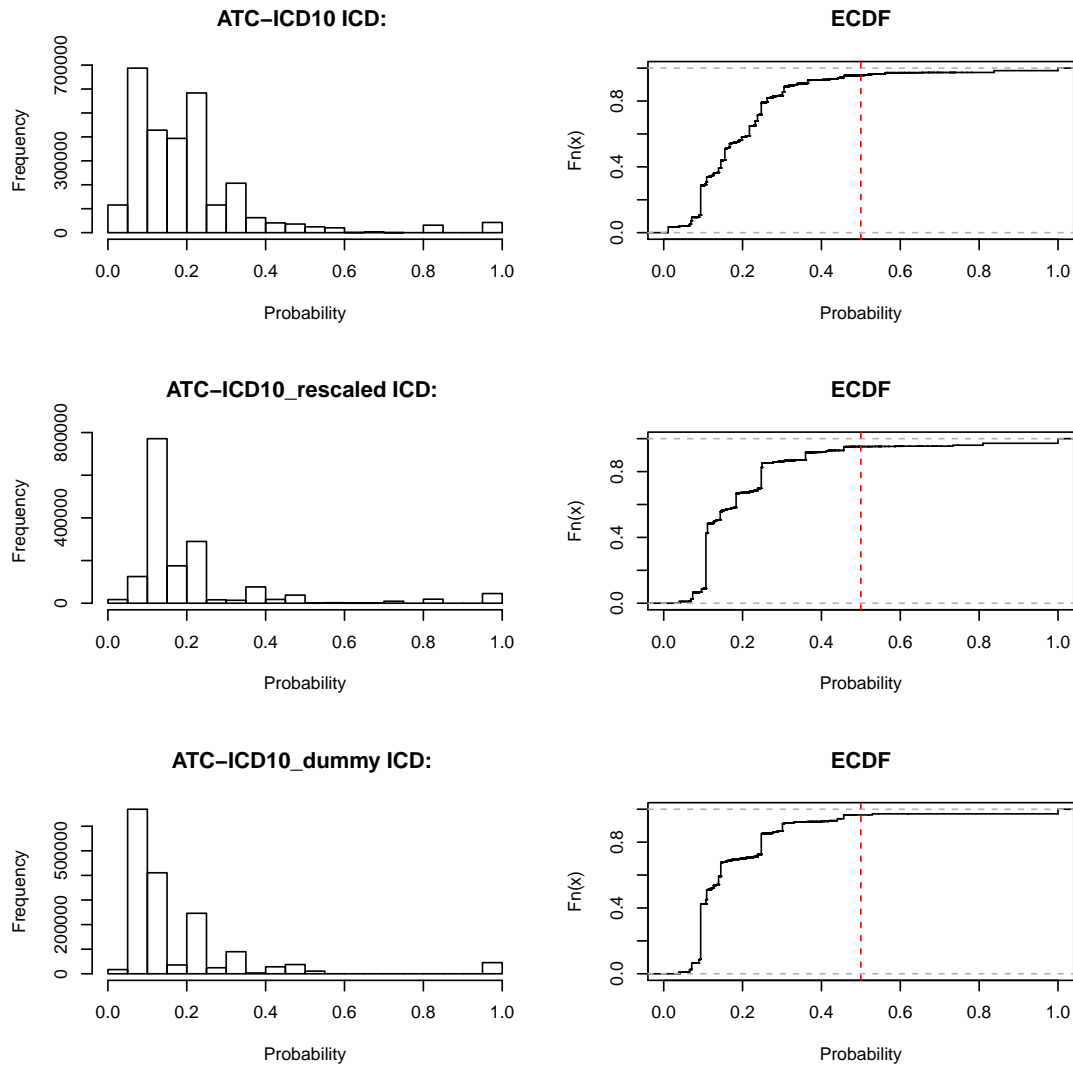


Figure 54: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group C30-C39.

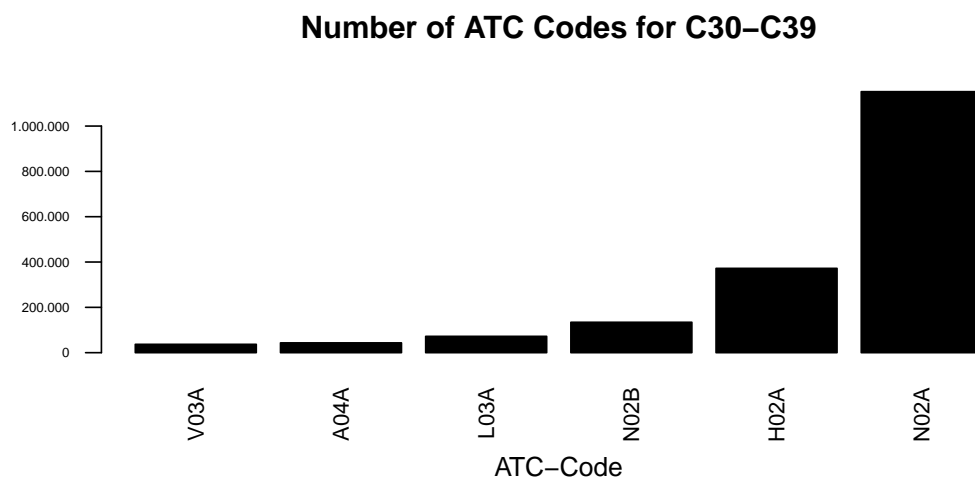
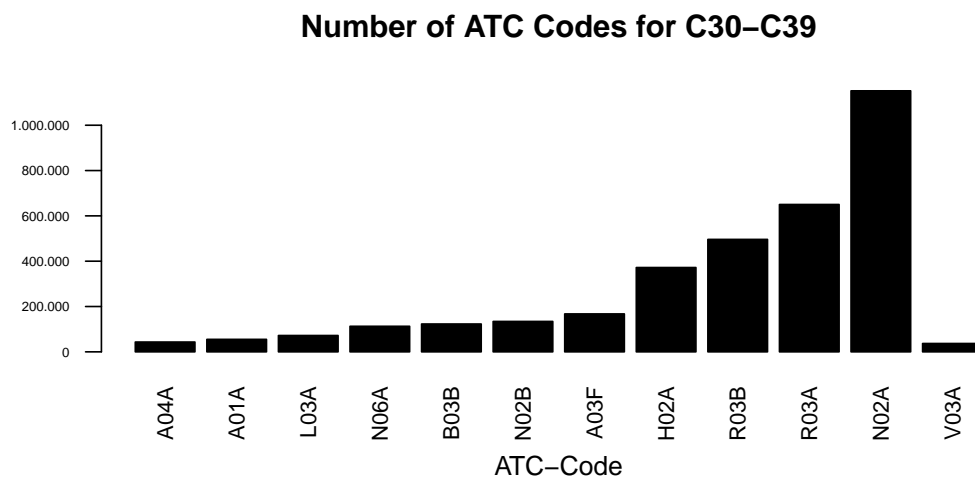


Figure 55: This figure shows the frequency of the underlying ATC codes for the given diagnose group C30-C39. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions. There are 32 ATC-Codes that related to the Diagnosis C30-C39. In order to give a clear overview of the distribution of the ATC codes behind an ICD10 group only the ATCs are shown, which represent the 95% of the cumulative frequency.

ATC	Description	Expert
A01A	STOMATOLOGIKA	FALSE
A03F	PROKINETIKA	FALSE
A04A	ANTIEMETIKA UND MITTEL GEGEN ÜBELKEIT	TRUE
B03B	VITAMIN-B12 UND FOLSÄURE	FALSE
H02A	CORTICOSTEROIDE ZUR SYSTEMISCHEN ANWENDUNG, REIN	TRUE
L03A	IMMUNSTIMULANZIEN	TRUE
N02A	OPIOIDE	TRUE
N02B	ANDERE ANALGETIKA UND ANTIPYRETIKA	TRUE
N06A	ANTIDEPRESSIVA	FALSE
R03A	Inhalative Sympathomimetika	FALSE
R03B	ANDERE INHALATIVE MITTEL BEI OBSTRUKTIVEN ATEMWEGSEKRANKUNGEN	FALSE
V03A	ALLE ÜBRIGEN THERAPEUTISCHEN MITTEL	TRUE

Table 31: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose C30-C39. There are 32 ATC-Codes that related to the Diagnosis C30-C39. In order to give a clear overview of the distribution of the ATC codes behind an ICD10 group only the ATCs are shown, which represent the 95% of the cumulative frequency.

E.3. Diagnose S40-S49: Verletzungen der Schulter und des Oberarmes

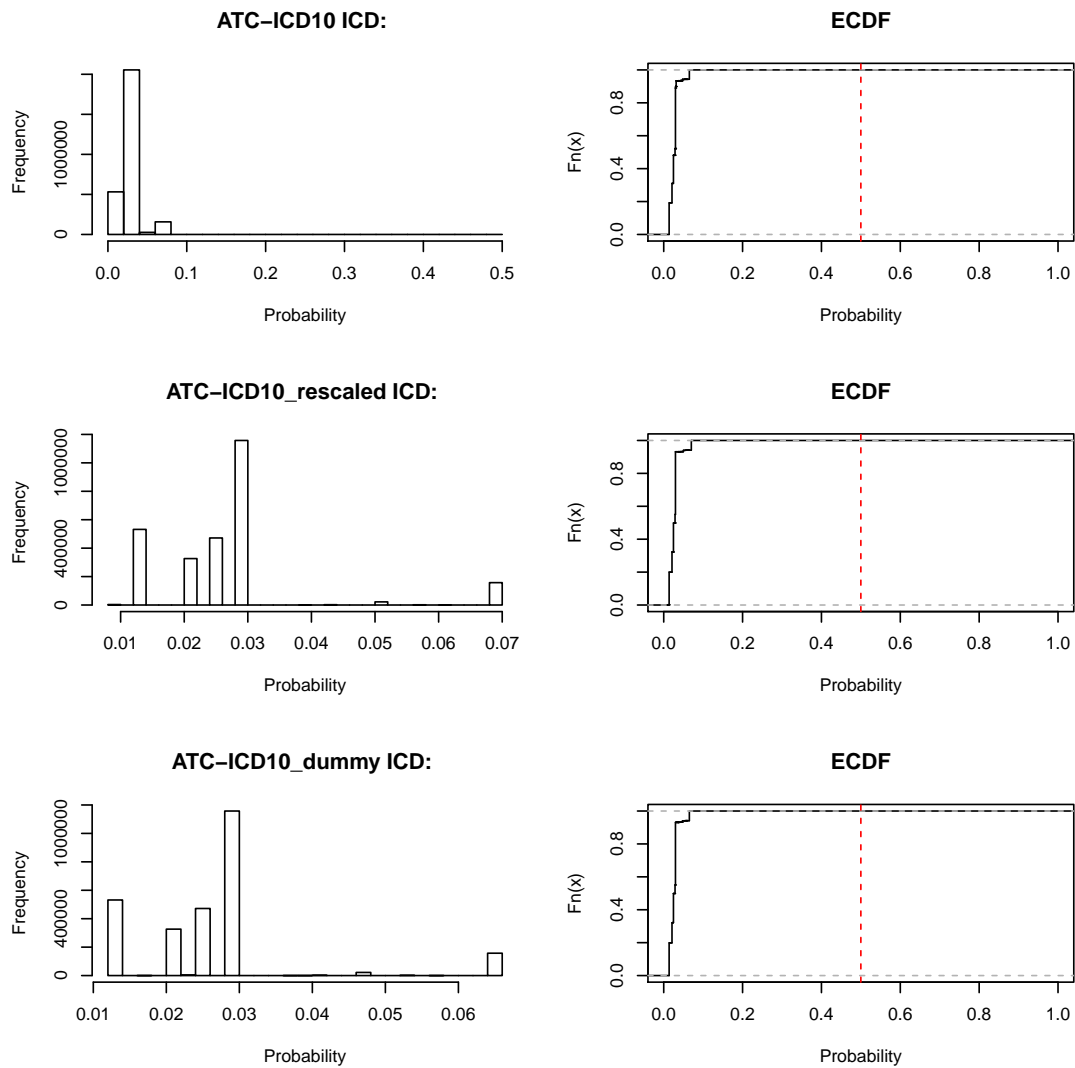
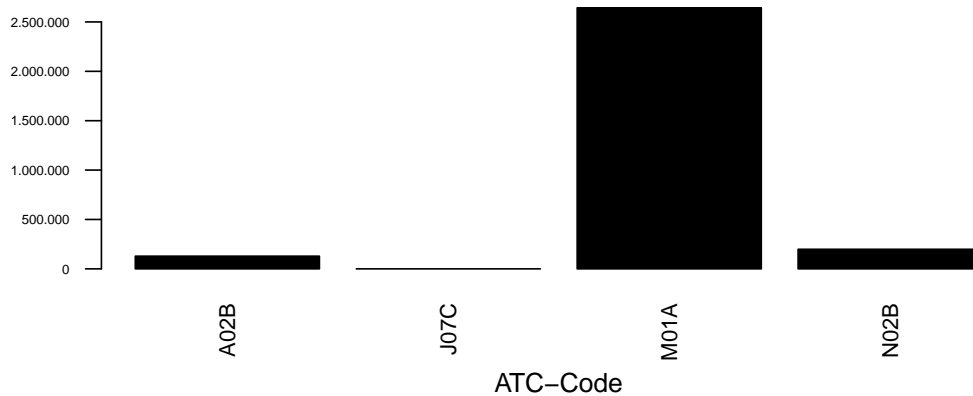


Figure 56: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group S40-S49.

Number of ATC Codes for S40–S49



Number of ATC Codes for S40–S49

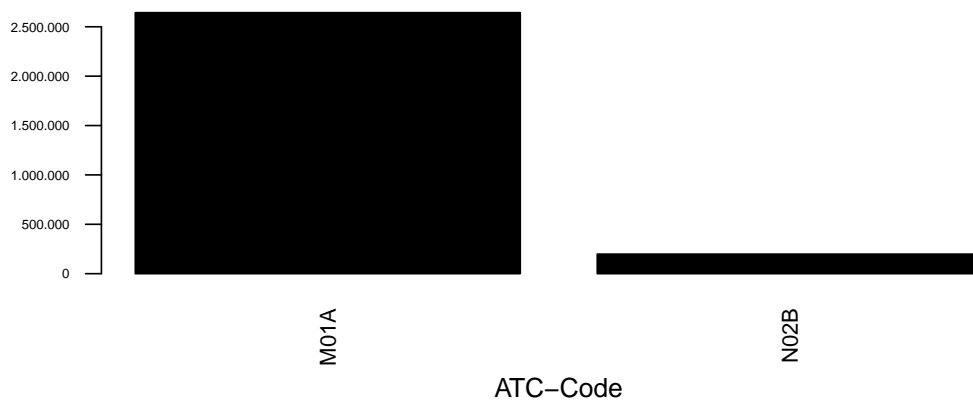


Figure 57: This figure shows the frequency of the underlying ATC codes for the given diagnose group S40-S49. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
A02B	MITTEL BEI PEPTISCHEM ULKUS UND GASTROE-SOPHAGEALER REFLUXKRANKHEIT	FALSE
J07C	BAKTERIELLE UND VIRALE IMPFSTOFFE, KOMBINIERT	FALSE
M01A	NICHTSTEROIDALE ANTIPHLOGISTIKA UND AN-TIRHEUMATIKA	TRUE
N02B	ANDERE ANALGETIKA UND ANTIPYRETIKA	TRUE

Table 32: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose S40-S49.

E.4. Diagnose T80-T88: Komplikationen bei chirurgischen Eingriffen und medizinischer Behandlung, anderenorts nicht klassifiziert

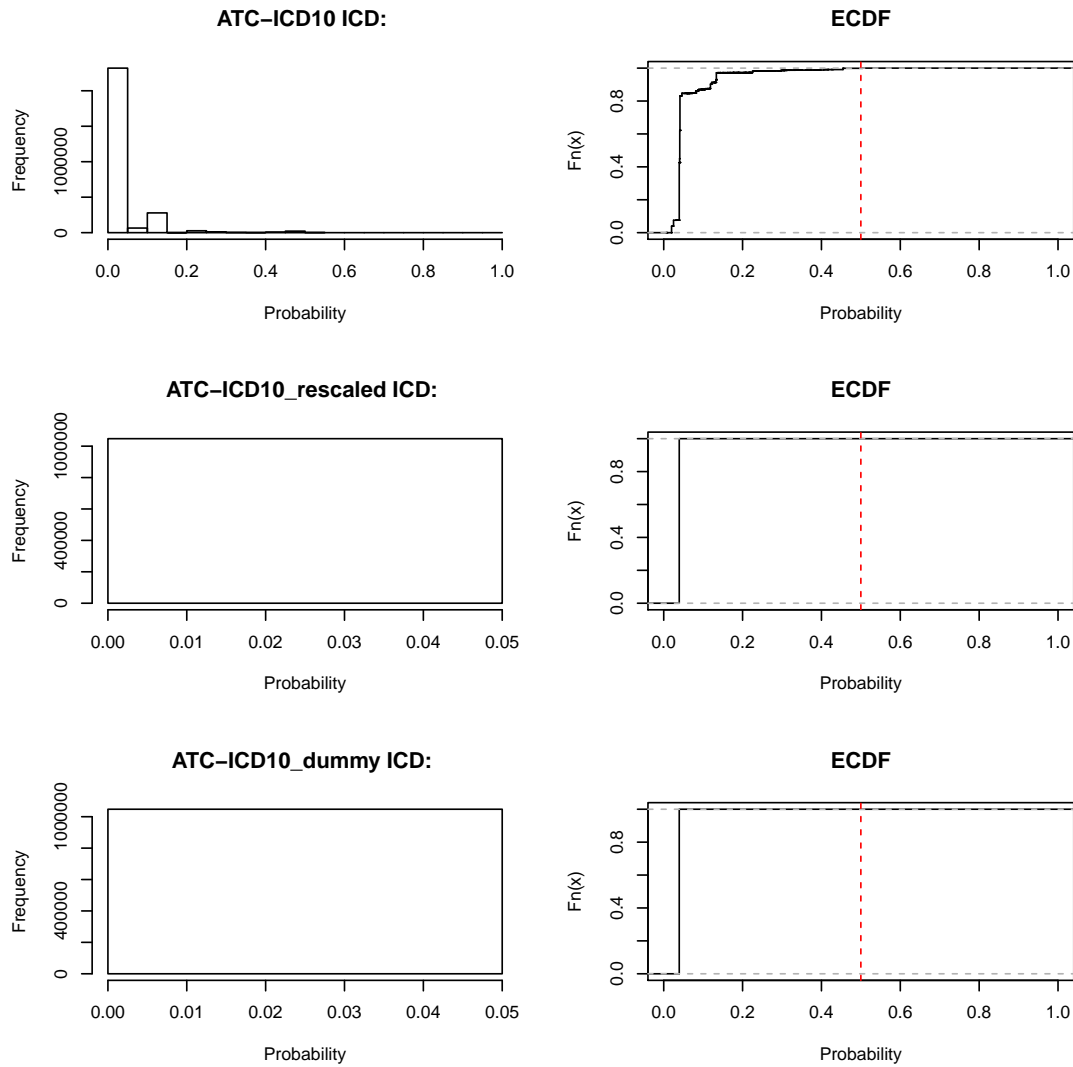
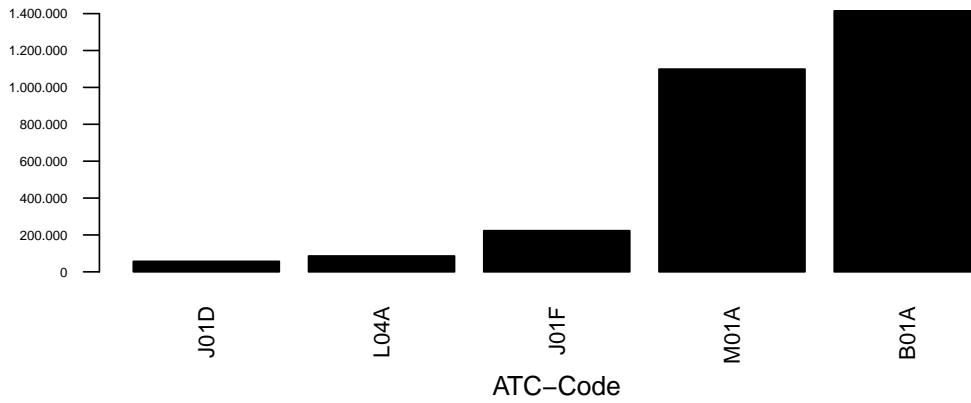


Figure 58: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group T80-T88.

Number of ATC Codes for T80–T88



Number of ATC Codes for T80–T88

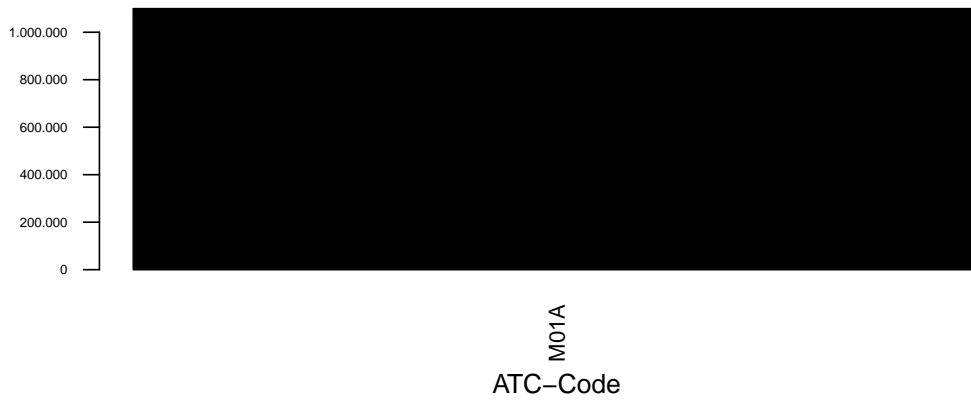


Figure 59: This figure shows the frequency of the underlying ATC codes for the given diagnose group T80-T88. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions. There are 16 ATC-Codes that related to the Diagnosis T80-T88. In order to give a clear overview of the distribution of the ATC codes behind an ICD10 group only the ATCs are shown, which represent the 95% of the cumulative frequency.

ATC	Description	Expert
B01A	ANTITHROMBOTISCHE MITTEL	FALSE
J01D	ANDERE BETA-LACTAM-ANTIBIOTIKA	FALSE
J01F	MAKROLIDE, LINCOSAMIDE UND STREPTOGRAMINE	FALSE
L04A	IMMUNSUPPRESSIVA	FALSE
M01A	NICHTSTEROIDALE ANTIPHLOGISTIKA UND AN-TIRHEUMATIKA	TRUE

Table 33: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose T80-T88. There are 16 ATC-Codes that related to the Diagnosis T80-T88. In order to give a clear overview of the distribution of the ATC codes behind an ICD10 group only the ATCs are shown, which represent the 95% of the cumulative frequency.

E.5. Diagnose J20-J22: Sonstige akute Infektionen der unteren Atemwege

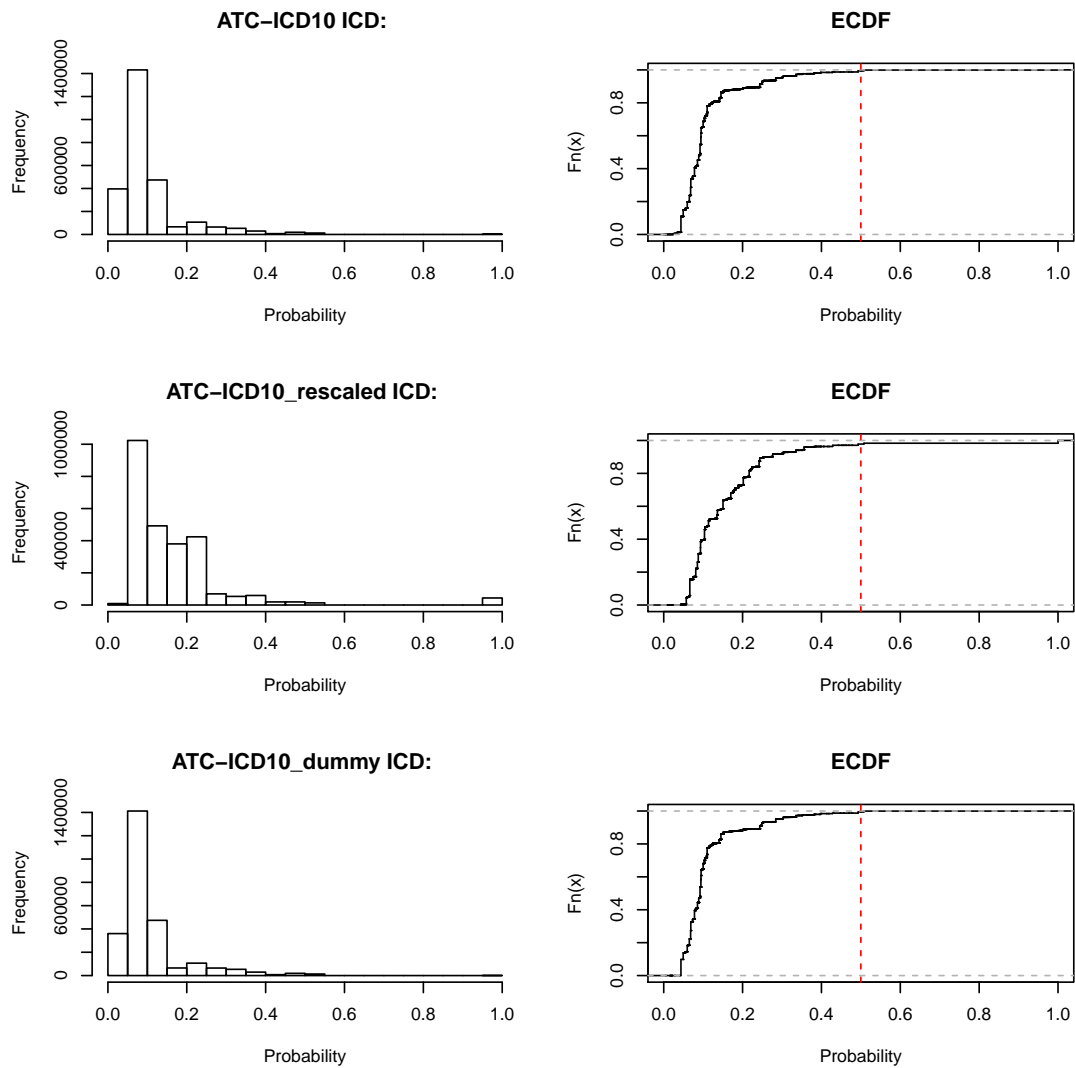
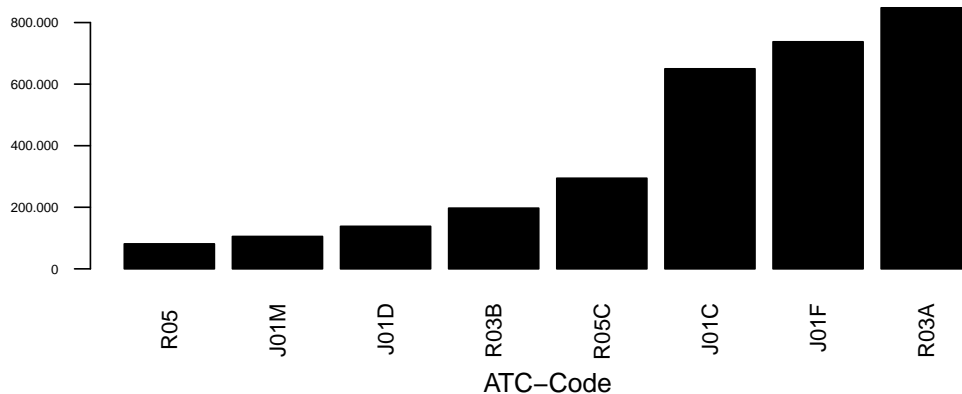


Figure 60: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group J20-J22.

Number of ATC Codes for J20–J22



Number of ATC Codes for J20–J22

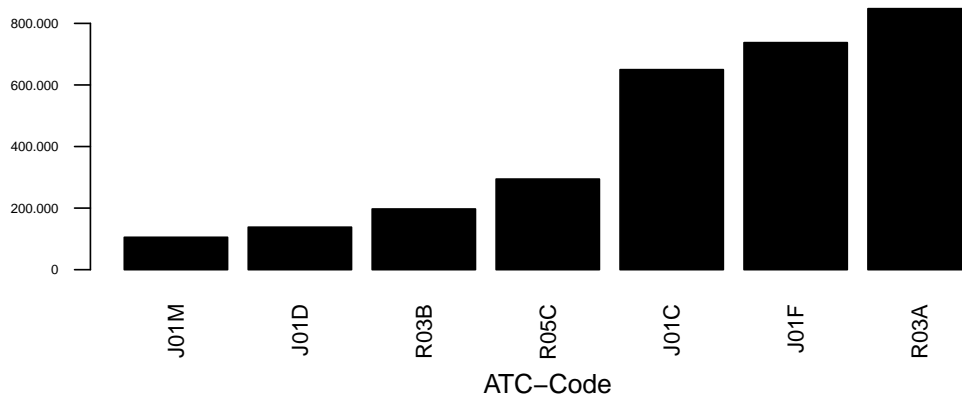


Figure 61: This figure shows the frequency of the underlying ATC codes for the given diagnose group J20-J22. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions. There are 24 ATC-Codes that related to the Diagnosis J20-J22. In order to give a clear overview of the distribution of the ATC codes behind an ICD10 group only the ATCs are shown, which represent the 95% of the cumulative frequency.

ATC	Description	Expert
J01C	BETALACTAM-ANTIBIOTIKA, PENICILLINE	TRUE
J01D	ANDERE BETA-LACTAM-ANTIBIOTIKA	TRUE
J01F	MAKROLIDE, LINCOSAMIDE UND STREPTOGRAMINE	TRUE
J01M	CHINOLONE	TRUE
R03A	Inhalative Sympathomimetika	TRUE
R03B	ANDERE INHALATIVE MITTEL BEI OBSTRUKTIVEN ATEMWEGSEKRANKUNGEN	TRUE
R05	HUSTEN- UND ERKÄLTUNGSPRÄPARATE	FALSE
R05C	EXPEKTORANZIEN, EXKL. KOMBINATIONEN MIT ANTI- TUSSIVA	TRUE

Table 34: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose J20-J22. There are 24 ATC-Codes that related to the Diagnosis J20-J22. In order to give a clear overview of the distribution of the ATC codes behind an ICD10 group only the ATCs are shown, which represent the 95% of the cumulative frequency.

E.6. Diagnose I80-I89: Krankheiten der Venen, der Lymphgefäße und der Lymphknoten, anderenorts nicht klassifiziert

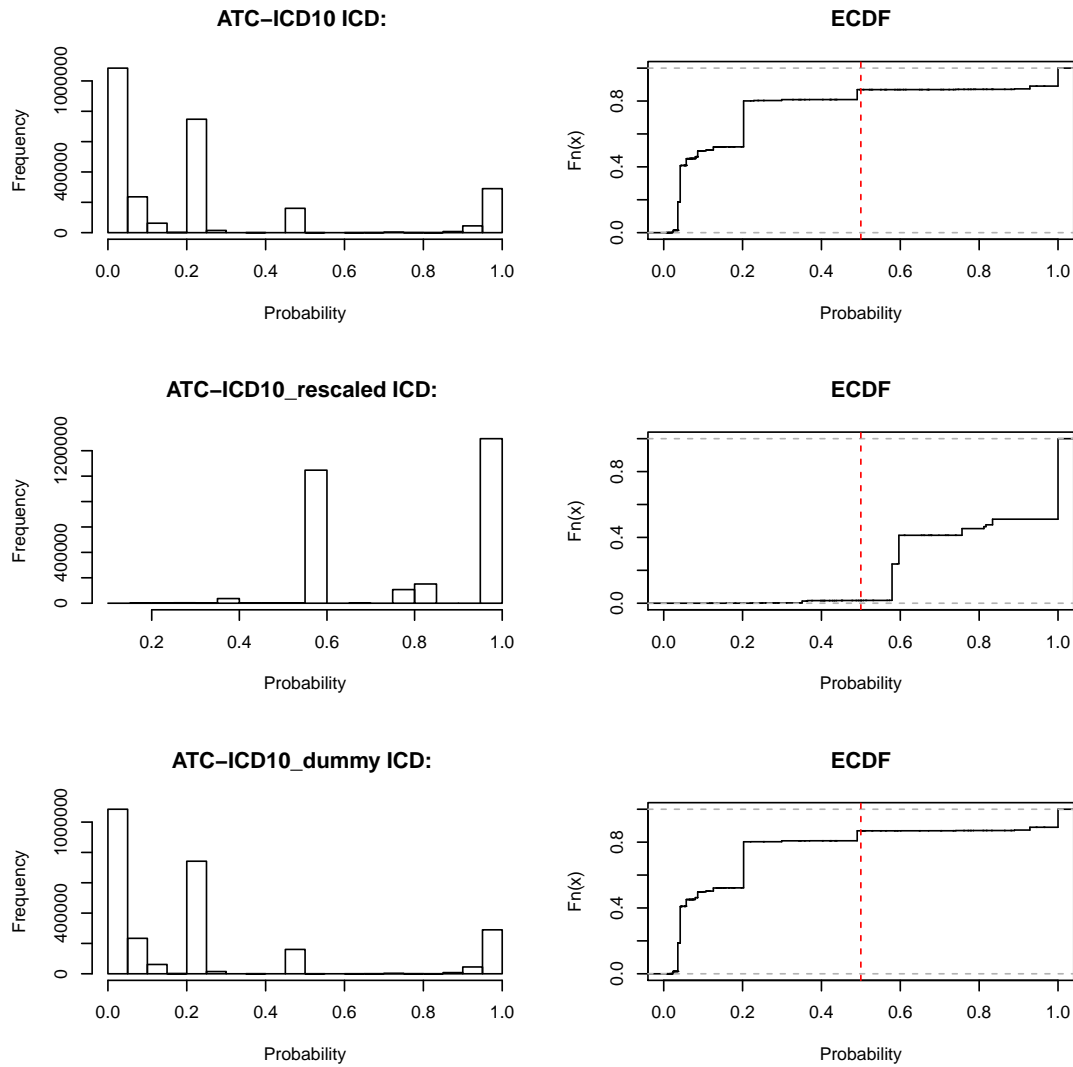


Figure 62: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group I80-I89.

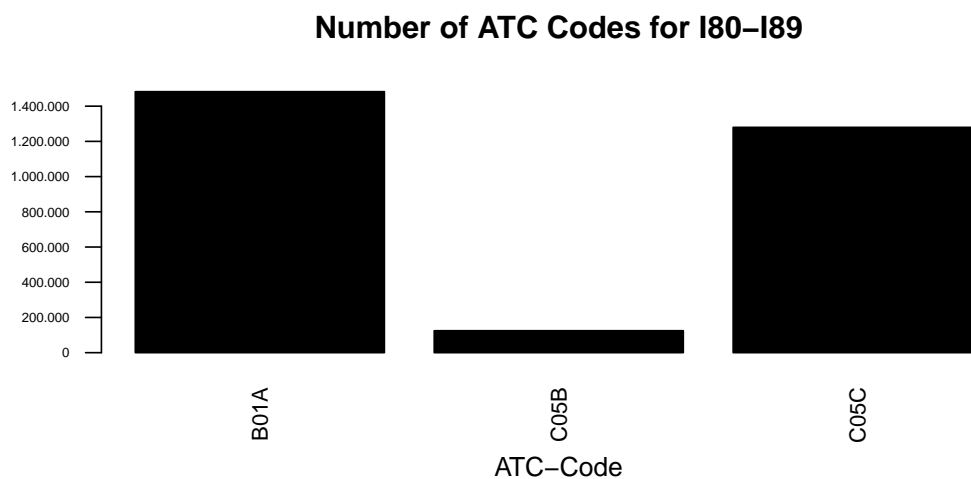
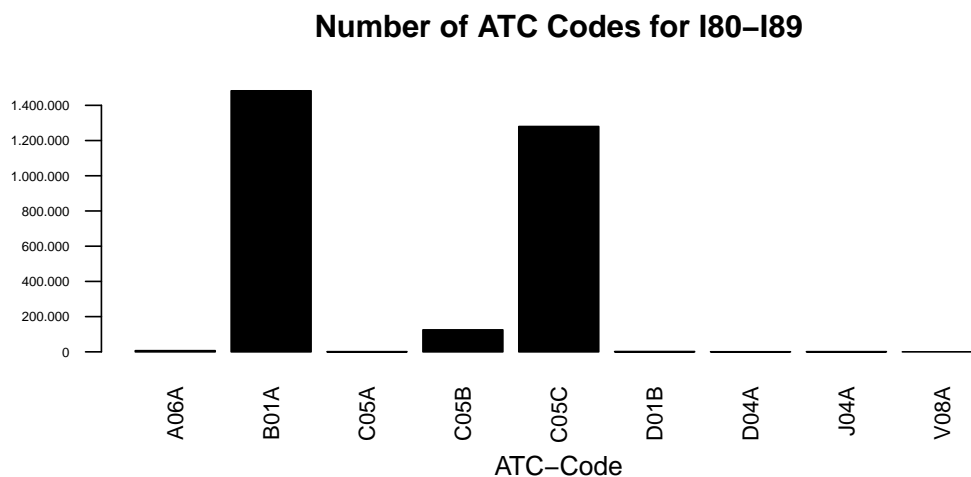


Figure 63: This figure shows the frequency of the underlying ATC codes for the given diagnose group I80-I89. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
A06A	LAXANTIEN	FALSE
B01A	ANTITHROMBOTISCHE MITTEL	TRUE
C05A	MITTEL ZUR BEH. HÄMORRH.+ANALFISSUREN Z.TOPISCH.ANWEND.	FALSE
C05B	ANTIVARIKOSA	TRUE
C05C	KAPILLARSTABILISIERENDE MITTEL	TRUE
D01B	ANTIMYKOTIKA ZUR SYSTEMISCHEN ANWENDUNG	FALSE
D04A	ANTIPRURIGINOSA, INKL. ANTIHISTAMINIKA, ANÄSTHETIKA, ETC.	FALSE
J04A	MITTEL ZUR BEHANDLUNG DER TUBERKULOSE	FALSE
V08A	RÖNTGENKONTRASTMITTEL, IOD-HALTIG	FALSE

Table 35: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose I80-I89.

E.7. Diagnose G40-G47: Episodische und paroxysmale Krankheiten des Nervensystems

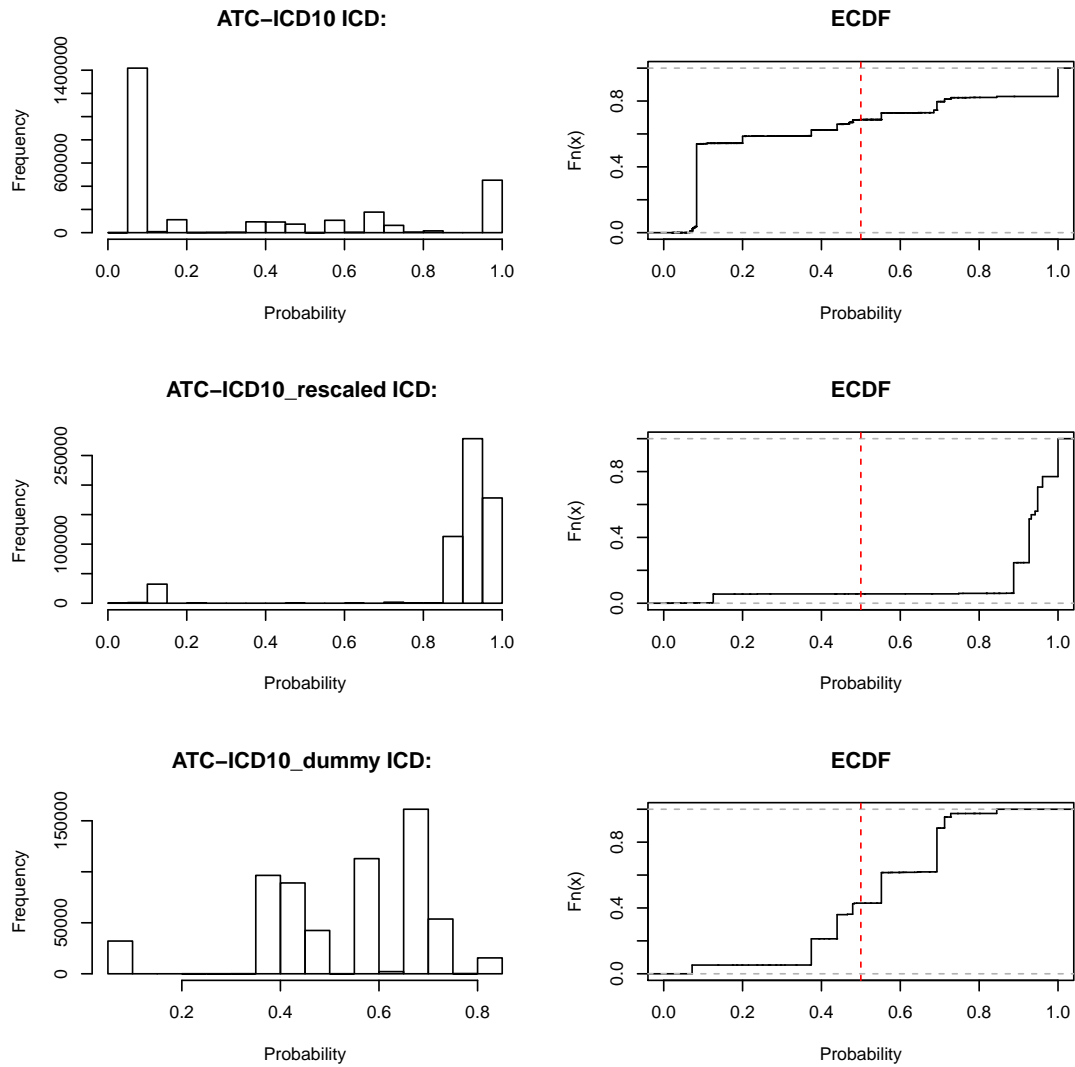
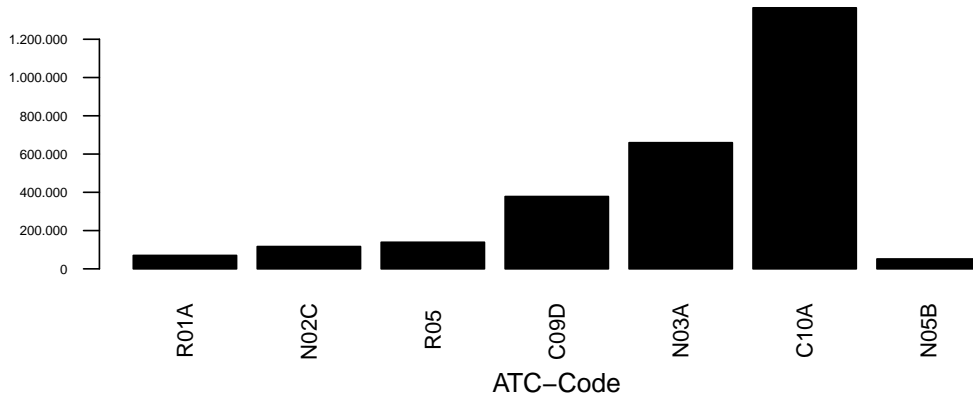


Figure 64: This figure shows the distribution of the probabilities of the diagnosis for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group G40-G47.

Number of ATC Codes for G40–G47



Number of ATC Codes for G40–G47

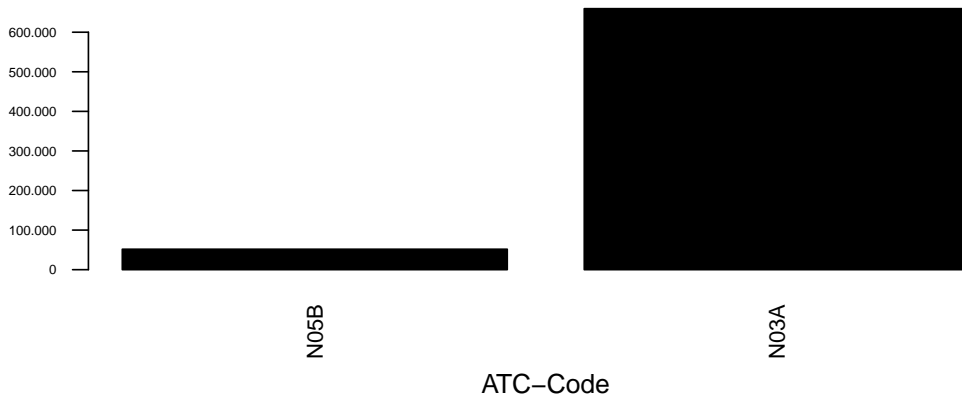


Figure 65: This figure shows the frequency of the underlying ATC codes for the given diagnose group G40-G47. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions. There are 18 ATC-Codes that related to the Diagnosis G40-G47. In order to give a clear overview of the distribution of the ATC codes behind an ICD10 group only the ATCs are shown, which represent the 95% of the cumulative frequency.

ATC	Description	Expert
C09D	ANGIOTENSIN-II-ANTAGONISTEN, KOMBINATIONEN	FALSE
C10A	MITTEL, DIE DEN LIPIDSTOFFWECHSEL BEEINFLUSSEN, REIN	FALSE
N02C	MIGRÄNEMITTEL	FALSE
N03A	ANTIEPILEPTIKA	TRUE
N05B	ANXIOLYTIKA	TRUE
R01A	DEKONGESTIVA UND ANDERE RHINOLOGIKA ZUR TOP-ISCHEM ANWENDUNG	FALSE
R05	HUSTEN- UND ERKÄLTUNGSPRÄPARATE	FALSE

Table 36: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose G40-G47. There are 18 ATC-Codes that related to the Diagnosis G40-G47. In order to give a clear overview of the distribution of the ATC codes behind an ICD10 group only the ATCs are shown, which represent the 95% of the cumulative frequency.

E.8. Diagnose F20-F29: Schizophrenie, schizotype und wahnhafte Störungen

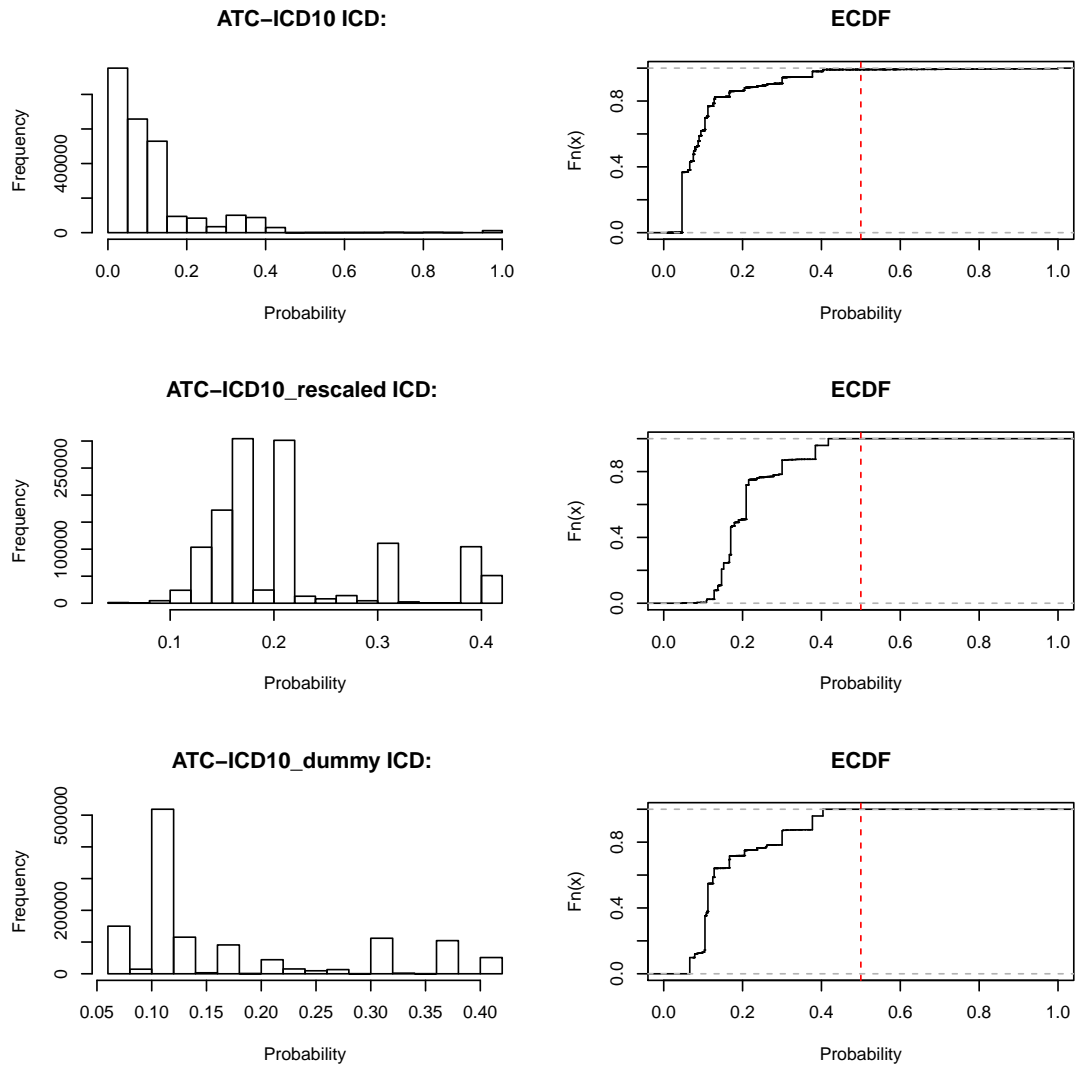


Figure 66: This figure shows the distribution of the probabilities of the diagnosis for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group F20-F29.

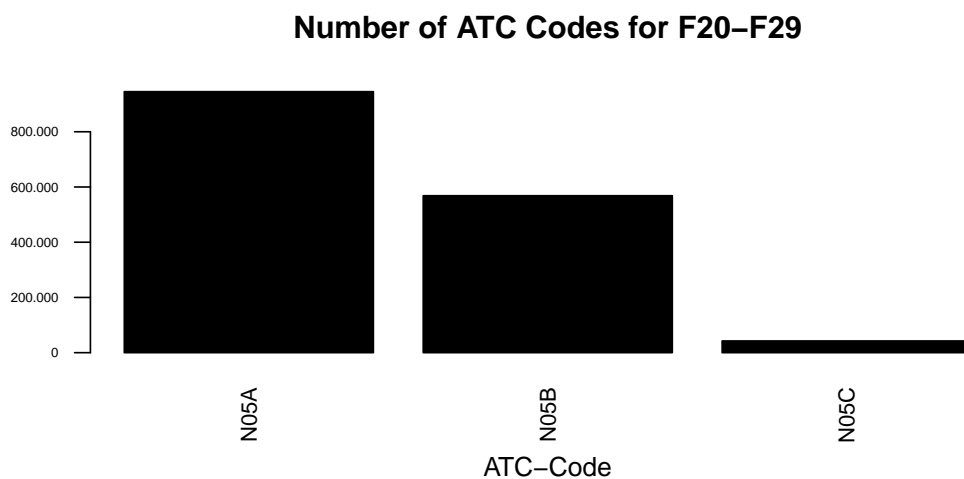
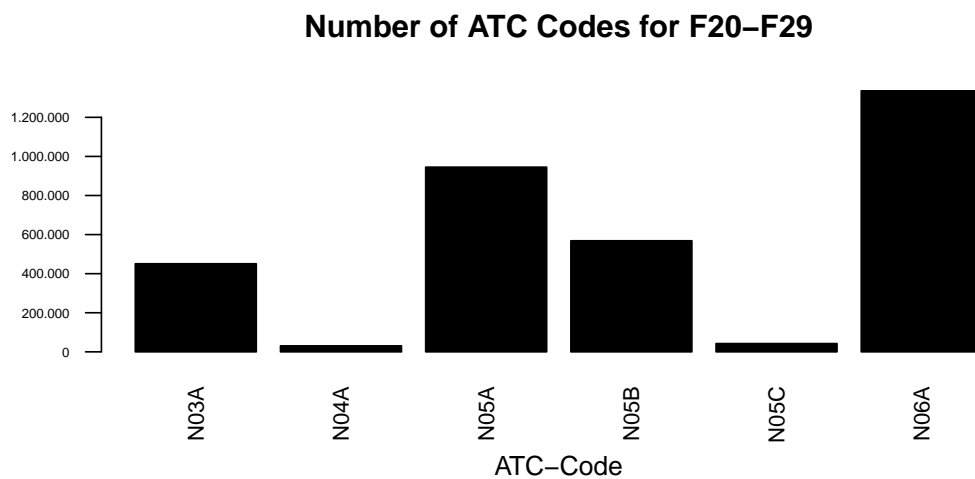


Figure 67: This figure shows the frequency of the underlying ATC codes for the given diagnose group F20-F29. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
N03A	ANTIEPILEPTIKA	FALSE
N04A	ANITCHOLINERGIKA	FALSE
N05A	ANTIPSYCHOTIKA	TRUE
N05B	ANXIOLYTIKA	TRUE
N05C	HYPNOTIKA UND SEDATIVA	TRUE
N06A	ANTIDEPRESSIVA	FALSE

Table 37: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose F20-F29.

E.9. Diagnose G50-G59: Krankheiten von Nerven, Nervenwurzeln und Nervenplexus

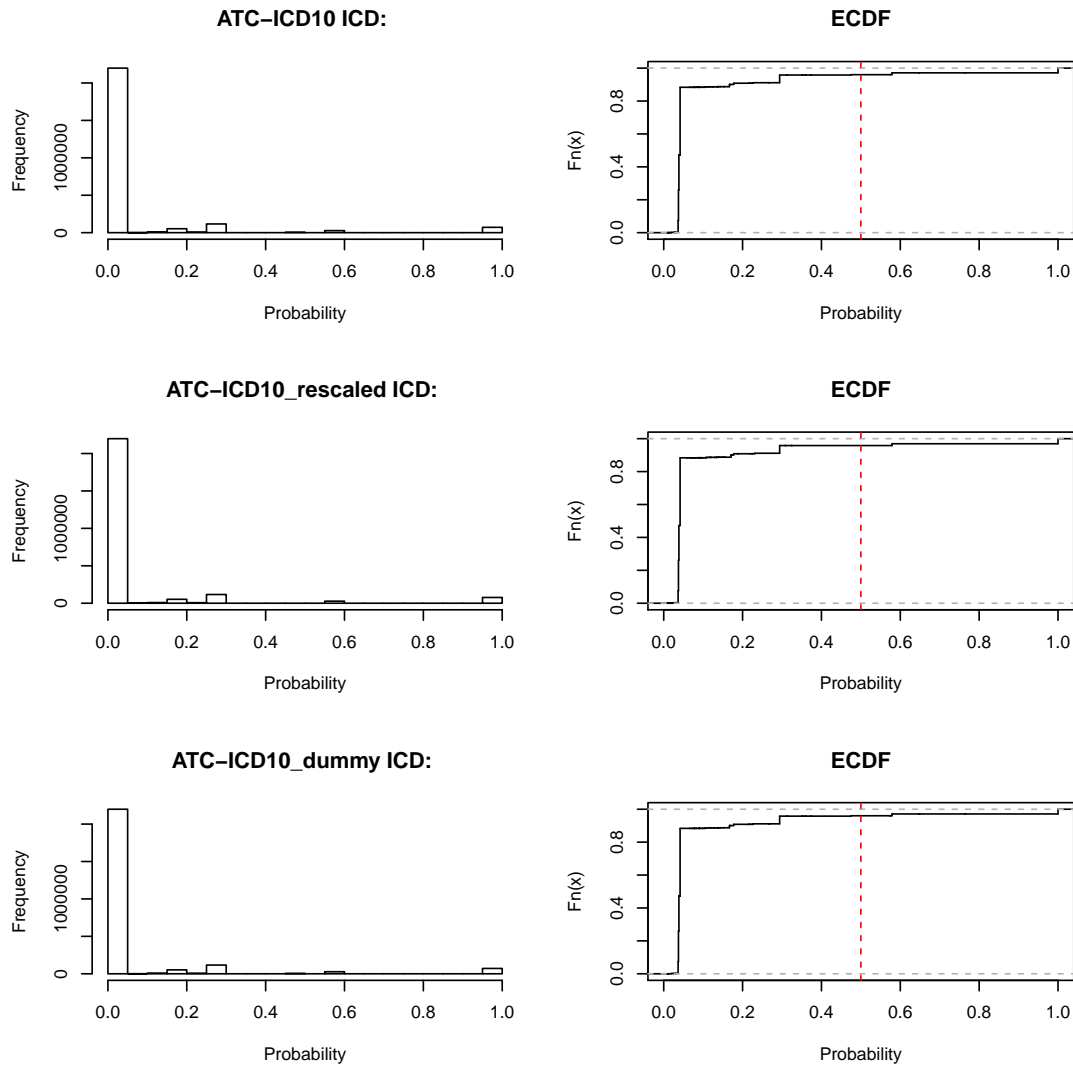
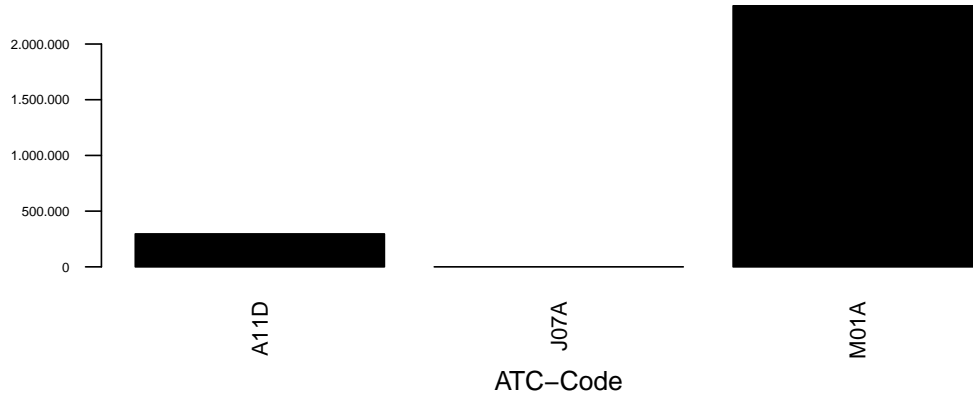


Figure 68: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group G50-G59.

Number of ATC Codes for G50–G59



Number of ATC Codes for G50–G59

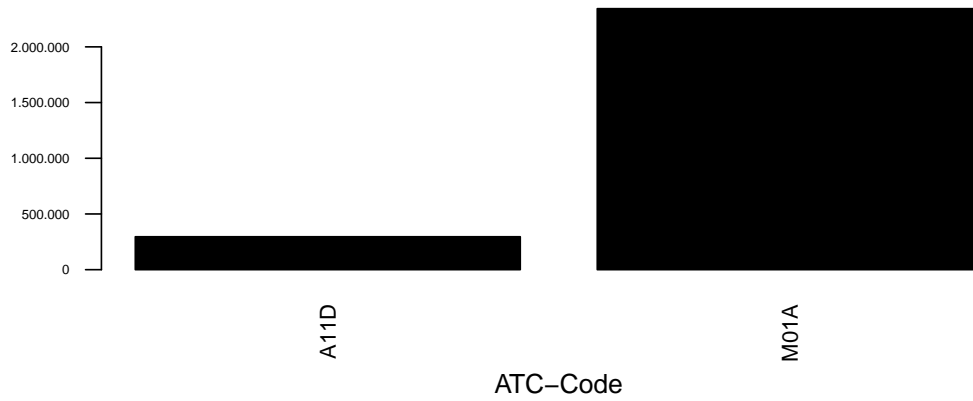


Figure 69: This figure shows the frequency of the underlying ATC codes for the given diagnose group G50-G59. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
A11D	VITAMIN-B1, REIN UND IN KOMBINATION MIT VITAMIN-B6 UND VITAMIN-B12	TRUE
J07A	BAKTERIELLE IMPFSTOFFE	FALSE
M01A	NICHTSTEROIDALE ANTIPHLOGISTIKA UND AN-TIRHEUMATIKA	TRUE

Table 38: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose G50-G59.

E.10. Diagnose S70-S79: Verletzungen der Hüfte und des Oberschenkels

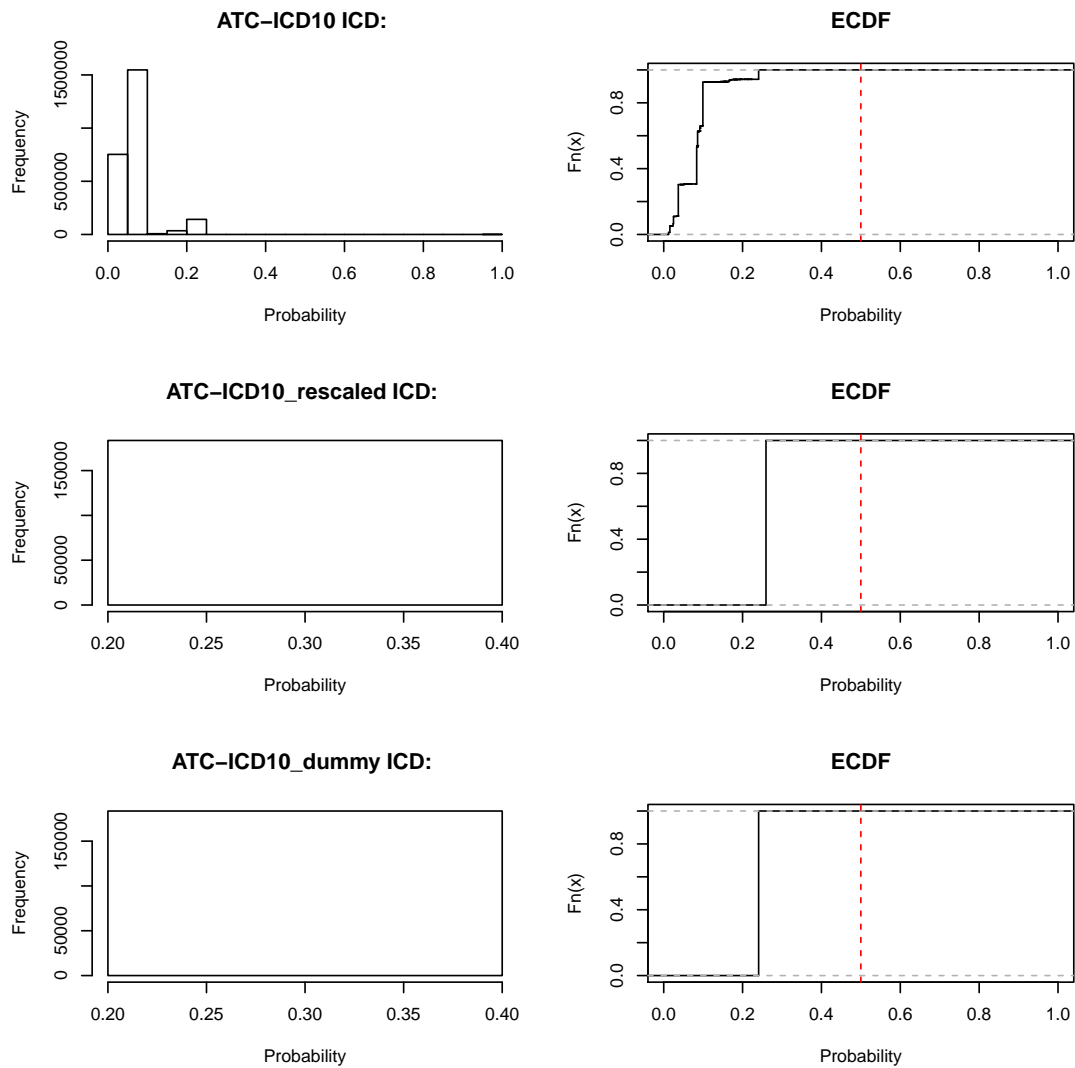


Figure 70: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group S70-S79.

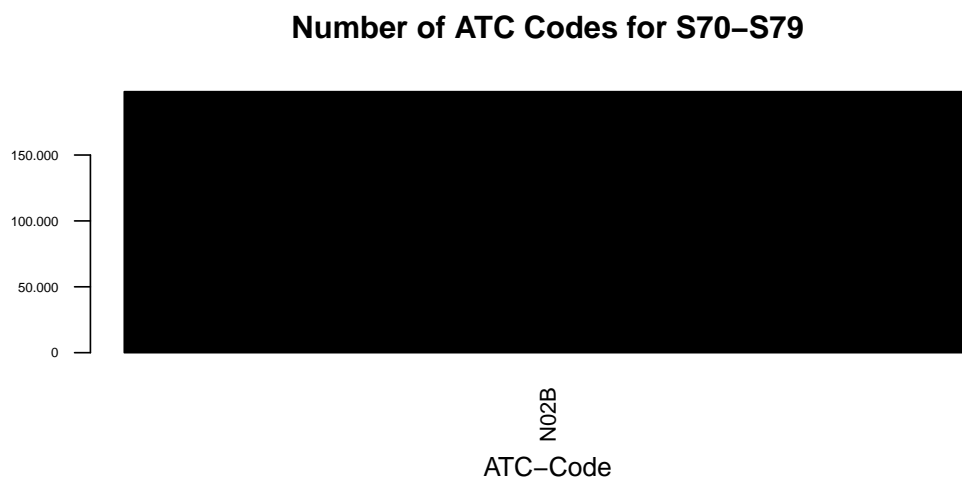
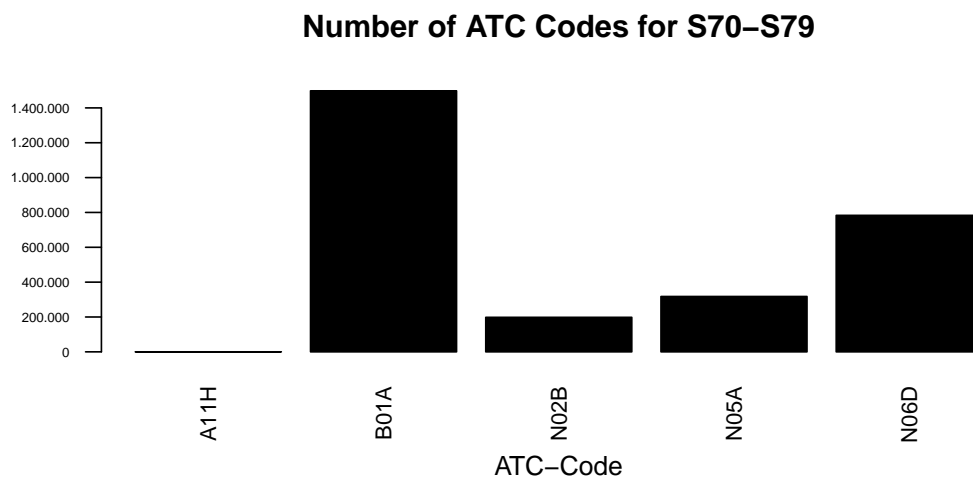


Figure 71: This figure shows the frequency of the underlying ATC codes for the given diagnose group S70-S79. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
A11H	ANDERE VITAMINPRÄPARATE, REIN	FALSE
B01A	ANTITHROMBOTISCHE MITTEL	FALSE
N02B	ANDERE ANALGETIKA UND ANTIPYRETIKA	TRUE
N05A	ANTIPSYCHOTIKA	FALSE
N06D	ANTIDEMENTIVA	FALSE

Table 39: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose S70-S79.

E.11. Diagnose S20-S29: Verletzungen des Thorax

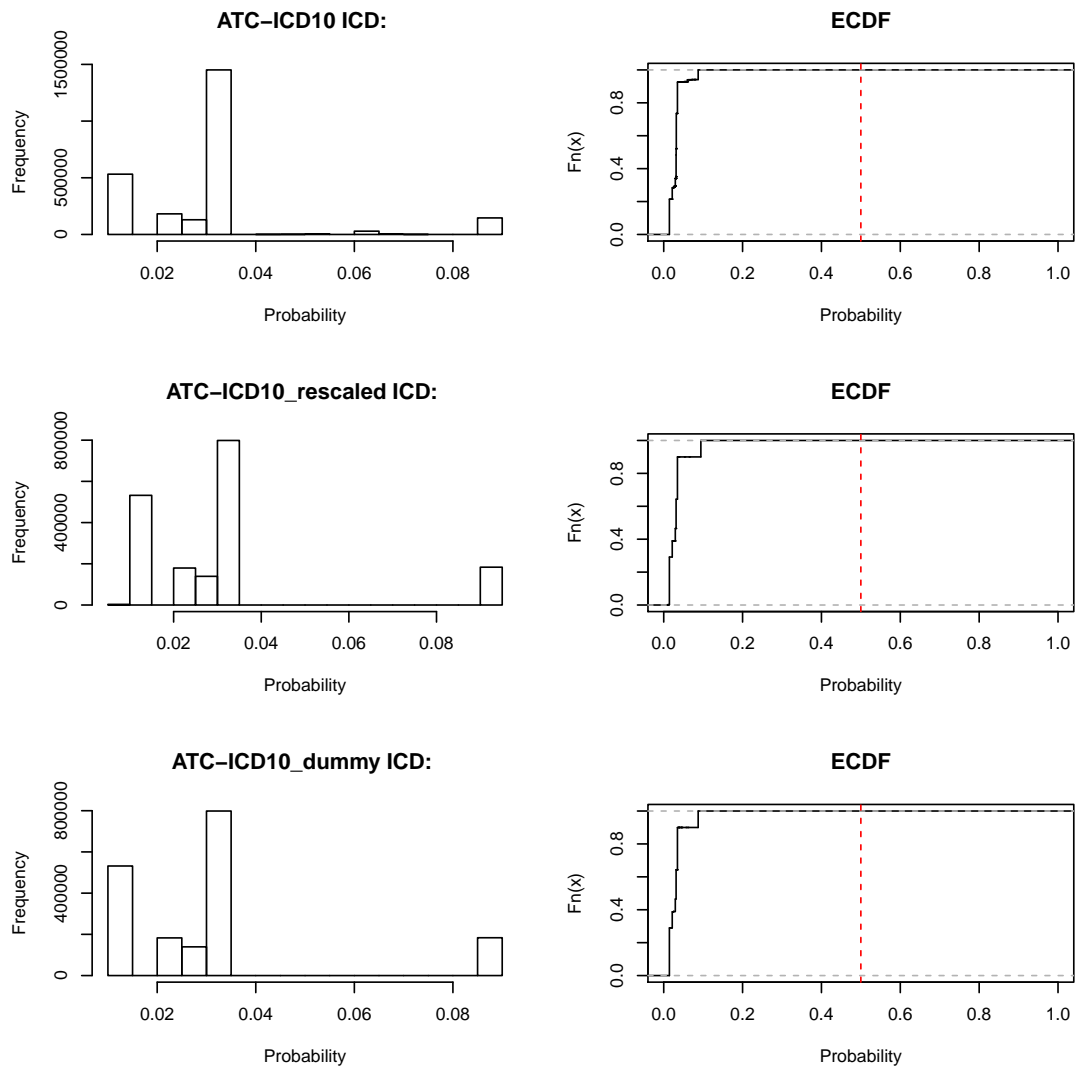


Figure 72: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group S20-S29.

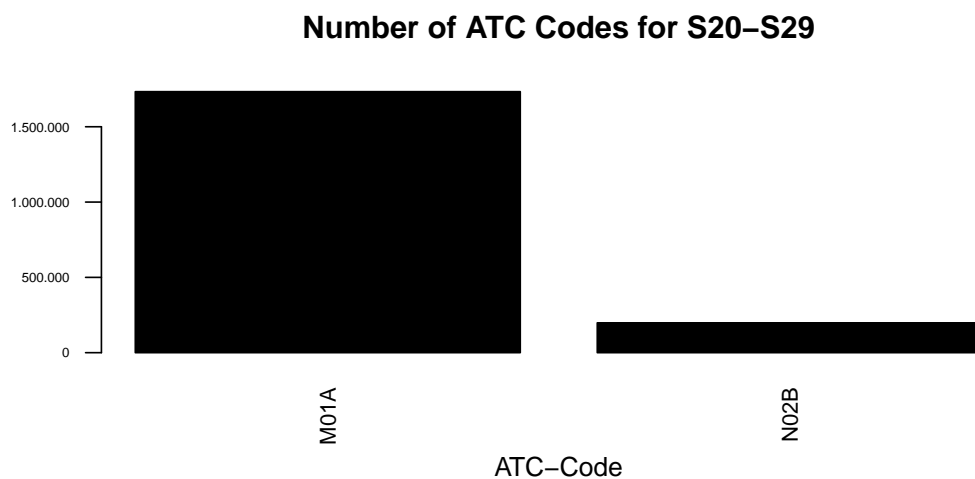
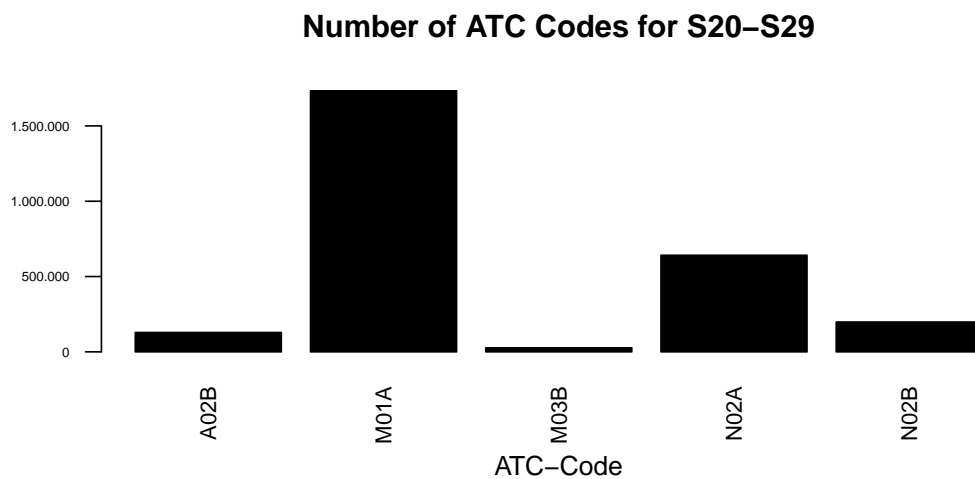


Figure 73: This figure shows the frequency of the underlying ATC codes for the given diagnose group S20-S29. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
A02B	MITTEL BEI PEPTISCHEM ULKUS UND GASTROE-SOPHAGEALER REFLUXKRANKHEIT	FALSE
M01A	NICHTSTEROIDALE ANTIPHLOGISTIKA UND AN-TIRHEUMATIKA	TRUE
M03B	MUSKELRELAXANTIEN, ZENTRAL WIRKENDE MITTEL	FALSE
N02A	OPIOIDE	FALSE
N02B	ANDERE ANALGETIKA UND ANTIPYRETIKA	TRUE

Table 40: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose S20-S29.

E.12. Diagnose T90-T98: Folgen von Verletzungen, Vergiftungen und sonstigen Auswirkungen äußerer Ursachen

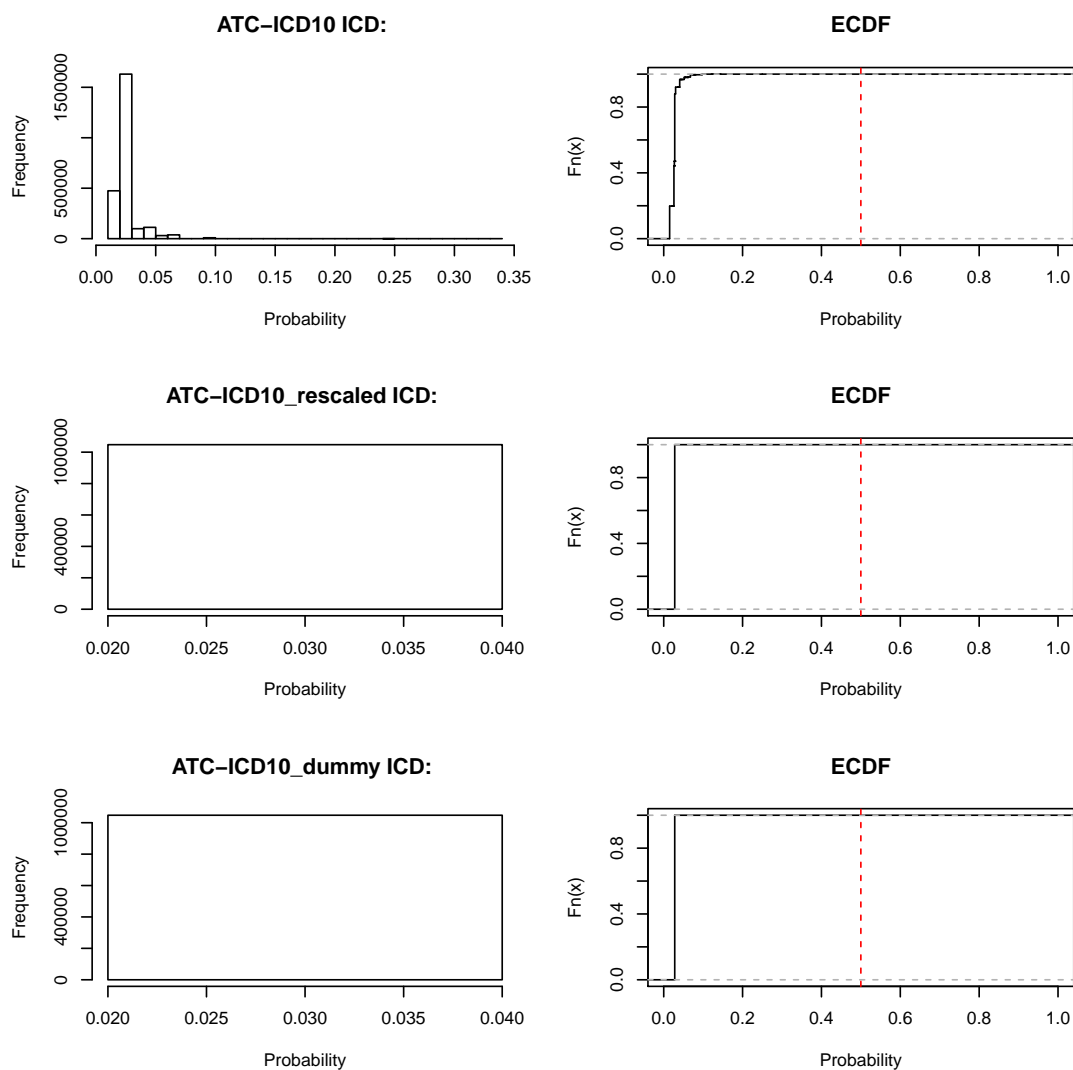
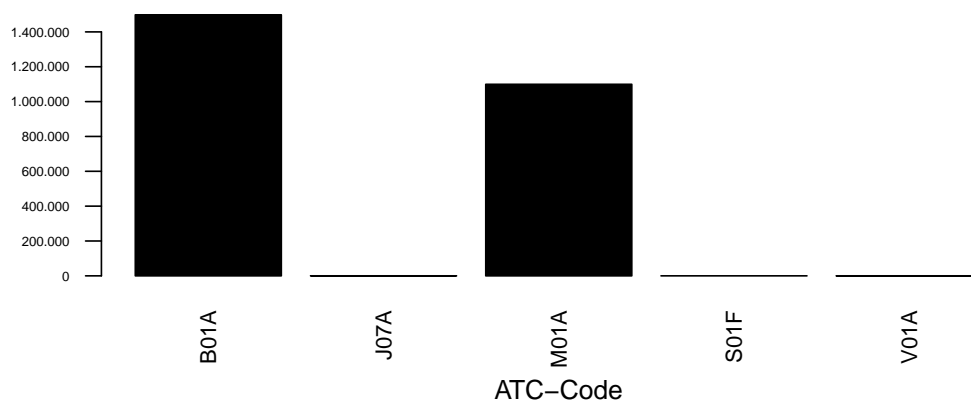


Figure 74: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group T90-T98.

Number of ATC Codes for T90–T98



Number of ATC Codes for T90–T98

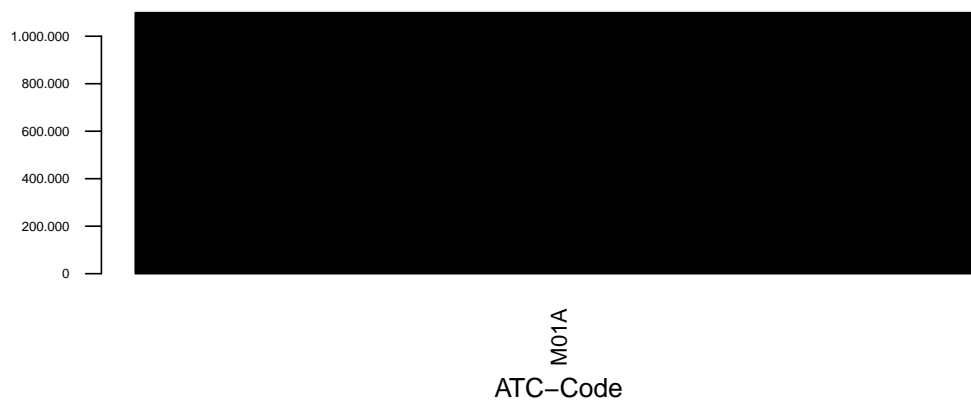


Figure 75: This figure shows the frequency of the underlying ATC codes for the given diagnose group T90-T98. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
B01A	ANTITHROMBOTISCHE MITTEL	FALSE
J07A	BAKTERIELLE IMPFSTOFFE	FALSE
M01A	NICHTSTEROIDALE ANTIPHLOGISTIKA UND AN-TIRHEUMATIKA	TRUE
S01F	MYDRIATIKA UND ZYKLOPLEGIKA	FALSE
V01A	ALLERGENE	FALSE

Table 41: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose T90-T98.

E.13. Diagnose N30-N39: Sonstige Krankheiten des Harnsystems

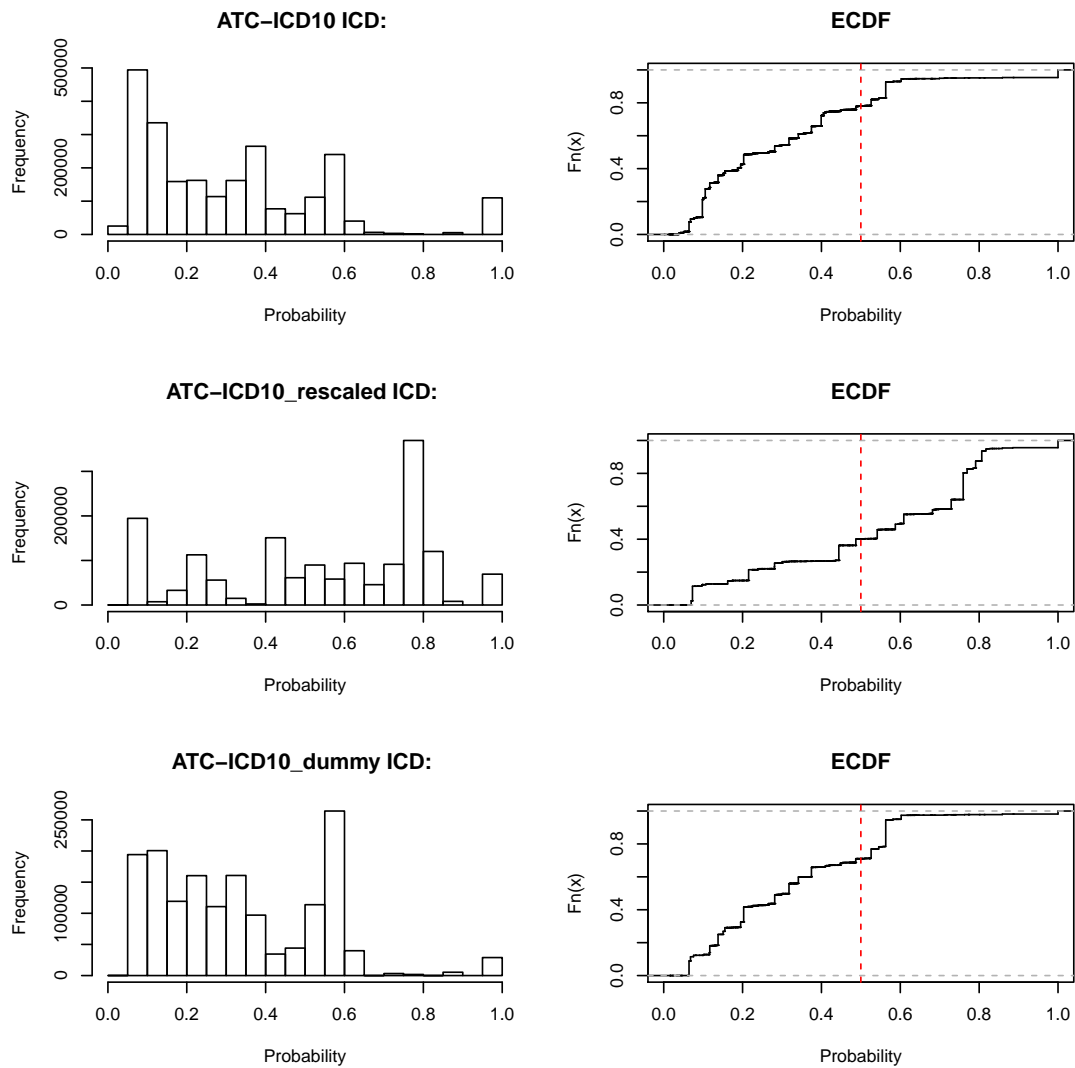


Figure 76: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group N30-N39.

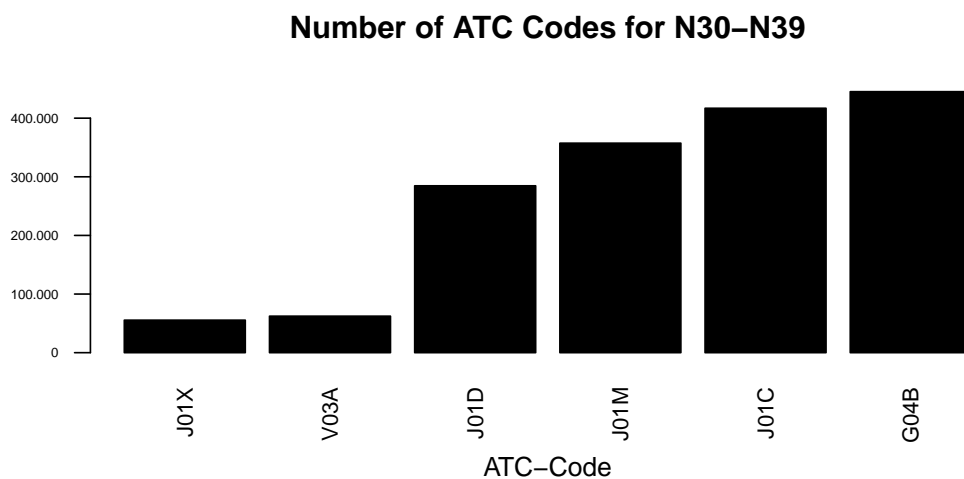
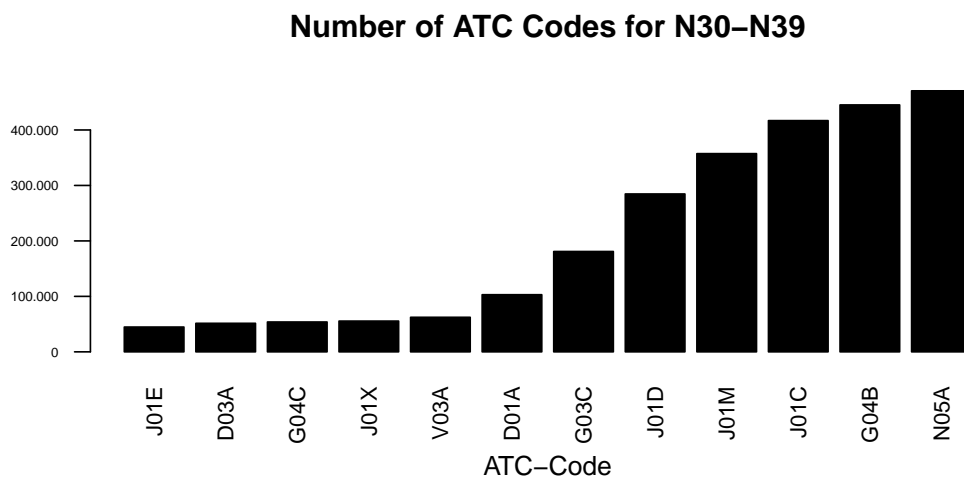


Figure 77: This figure shows the frequency of the underlying ATC codes for the given diagnose group N30-N39. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions. There are 29 ATC-Codes that related to the Diagnosis N30-N39. In order to give a clear overview of the distribution of the ATC codes behind an ICD10 group only the ATCs are shown, which represent the 95% of the cumulative frequency.

ATC	Description	Expert
D01A	ANTIMYKOTIKA ZUR TOPISCHEN ANWENDUNG	FALSE
D03A	Wundbehandlungsmittel	FALSE
G03C	ESTROGENE	FALSE
G04B	ANDERE UROLOGIKA, INKL. SPASMOLYTIKA	TRUE
G04C	MITTEL BEI BENIGNER PROSTATAHYPERPLASIE	FALSE
J01C	BETALACTAM-ANTIBIOTIKA, PENICILLINE	TRUE
J01D	ANDERE BETA-LACTAM-ANTIBIOTIKA	TRUE
J01E	SULFONAMIDE UND TRIMETHOPRIM	FALSE
J01M	CHINOLONE	TRUE
J01X	ANDERE ANTIBIOTIKA	TRUE
N05A	ANTIPSYCHOTIKA	FALSE
V03A	ALLE ÜBRIGEN THERAPEUTISCHEN MITTEL	TRUE

Table 42: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose N30-N39. There are 29 ATC-Codes that related to the Diagnosis N30-N39. In order to give a clear overview of the distribution of the ATC codes behind an ICD10 group only the ATCs are shown, which represent the 95% of the cumulative frequency.

E.14. Diagnose M45-M49: Spondylopathien

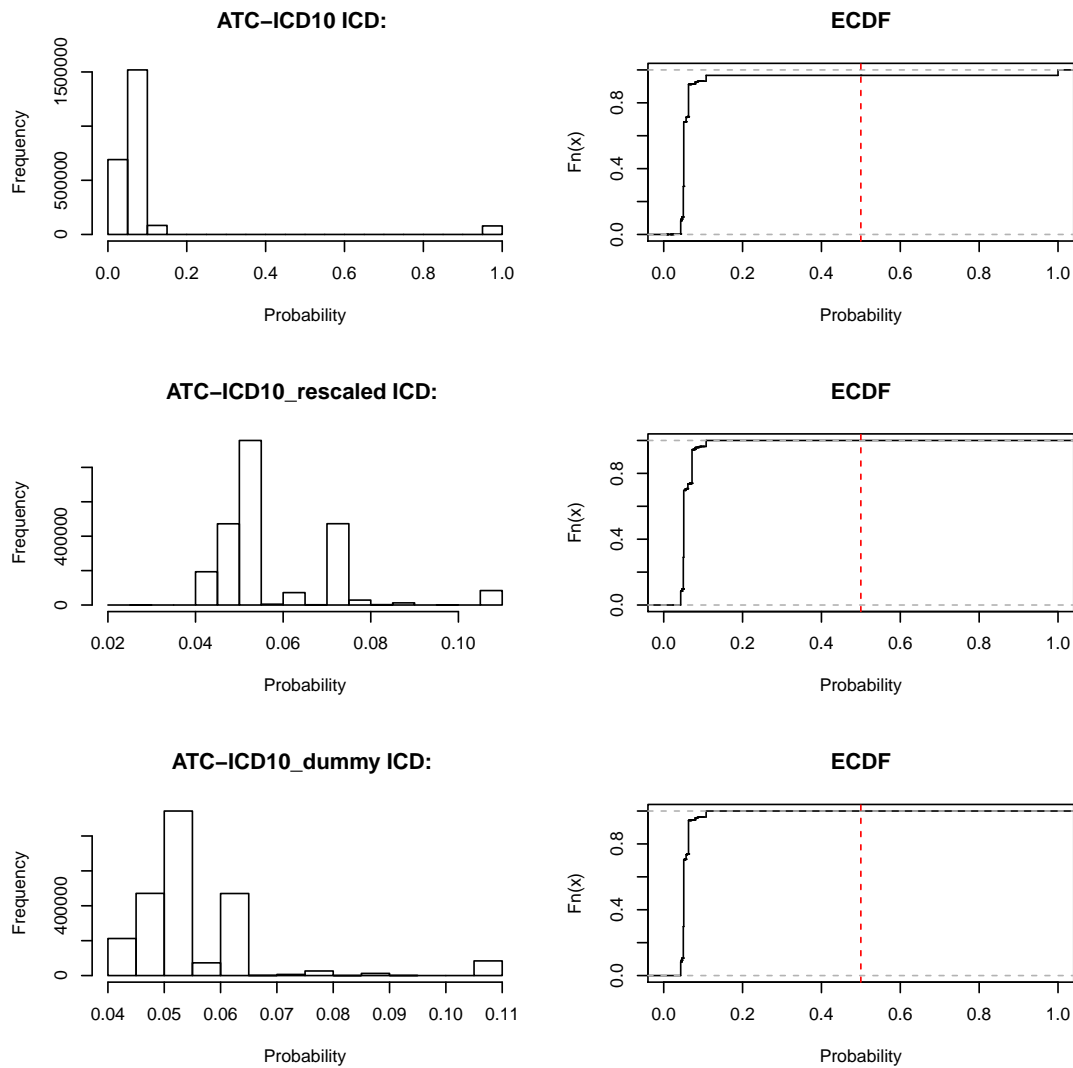


Figure 78: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group M45-M49.

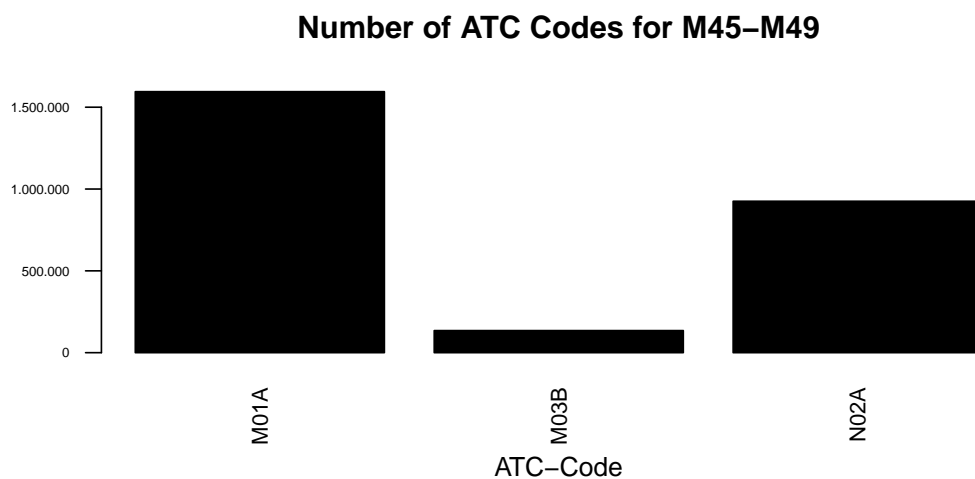
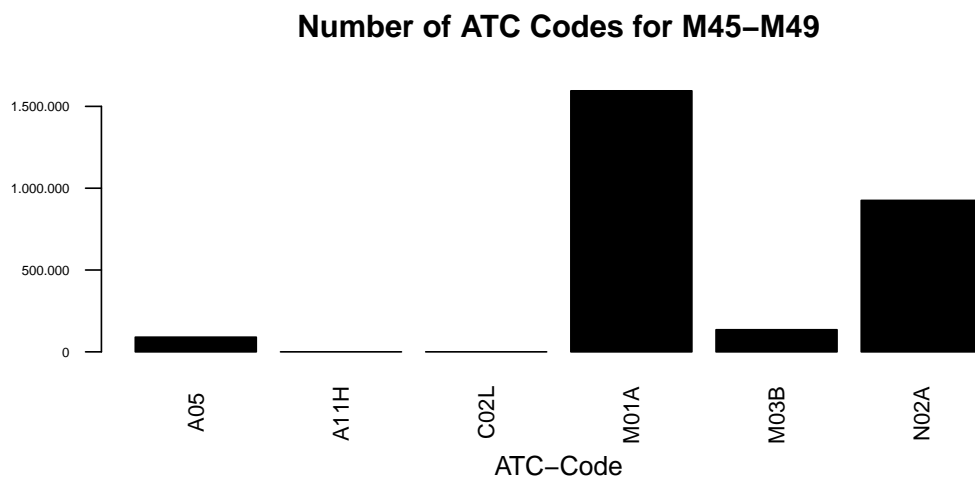


Figure 79: This figure shows the frequency of the underlying ATC codes for the given diagnose group M45-M49. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
A05	GALLE- UND LEBERTHERAPEUTIKA	FALSE
A11H	ANDERE VITAMINPRÄPARATE, REIN	FALSE
C02L	ANTIHYPERTONIKA UND DIURETIKA IN KOMBINATION	FALSE
M01A	NICHTSTEROIDALE ANTIPHLOGISTIKA UND AN-TIRHEUMATIKA	TRUE
M03B	MUSKELRELAXANTIEN, ZENTRAL WIRKENDE MITTEL	TRUE
N02A	OPIOIDE	TRUE

Table 43: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose M45-M49.

E.15. Diagnose M40-M43: Deformitäten der Wirbelsäule und des Rückens

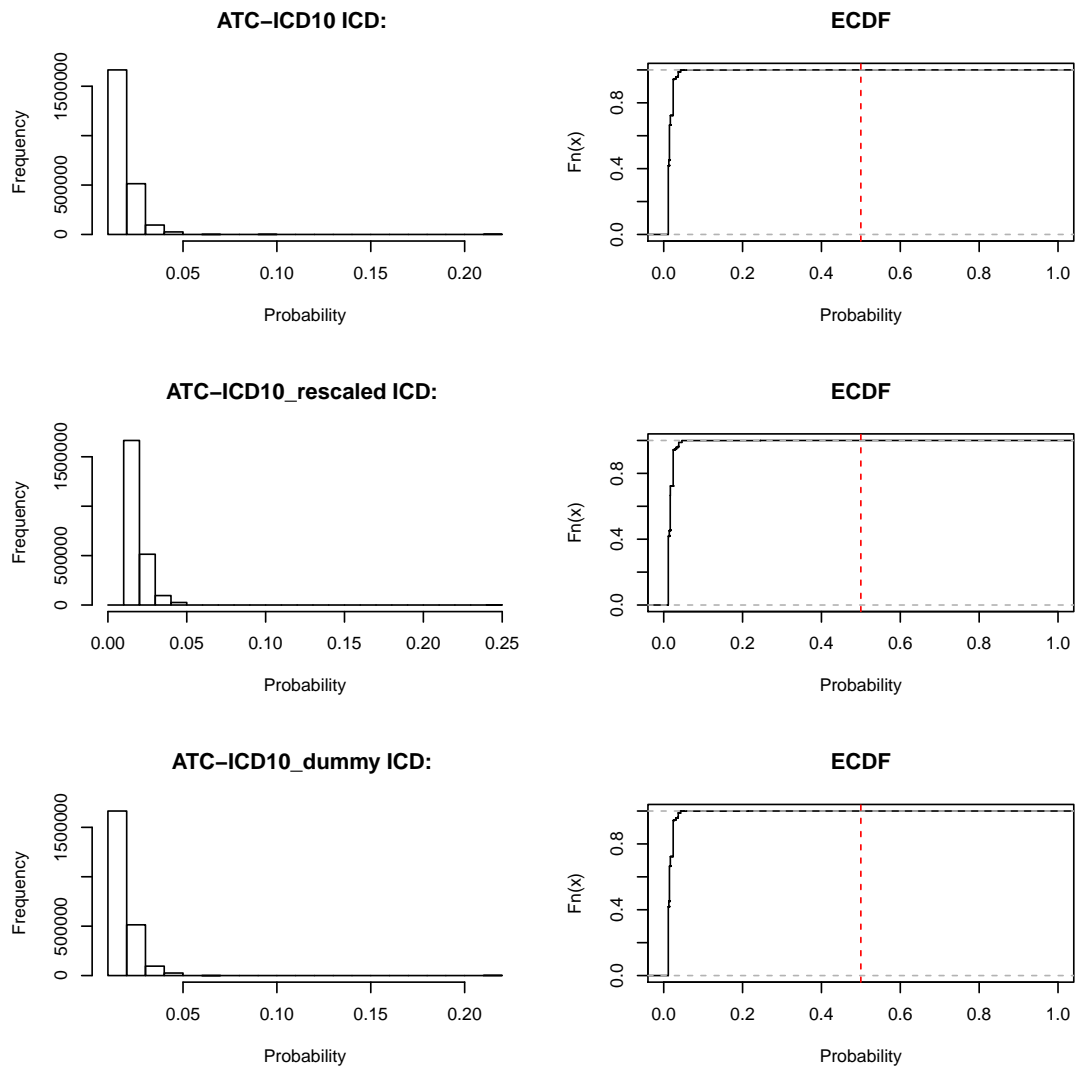
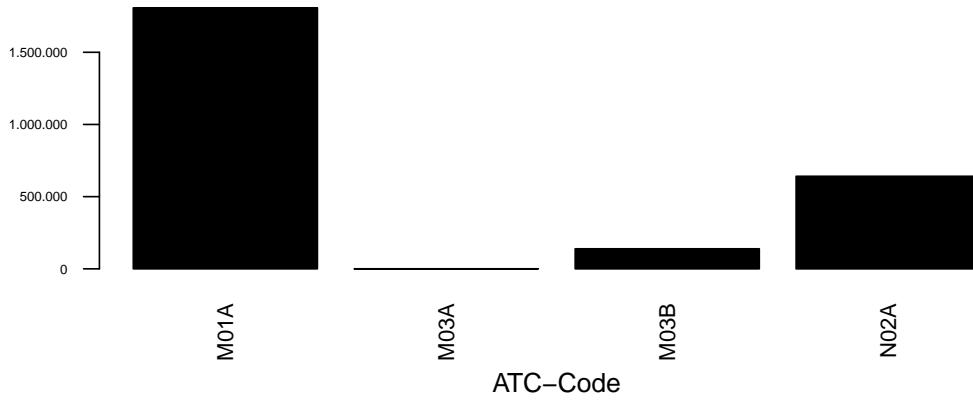


Figure 80: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group M40-M43.

Number of ATC Codes for M40–M43



Number of ATC Codes for M40–M43

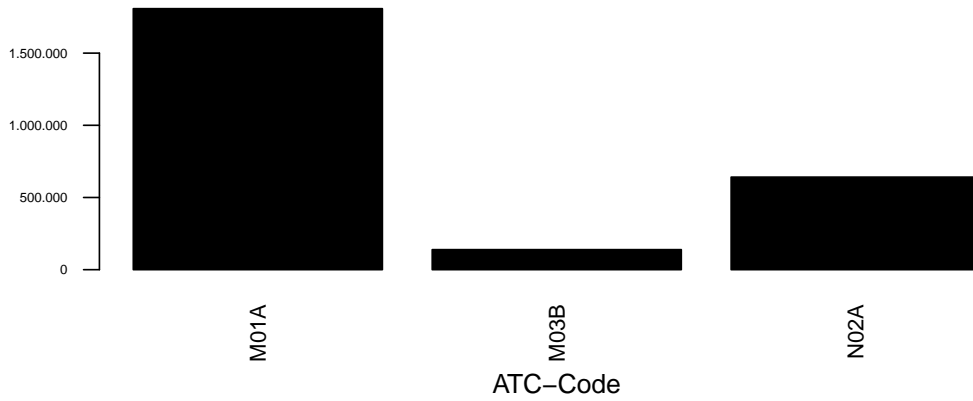


Figure 81: This figure shows the frequency of the underlying ATC codes for the given diagnose group M40-M43. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
M01A	NICHTSTEROIDALE ANTIPHLOGISTIKA UND AN-TIRHEUMATIKA	TRUE
M03A	MUSKELRELAXANZIEN, PERIPHER WIRKENDE MITTEL	FALSE
M03B	MUSKELRELAXANTIEN, ZENTRAL WIRKENDE MITTEL	TRUE
N02A	OPIOIDE	TRUE

Table 44: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose M40-M43.

E.16. Diagnose D50-D53: Alimentäre Anämien

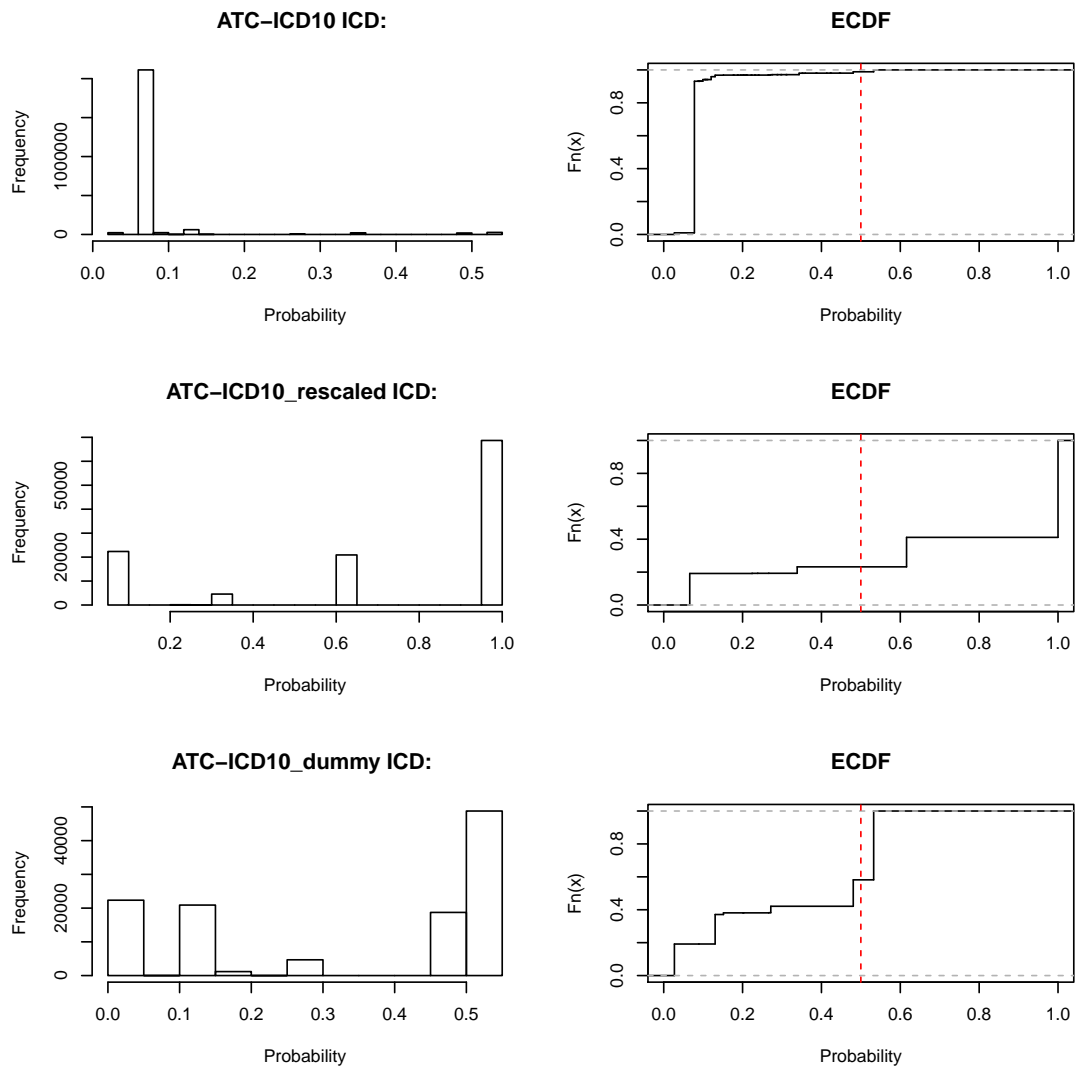
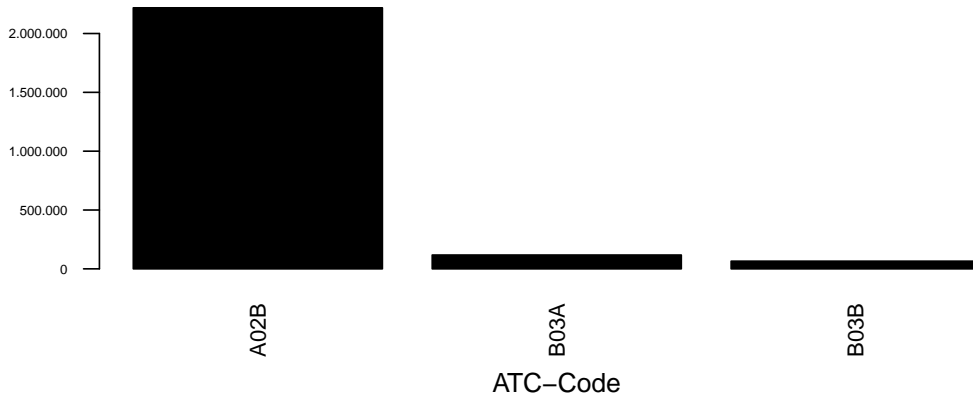


Figure 82: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group D50-D53.

Number of ATC Codes for D50–D53



Number of ATC Codes for D50–D53

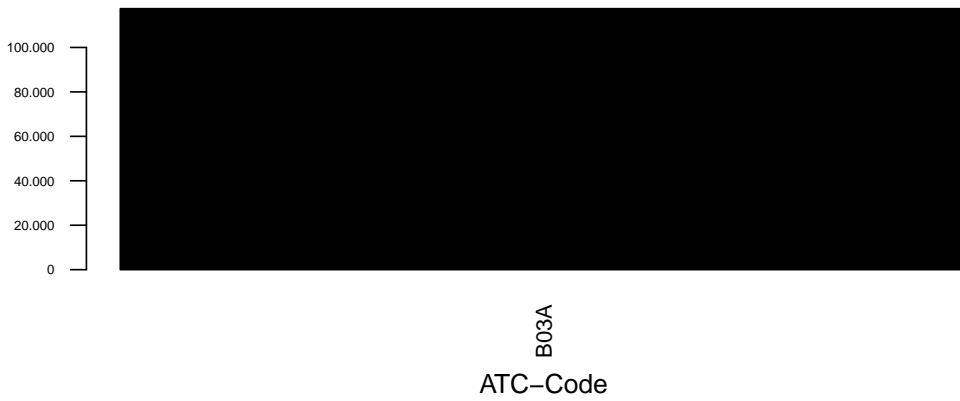


Figure 83: This figure shows the frequency of the underlying ATC codes for the given diagnose group D50-D53. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
A02B	MITTEL BEI PEPTISCHEM ULKUS UND GASTROE-SOPHAGEALER REFLUXKRANKHEIT	FALSE
B03A	EISEN-HALTIGE ZUBEREITUNGEN	TRUE
B03B	VITAMIN-B12 UND FOLSÄURE	FALSE

Table 45: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose D50-D53.

E.17. Diagnose N17-N19: Niereninsuffizienz

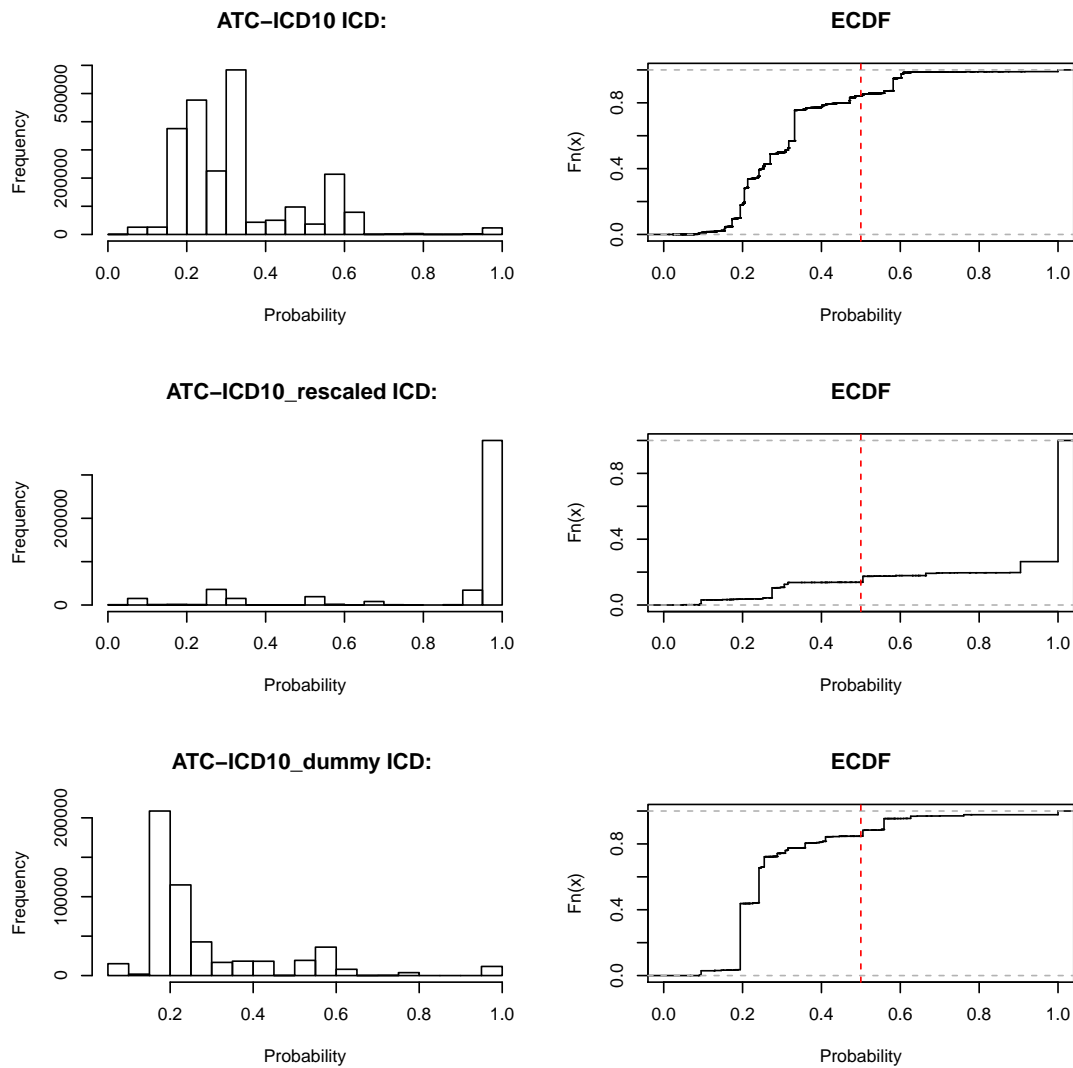
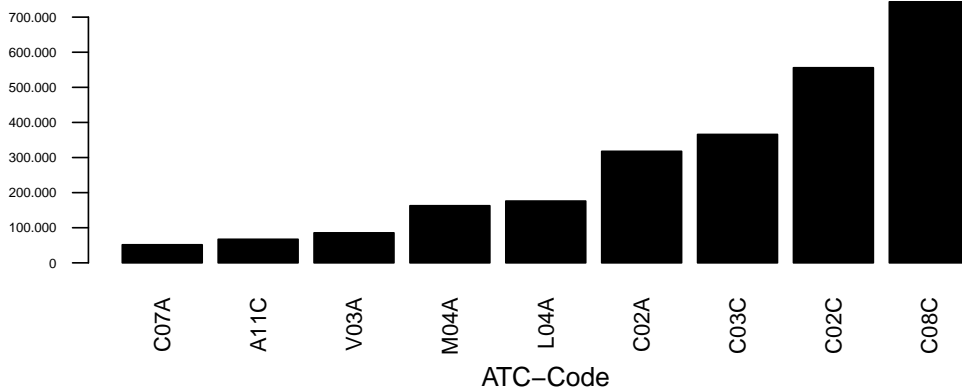


Figure 84: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group N17-N19.

Number of ATC Codes for N17–N19



Number of ATC Codes for N17–N19

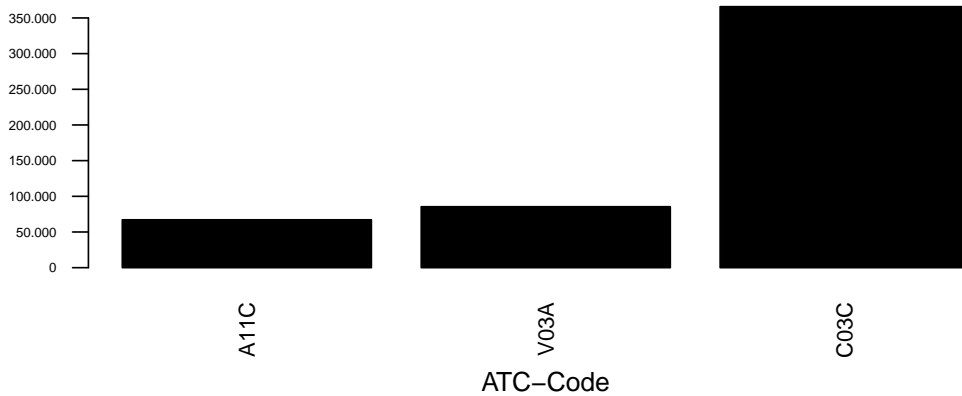


Figure 85: This figure shows the frequency of the underlying ATC codes for the given diagnose group N17-N19. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions. There are 22 ATC-Codes that related to the Diagnosis N17-N19. In order to give a clear overview of the distribution of the ATC codes behind an ICD10 group only the ATCs are shown, which represent the 95% of the cumulative frequency.

ATC	Description	Expert
A11C	VITAMIN A UND D, INKL. DEREN KOMBINATIONEN	TRUE
C02A	ANTIADRENERGE MITTEL, ZENTRAL WIRKEND	FALSE
C02C	ANTIADRENERGE MITTEL, PERIPHER WIRKEND	FALSE
C03C	HIGH-CEILING-DIURETIKA	TRUE
C07A	BETA-ADRENOREZEPTOR-ANTAGONISTEN	FALSE
C08C	SELEKTIVE CALCIUMKANALBLOCKER MIT VOR- WIEGENDER GEFÄSSWIRKUNG	FALSE
L04A	IMMUNSUPPRESSIVA	FALSE
M04A	GICHTMITTEL	FALSE
V03A	ALLE ÜBRIGEN THERAPEUTISCHEN MITTEL	TRUE

Table 46: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose N17-N19. There are 22 ATC-Codes that related to the Diagnosis N17-N19. In order to give a clear overview of the distribution of the ATC codes behind an ICD10 group only the ATCs are shown, which represent the 95% of the cumulative frequency.

E.18. Diagnose E10-E14: Diabetes mellitus

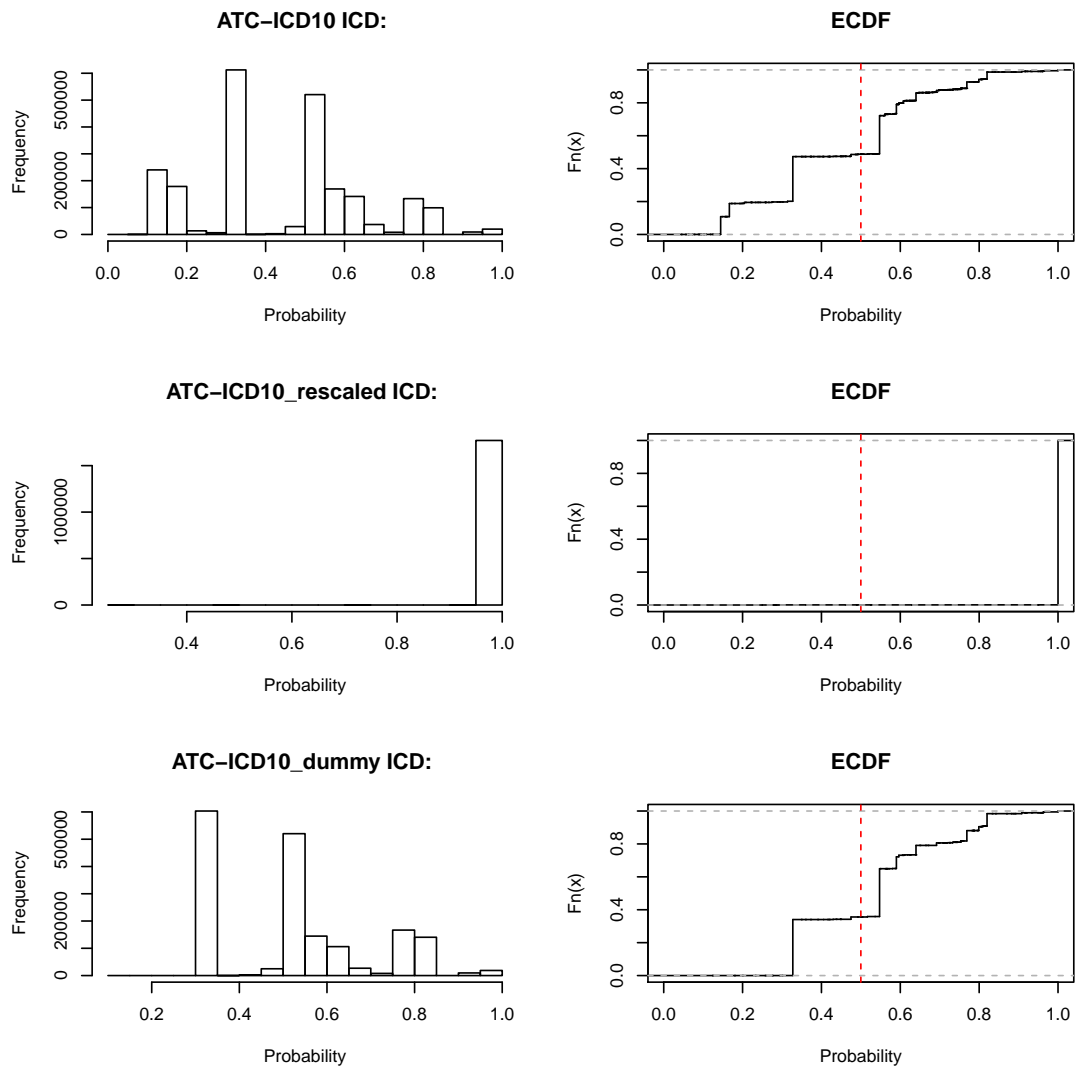


Figure 86: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group E10-E14.

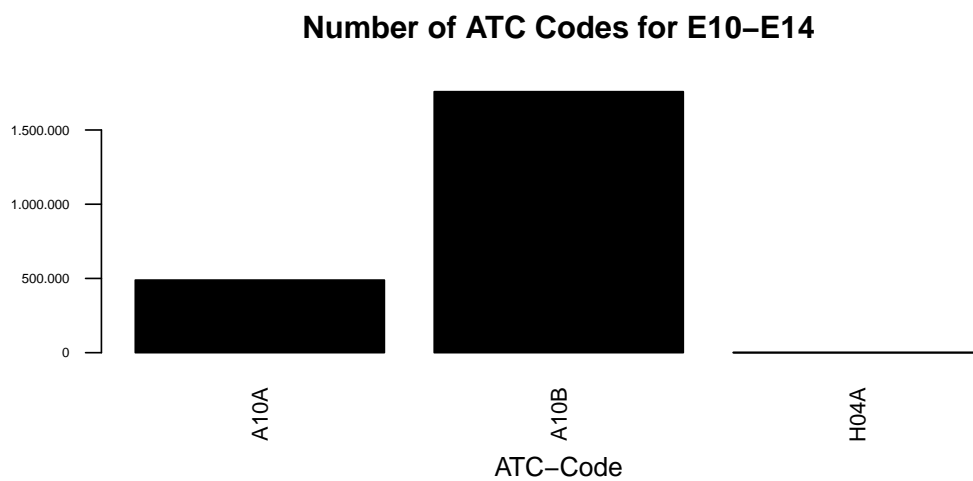
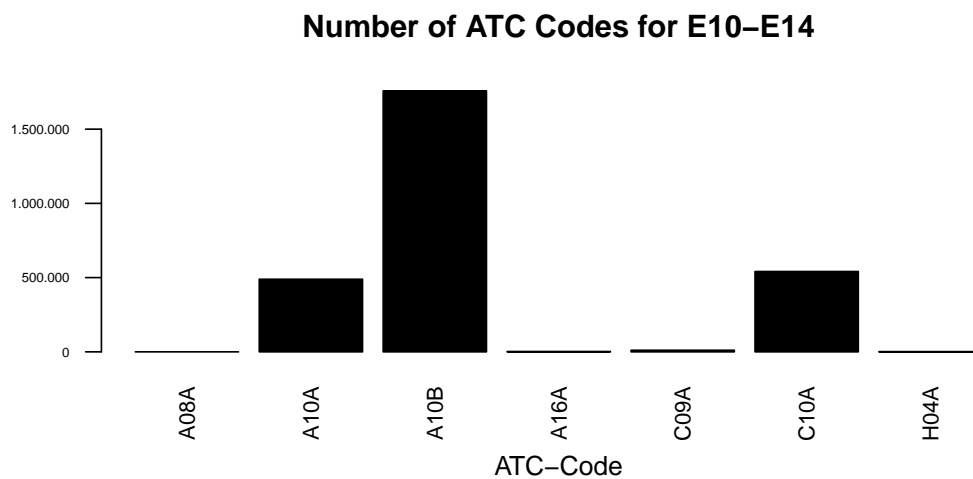


Figure 87: This figure shows the frequency of the underlying ATC codes for the given diagnose group E10-E14. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
A08A	ABMAGERUNGSMITTEL, EXKL. DIÄTETIKA	FALSE
A10A	INSULINE UND ANALOGA	TRUE
A10B	ORALE ANTIDIABETIKA, EXKL. INSULINE	TRUE
A16A	ANDERE MITTEL FÜR DAS ALIMENTÄRE SYSTEM UND DEN STOFFWECHSEL	FALSE
C09A	ACE-HEMMER, REIN	FALSE
C10A	MITTEL, DIE DEN LIPIDSTOFFWECHSEL BEEINFLUSSEN, REIN	FALSE
H04A	GLYKOGENOLYTISCHE HORMONE	TRUE

Table 47: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose E10-E14.

E.19. Diagnose S00-S09: Verletzungen des Kopfes

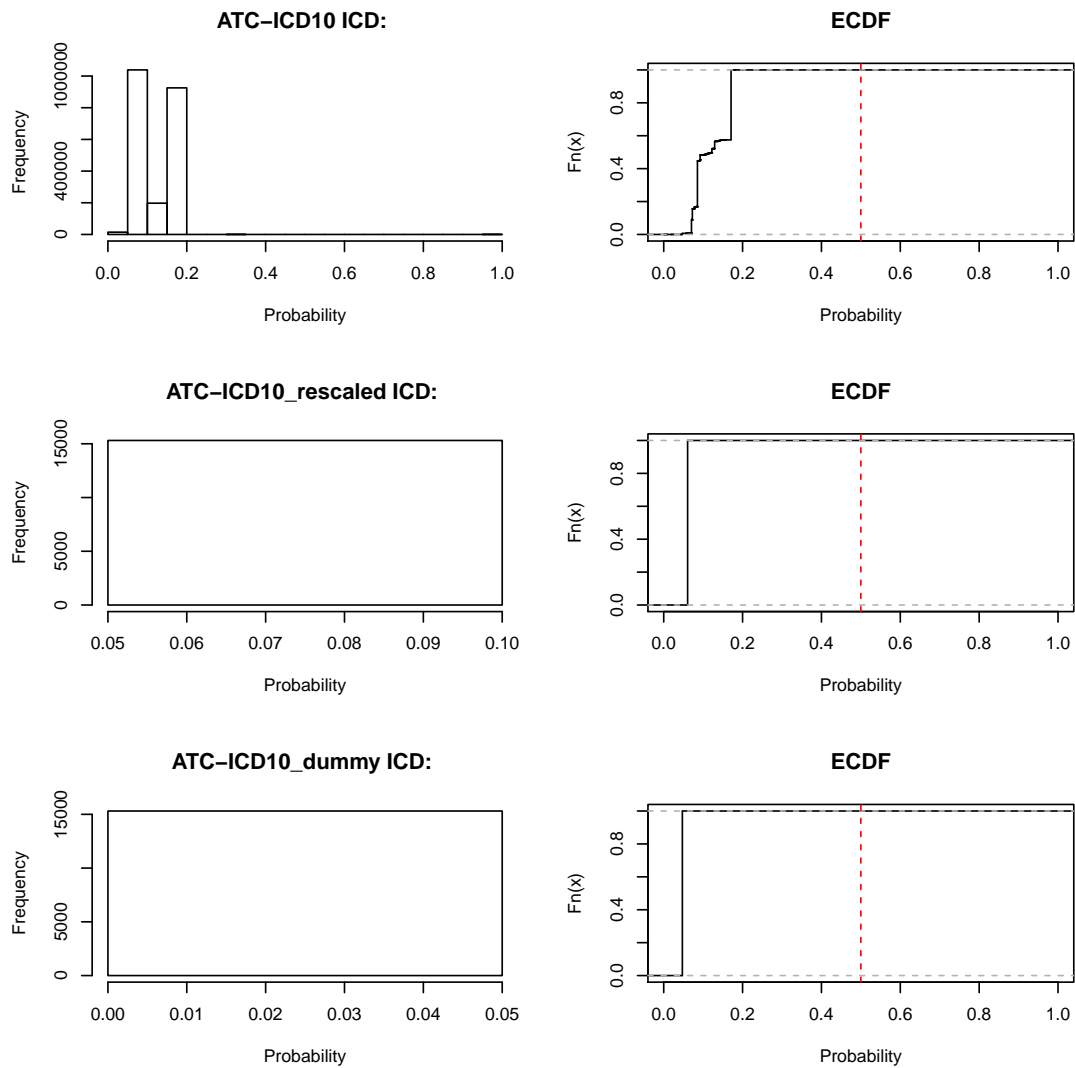
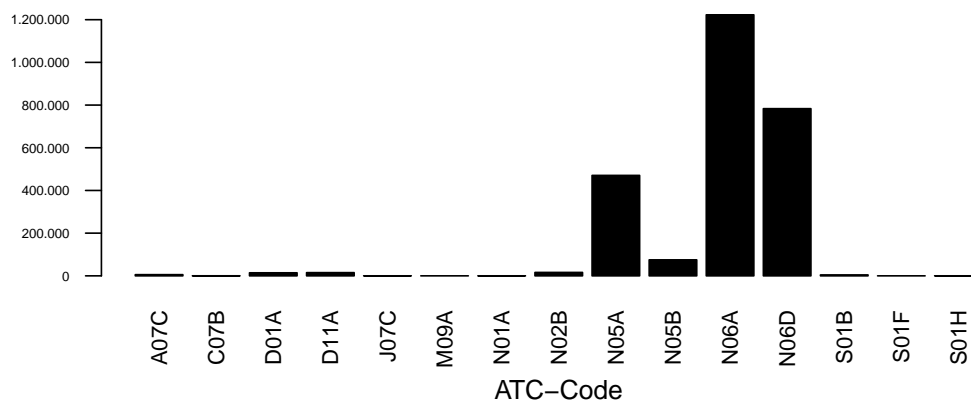


Figure 88: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group S00-S09.

Number of ATC Codes for S00–S09



Number of ATC Codes for S00–S09

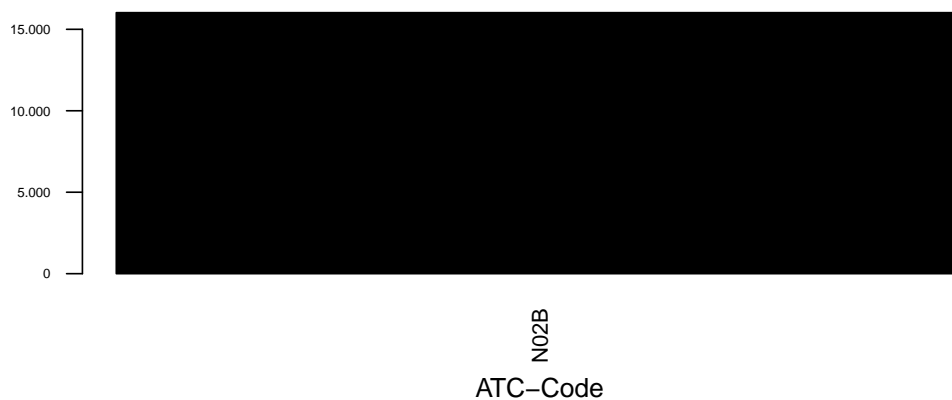


Figure 89: This figure shows the frequency of the underlying ATC codes for the given diagnose group S00-S09. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
A07C	ELEKTROLYTE MIT KOHLENHYDRATEN	FALSE
C07B	BETA-ADRENOREZEPTOR-ANTAGONISTEN UND THI-AZIDE	FALSE
D01A	ANTIMYKOTIKA ZUR TOPISCHEN ANWENDUNG	FALSE
D11A	ANDERE DERMATIKA	FALSE
J07C	BAKTERIELLE UND VIRALE IMPFSTOFFE, KOMBINIERT	FALSE
M09A	ANDERE MITTEL GEGEN STÖRUNGEN DES MUSKEL- UND SKELETTSYSTEMS	FALSE
N01A	ALLGEMEINANÄSTHETIKA	FALSE
N02B	ANDERE ANALGETIKA UND ANTIPYRETIKA	TRUE
N05A	ANTIPSYCHOTIKA	FALSE
N05B	ANXIOLYTIKA	FALSE
N06A	ANTIDEPRESSIVA	FALSE
N06D	ANTIDEMENTIVA	FALSE
S01B	ANTIPHLOGISTIKA	FALSE
S01F	MYDRIATIKA UND ZYKLOPLEGIKA	FALSE
S01H	LOKALANÄSTHETIKA	FALSE

Table 48: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose S00-S09.

E.20. Diagnose S30-S39: Verletzungen des Abdomens, der Lumbosakralgegend, der Lendenwirbelsäule und des Beckens

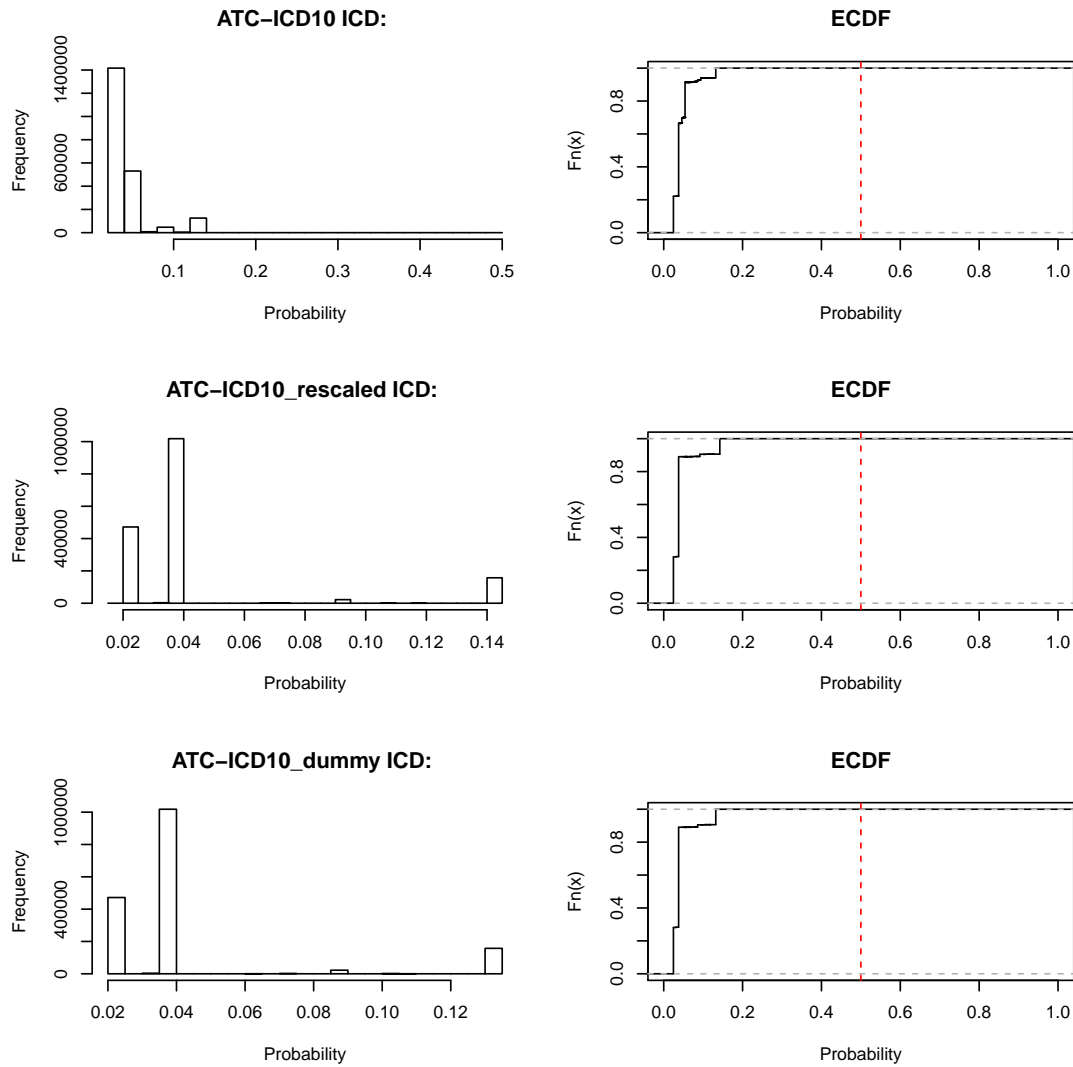


Figure 90: This figure shows the distribution of the probabilities of the diagnosis for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group S30-S39.

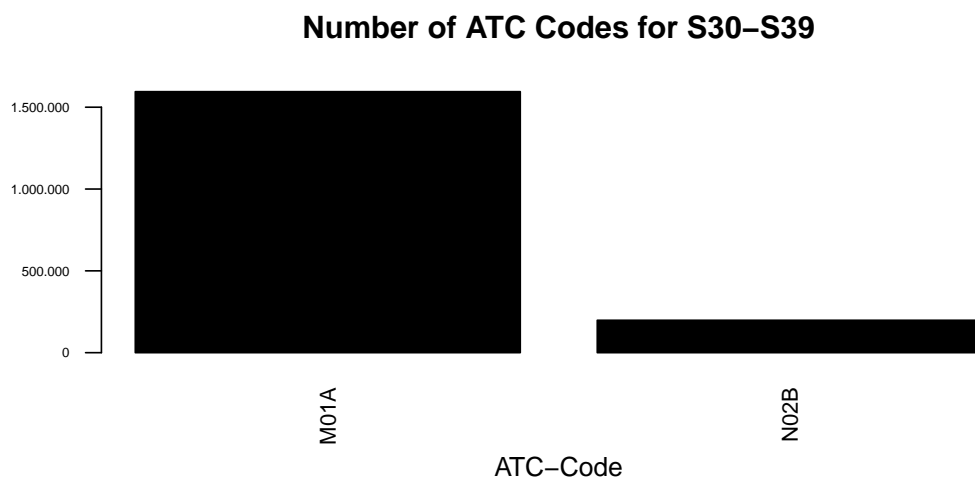
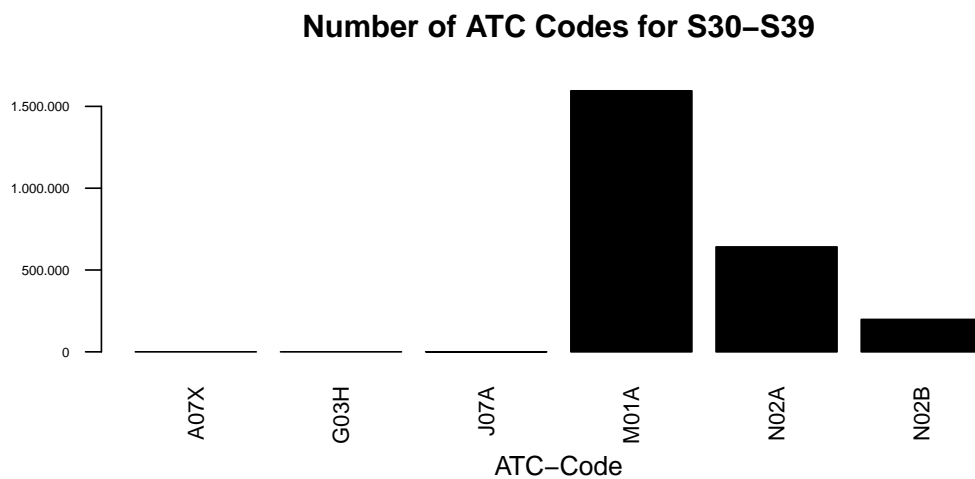


Figure 91: This figure shows the frequency of the underlying ATC codes for the given diagnose group S30-S39. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
A07X	ANDERE ANTIDIARRHOIKA	FALSE
G03H	ANTIANDROGENE	FALSE
J07A	BAKTERIELLE IMPFSTOFFE	FALSE
M01A	NICHTSTEROIDALE ANTIPHLOGISTIKA UND AN-TIRHEUMATIKA	TRUE
N02A	OPIOIDE	FALSE
N02B	ANDERE ANALGETIKA UND ANTIPYRETIKA	TRUE

Table 49: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose S30-S39.

E.21. Diagnose R10-R19: Symptome, die das Verdauungssystem und das Abdomen betreffen

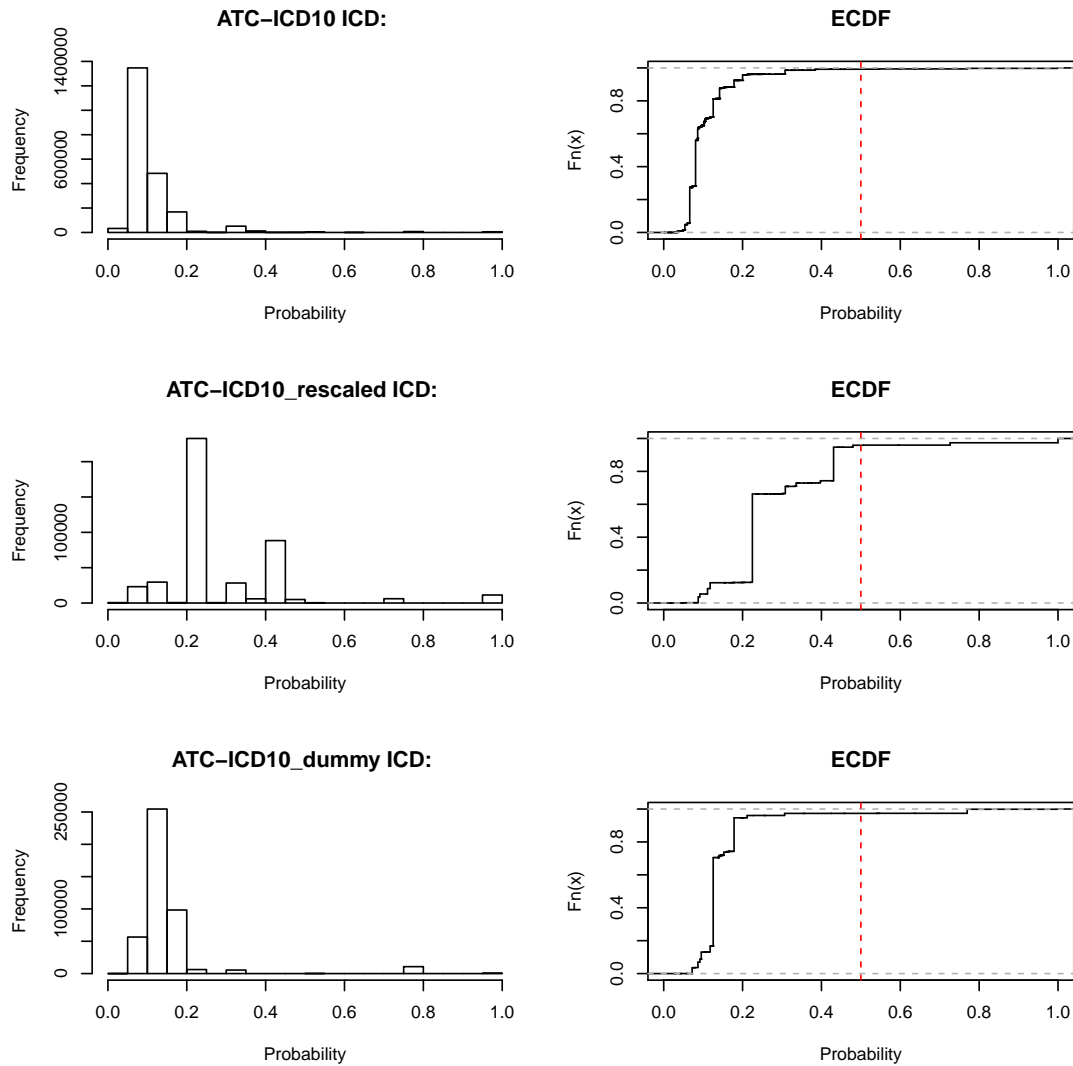


Figure 92: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group R10-R19.

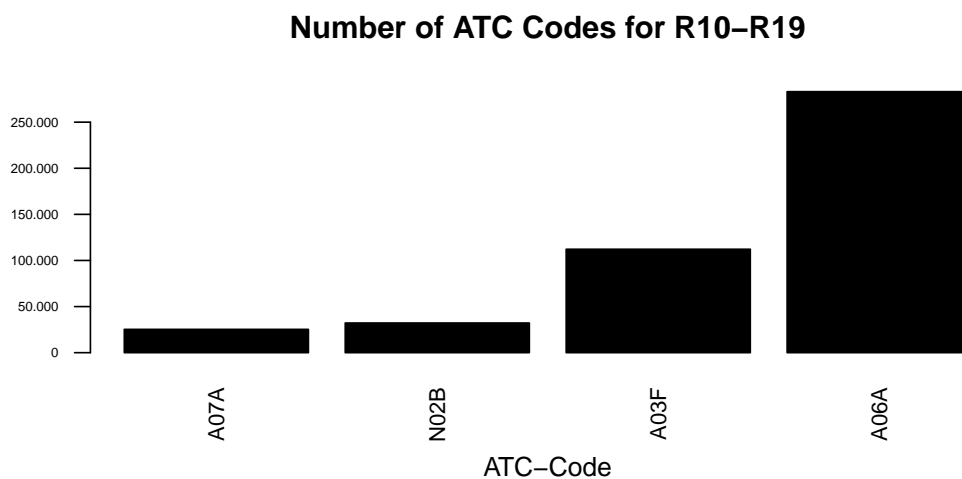
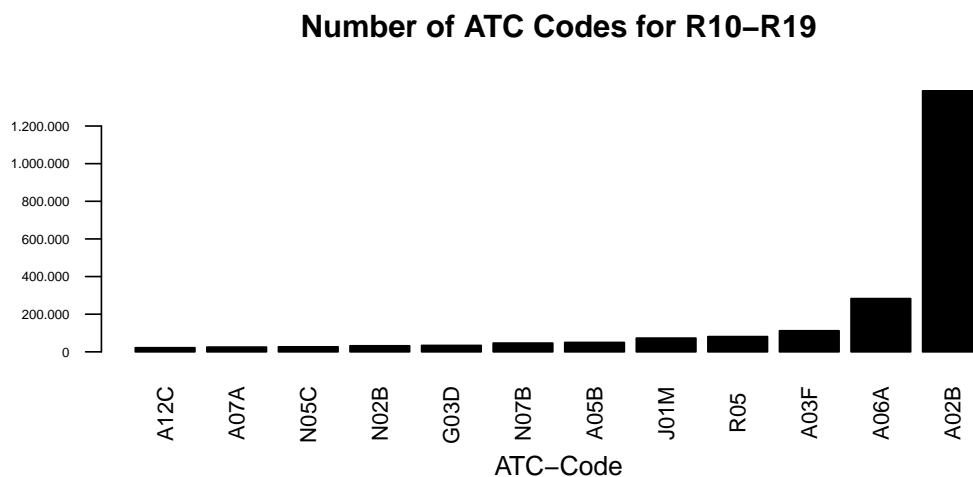


Figure 93: This figure shows the frequency of the underlying ATC codes for the given diagnose group R10-R19. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions. There are 29 ATC-Codes that related to the Diagnosis R10-R19. In order to give a clear overview of the distribution of the ATC codes behind an ICD10 group only the ATCs are shown, which represent the 95% of the cumulative frequency.

ATC	Description	Expert
A02B	MITTEL BEI PEPTISCHEM ULKUS UND GASTROE-SOPHAGEALER REFLUXKRANKHEIT	FALSE
A03F	PROKINETIKA	TRUE
A05B	LEBERTHERAPIE, LIPOTROPE SUBSTANZEN	FALSE
A06A	LAXANTIEN	TRUE
A07A	INTESTINALE ANTIINFEKTIVA	TRUE
A12C	ANDERE MINERALSTOFFE	FALSE
G03D	GESTAGENE	FALSE
J01M	CHINOLONE	FALSE
N02B	ANDERE ANALGETIKA UND ANTIPYRETIKA	TRUE
N05C	HYPNOTIKA UND SEDATIVA	FALSE
N07B	MITTEL ZUR BEHANDLUNG VON SUCHTERKRANKUNGEN	FALSE
R05	HUSTEN- UND ERKÄLTUNGSPRÄPARATE	FALSE

Table 50: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose R10-R19. There are 29 ATC-Codes that related to the Diagnosis R10-R19. In order to give a clear overview of the distribution of the ATC codes behind an ICD10 group only the ATCs are shown, which represent the 95% of the cumulative frequency.

E.22. Diagnose G20-G26: Extrapyramidale Krankheiten und Bewegungsstörungen

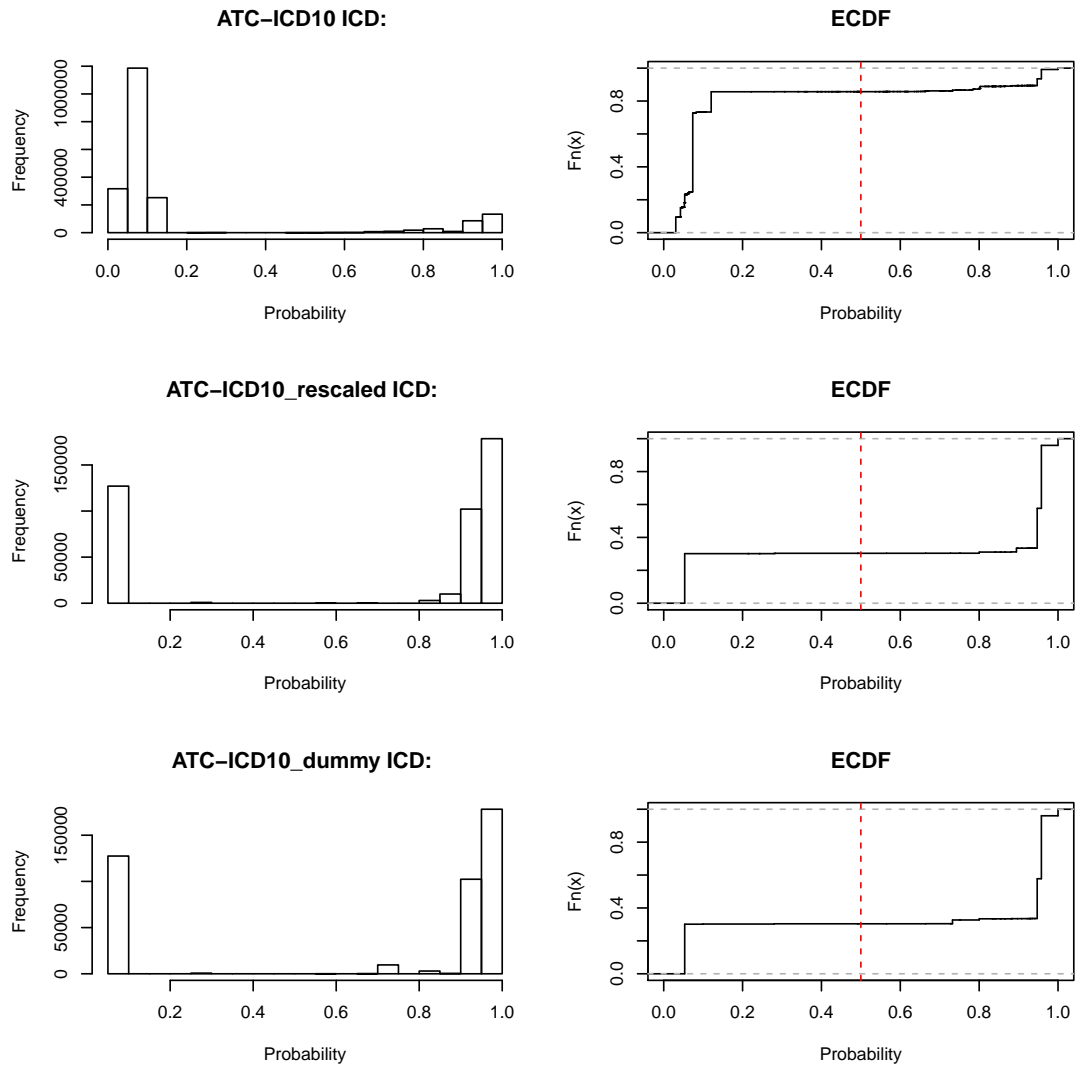


Figure 94: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group G20-G26.

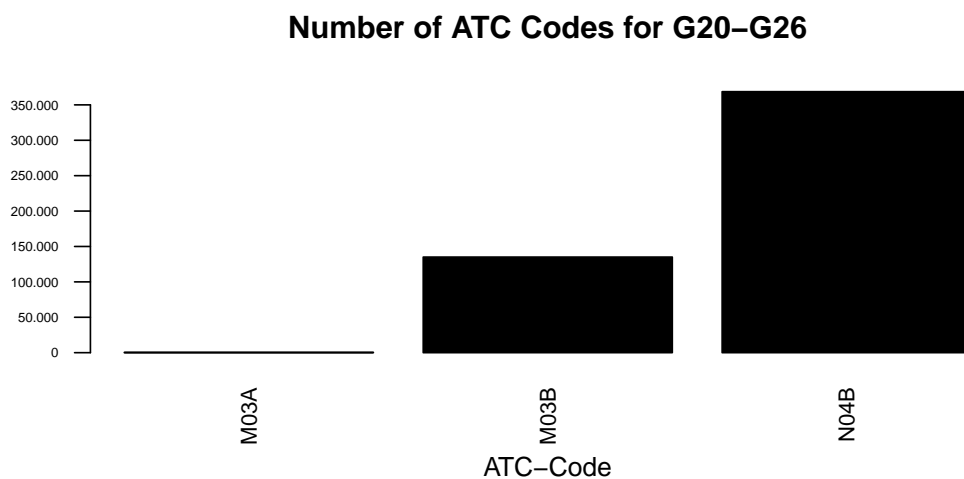
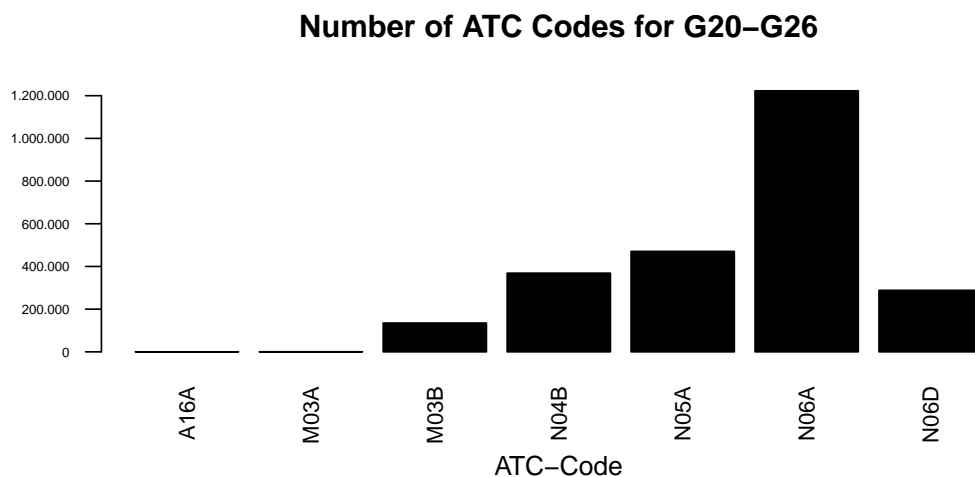


Figure 95: This figure shows the frequency of the underlying ATC codes for the given diagnose group G20-G26. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
A16A	ANDERE MITTEL FÜR DAS ALIMENTÄRE SYSTEM UND DEN STOFFWECHSEL	FALSE
M03A	MUSKELRELAXANZIEN, PERIPHER WIRKENDE MITTEL	TRUE
M03B	MUSKELRELAXANTIEN, ZENTRAL WIRKENDE MITTEL	TRUE
N04B	DOPAMINERGE MITTEL	TRUE
N05A	ANTIPSYCHOTIKA	FALSE
N06A	ANTIDEPRESSIVA	FALSE
N06D	ANTIDEMENTIVA	FALSE

Table 51: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose G20-G26.

E.23. Diagnose C81-C96: Bösartige Neubildungen des lymphatischen, blutbildenden und verwandten Gewebes

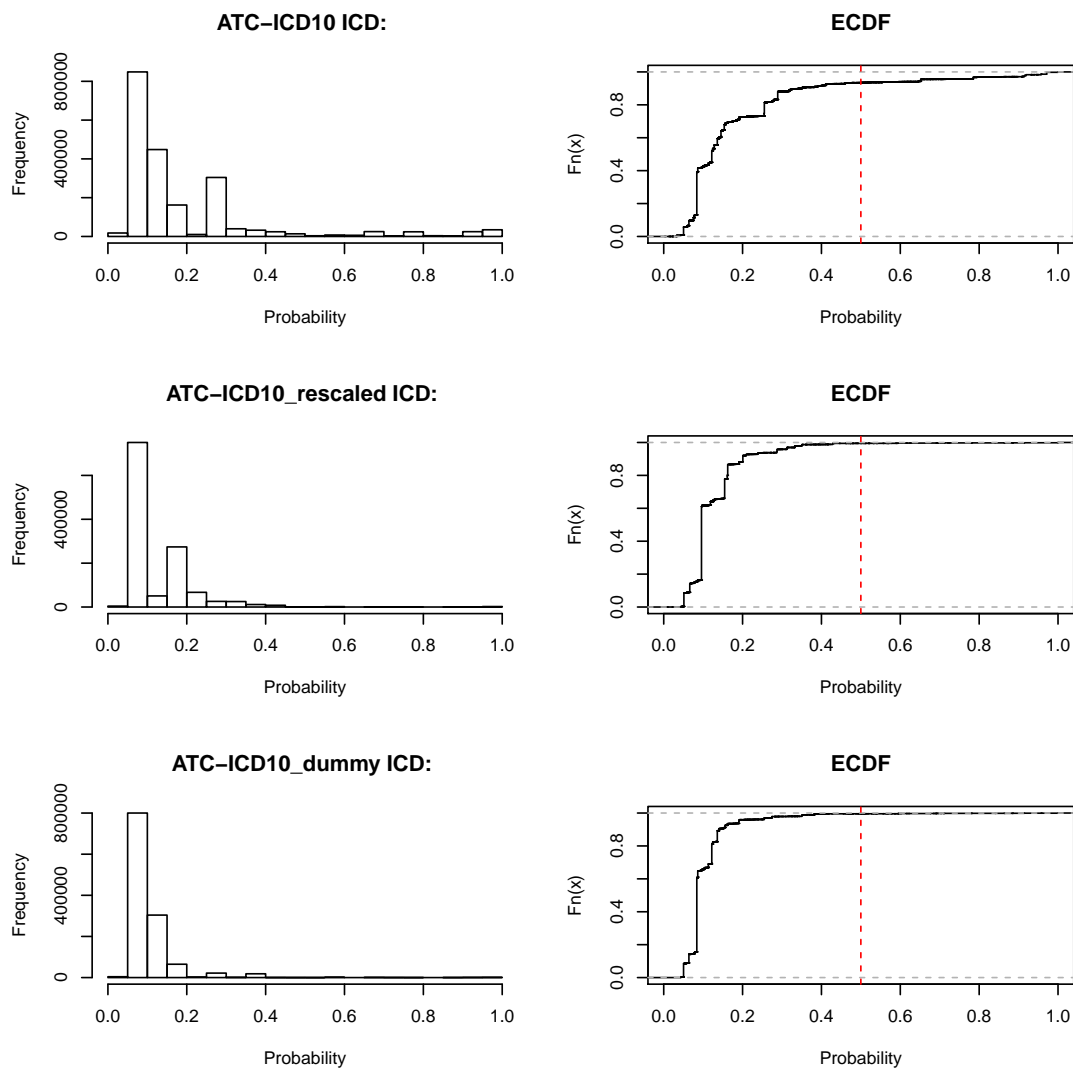
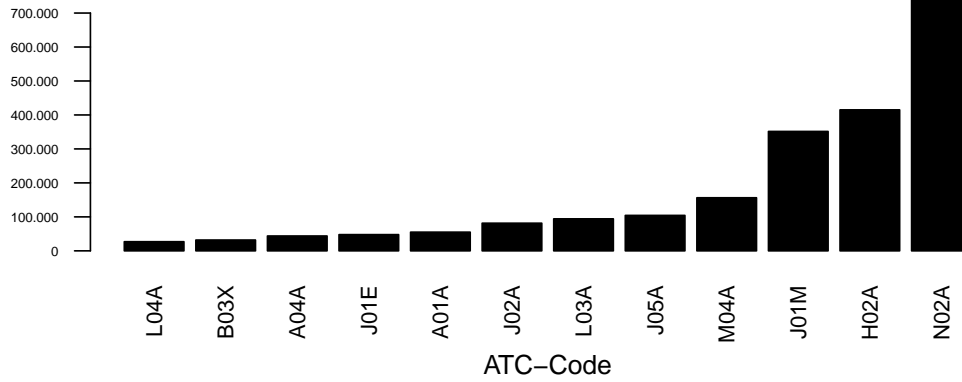


Figure 96: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group C81-C96.

Number of ATC Codes for C81–C96



Number of ATC Codes for C81–C96

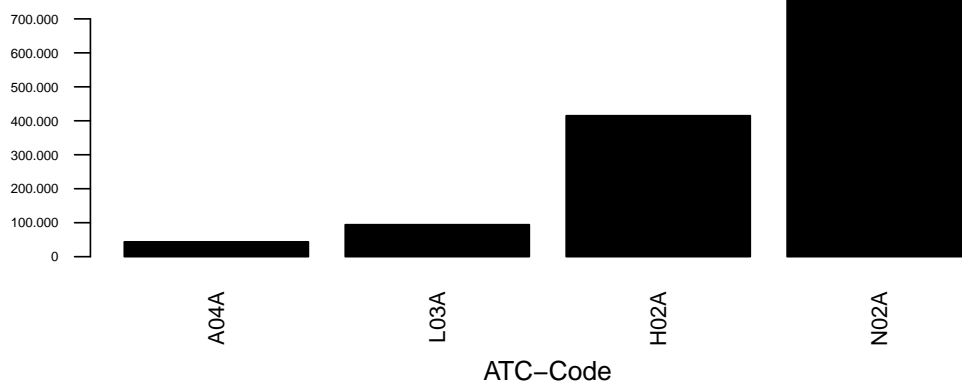


Figure 97: This figure shows the frequency of the underlying ATC codes for the given diagnose group C81-C96. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions. There are 40 ATC-Codes that related to the Diagnosis C81-C96. In order to give a clear overview of the distribution of the ATC codes behind an ICD10 group only the ATCs are shown, which represent the 95% of the cumulative frequency.

ATC	Description	Expert
A01A	STOMATOLOGIKA	FALSE
A04A	ANTIEMETIKA UND MITTEL GEGEN ÜBELKEIT	TRUE
B03X	ANDERE ANTIANÄMIKA	FALSE
H02A	CORTICOSTEROIDE ZUR SYSTEMISCHEN ANWENDUNG, REIN	TRUE
J01E	SULFONAMIDE UND TRIMETHOPRIM	FALSE
J01M	CHINOLONE	FALSE
J02A	Antimykotika zur systemischen Anwendung	FALSE
J05A	DIREKT WIRKENDE ANTIVIRALE MITTEL	FALSE
L03A	IMMUNSTIMULANZIEN	TRUE
L04A	IMMUNSUPPRESSIVA	FALSE
M04A	GICHTMITTEL	FALSE
N02A	OPIOIDE	TRUE

Table 52: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose C81-C96. There are 40 ATC-Codes that related to the Diagnosis C81-C96. In order to give a clear overview of the distribution of the ATC codes behind an ICD10 group only the ATCs are shown, which represent the 95% of the cumulative frequency.

E.24. Diagnose H90-H95: Sonstige Krankheiten des Ohres

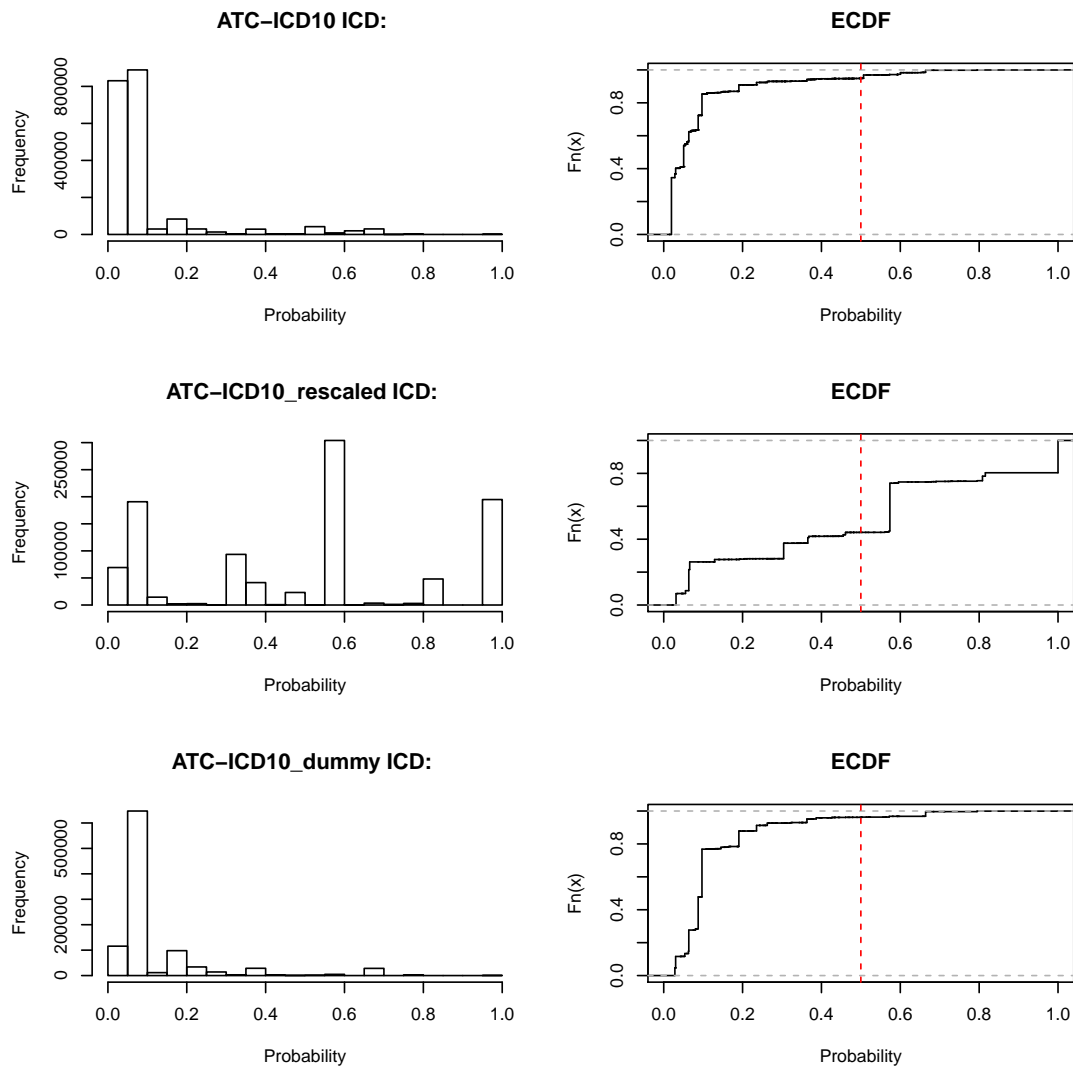


Figure 98: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group H90-H95.

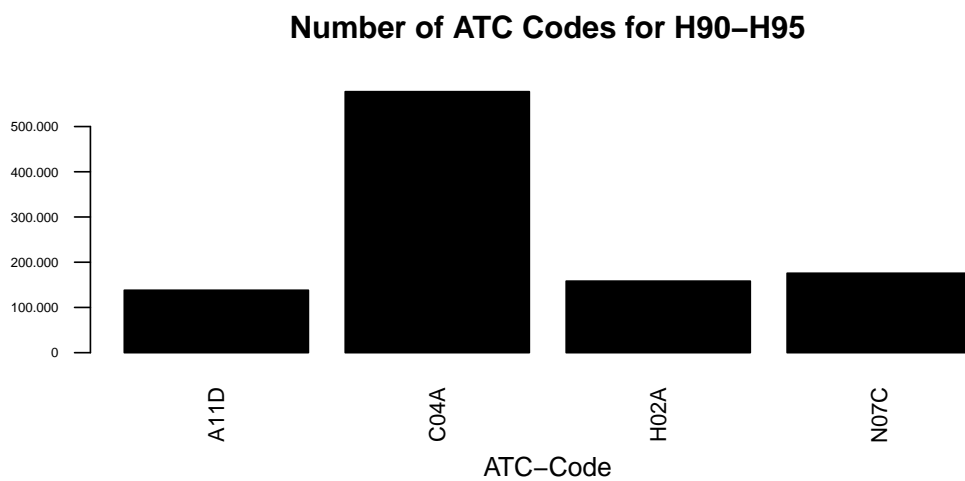
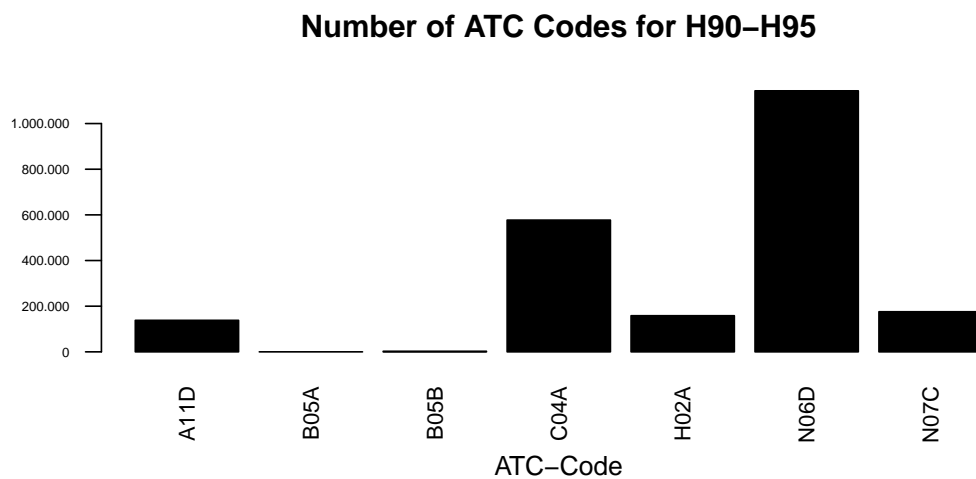


Figure 99: This figure shows the frequency of the underlying ATC codes for the given diagnose group H90-H95. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
A11D	VITAMIN-B1, REIN UND IN KOMBINATION MIT VITAMIN-B6 UND VITAMIN-B12	TRUE
B05A	BLUT UND VERWANDTE PRODUKTE	FALSE
B05B	I.V.-LÖSUNGEN	FALSE
C04A	PERIPHERE VASODILATATOREN	TRUE
H02A	CORTICOSTEROIDE ZUR SYSTEMISCHEN ANWENDUNG, REIN	TRUE
N06D	ANTIDEMENTIVA	FALSE
N07C	ANTIVERTIGINOSA	TRUE

Table 53: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose H90-H95.

E.25. Diagnose M80-M85: Veränderungen der Knochendichte und -struktur

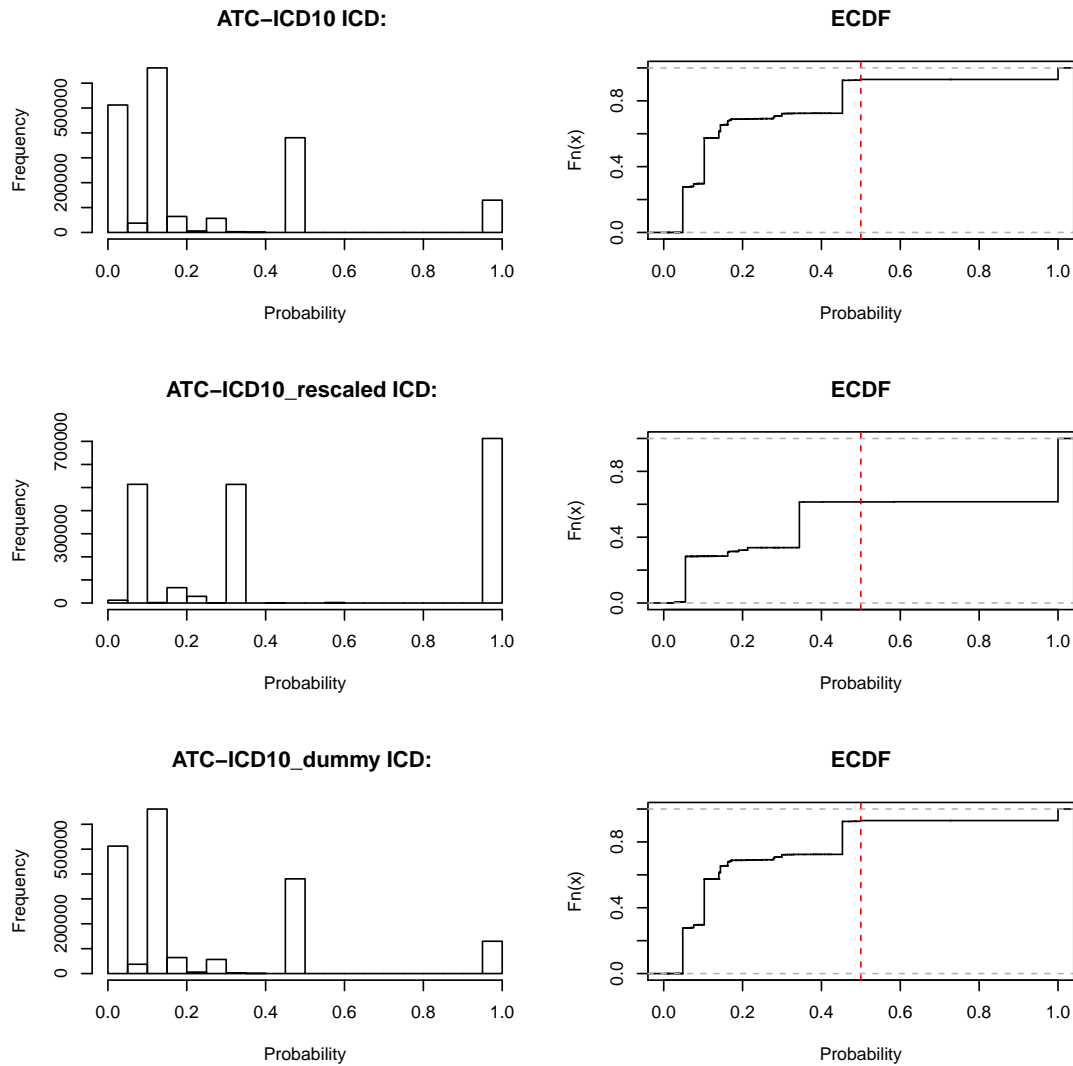


Figure 100: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group M80-M85.

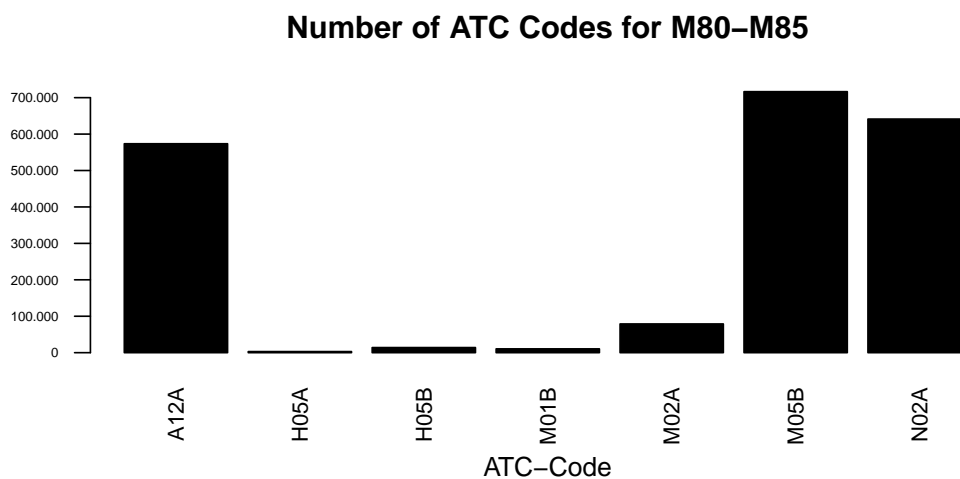
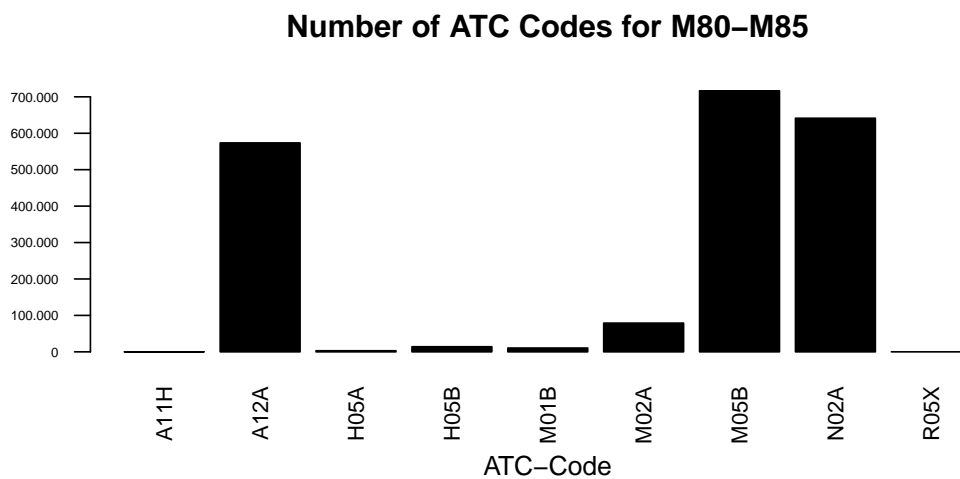


Figure 101: This figure shows the frequency of the underlying ATC codes for the given diagnose group M80-M85. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
A11H	ANDERE VITAMINPRÄPARATE, REIN	FALSE
A12A	CALCIUM	TRUE
H05A	NEBENSCHILDDRÜSENHORMONE UND ANALOGA	TRUE
H05B	NEBENSCHILDDRÜSEN-ANTAGONISTEN	TRUE
M01B	ANTIPHLOGISTIKA/ANTIRHEUMATIKA IN KOMBINATION	TRUE
M02A	TOPISCHE MITTEL GEGEN GELENK- UND MUSKELSCHMERZEN	TRUE
M05B	MITTEL MIT EINFLUSS AUF DIE KNOCHENSTRUKTUR UND DIE MINERALISATION	TRUE
N02A	OPIOIDE	TRUE
R05X	ANDERE KOMBINATIONSPRÄPARATE GEGEN ERKÄLTUNGSKRANKHEITEN	FALSE

Table 54: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose M80-M85.

E.26. Diagnose K00-K14: Krankheiten der Mundhöhle, der Speicheldrüsen und der Kiefer

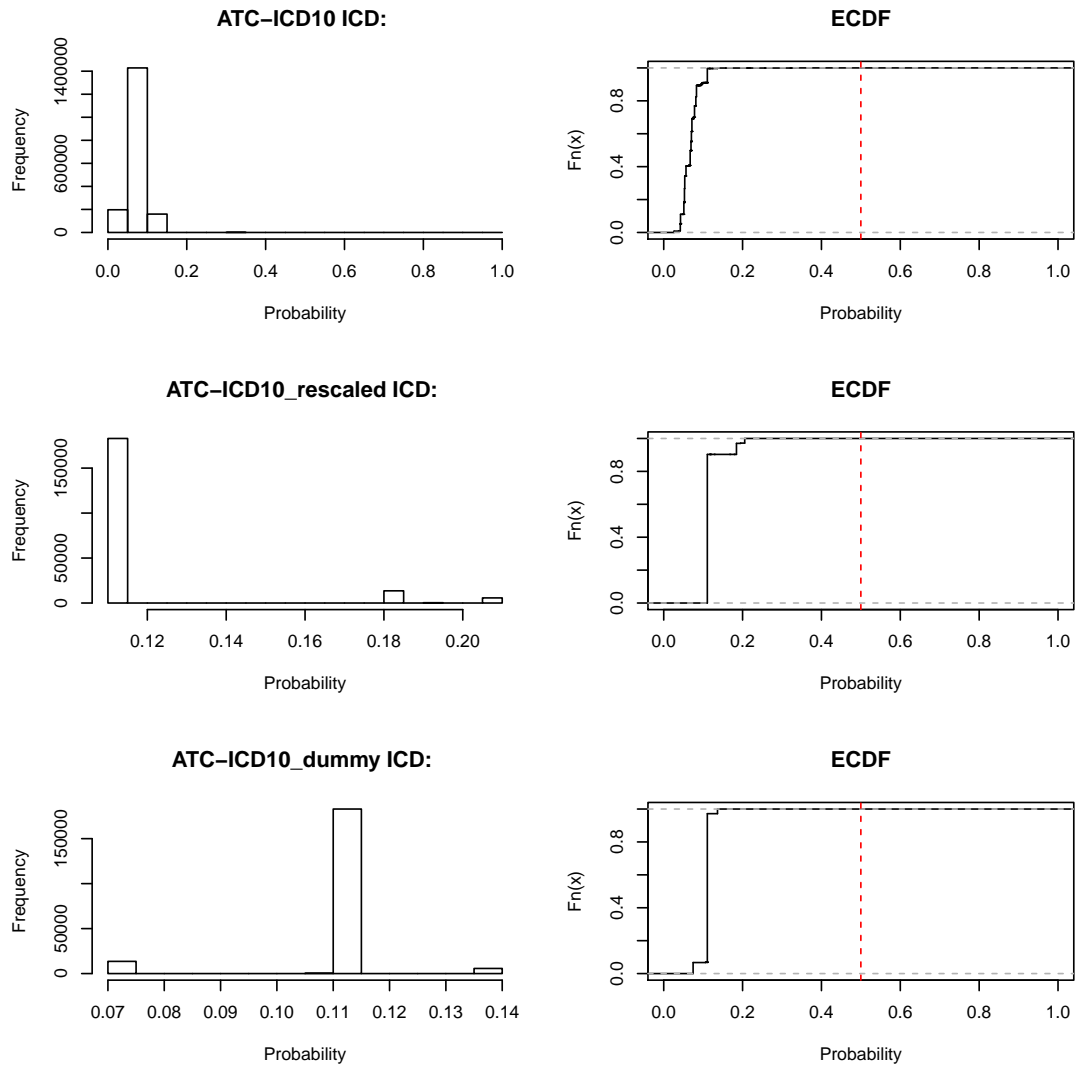


Figure 102: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group K00-K14.

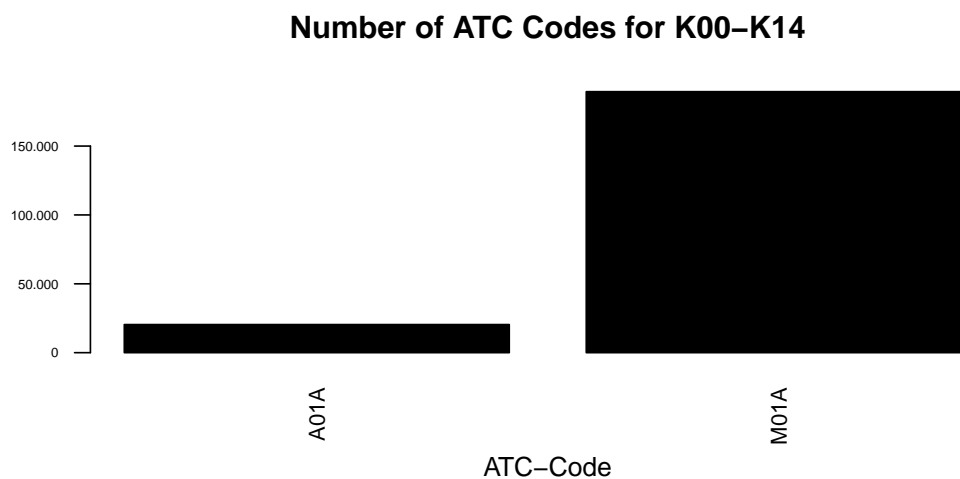
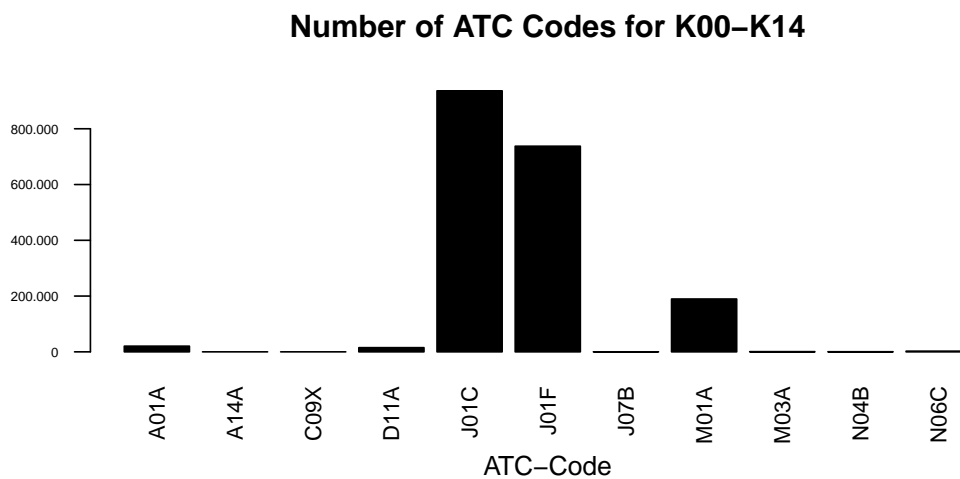


Figure 103: This figure shows the frequency of the underlying ATC codes for the given diagnose group K00-K14. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
A01A	STOMATOLOGIKA	TRUE
A14A	ANABOLE STEROIDE	FALSE
C09X	ANDERE MITTEL MIT WIRKUNG AUF DAS RENIN- ANGIOTENSIN-SYSTEM	FALSE
D11A	ANDERE DERMATIKA	FALSE
J01C	BETALACTAM-ANTIBIOTIKA, PENICILLINE	FALSE
J01F	MAKROLIDE, LINCOSAMIDE UND STREPTOGRAMINE	FALSE
J07B	VIRALE IMPFSTOFFE	FALSE
M01A	NICHTSTEROIDALE ANTIPHLOGISTIKA UND AN- TIRHEUMATIKA	TRUE
M03A	MUSKELRELAXANZIEN, PERIPHER WIRKENDE MITTEL	FALSE
N04B	DOPAMINERGE MITTEL	FALSE
N06C	PSYCHOLEPTIKA UND PSYCHOANALEPTIKA IN KOMBI- NATION	FALSE

Table 55: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose K00-K14.

E.27. Diagnose C76-C80: Bösartige Neubildungen ungenau bezeichneter, sekundärer und nicht näher bezeichneter Lokalisationen

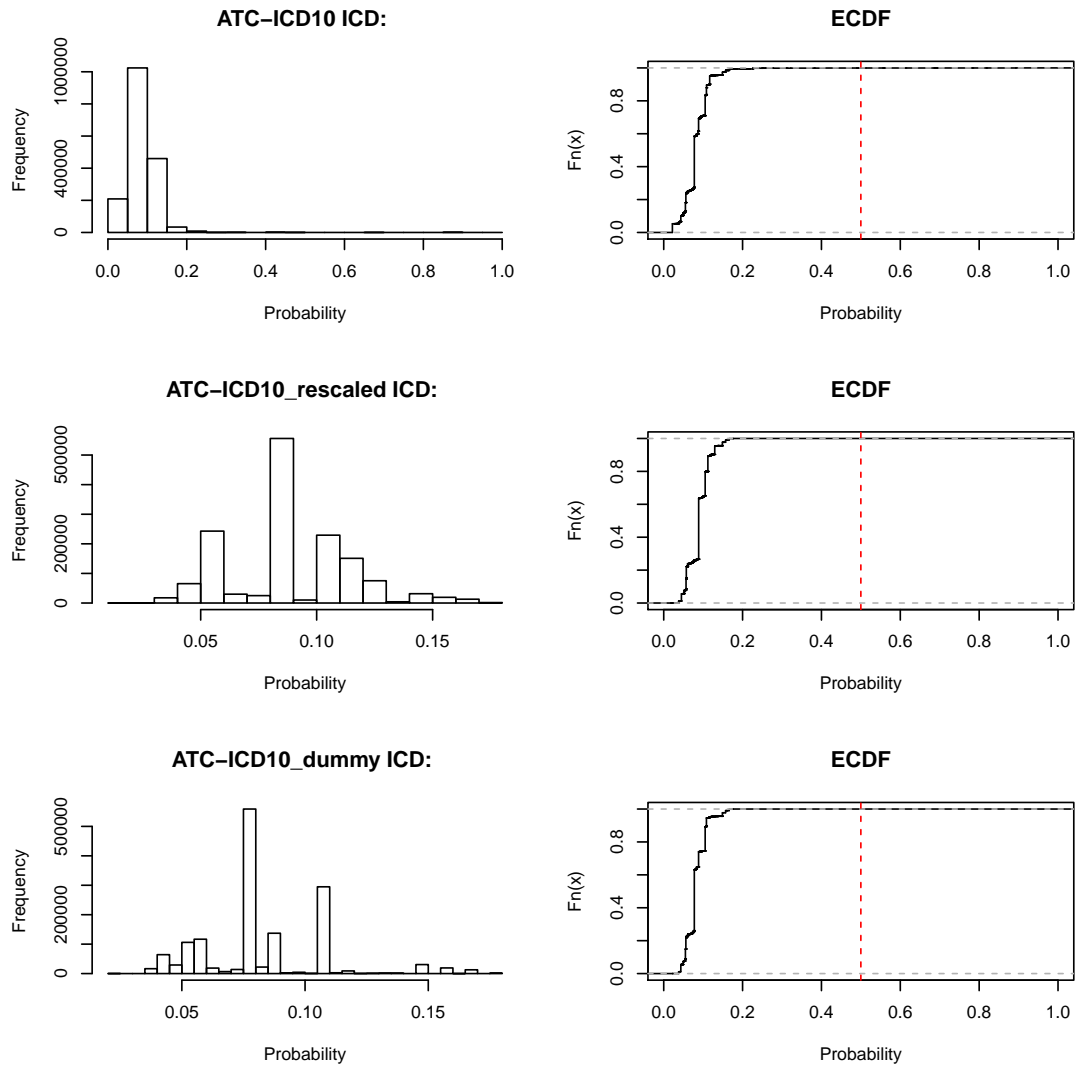


Figure 104: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group C76-C80.

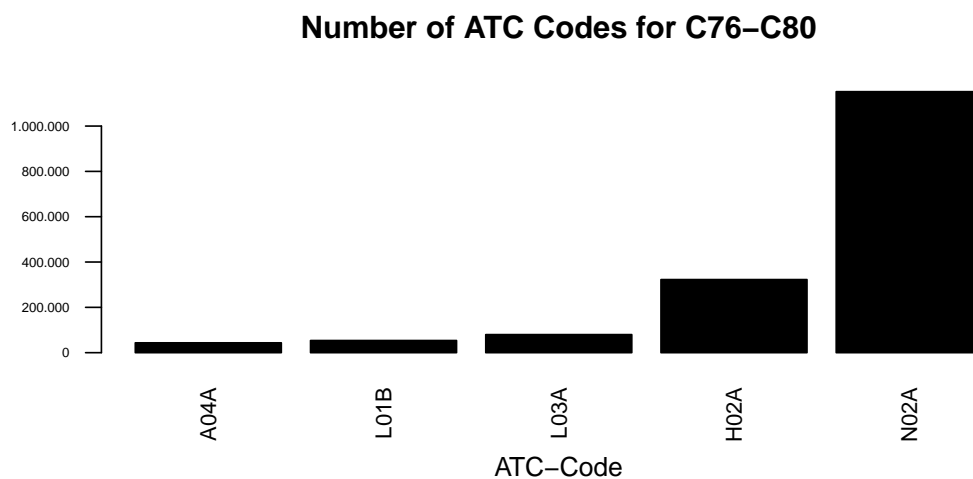
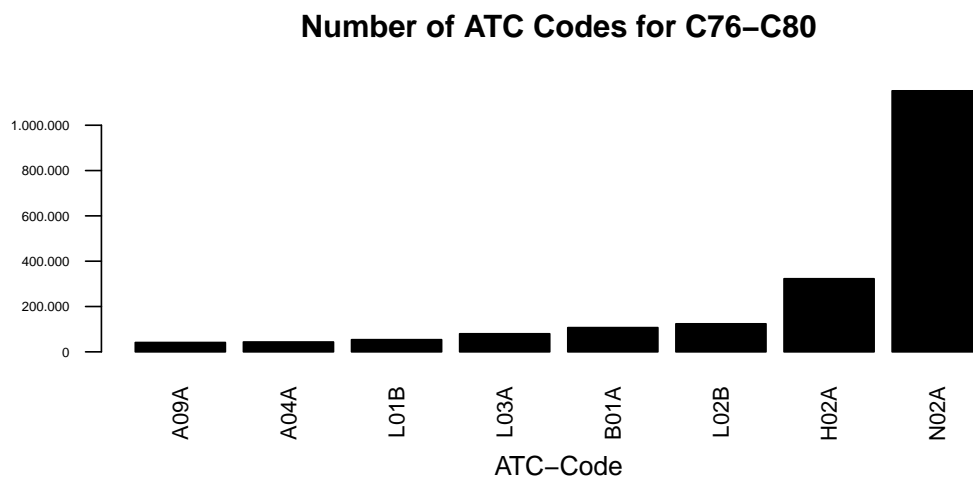


Figure 105: This figure shows the frequency of the underlying ATC codes for the given diagnose group C76-C80. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions. There are 21 ATC-Codes that related to the Diagnosis C76-C80. In order to give a clear overview of the distribution of the ATC codes behind an ICD10 group only the ATCs are shown, which represent the 95% of the cumulative frequency.

ATC	Description	Expert
A04A	ANTIEMETIKA UND MITTEL GEGEN ÜBELKEIT	TRUE
A09A	DIGESTIVA, INKL. ENZYME	FALSE
B01A	ANTITHROMBOTISCHE MITTEL	FALSE
H02A	CORTICOSTEROIDE ZUR SYSTEMISCHEN ANWENDUNG, REIN	TRUE
L01B	ANTIMETABOLITE	TRUE
L02B	HORMONANTAGONISTEN UND VERWANDTE STOFFE	FALSE
L03A	IMMUNSTIMULANZIEN	TRUE
N02A	OPIOIDE	TRUE

Table 56: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose C76-C80. There are 21 ATC-Codes that related to the Diagnosis C76-C80. In order to give a clear overview of the distribution of the ATC codes behind an ICD10 group only the ATCs are shown, which represent the 95% of the cumulative frequency.

E.28. Diagnose F60-F69: Persönlichkeits- und Verhaltensstörungen

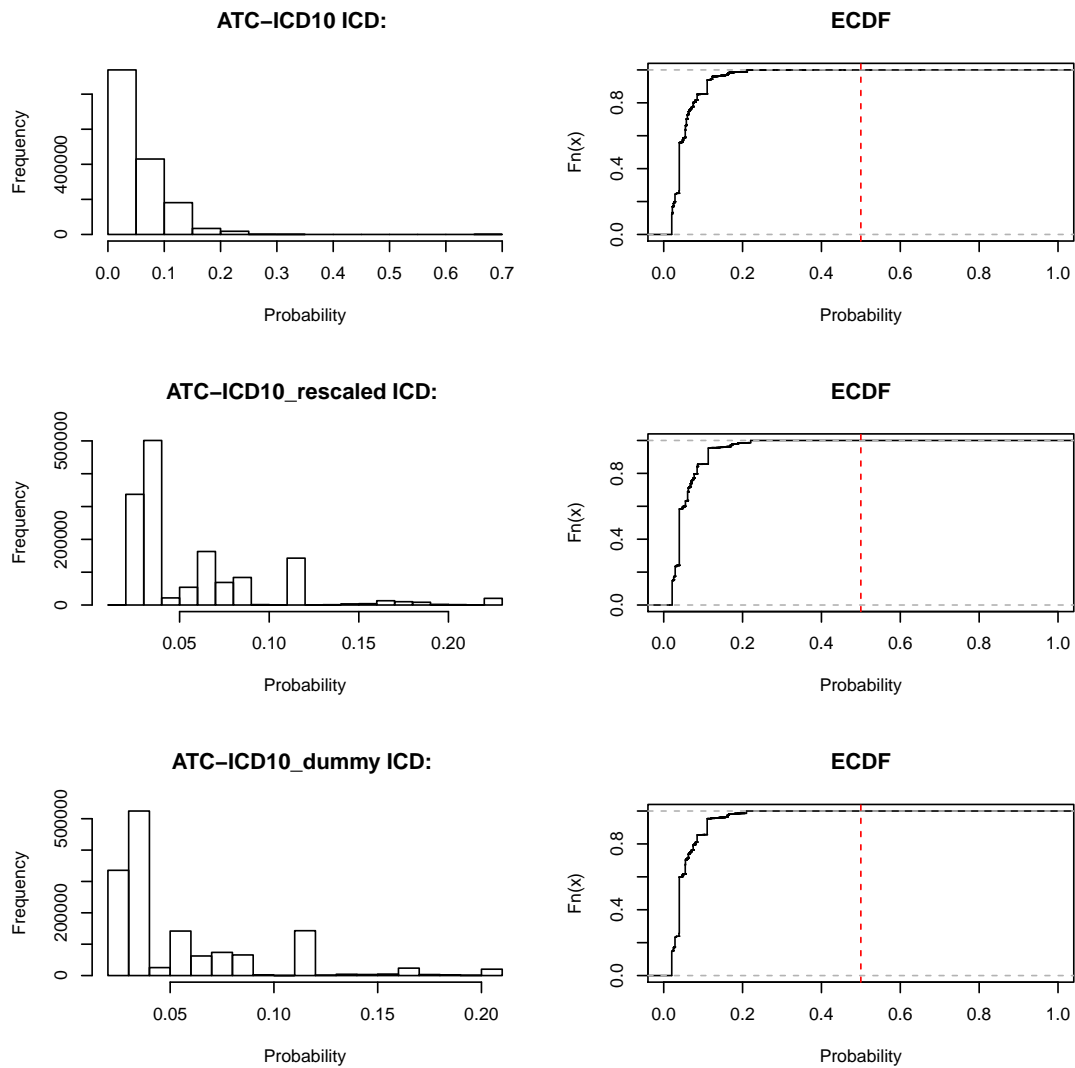


Figure 106: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group F60-F69.

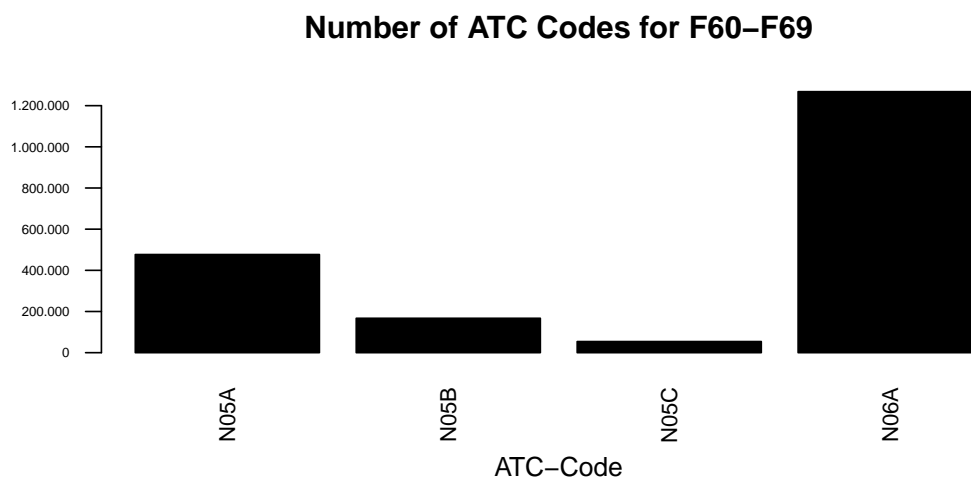
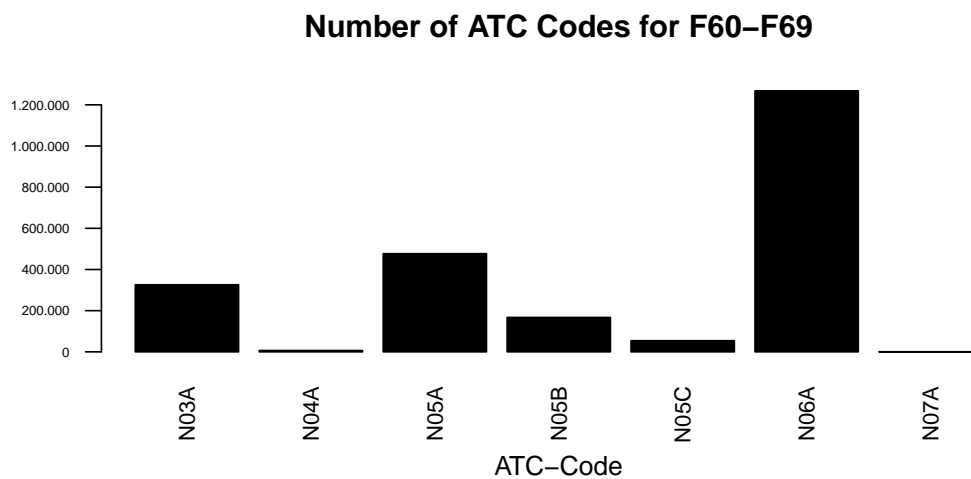


Figure 107: This figure shows the frequency of the underlying ATC codes for the given diagnose group F60-F69. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
N03A	ANTIEPILEPTIKA	FALSE
N04A	ANITCHOLINERGIKA	FALSE
N05A	ANTIPSYCHOTIKA	TRUE
N05B	ANXIOLYTIKA	TRUE
N05C	HYPNOTIKA UND SEDATIVA	TRUE
N06A	ANTIDEPRESSIVA	TRUE
N07A	PARASYMPATHOMIMETIKA	FALSE

Table 57: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose F60-F69.

E.29. Diagnose G35-G37: Demyelinisierende Krankheiten des Zentralnervensystems

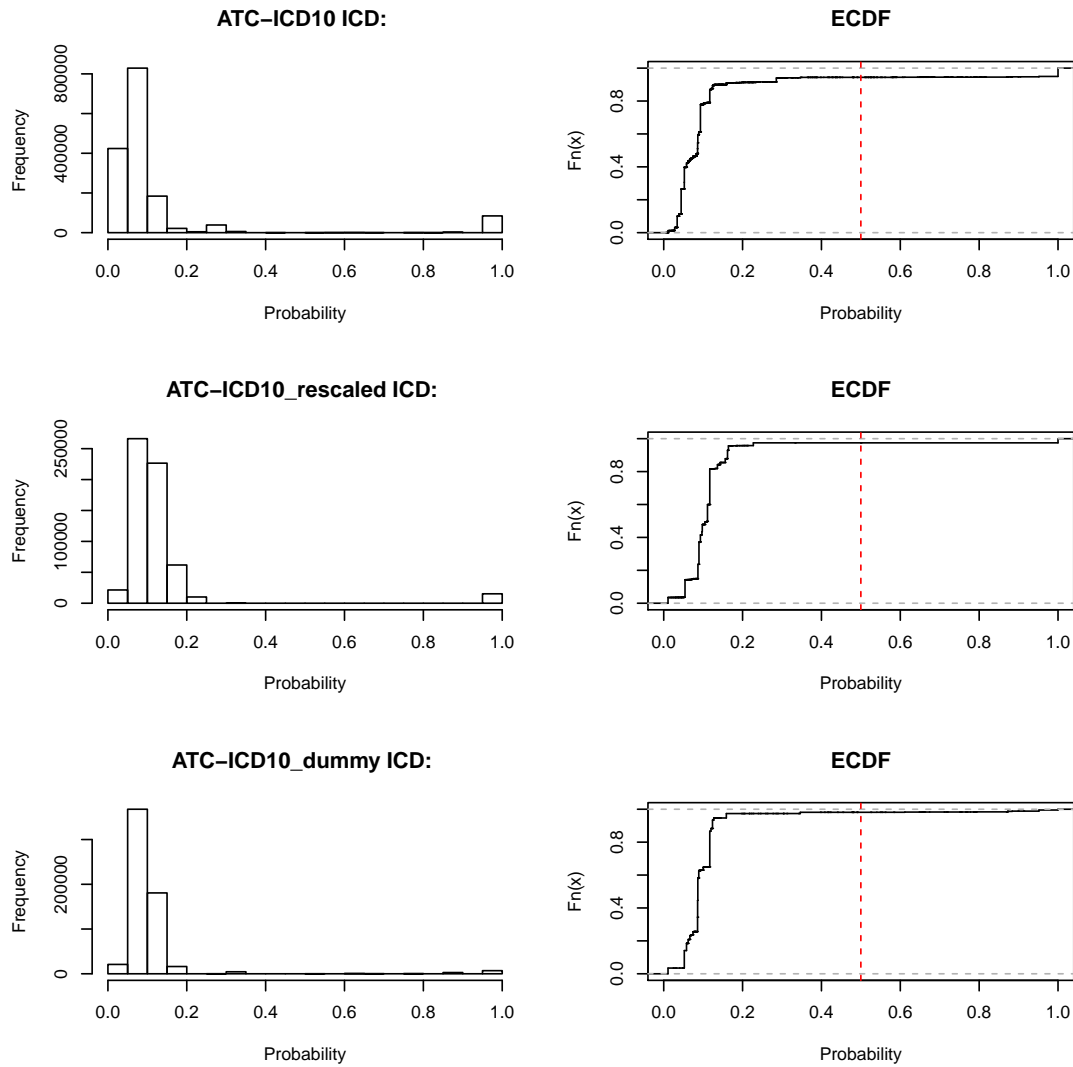


Figure 108: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group G35-G37.

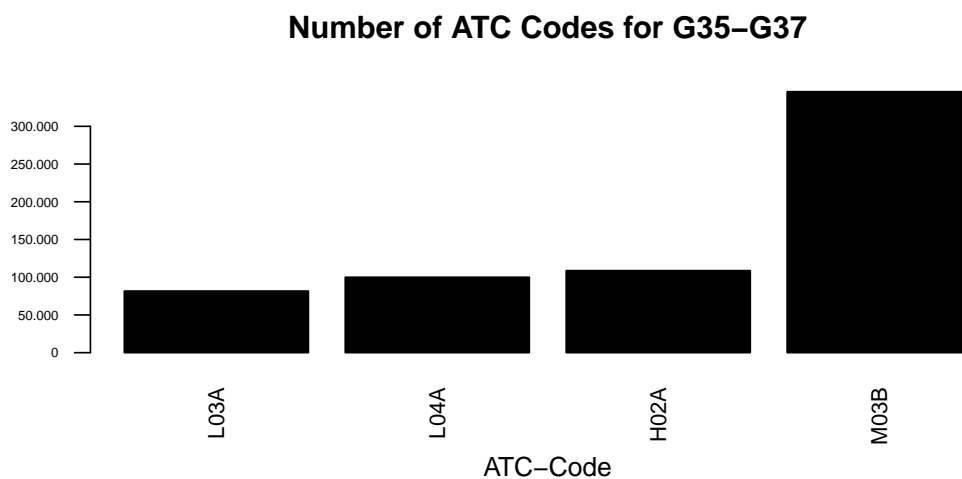
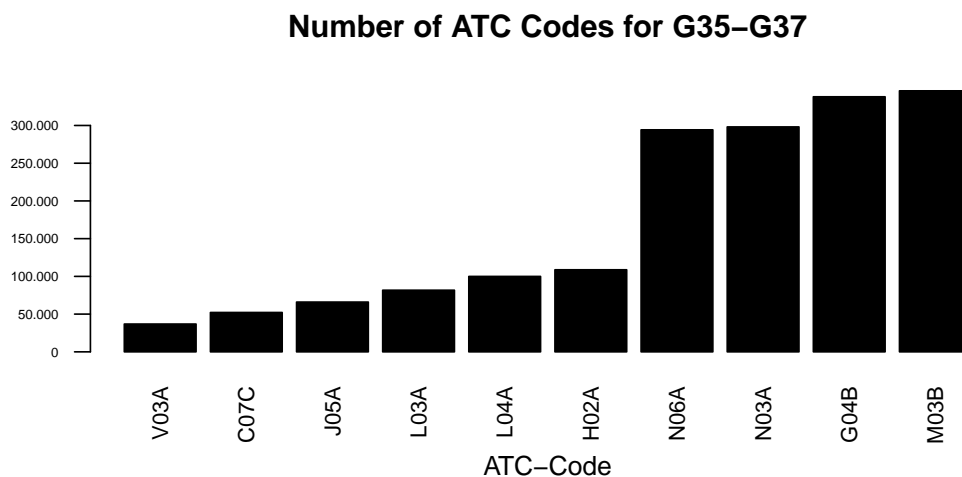


Figure 109: This figure shows the frequency of the underlying ATC codes for the given diagnose group G35-G37. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions. There are 16 ATC-Codes that related to the Diagnosis G35-G37. In order to give a clear overview of the distribution of the ATC codes behind an ICD10 group only the ATCs are shown, which represent the 95% of the cumulative frequency.

ATC	Description	Expert
C07C	BETA-ADRENOREZEPTOR-ANTAGONISTEN UND ANDERE DIURETIKA	FALSE
G04B	ANDERE UROLOGIKA, INKL. SPASMOLYTIKA	FALSE
H02A	CORTICOSTEROIDE ZUR SYSTEMISCHEN ANWENDUNG, REIN	TRUE
J05A	DIREKT WIRKENDE ANTIVIRALE MITTEL	FALSE
L03A	IMMUNSTIMULANZIEN	TRUE
L04A	IMMUNSUPPRESSIVA	TRUE
M03B	MUSKELRELAXANTIEN, ZENTRAL WIRKENDE MITTEL	TRUE
N03A	ANTIEPILEPTIKA	FALSE
N06A	ANTIDEPRESSIVA	FALSE
V03A	ALLE ÜBRIGEN THERAPEUTISCHEN MITTEL	FALSE

Table 58: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose G35-G37. There are 16 ATC-Codes that related to the Diagnosis G35-G37. In order to give a clear overview of the distribution of the ATC codes behind an ICD10 group only the ATCs are shown, which represent the 95% of the cumulative frequency.

E.30. Diagnose E70-E90: Stoffwechselstörungen

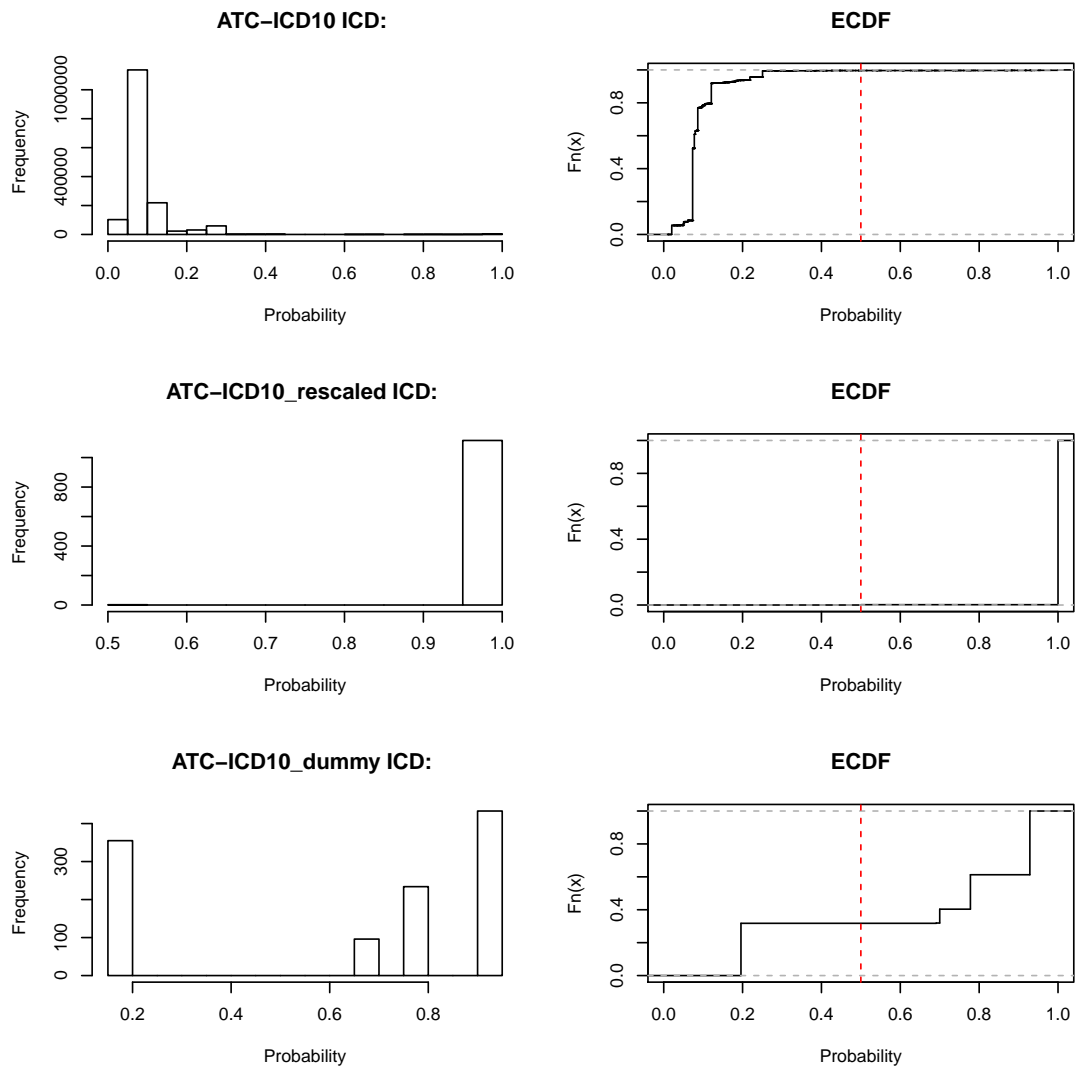


Figure 110: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group E70-E90.

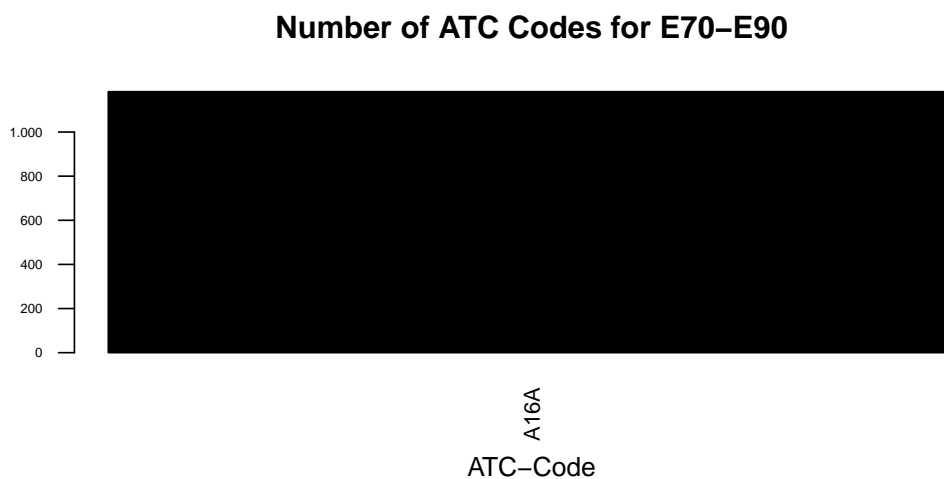
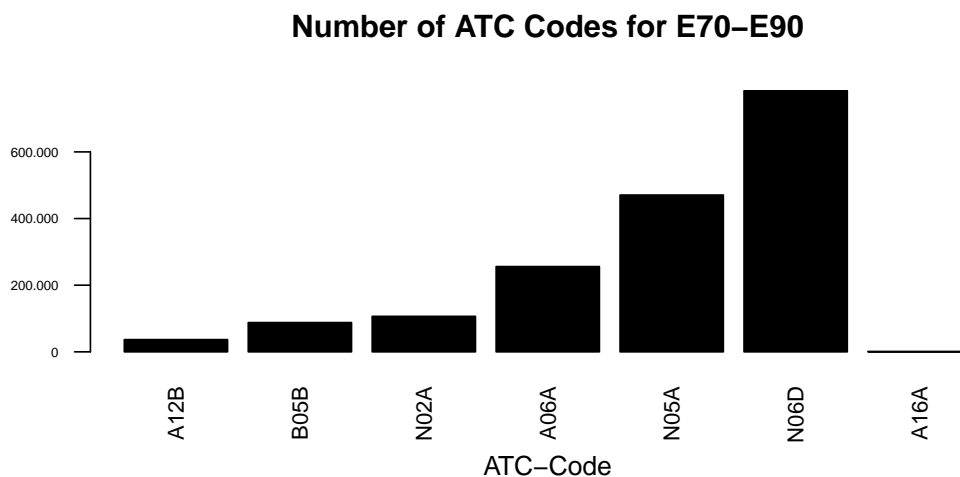


Figure 111: This figure shows the frequency of the underlying ATC codes for the given diagnose group E70-E90. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions. There are 24 ATC-Codes that related to the Diagnosis E70-E90. In order to give a clear overview of the distribution of the ATC codes behind an ICD10 group only the ATCs are shown, which represent the 95% of the cumulative frequency.

ATC	Description	Expert
A06A	LAXANTIEN	FALSE
A12B	KALIUM	FALSE
A16A	ANDERE MITTEL FÜR DAS ALIMENTÄRE SYSTEM UND DEN STOFFWECHSEL	TRUE
B05B	I.V.-LÖSUNGEN	FALSE
N02A	OPIOIDE	FALSE
N05A	ANTIPSYCHOTIKA	FALSE
N06D	ANTIDEMENTIVA	FALSE

Table 59: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose E70-E90. There are 24 ATC-Codes that related to the Diagnosis E70-E90. In order to give a clear overview of the distribution of the ATC codes behind an ICD10 group only the ATCs are shown, which represent the 95% of the cumulative frequency.

E.31. Diagnose N20-N23: Urolithiasis

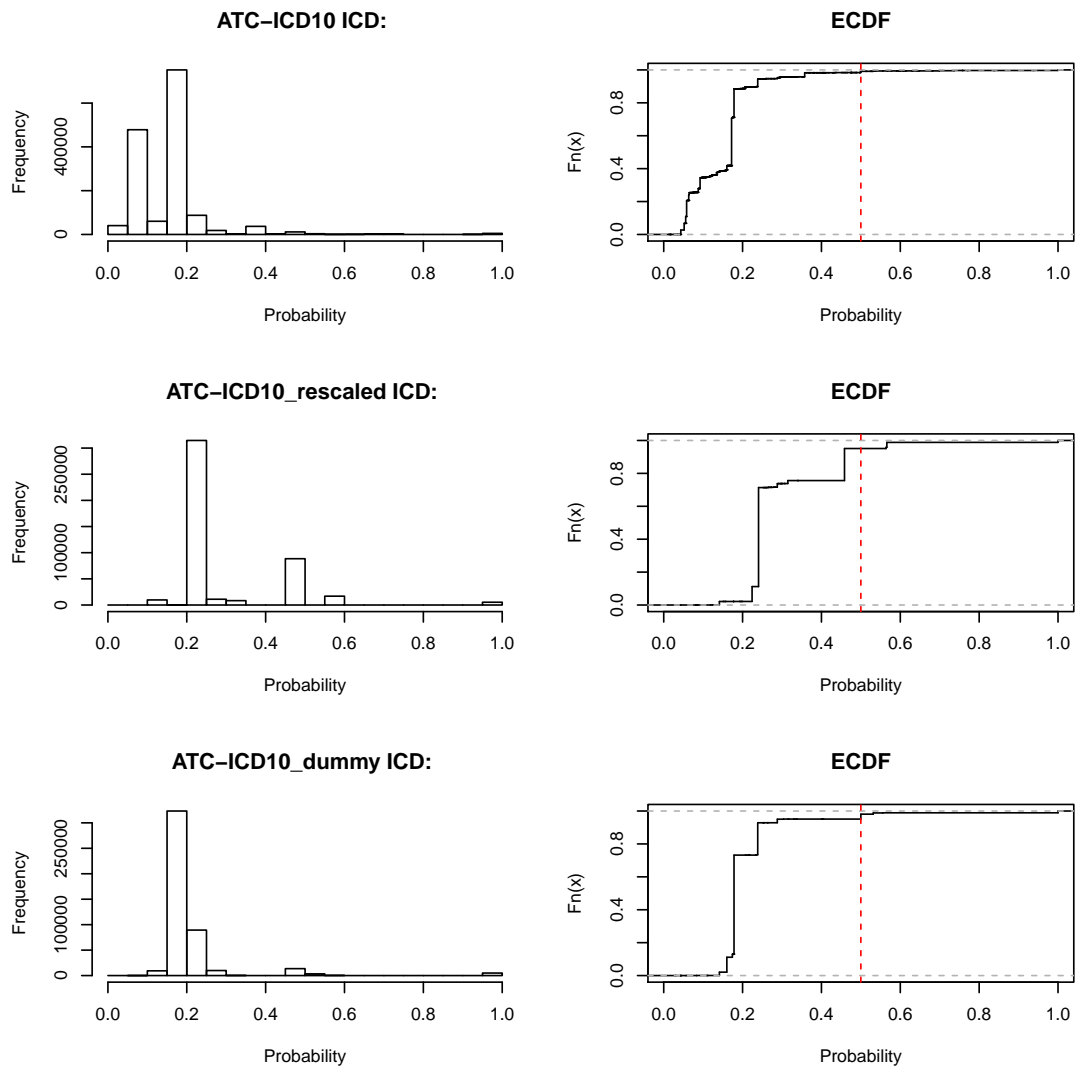


Figure 112: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group N20-N23.

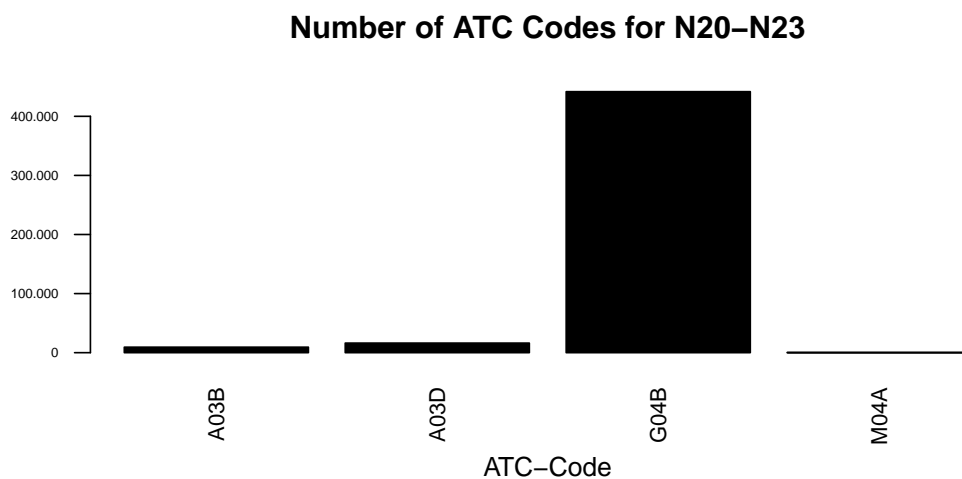
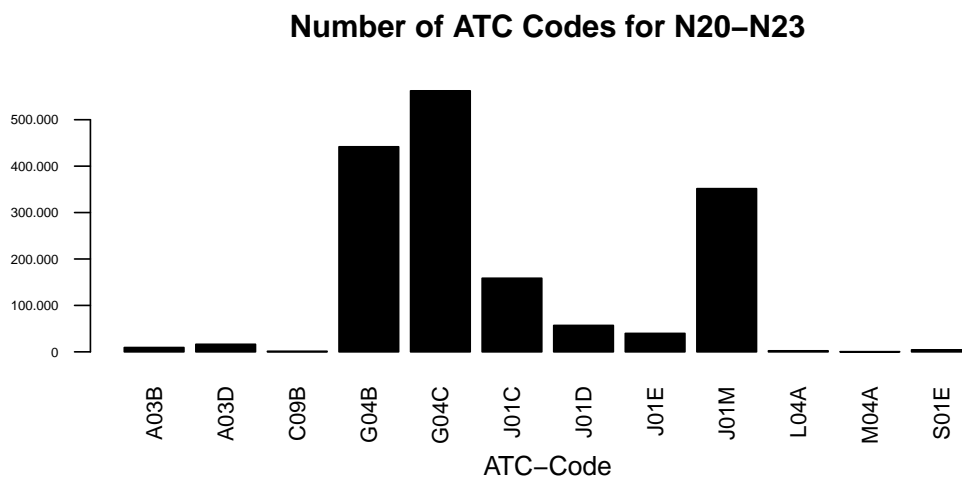


Figure 113: This figure shows the frequency of the underlying ATC codes for the given diagnose group N20-N23. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
A03B	BELLADONNA UND DERIVATE, REIN	TRUE
A03D	SPASMOLYTIKA IN KOMBINATION MIT ANALGETIKA	TRUE
C09B	ACE-HEMMER, KOMBINATIONEN	FALSE
G04B	ANDERE UROLOGIKA, INKL. SPASMOLYTIKA	TRUE
G04C	MITTEL BEI BENIGNER PROSTATAHYPERPLASIE	FALSE
J01C	BETALACTAM-ANTIBIOTIKA, PENICILLINE	FALSE
J01D	ANDERE BETA-LACTAM-ANTIBIOTIKA	FALSE
J01E	SULFONAMIDE UND TRIMETHOPRIM	FALSE
J01M	CHINOLONE	FALSE
L04A	IMMUNSUPPRESSIVA	FALSE
M04A	GICHTMITTEL	TRUE
S01E	GLAUKOMMITTEL UND MIOTIKA	FALSE

Table 60: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose N20-N23.

E.32. Diagnose I26-I28: Pulmonale Herzkrankheit und Krankheiten des Lungenkreislaufes

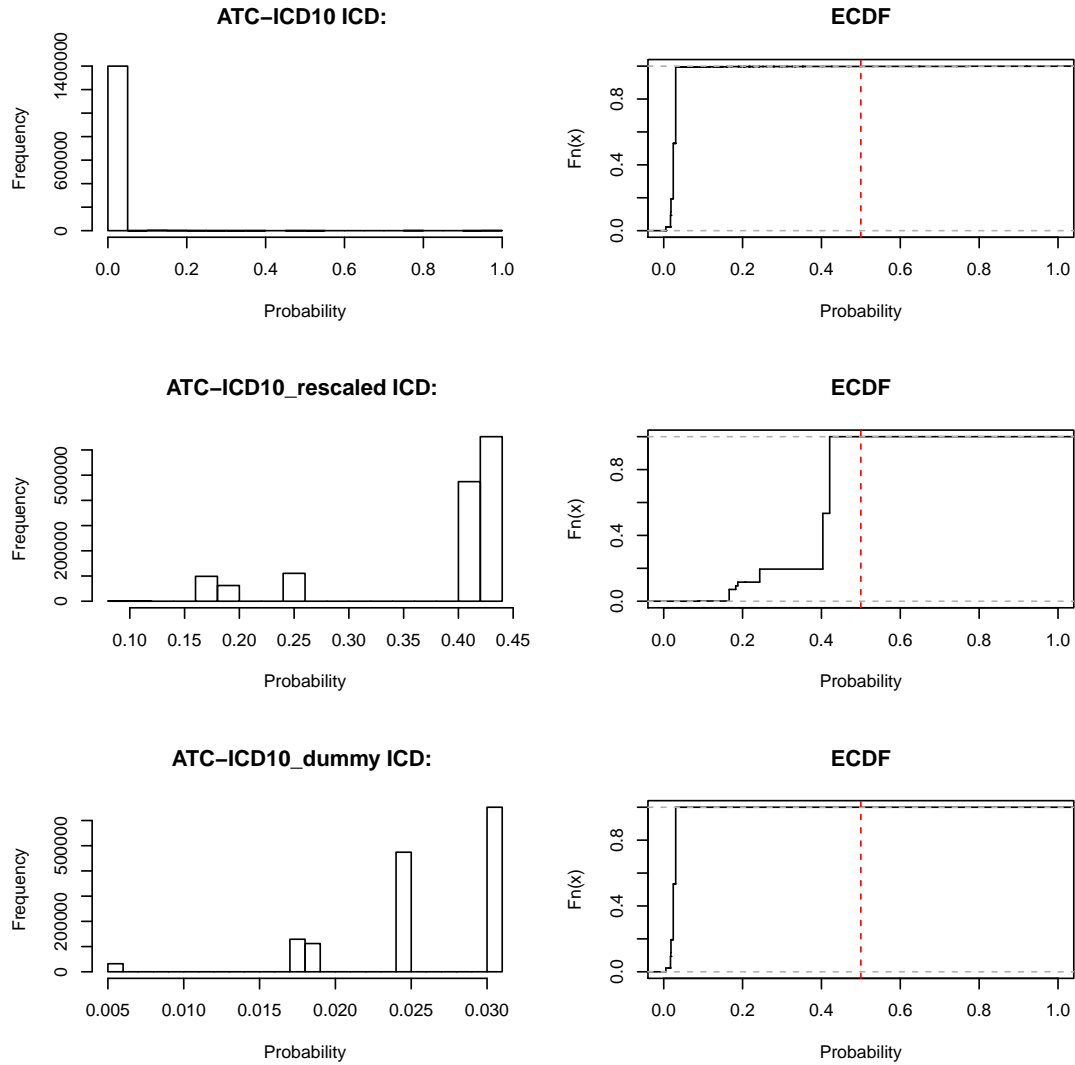
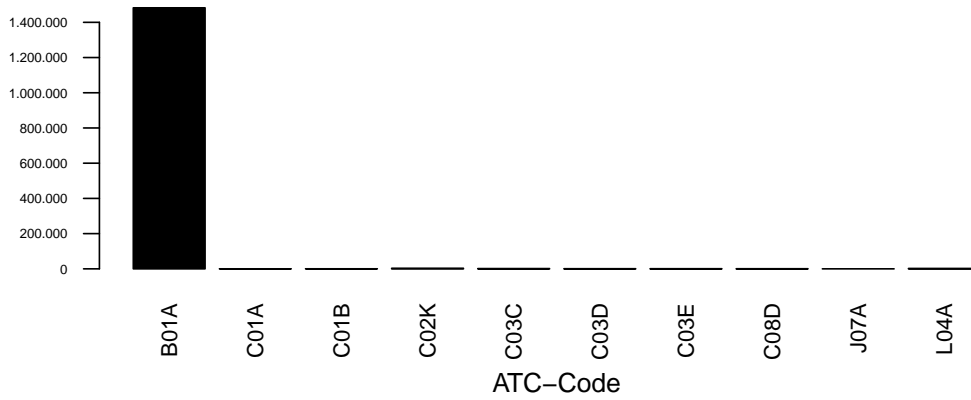


Figure 114: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group I26-I28.

Number of ATC Codes for I26-I28



Number of ATC Codes for I26-I28

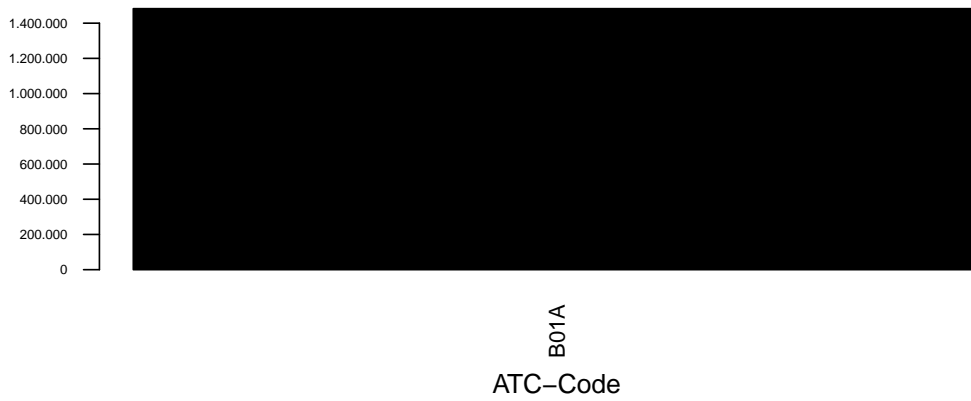


Figure 115: This figure shows the frequency of the underlying ATC codes for the given diagnose group I26-I28. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
B01A	ANTITHROMBOTISCHE MITTEL	TRUE
C01A	HERZGLYKOSIDE	FALSE
C01B	ANTIARRHYTHMIKA, KLASSE I UND III	FALSE
C02K	ANDERE ANTIHYPERTONIKA	FALSE
C03C	HIGH-CEILING-DIURETIKA	FALSE
C03D	KALIUM SPARENDE DIURETIKA	FALSE
C03E	DIURETIKA UND KALIUM SPARENDE MITTEL IN KOMBINATION	FALSE
C08D	SELEKTIVE CALCIUMKANALBLOCKER MIT DIREKTER HERZWIRKUNG	FALSE
J07A	BAKTERIELLE IMPFSTOFFE	FALSE
L04A	IMMUNSUPPRESSIVA	FALSE

Table 61: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose I26-I28.

E.33. Diagnose G30-G32: Sonstige degenerative Krankheiten des Nervensystems

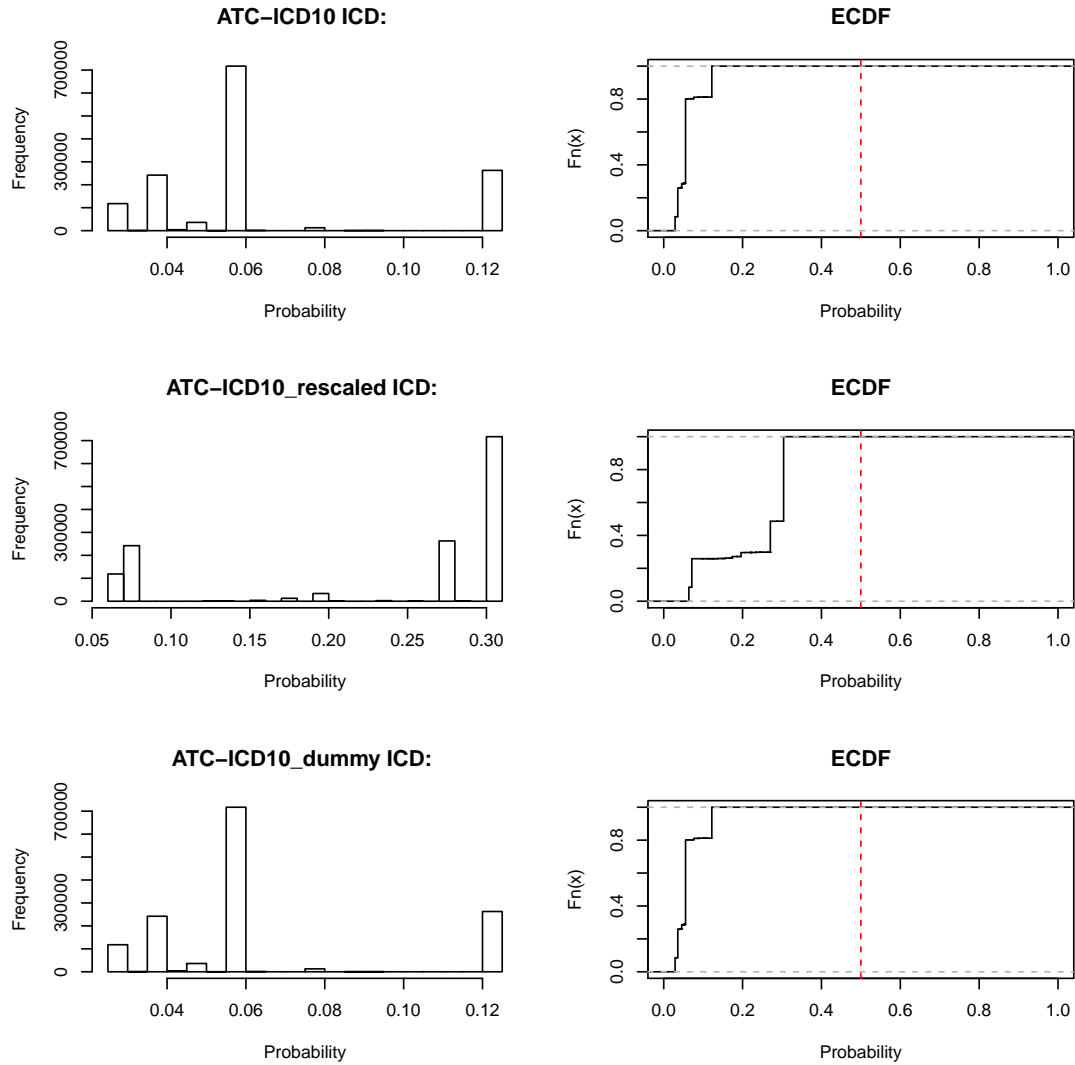
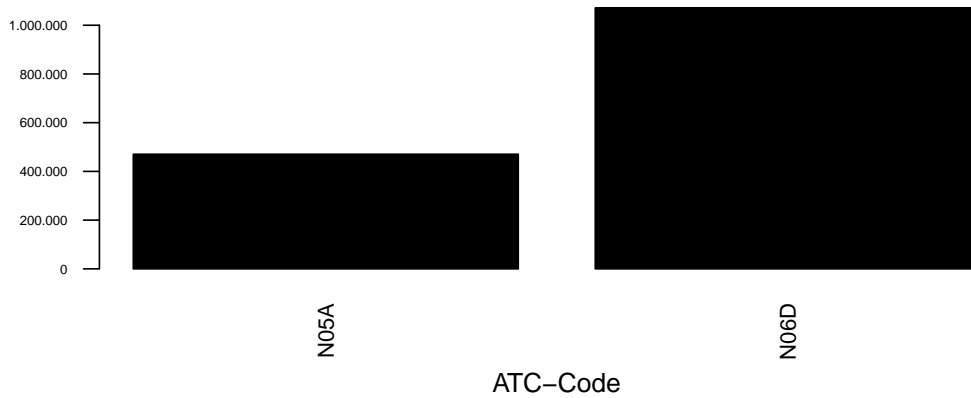


Figure 116: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group G30-G32.

Number of ATC Codes for G30–G32



Number of ATC Codes for G30–G32

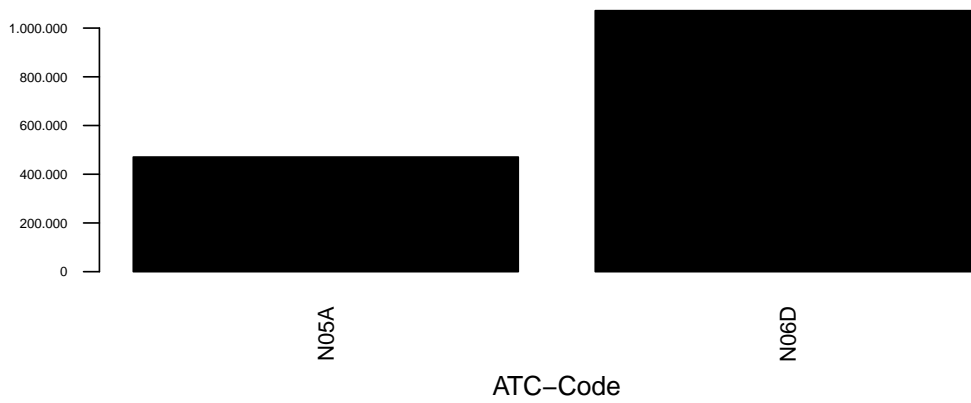


Figure 117: This figure shows the frequency of the underlying ATC codes for the given diagnose group G30-G32. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
N05A	ANTIPSYCHOTIKA	TRUE
N06D	ANTIDEMENTIVA	TRUE

Table 62: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose G30-G32.

E.34. Diagnose J30-J39: Sonstige Krankheiten der oberen Atemwege

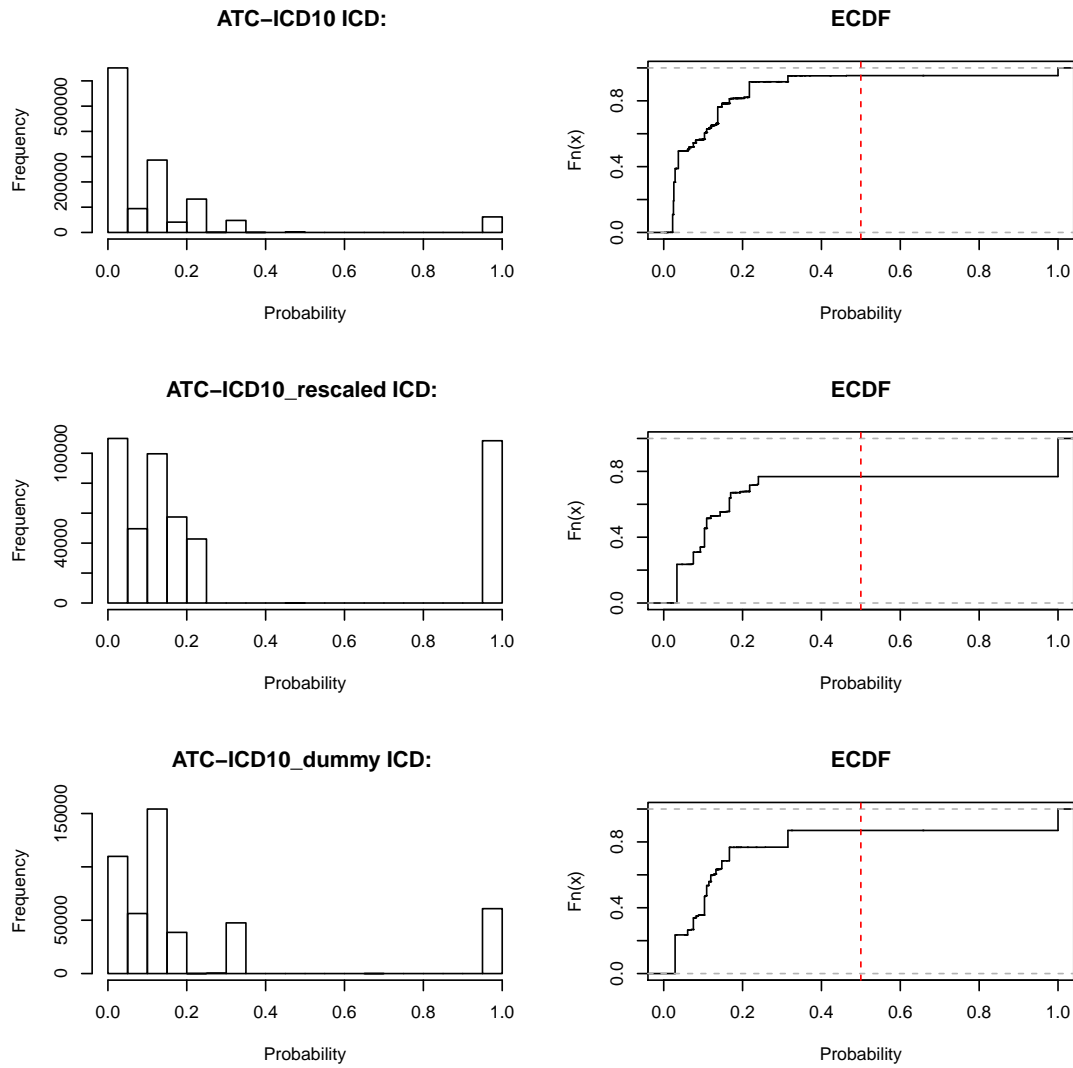


Figure 118: This figure shows the distribution of the probabilities of the diagnosis for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group J30-J39.

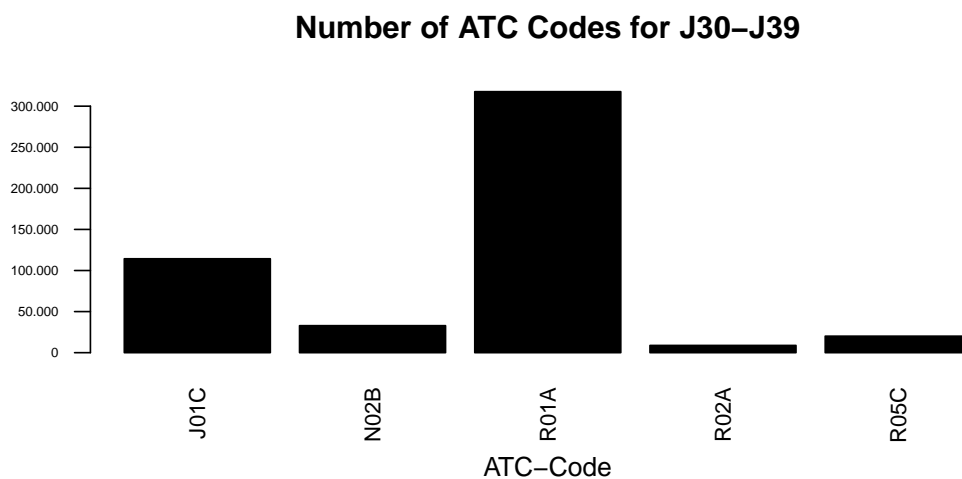
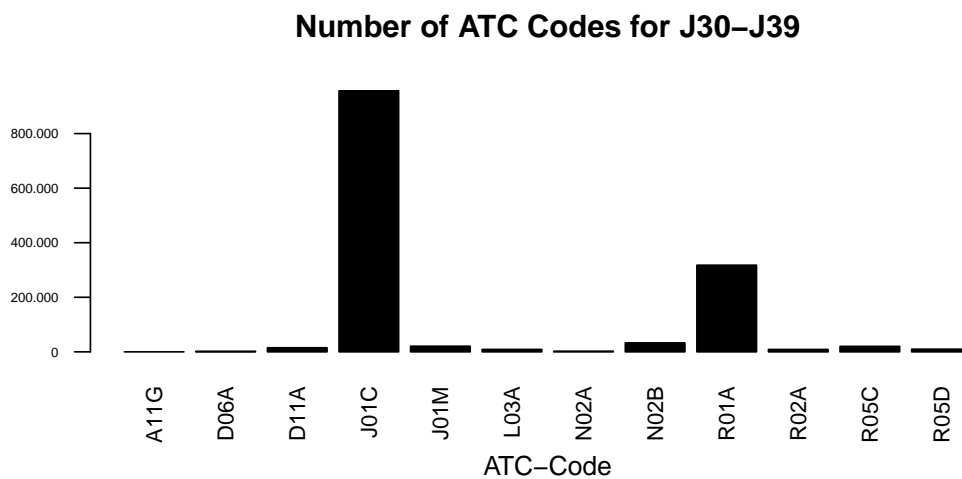


Figure 119: This figure shows the frequency of the underlying ATC codes for the given diagnose group J30-J39. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
A11G	ASCORBINSÄURE (VITAMIN C), INKL. KOMBINATIONEN	FALSE
D06A	ANTIBIOTIKA ZUR TOPISCHEN ANWENDUNG	FALSE
D11A	ANDERE DERMATIKA	FALSE
J01C	BETALACTAM-ANTIBIOTIKA, PENICILLINE	TRUE
J01M	CHINOLONE	FALSE
L03A	IMMUNSTIMULANZIEN	FALSE
N02A	OPIOIDE	FALSE
N02B	ANDERE ANALGETIKA UND ANTIPYRETIKA	TRUE
R01A	DEKONGESTIVA UND ANDERE RHINOLOGIKA ZUR TOPISCHEN ANWENDUNG	TRUE
R02A	HALS- UND RACHENTHERAPEUTIKA	TRUE
R05C	EXPEKTORANZIEN, EXKL. KOMBINATIONEN MIT ANTI-TUSSIVA	TRUE
R05D	ANTITUSSIVA, EXKL. KOMBINATIONEN MIT EXPEKTORANZIEN	FALSE

Table 63: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose J30-J39.

E.35. Diagnose C00-C14: Bösartige Neubildungen der Lippe, der Mundhöhle und des Pharynx

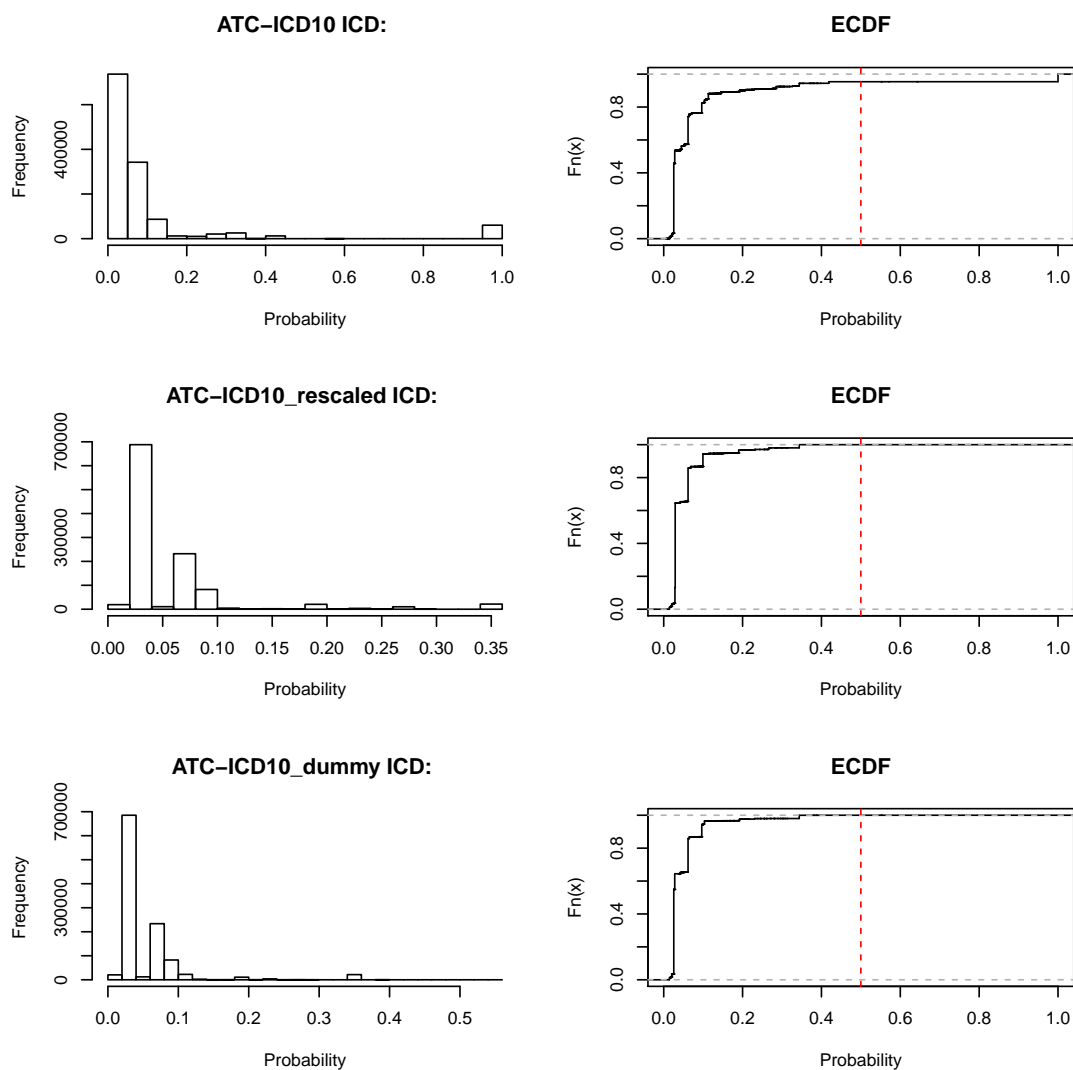


Figure 120: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group C00-C14.

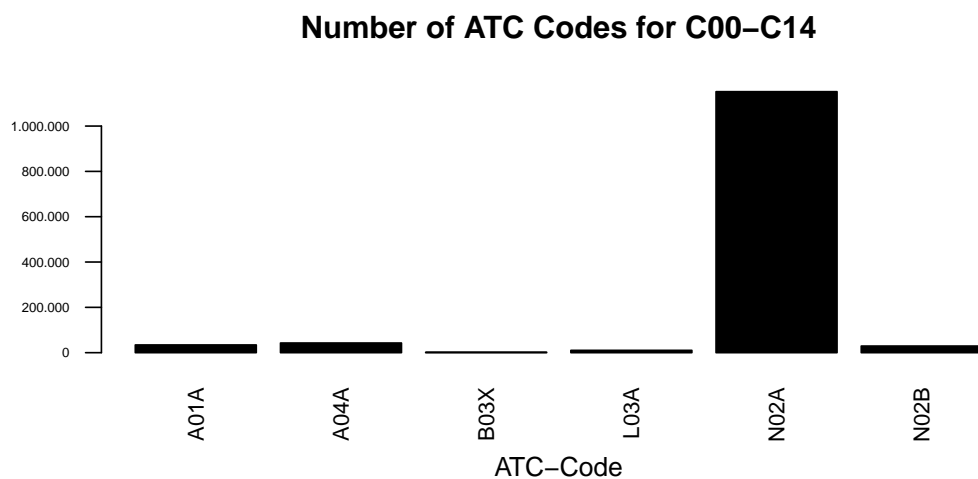
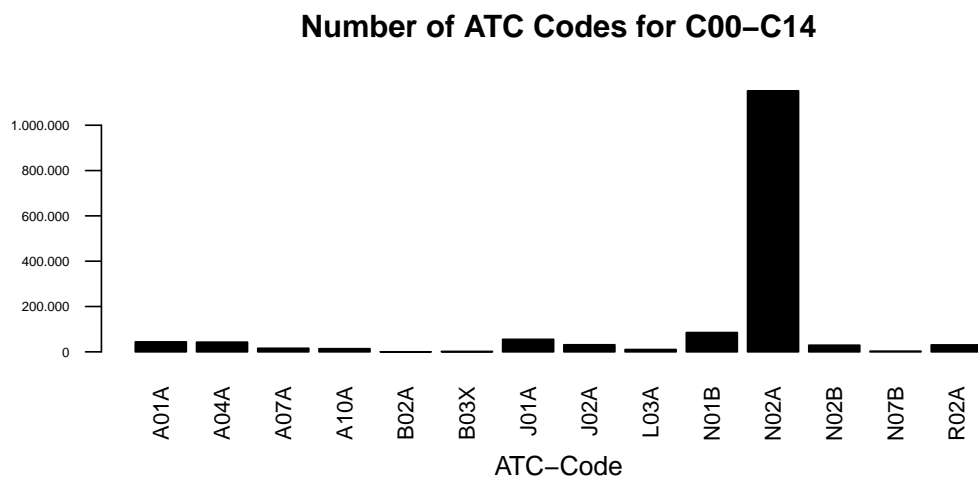


Figure 121: This figure shows the frequency of the underlying ATC codes for the given diagnose group C00-C14. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
A01A	STOMATOLOGIKA	TRUE
A04A	ANTIEMETIKA UND MITTEL GEGEN ÜBELKEIT	TRUE
A07A	INTESTINALE ANTIINFEKTIVA	FALSE
A10A	INSULINE UND ANALOGA	FALSE
B02A	ANTIFIBRINOLYTIKA	FALSE
B03X	ANDERE ANTIANÄMIKA	TRUE
J01A	TETRACYCLINE	FALSE
J02A	Antimykotika zur systemischen Anwendung	FALSE
L03A	IMMUNSTIMULANZIEN	TRUE
N01B	LOKALANÄSTHETIKA	FALSE
N02A	OPIOIDE	TRUE
N02B	ANDERE ANALGETIKA UND ANTIPYRETIKA	TRUE
N07B	MITTEL ZUR BEHANDLUNG VON SUCHTERKRANKUN- GEN	FALSE
R02A	HALS- UND RACHENTHERAPEUTIKA	FALSE

Table 64: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose C00-C14.

E.36. Diagnose H80-H83: Krankheiten des Innenohres

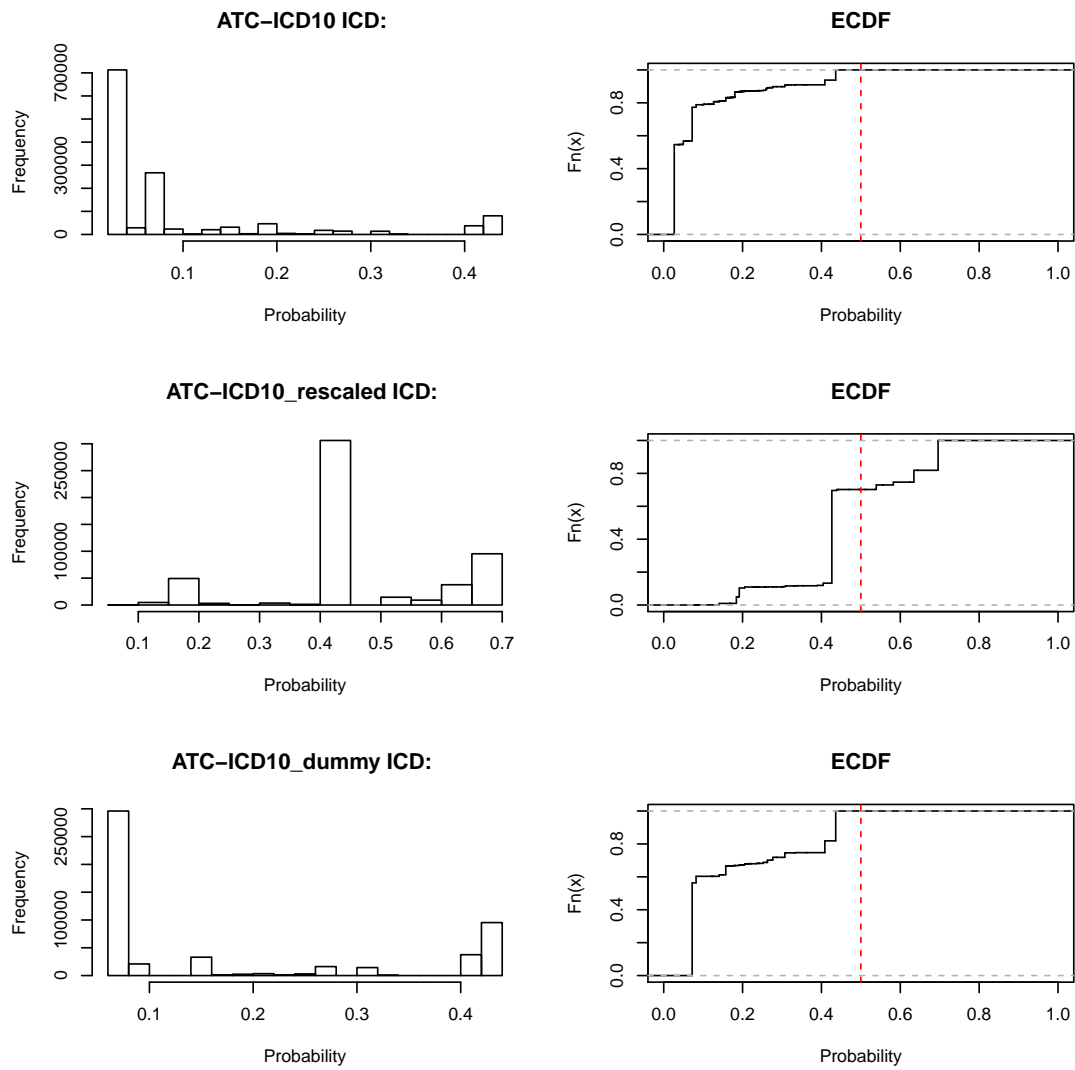
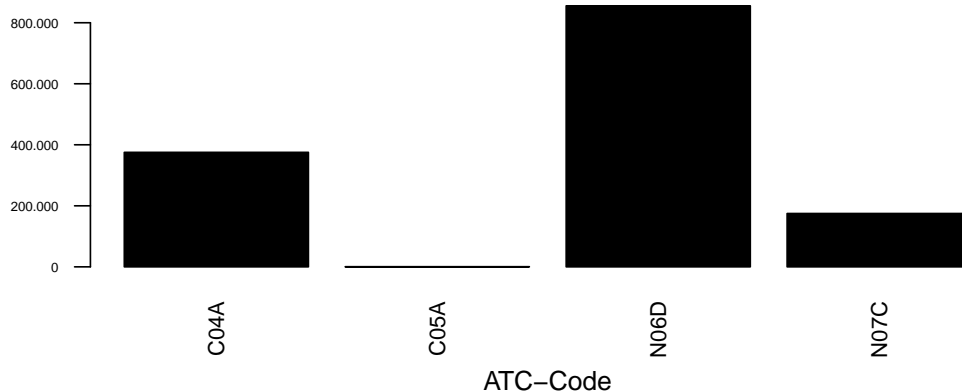


Figure 122: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group H80-H83.

Number of ATC Codes for H80–H83



Number of ATC Codes for H80–H83

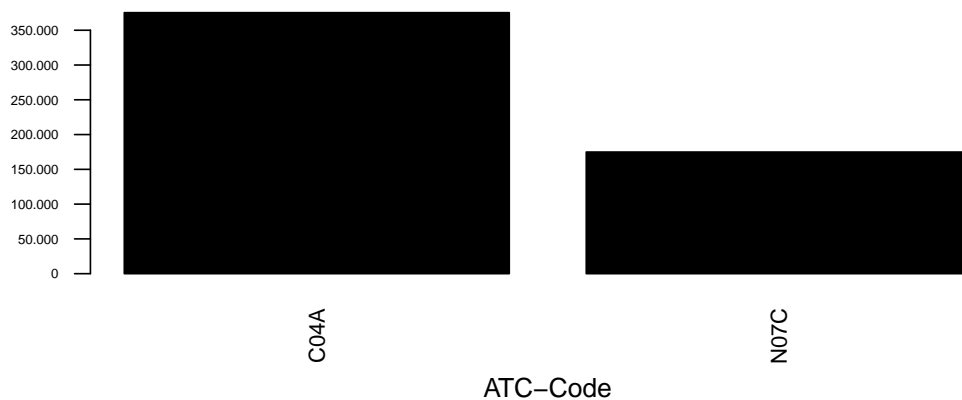


Figure 123: This figure shows the frequency of the underlying ATC codes for the given diagnose group H80-H83. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
C04A	PERIPHERE VASODILATATOREN	TRUE
C05A	MITTEL ZUR BEH. HÄMORRH.+ANALFISSUREN Z.TOPISCH.ANWEND.	FALSE
N06D	ANTIDEMENTIVA	FALSE
N07C	ANTIVERTIGINOSA	TRUE

Table 65: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose H80-H83.

E.37. Diagnose C51-C58: Bösartige Neubildungen der weiblichen Genitalorgane

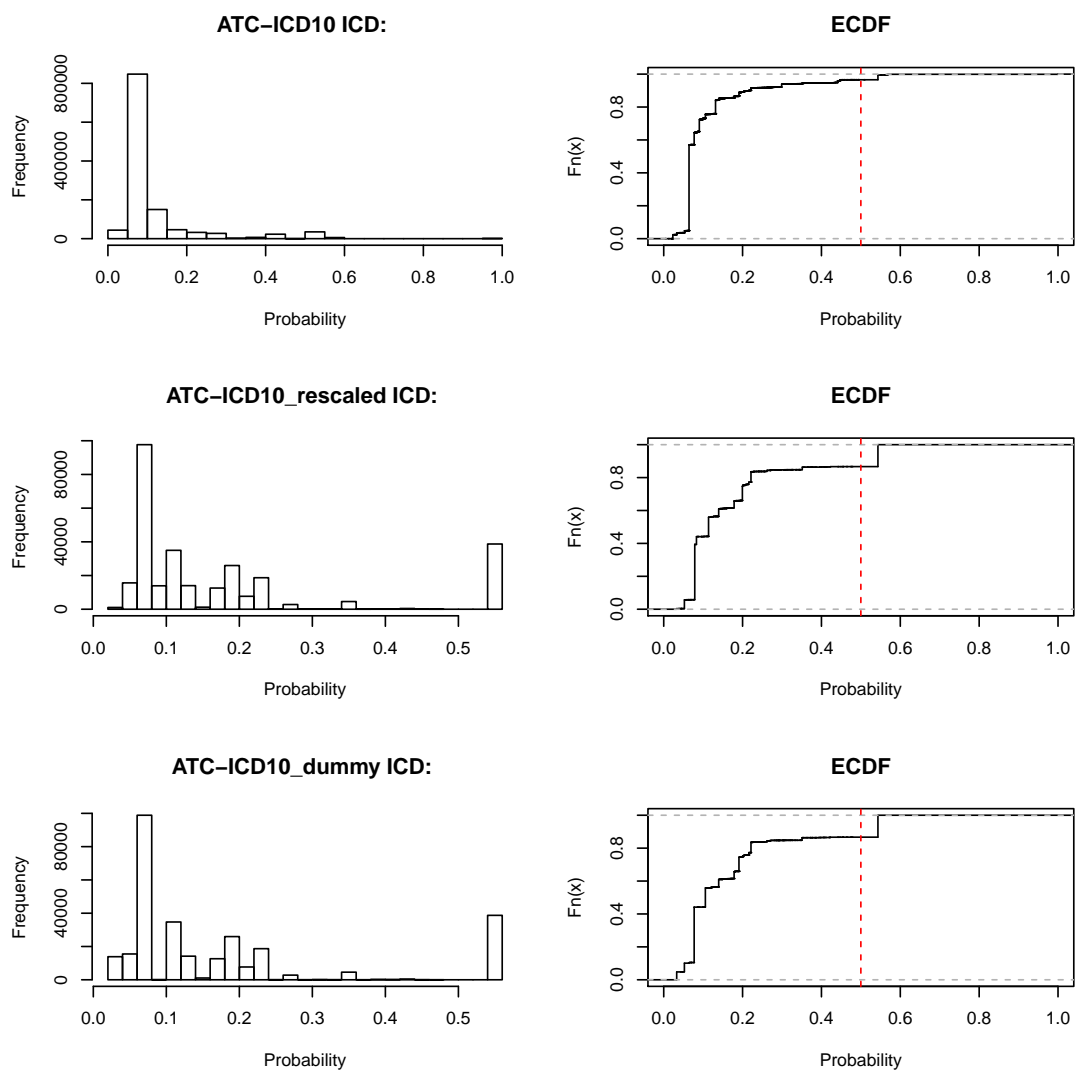
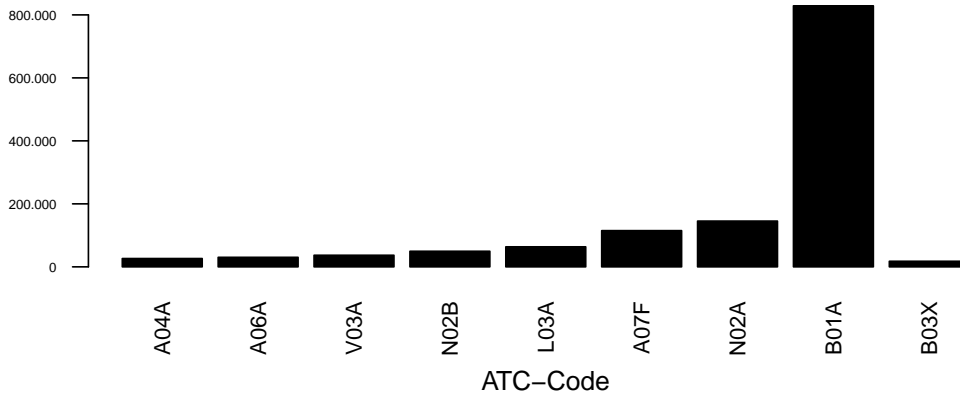


Figure 124: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group C51-C58.

Number of ATC Codes for C51–C58



Number of ATC Codes for C51–C58

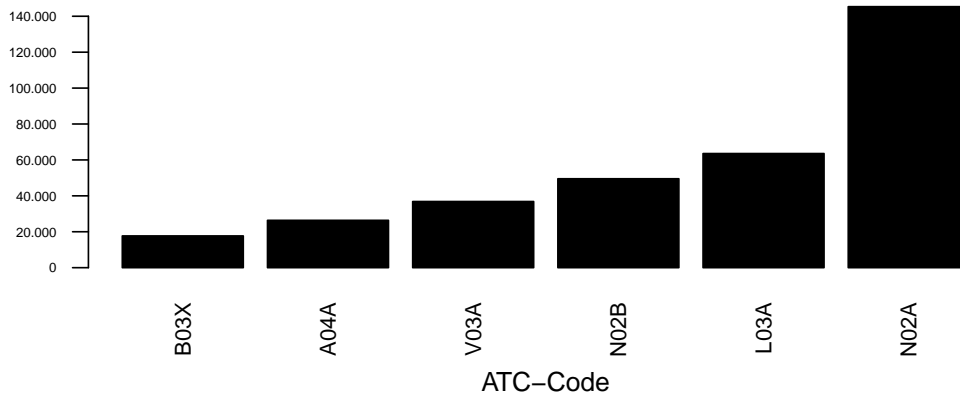


Figure 125: This figure shows the frequency of the underlying ATC codes for the given diagnose group C51-C58. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions. There are 22 ATC-Codes that related to the Diagnosis C51-C58. In order to give a clear overview of the distribution of the ATC codes behind an ICD10 group only the ATCs are shown, which represent the 95% of the cumulative frequency.

ATC	Description	Expert
A04A	ANTIEMETIKA UND MITTEL GEGEN ÜBELKEIT	TRUE
A06A	LAXANTIEN	FALSE
A07F	MIKROBIELLE ANTIDIARRHOIKA	FALSE
B01A	ANTITHROMBOTISCHE MITTEL	FALSE
B03X	ANDERE ANTIANÄMIKA	TRUE
L03A	IMMUNSTIMULANZIEN	TRUE
N02A	OPIOIDE	TRUE
N02B	ANDERE ANALGETIKA UND ANTIPYRETIKA	TRUE
V03A	ALLE ÜBRIGEN THERAPEUTISCHEN MITTEL	TRUE

Table 66: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose C51-C58. There are 22 ATC-Codes that related to the Diagnosis C51-C58. In order to give a clear overview of the distribution of the ATC codes behind an ICD10 group only the ATCs are shown, which represent the 95% of the cumulative frequency.

E.38. Diagnose C50-C50: Bösartige Neubildung der Brustdrüse [Mamma]

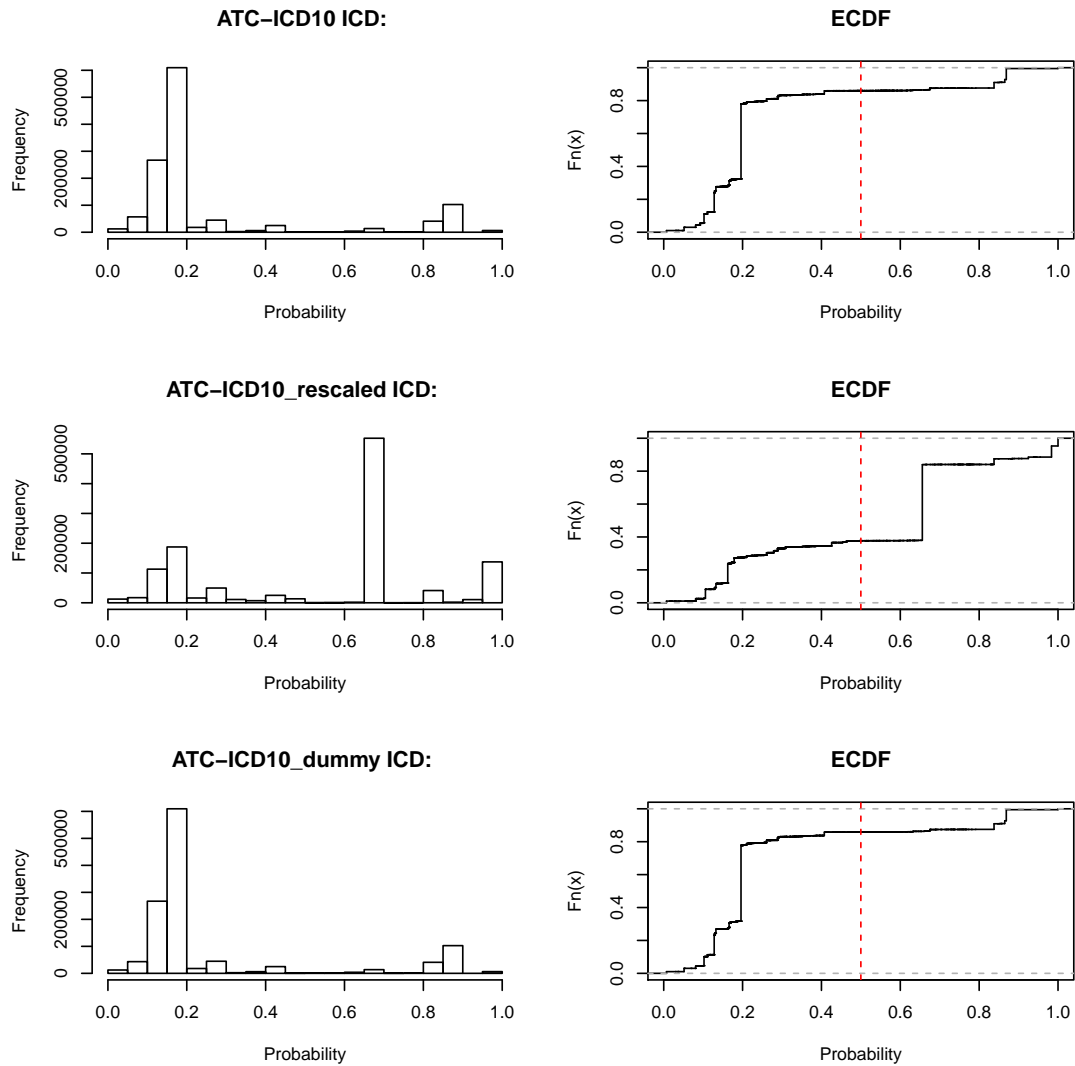
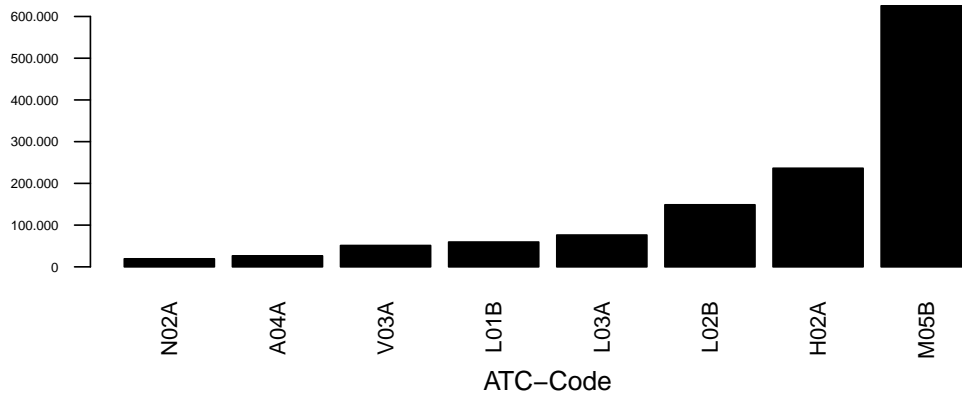


Figure 126: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group C50-C50.

Number of ATC Codes for C50–C50



Number of ATC Codes for C50–C50

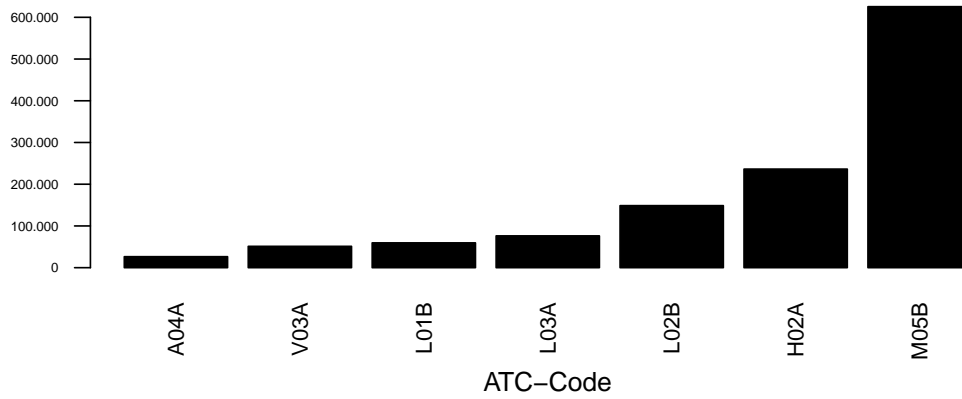


Figure 127: This figure shows the frequency of the underlying ATC codes for the given diagnose group C50-C50. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions. There are 16 ATC-Codes that related to the Diagnosis C50-C50. In order to give a clear overview of the distribution of the ATC codes behind an ICD10 group only the ATCs are shown, which represent the 95% of the cumulative frequency.

ATC	Description	Expert
A04A	ANTIEMETIKA UND MITTEL GEGEN ÜBELKEIT	TRUE
H02A	CORTICOSTEROIDE ZUR SYSTEMISCHEN ANWENDUNG, REIN	TRUE
L01B	ANTIMETABOLITE	TRUE
L02B	HORMONANTAGONISTEN UND VERWANDTE STOFFE	TRUE
L03A	IMMUNSTIMULANZIEN	TRUE
M05B	MITTEL MIT EINFLUSS AUF DIE KNOCHENSTRUKTUR UND DIE MINERALISATION	TRUE
N02A	OPIOIDE	FALSE
V03A	ALLE ÜBRIGEN THERAPEUTISCHEN MITTEL	TRUE

Table 67: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose C50-C50. There are 16 ATC-Codes that related to the Diagnosis C50-C50. In order to give a clear overview of the distribution of the ATC codes behind an ICD10 group only the ATCs are shown, which represent the 95% of the cumulative frequency.

E.39. Diagnose E00-E07: Krankheiten der Schilddrüse

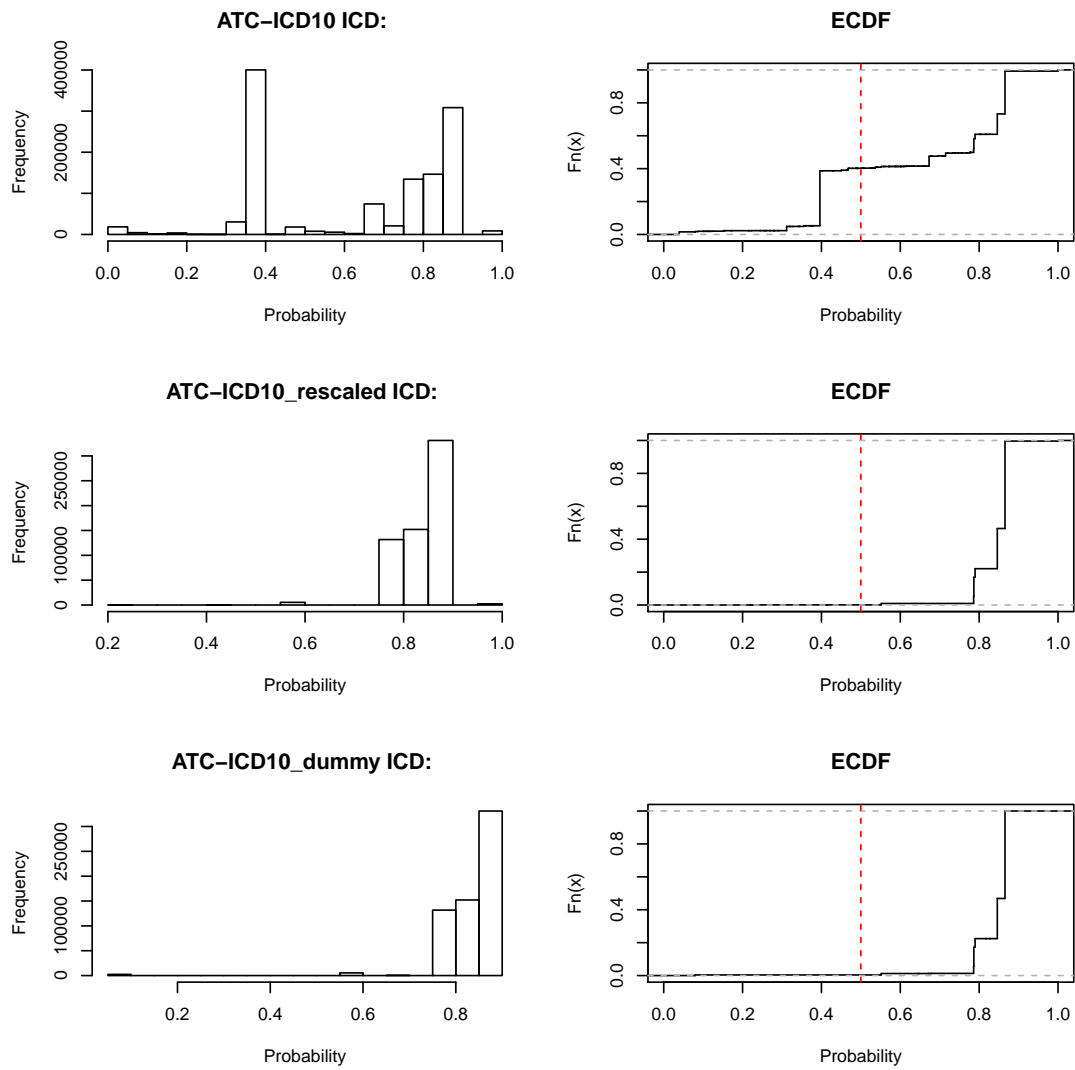


Figure 128: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group E00-E07.

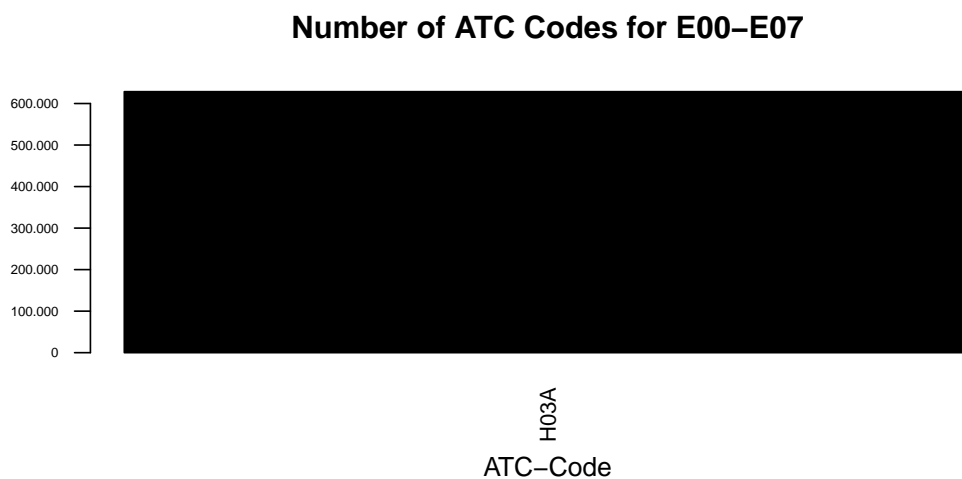
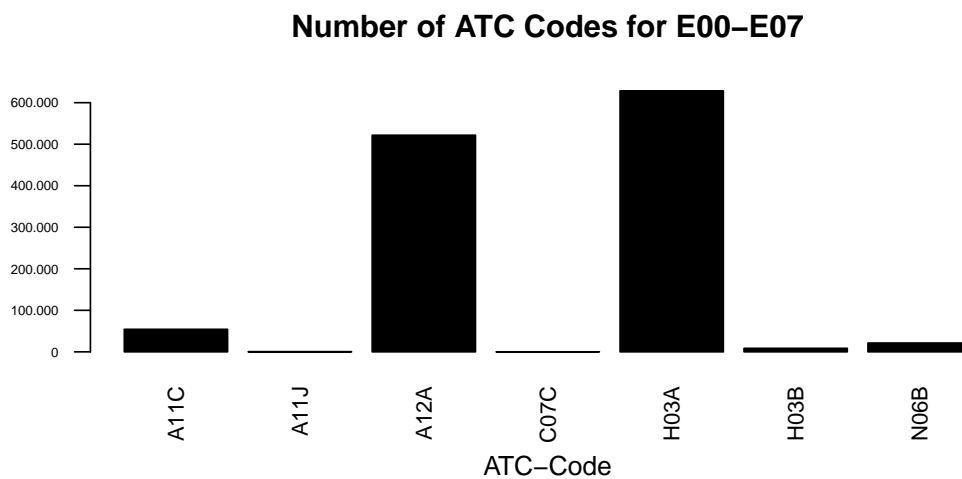


Figure 129: This figure shows the frequency of the underlying ATC codes for the given diagnose group E00-E07. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
A11C	VITAMIN A UND D, INKL. DEREN KOMBINATIONEN	FALSE
A11J	ANDERE VITAMINPRÄPARATE, KOMBINATIONEN	FALSE
A12A	CALCIUM	FALSE
C07C	BETA-ADRENOREZEPTOR-ANTAGONISTEN UND AN- DERE DIURETIKA	FALSE
H03A	SCHILDDRÜSENPRÄPARATE	TRUE
H03B	THYREOSTATIKA	FALSE
N06B	PSYCHOSTIMULANZIEN, MITTEL FÜR DIE ADHD UND NOOTROPIKA	FALSE

Table 68: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose E00-E07.

E.40. Diagnose M65-M68: Krankheiten der Synovialis und der Sehnen

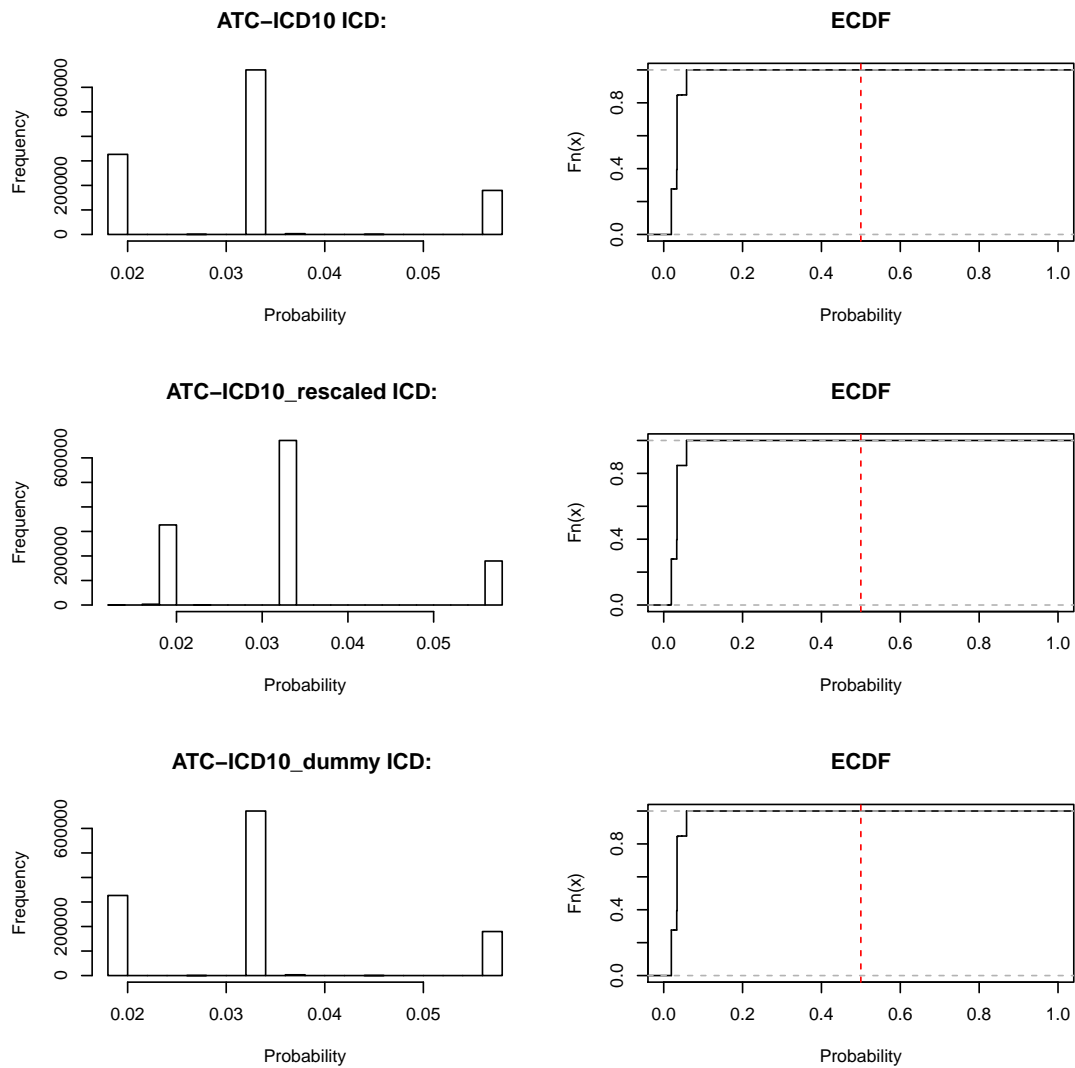
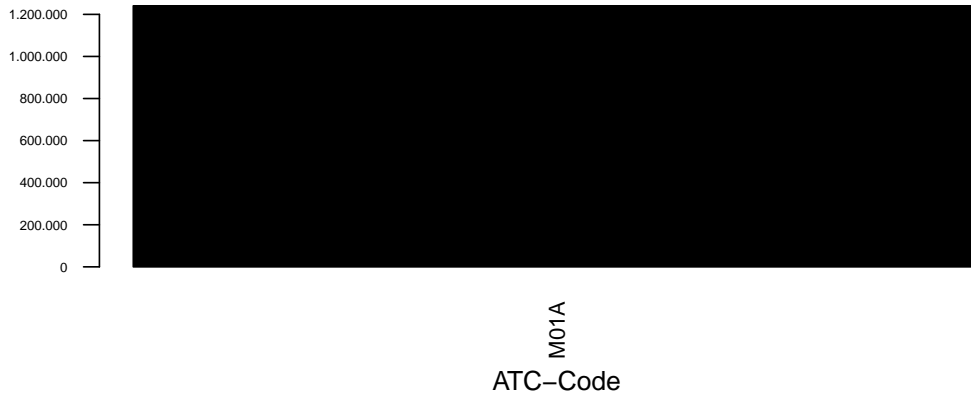


Figure 130: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group M65-M68.

Number of ATC Codes for M65–M68



Number of ATC Codes for M65–M68

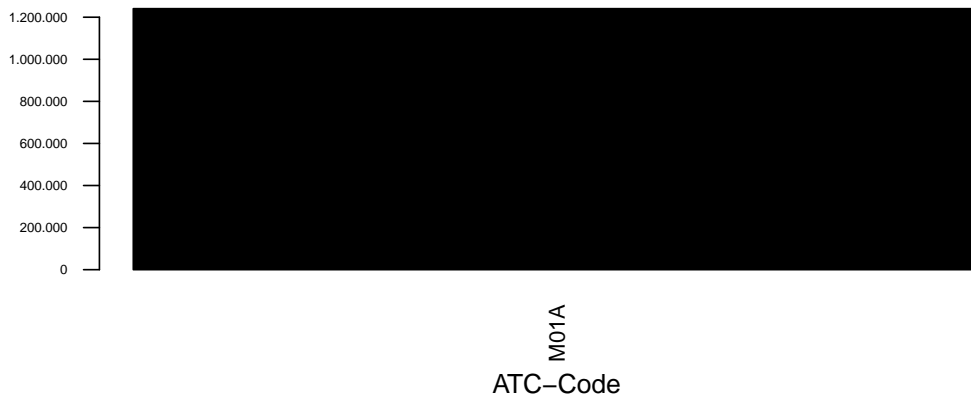


Figure 131: This figure shows the frequency of the underlying ATC codes for the given diagnose group M65-M68. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
M01A	NICHTSTEROIDALE ANTIPHLOGISTIKA UND AN-TIRHEUMATIKA	TRUE

Table 69: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose M65-M68.

E.41. Diagnose A00-A09: Infektiöse Darmkrankheiten

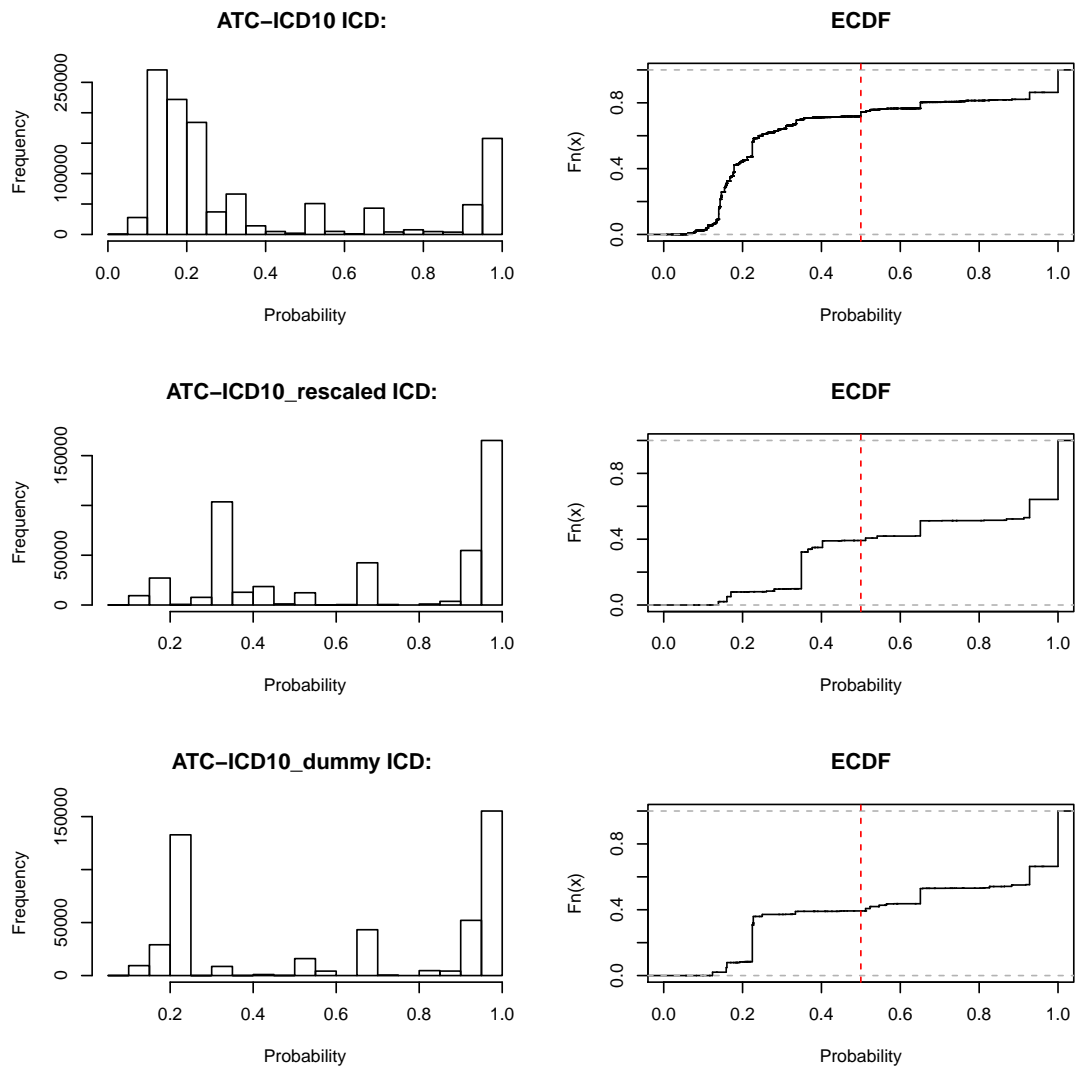
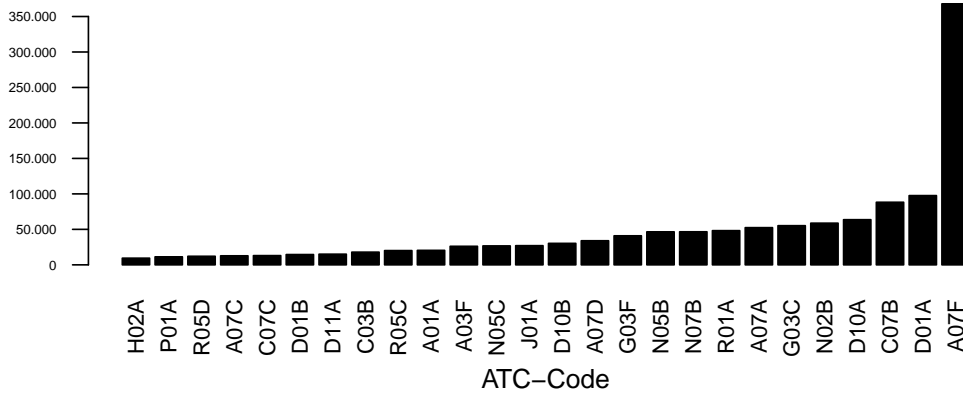


Figure 132: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group A00-A09.

Number of ATC Codes for A00–A09



Number of ATC Codes for A00–A09

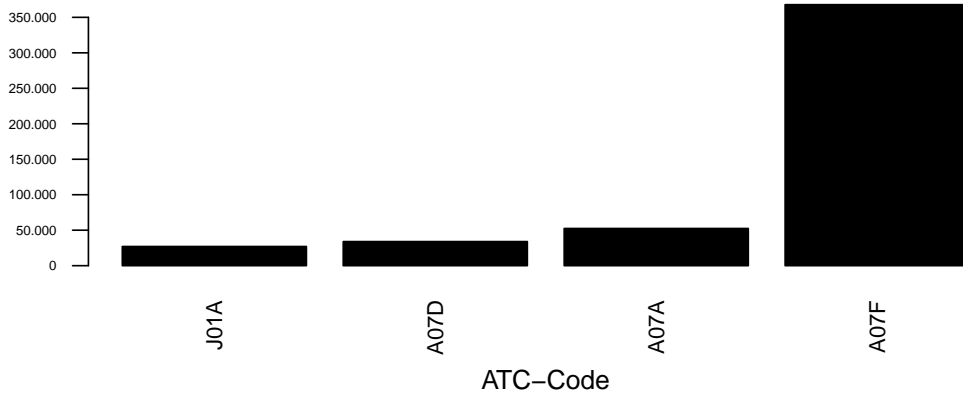


Figure 133: This figure shows the frequency of the underlying ATC codes for the given diagnose group A00-A09. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions. There are 58 ATC-Codes that related to the Diagnosis A00-A09. In order to give a clear overview of the distribution of the ATC codes behind an ICD10 group only the ATCs are shown, which represent the 95% of the cumulative frequency.

E.42. Diagnose M86-M90: Sonstige Osteopathien

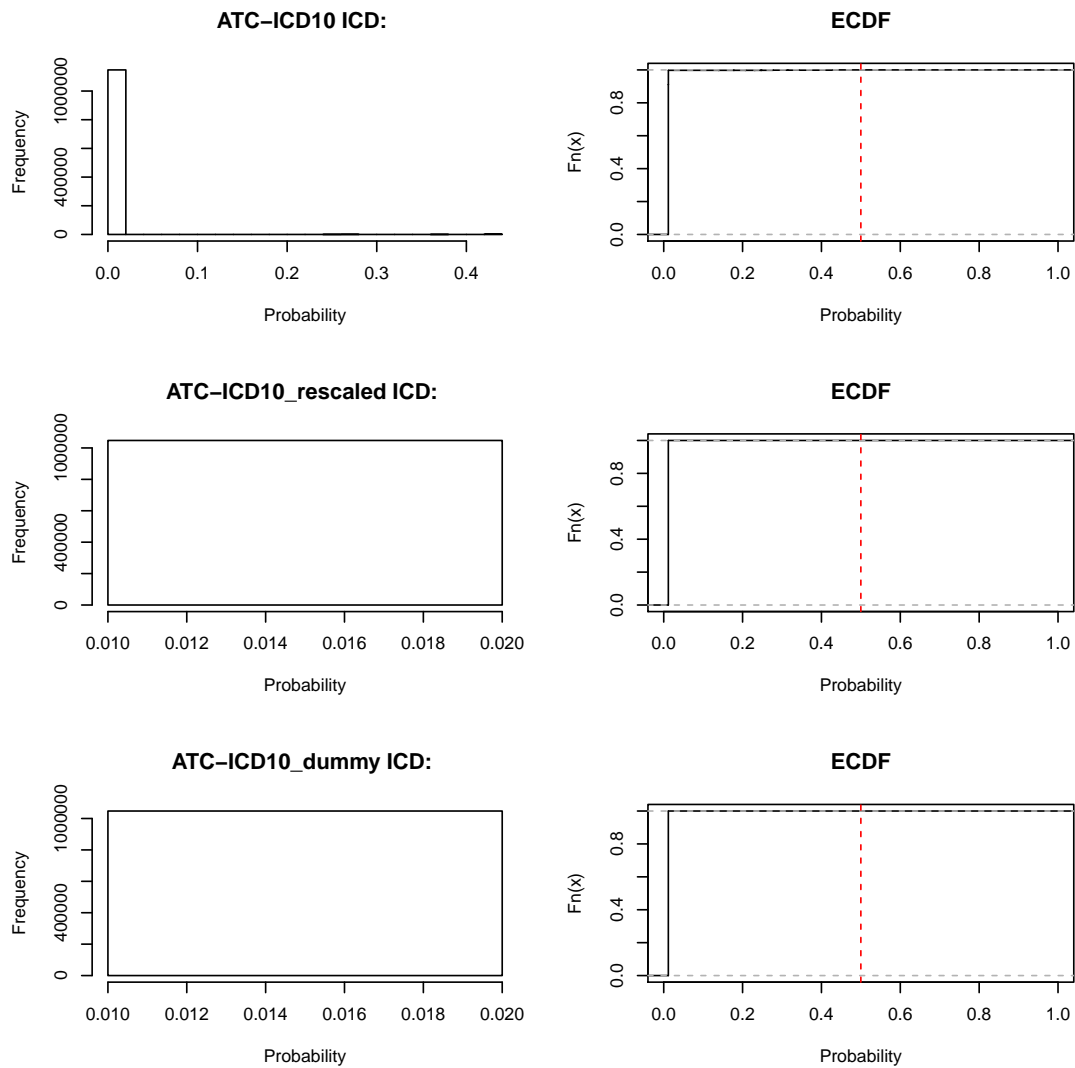
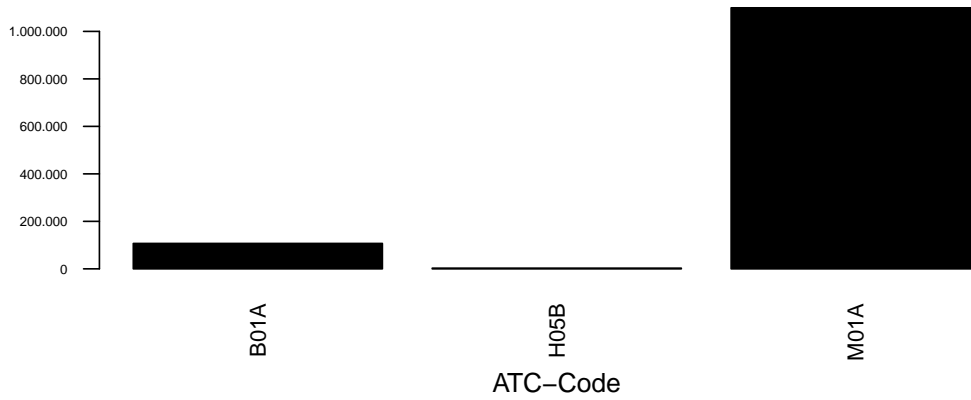


Figure 134: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group M86-M90.

ATC	Description	Expert
A01A	STOMATOLOGIKA	FALSE
A03F	PROKINETIKA	FALSE
A07A	INTESTINALE ANTIINFEKTIVA	TRUE
A07C	ELEKTROLYTE MIT KOHLENHYDRATEN	FALSE
A07D	MOTILITÄTSCHEMMER	TRUE
A07F	MIKROBIELLE ANTIDIARRHOIKA	TRUE
C03B	LOW-CEILING-DIURETIKA, EXKL. THIAZIDE	FALSE
C07B	BETA-ADRENOREZEPTOR-ANTAGONISTEN UND THI-AZIDE	FALSE
C07C	BETA-ADRENOREZEPTOR-ANTAGONISTEN UND AN-DERE DIURETIKA	FALSE
D01A	ANTIMYKOTIKA ZUR TOPISCHEN ANWENDUNG	FALSE
D01B	ANTIMYKOTIKA ZUR SYSTEMISCHEN ANWENDUNG	FALSE
D10A	AKNEMITTEL ZUR TOPISCHEN ANWENDUNG	FALSE
D10B	AKNEMITTEL ZUR SYSTEMISCHEN ANWENDUNG	FALSE
D11A	ANDERE DERMATIKA	FALSE
G03C	ESTROGENE	FALSE
G03F	GESTAGENE UND ESTROGENE IN KOMBINATION	FALSE
H02A	CORTICOSTEROIDE ZUR SYSTEMISCHEN ANWENDUNG, REIN	FALSE
J01A	TETRACYCLINE	TRUE
N02B	ANDERE ANALGETIKA UND ANTIPYRETIKA	FALSE
N05B	ANXIOLYTIKA	FALSE
N05C	HYPNOTIKA UND SEDATIVA	FALSE
N07B	MITTEL ZUR BEHANDLUNG VON SUCHTERKRANKUN-GEN	FALSE
P01A	MITTEL GEGEN AMÖBEN UND ANDERE PROTOZOEN-ERKRANKUNGEN	FALSE
R01A	DEKONGESTIVA UND ANDERE RHINOLOGIKA ZUR TOP-ISCHEN ANWENDUNG	FALSE
R05C	EXPEKTORANZIEN, EXKL. KOMBINATIONEN MIT ANTI-TUSSIVA	FALSE
R05D	ANTITUSSIVA, EXKL. KOMBINATIONEN MIT EXPEK-TORANZIEN	FALSE

Table 70: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose A00-A09. There are 58 ATC-Codes that related to the Diagnosis A00-A09. In order to give a clear overview of the distribution of the ATC codes behind an ICD10 group only the ATCs are shown, which represent the 95% of the cumulative frequency.

Number of ATC Codes for M86–M90



Number of ATC Codes for M86–M90

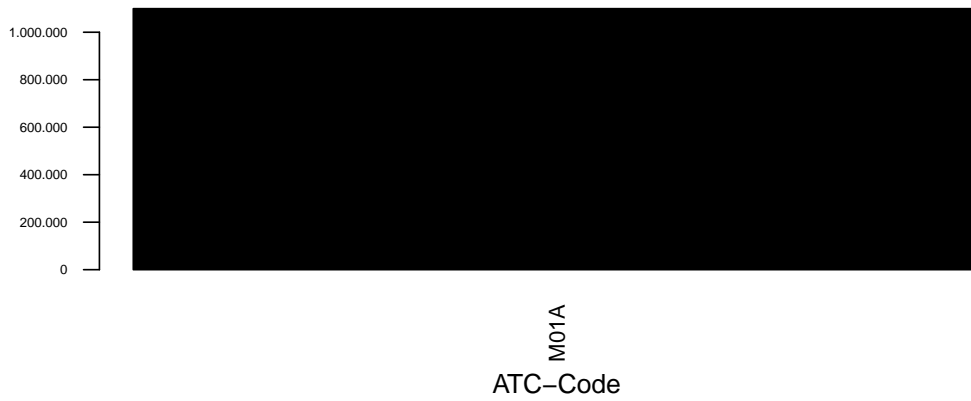


Figure 135: This figure shows the frequency of the underlying ATC codes for the given diagnose group M86-M90. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
B01A	ANTITHROMBOTISCHE MITTEL	FALSE
H05B	NEBENSCHILDDRÜSEN-ANTAGONISTEN	FALSE
M01A	NICHTSTEROIDALE ANTIPHLOGISTIKA UND AN-TIRHEUMATIKA	TRUE

Table 71: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose M86-M90.

E.43. Diagnose L20-L30: Dermatitis und Ekzem

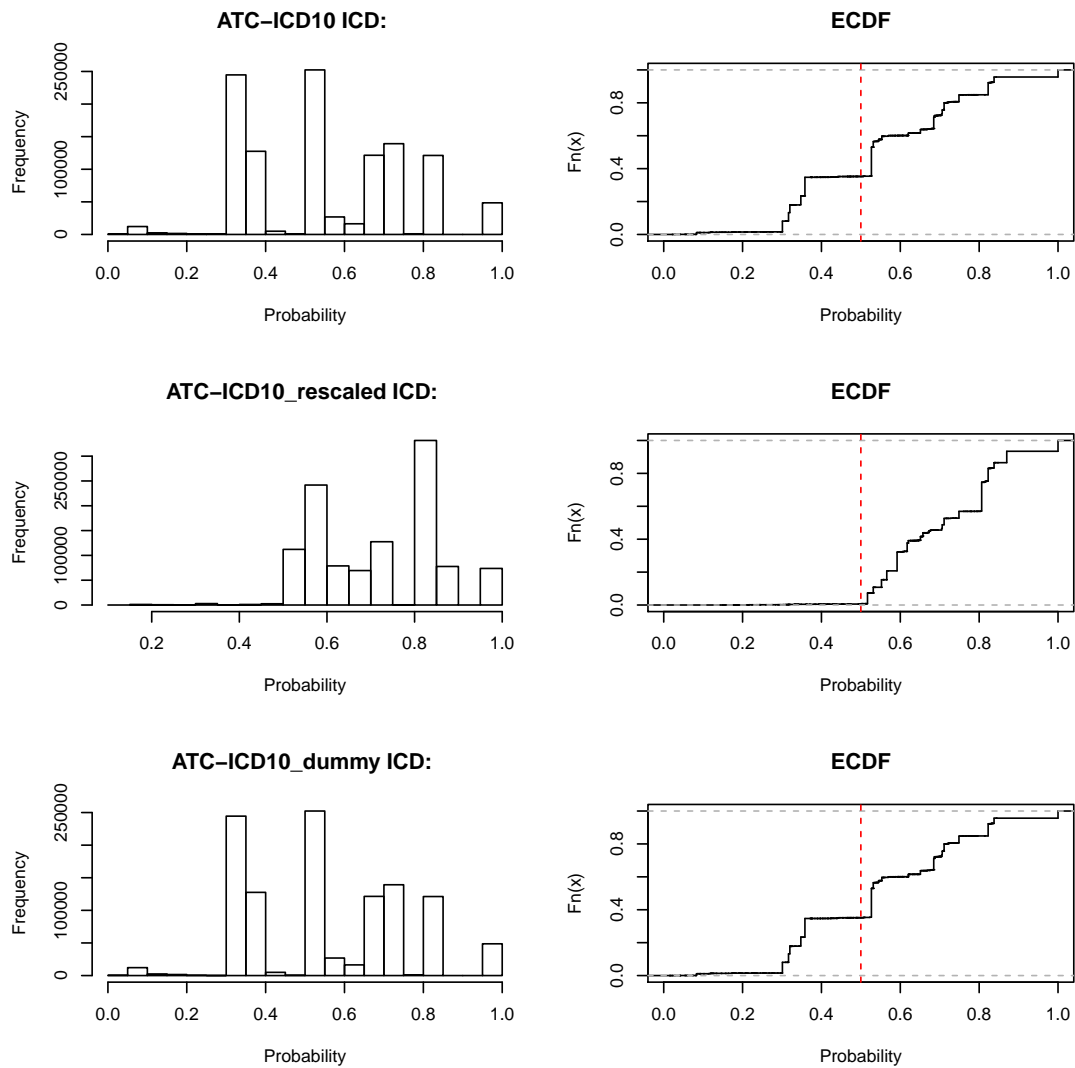


Figure 136: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group L20-L30.

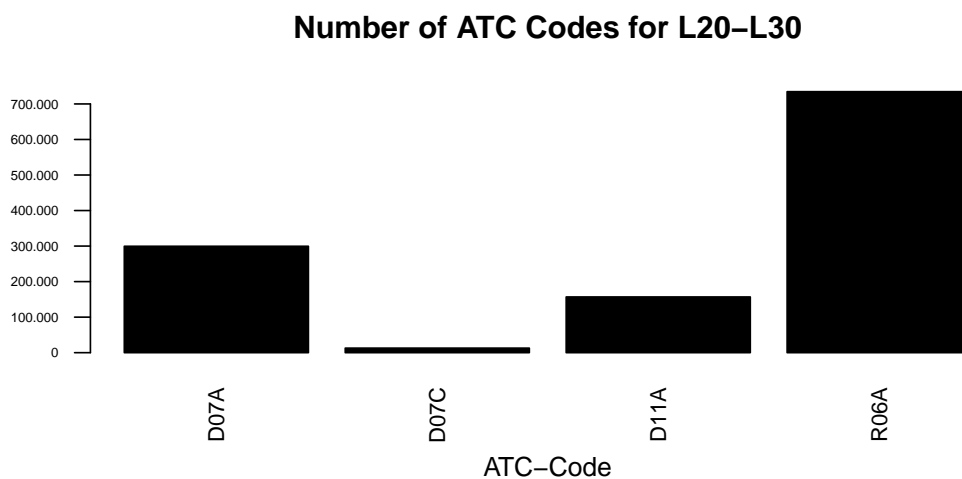
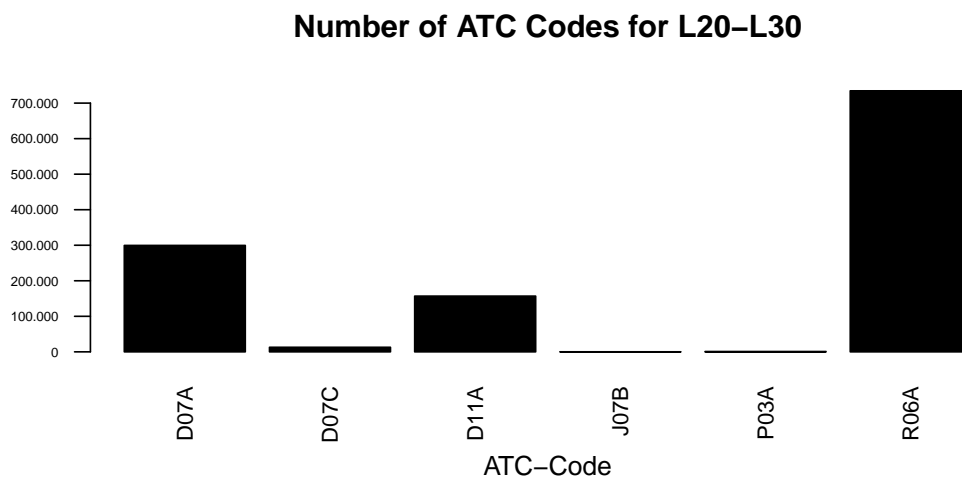


Figure 137: This figure shows the frequency of the underlying ATC codes for the given diagnose group L20-L30. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
D07A	CORTICOSTEROIDE, REIN	TRUE
D07C	CORTICOSTEROIDE, KOMBINATIONEN MIT ANTIBIOTIKA	TRUE
D11A	ANDERE DERMATIKA	TRUE
J07B	VIRALE IMPFSTOFFE	FALSE
P03A	MITTEL GEGEN EKTOPARASITEN, INKL. ANTISCABIOSA	FALSE
R06A	ANTI-HISTAMINIKA ZUR SYSTEMISCHEN ANWENDUNG	TRUE

Table 72: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose L20-L30.

E.44. Diagnose S50-S59: Verletzungen des Ellenbogens und des Unterarmes

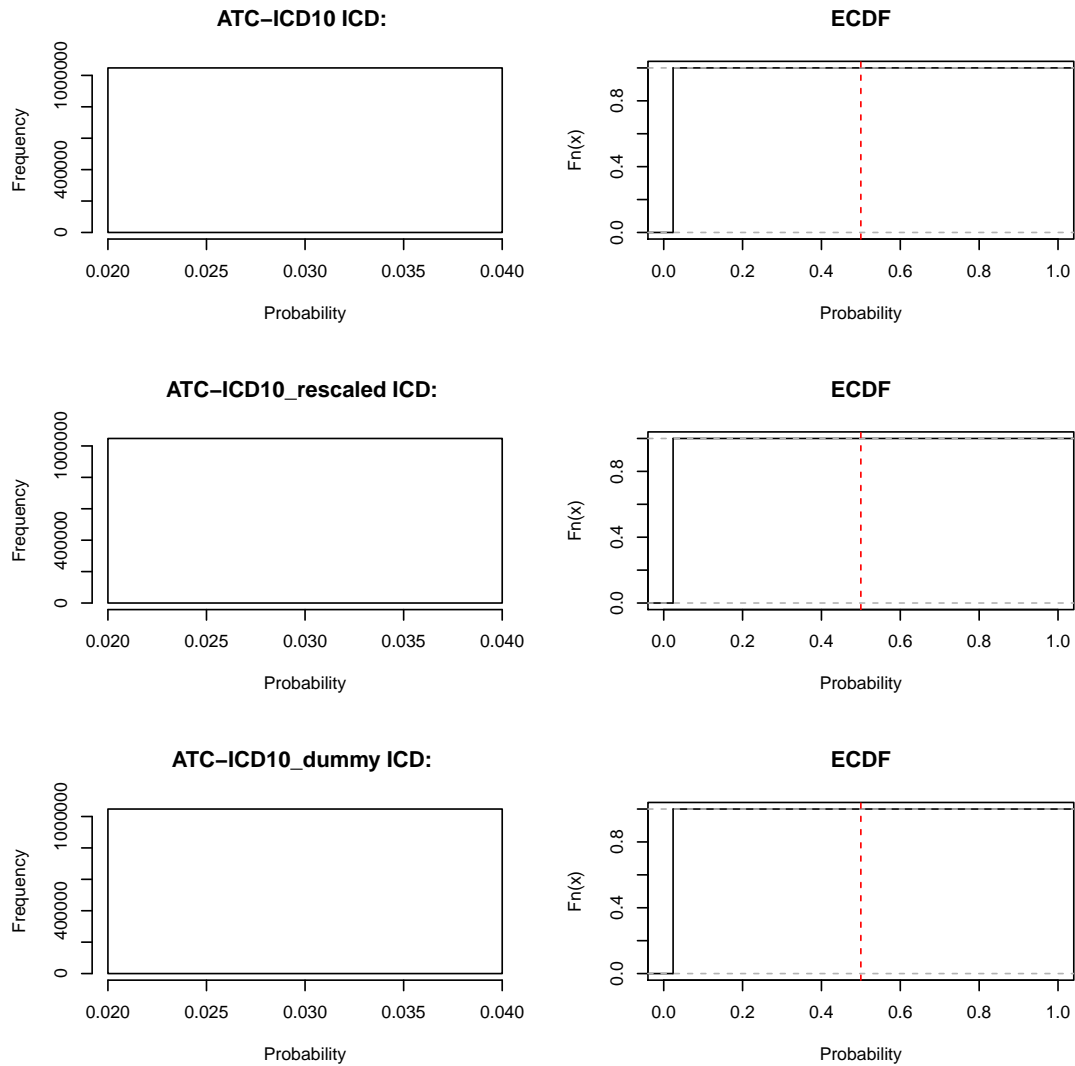
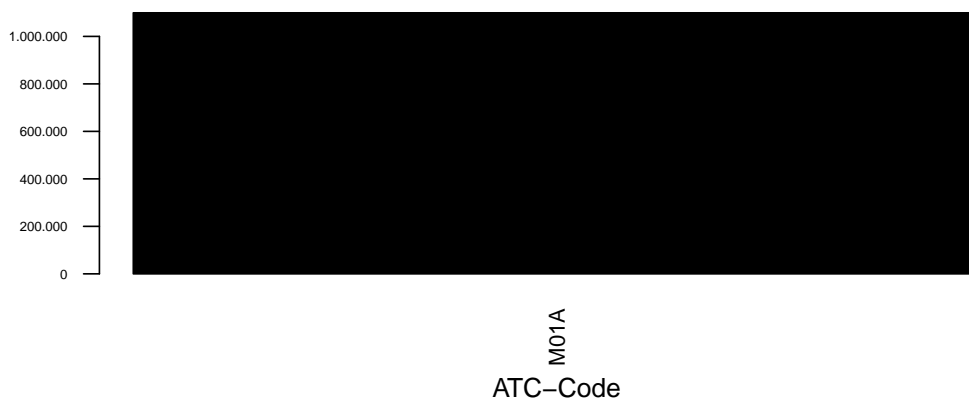


Figure 138: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group S50-S59.

Number of ATC Codes for S50–S59



Number of ATC Codes for S50–S59

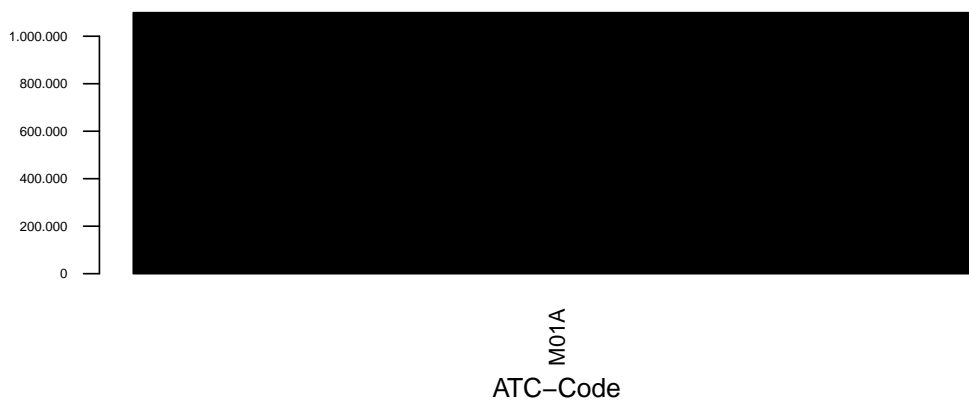


Figure 139: This figure shows the frequency of the underlying ATC codes for the given diagnose group S50-S59. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
M01A	NICHTSTEROIDALE ANTIPHLOGISTIKA UND AN-TIRHEUMATIKA	TRUE

Table 73: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose S50-S59.

E.45. Diagnose C64-C68: Bösartige Neubildungen der Harnorgane

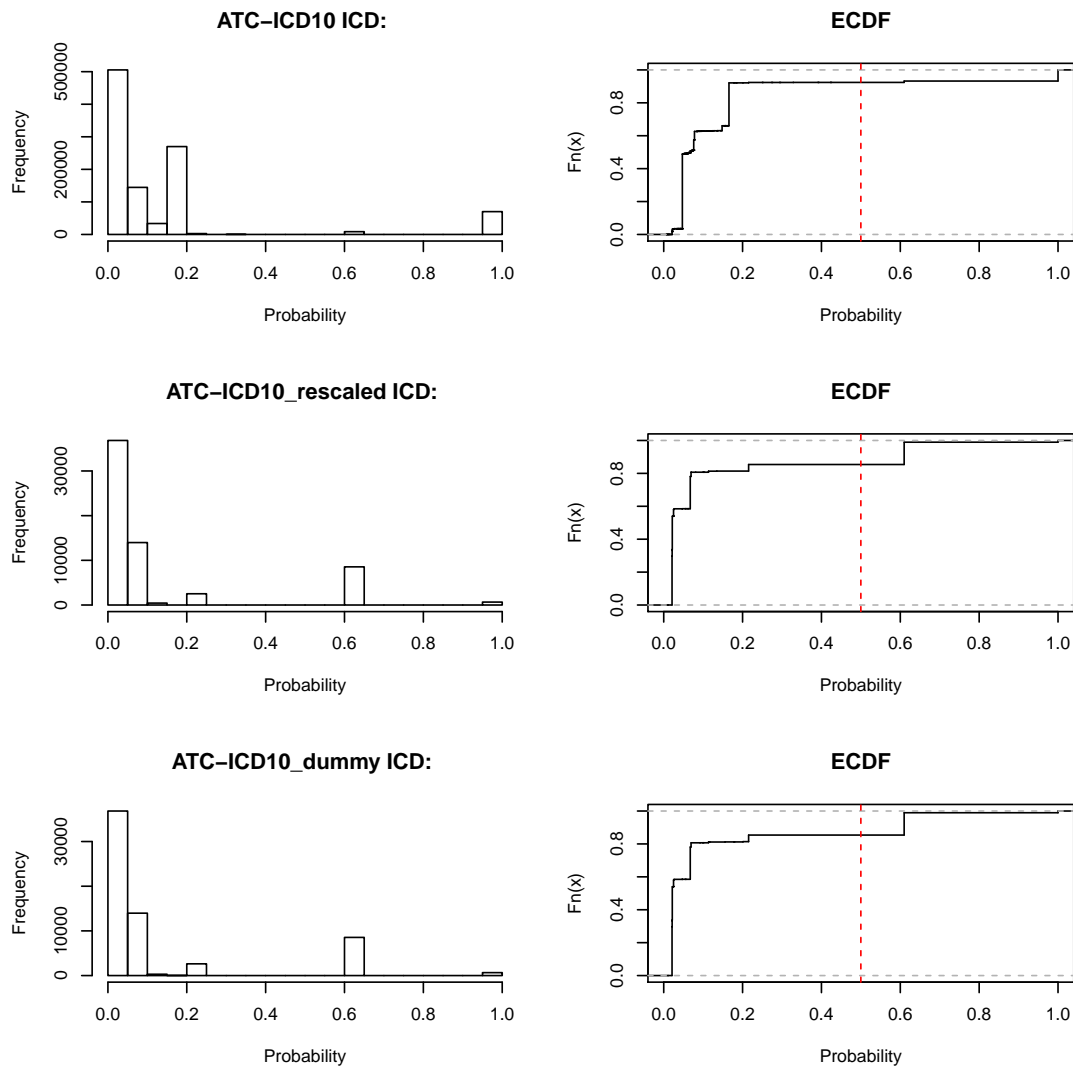


Figure 140: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group C64-C68.

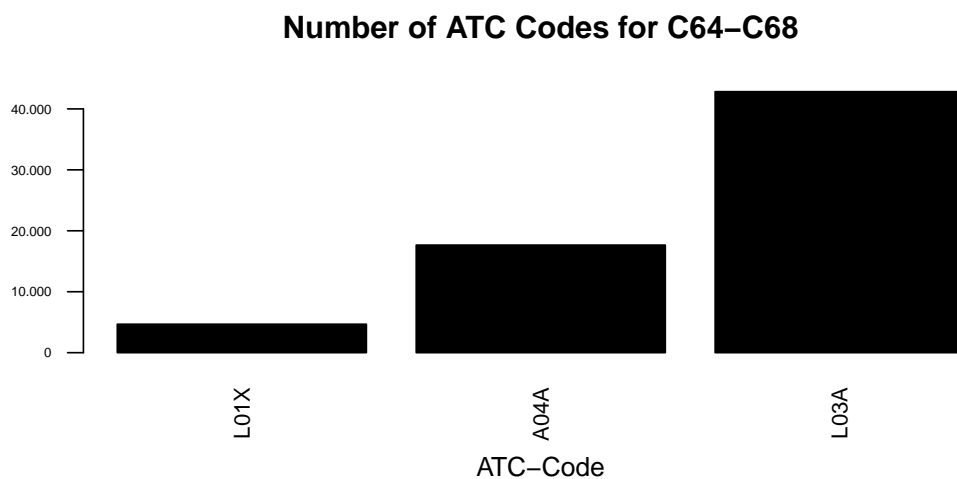
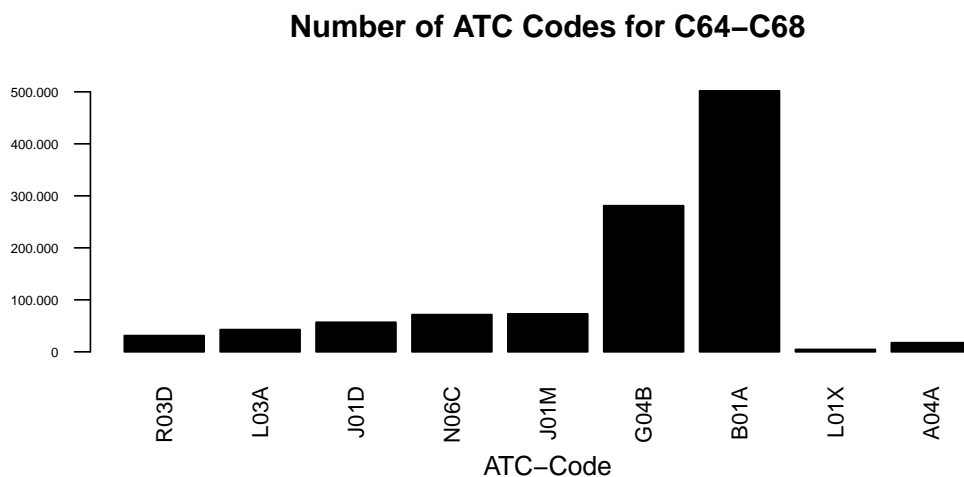


Figure 141: This figure shows the frequency of the underlying ATC codes for the given diagnose group C64-C68. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions. There are 17 ATC-Codes that related to the Diagnosis C64-C68. In order to give a clear overview of the distribution of the ATC codes behind an ICD10 group only the ATCs are shown, which represent the 95% of the cumulative frequency.

ATC	Description	Expert
A04A	ANTIEMETIKA UND MITTEL GEGEN ÜBELKEIT	TRUE
B01A	ANTITHROMBOTISCHE MITTEL	FALSE
G04B	ANDERE UROLOGIKA, INKL. SPASMOLYTIKA	FALSE
J01D	ANDERE BETA-LACTAM-ANTIBIOTIKA	FALSE
J01M	CHINOLONE	FALSE
L01X	ANDERE ANTINEOPLASTISCHE MITTEL	TRUE
L03A	IMMUNSTIMULANZIEN	TRUE
N06C	PSYCHOLEPTIKA UND PSYCHOANALEPTIKA IN KOMBI- NATION	FALSE
R03D	ANDERE MITTEL BEI OBSTRUKTIVEN ATEMWEGSEKRANKUNGEN Z.SYSTEM.ANWENDUNG	FALSE

Table 74: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose C64-C68. There are 17 ATC-Codes that related to the Diagnosis C64-C68. In order to give a clear overview of the distribution of the ATC codes behind an ICD10 group only the ATCs are shown, which represent the 95% of the cumulative frequency.

E.46. Diagnose C69-C72: Bösartige Neubildungen des Auges, des Gehirns und sonstiger Teile des Zentralnervensystems

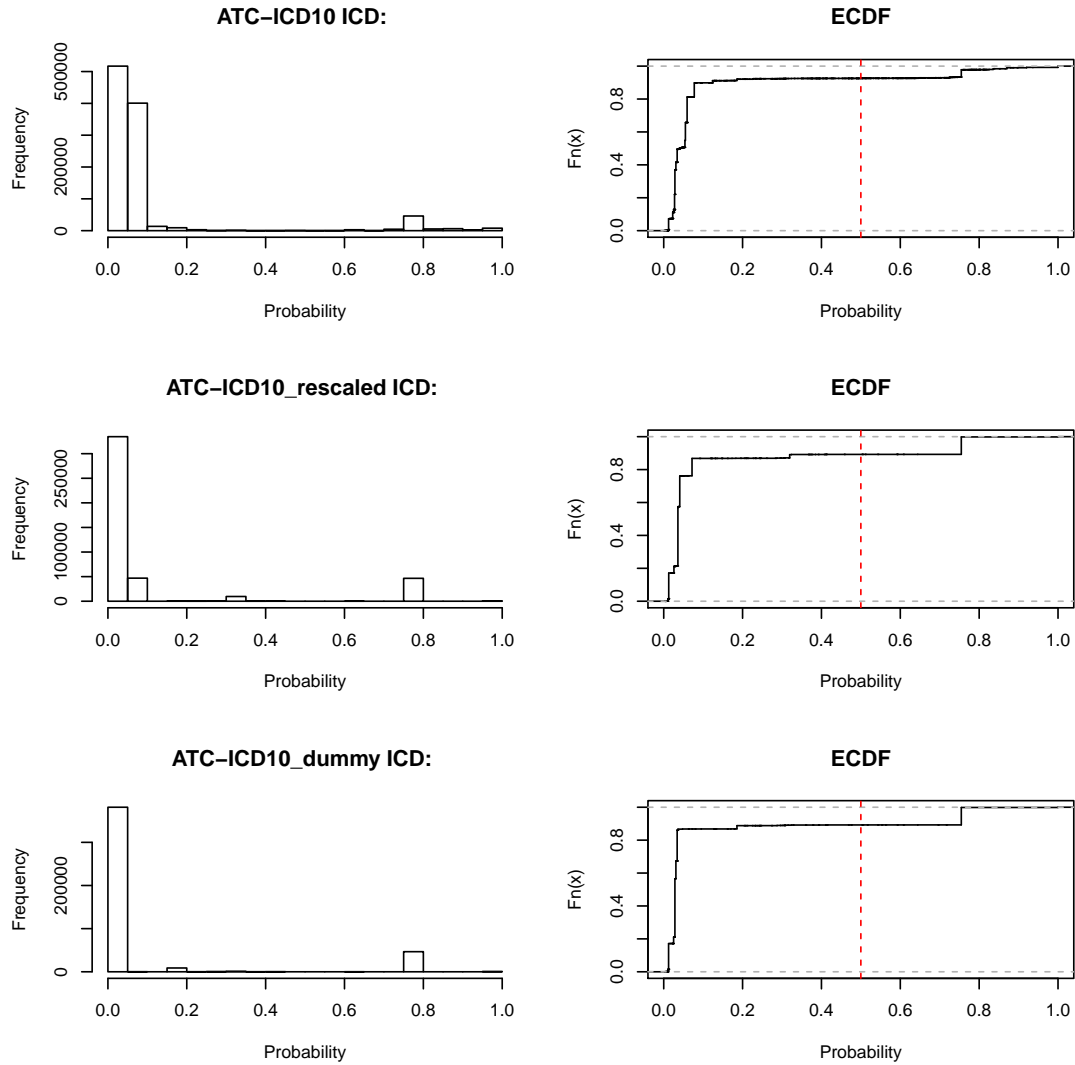
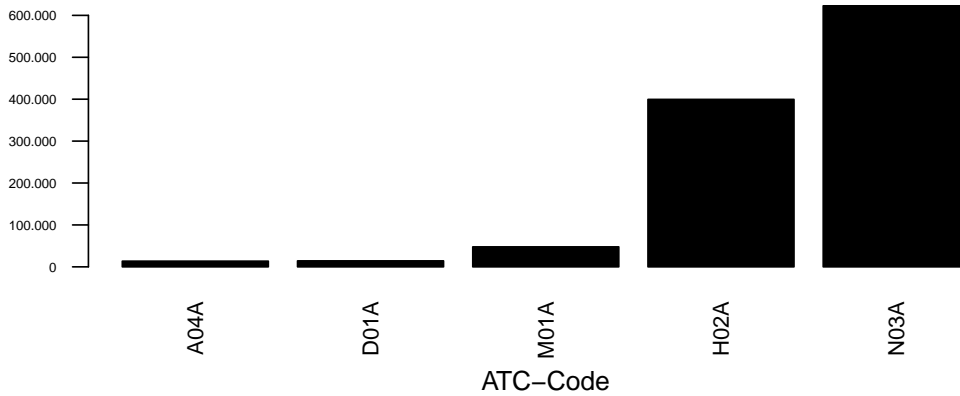


Figure 142: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group C69-C72.

Number of ATC Codes for C69–C72



Number of ATC Codes for C69–C72

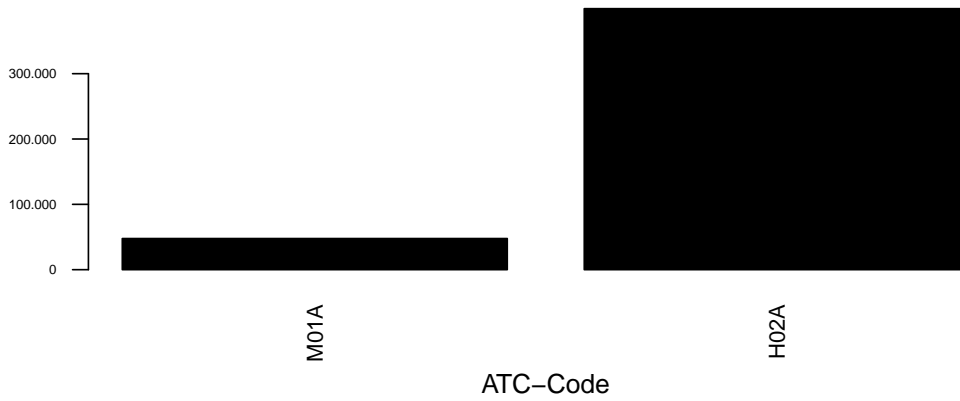


Figure 143: This figure shows the frequency of the underlying ATC codes for the given diagnose group C69-C72. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions. There are 23 ATC-Codes that related to the Diagnosis C69-C72. In order to give a clear overview of the distribution of the ATC codes behind an ICD10 group only the ATCs are shown, which represent the 95% of the cumulative frequency.

ATC	Description	Expert
A04A	ANTIEMETIKA UND MITTEL GEGEN ÜBELKEIT	FALSE
D01A	ANTIMYKOTIKA ZUR TOPISCHEN ANWENDUNG	FALSE
H02A	CORTICOSTEROIDE ZUR SYSTEMISCHEN ANWENDUNG, REIN	TRUE
M01A	NICHTSTEROIDALE ANTIPHLOGISTIKA UND AN- TIRHEUMATIKA	TRUE
N03A	ANTIEPILEPTIKA	FALSE

Table 75: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose C69-C72. There are 23 ATC-Codes that related to the Diagnosis C69-C72. In order to give a clear overview of the distribution of the ATC codes behind an ICD10 group only the ATCs are shown, which represent the 95% of the cumulative frequency.

E.47. Diagnose N10-N16: Tubulointerstitielle Nierenkrankheiten

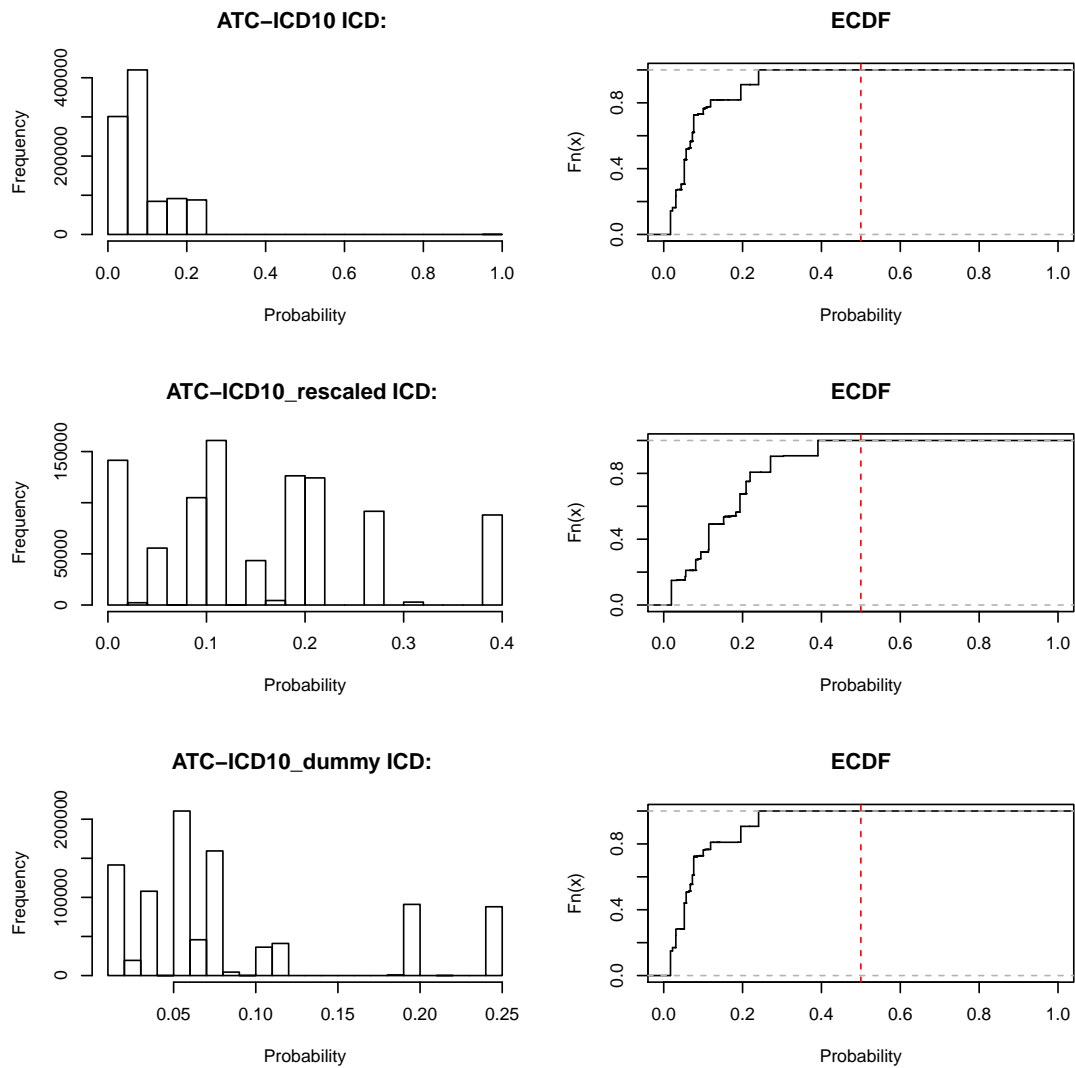


Figure 144: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group N10-N16.

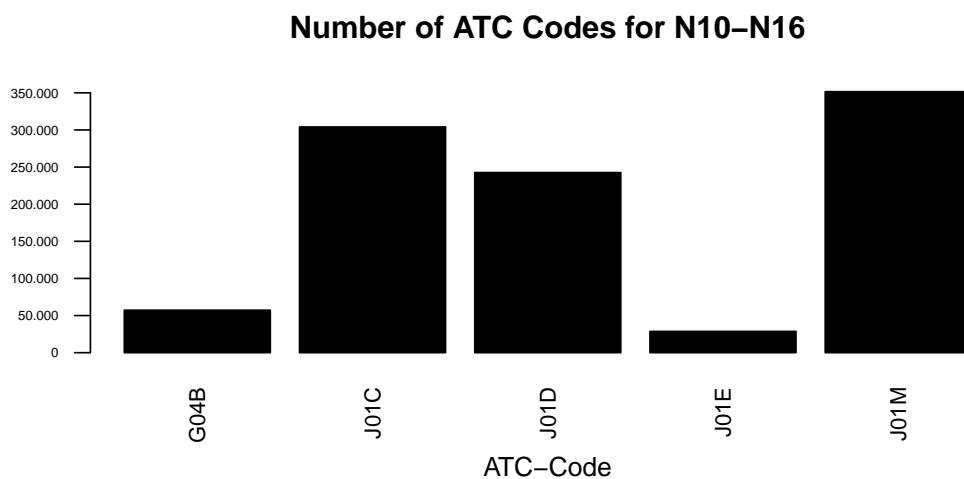
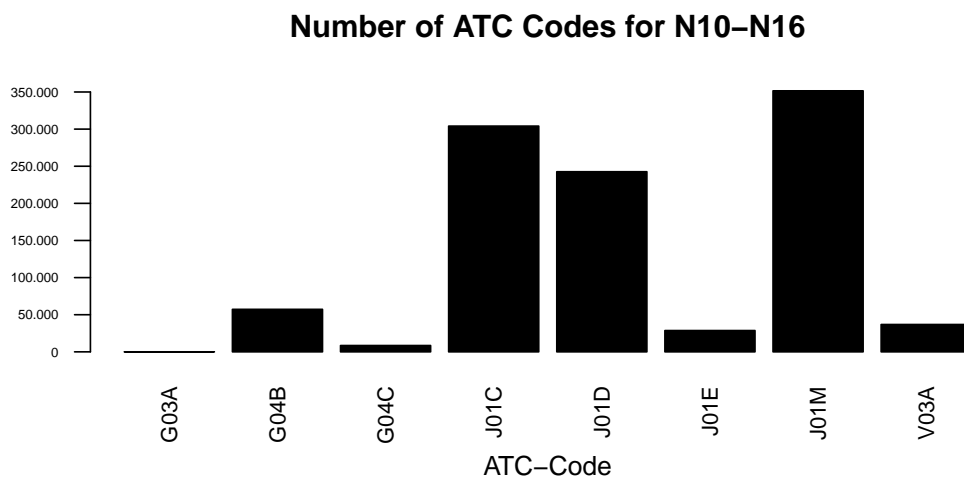


Figure 145: This figure shows the frequency of the underlying ATC codes for the given diagnose group N10-N16. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
G03A	HORMONELLE KONTRAZEPTIVA ZUR SYSTEMISCHEN ANWENDUNG	FALSE
G04B	ANDERE UROLOGIKA, INKL. SPASMOLYTIKA	TRUE
G04C	MITTEL BEI BENIGNER PROSTATAHYPERPLASIE	FALSE
J01C	BETALACTAM-ANTIBIOTIKA, PENICILLINE	TRUE
J01D	ANDERE BETA-LACTAM-ANTIBIOTIKA	TRUE
J01E	SULFONAMIDE UND TRIMETHOPRIM	TRUE
J01M	CHINOLONE	TRUE
V03A	ALLE ÜBRIGEN THERAPEUTISCHEN MITTEL	FALSE

Table 76: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose N10-N16.

E.48. Diagnose L00-L08: Infektionen der Haut und der Unterhaut

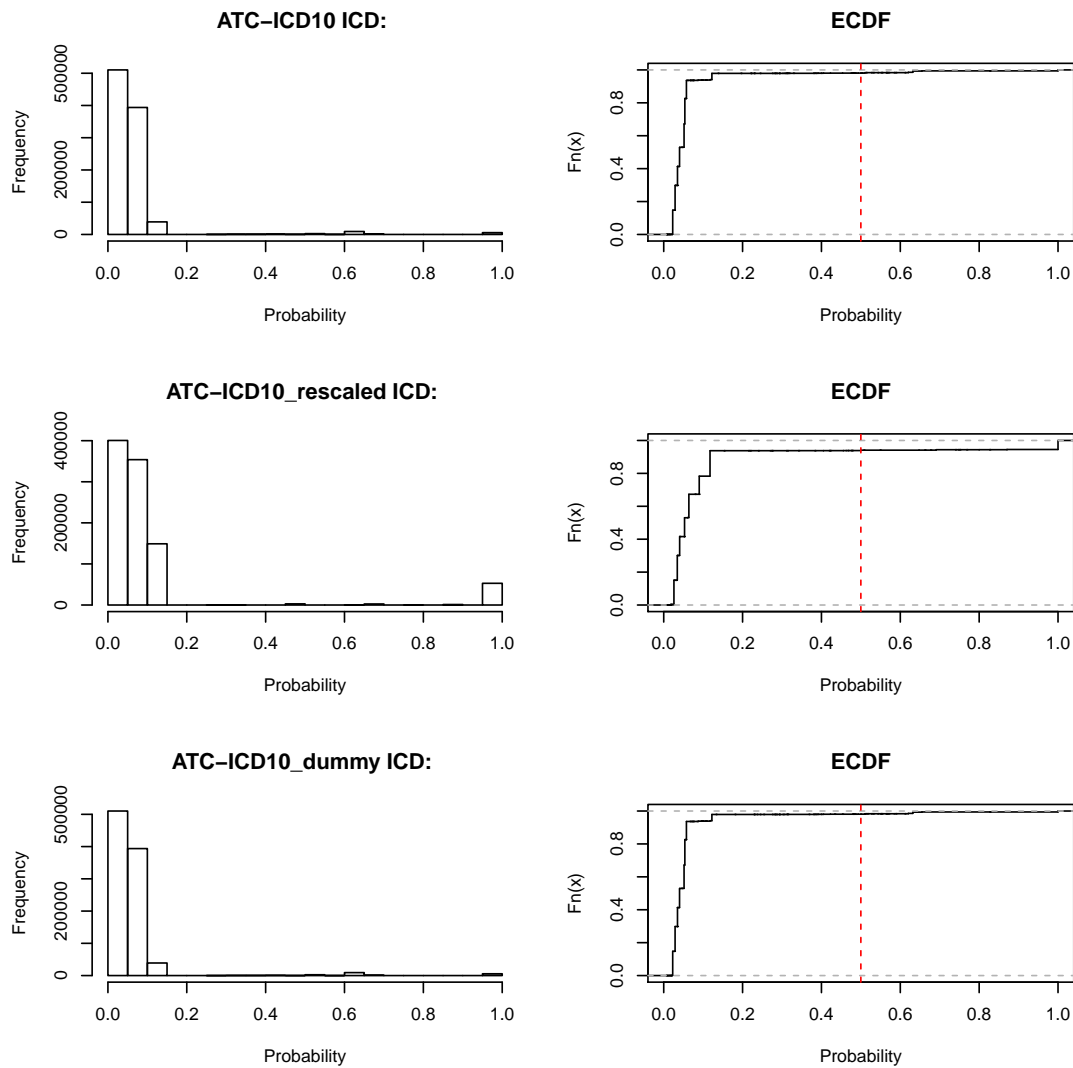


Figure 146: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group L00-L08.

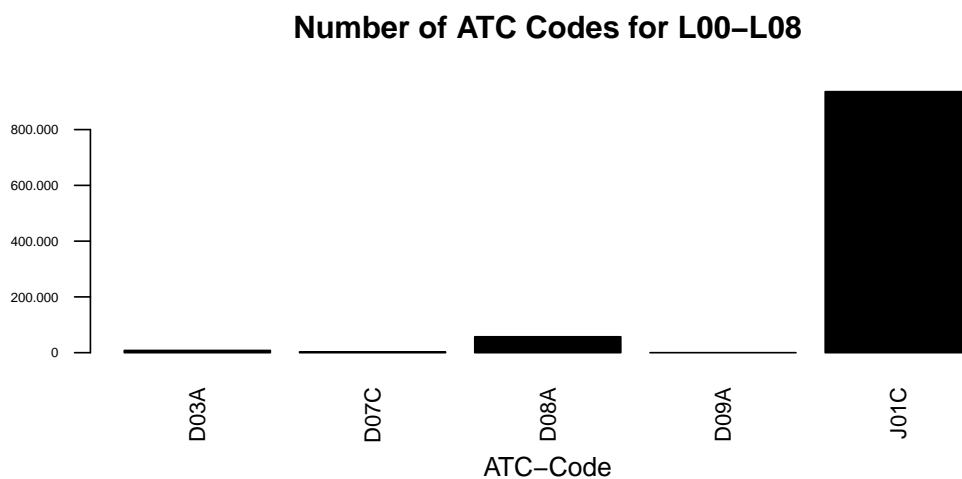
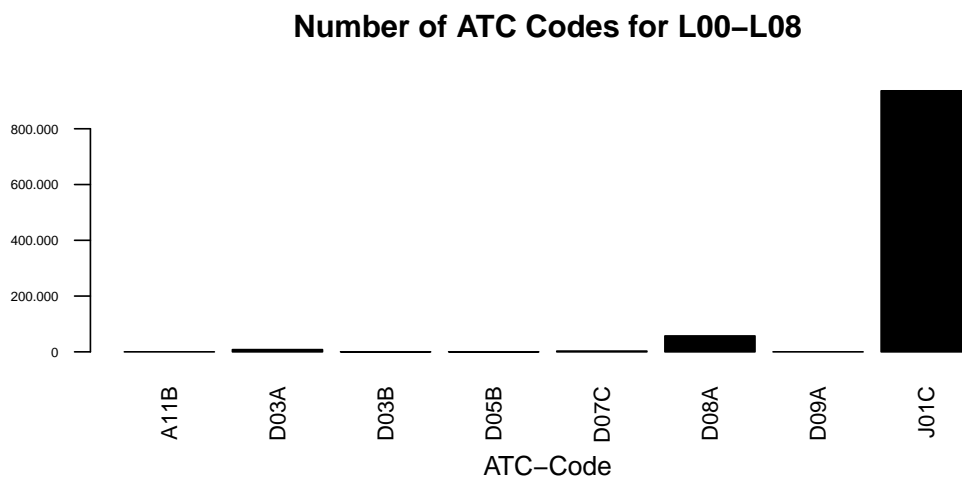


Figure 147: This figure shows the frequency of the underlying ATC codes for the given diagnose group L00-L08. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
A11B	MULTIVITAMINE, REIN	FALSE
D03A	Wundbehandlungsmittel	TRUE
D03B	ENZYME	FALSE
D05B	ANTIPSORIATIKA ZUR SYSTEMISCHEN ANWENDUNG	FALSE
D07C	CORTICOSTEROIDE, KOMBINATIONEN MIT ANTIBIOTIKA	TRUE
D08A	ANTISEPTIKA UND DESINFEKTIONSMITTEL	TRUE
D09A	MEDIZINISCHE VERBÄNDE	TRUE
J01C	BETALACTAM-ANTIBIOTIKA, PENICILLINE	TRUE

Table 77: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose L00-L08.

E.49. Diagnose N00-N08: Glomeruläre Krankheiten

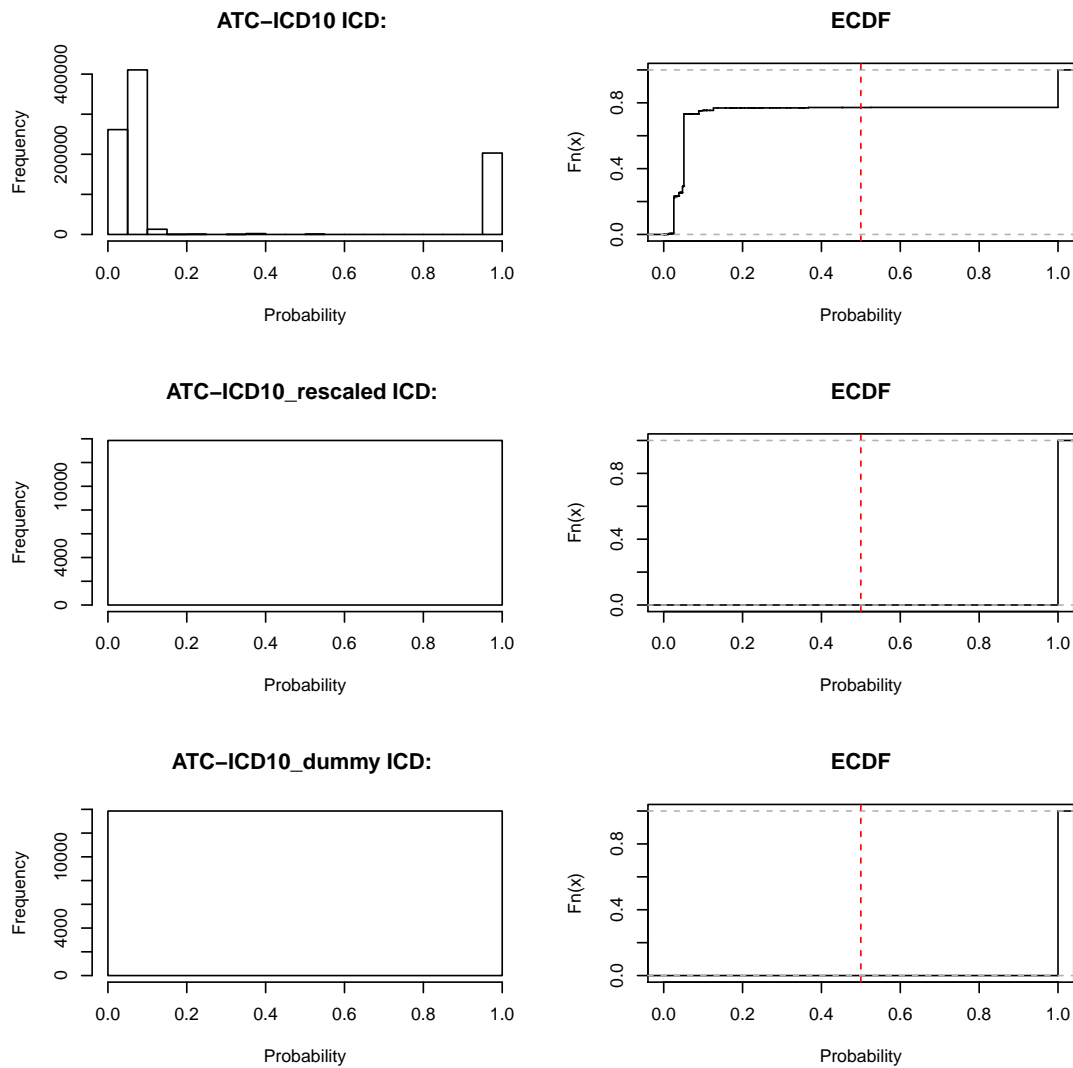


Figure 148: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group N00-N08.

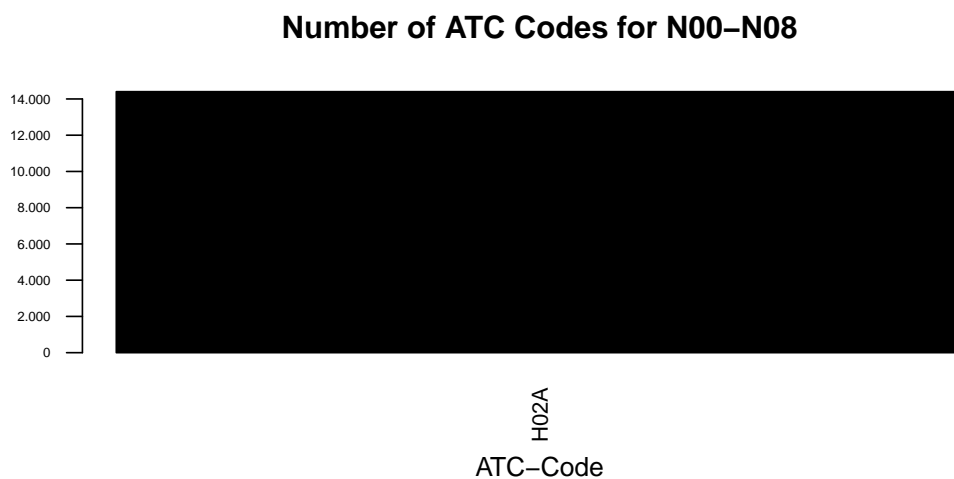
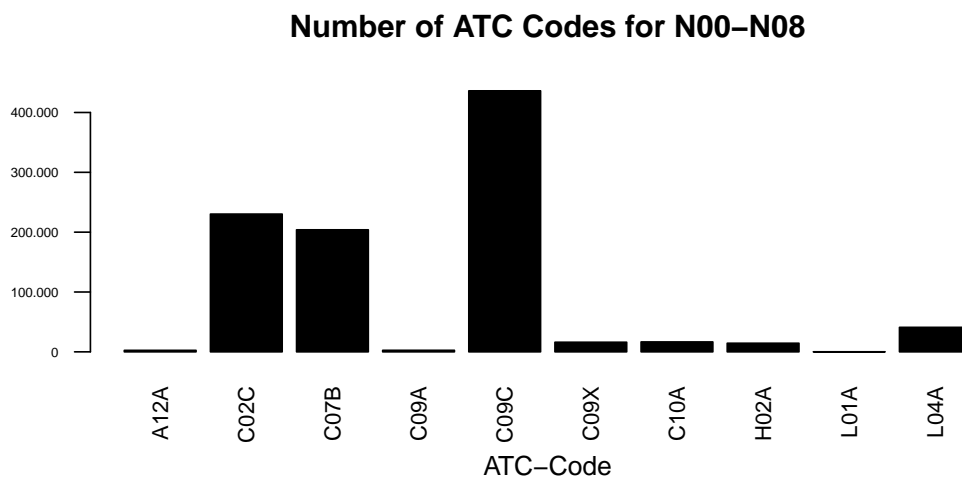


Figure 149: This figure shows the frequency of the underlying ATC codes for the given diagnose group N00-N08. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
A12A	CALCIUM	FALSE
C02C	ANTIADRENERGE MITTEL, PERIPHER WIRKEND	FALSE
C07B	BETA-ADRENOREZEPTOR-ANTAGONISTEN UND THI-AZIDE	FALSE
C09A	ACE-HEMMER, REIN	FALSE
C09C	ANGIOTENSIN-II-ANTAGONISTEN, REIN	FALSE
C09X	ANDERE MITTEL MIT WIRKUNG AUF DAS RENIN-ANGIOTENSIN-SYSTEM	FALSE
C10A	MITTEL, DIE DEN LIPIDSTOFFWECHSEL BEEINFLUSSEN, REIN	FALSE
H02A	CORTICOSTEROIDE ZUR SYSTEMISCHEN ANWENDUNG, REIN	TRUE
L01A	ALKYLIERENDE MITTEL	FALSE
L04A	IMMUNSUPPRESSIVA	FALSE

Table 78: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose N00-N08.

E.50. Diagnose N40-N51: Krankheiten der männlichen Genitalorgane

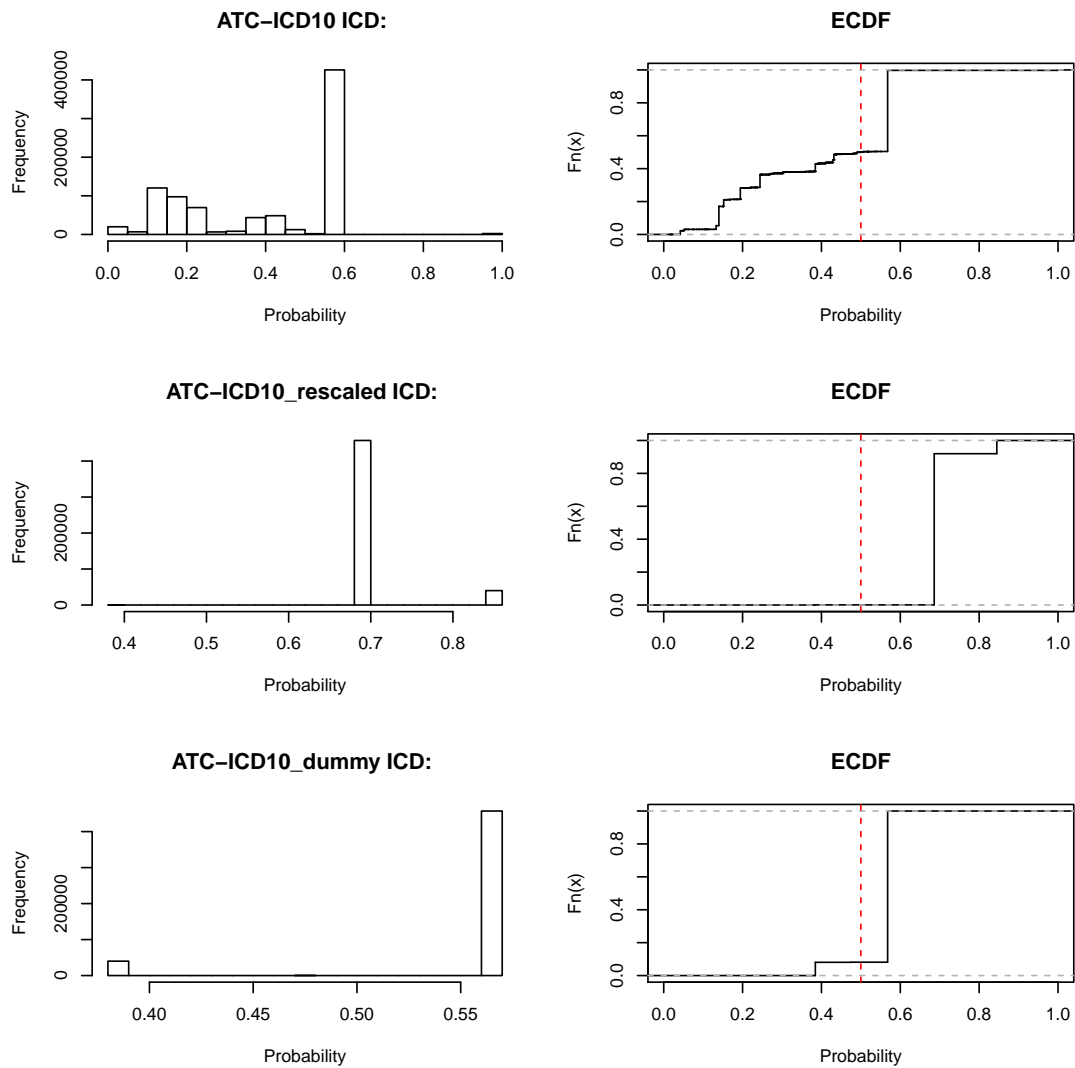
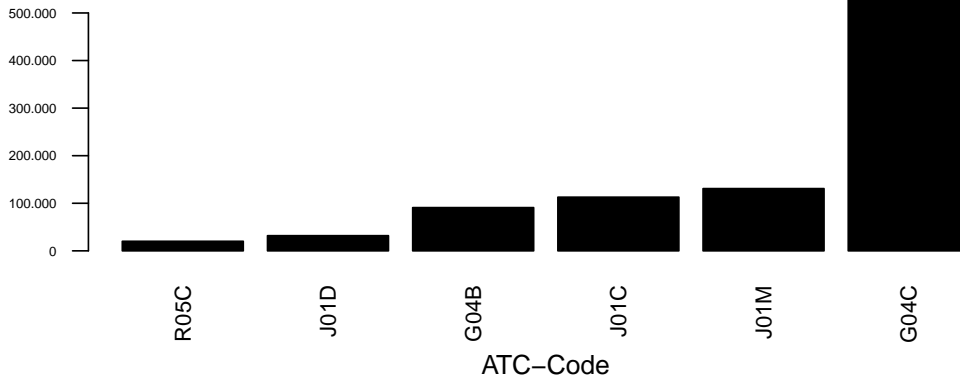


Figure 150: This figure shows the distribution of the probabilities of the diagnosis for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group N40-N51.

Number of ATC Codes for N40–N51



Number of ATC Codes for N40–N51

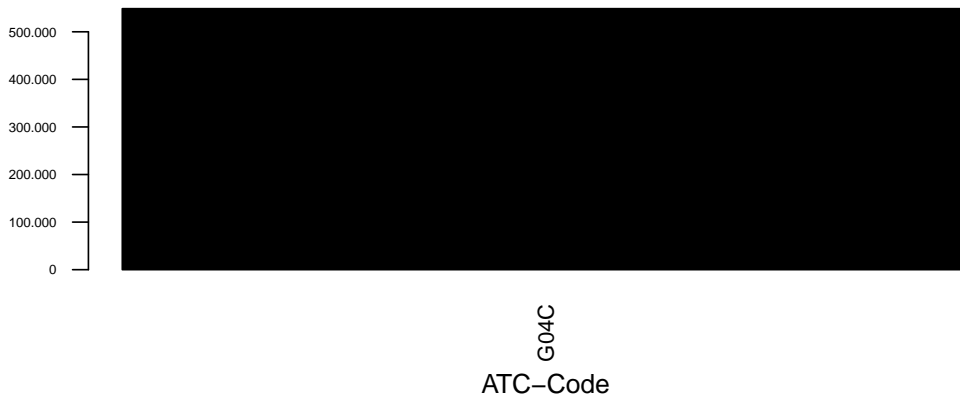


Figure 151: This figure shows the frequency of the underlying ATC codes for the given diagnose group N40-N51. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions. There are 18 ATC-Codes that related to the Diagnosis N40-N51. In order to give a clear overview of the distribution of the ATC codes behind an ICD10 group only the ATCs are shown, which represent the 95% of the cumulative frequency.

ATC	Description	Expert
G04B	ANDERE UROLOGIKA, INKL. SPASMOLYTIKA	FALSE
G04C	MITTEL BEI BENIGNER PROSTATAHYPERPLASIE	TRUE
J01C	BETALACTAM-ANTIBIOTIKA, PENICILLINE	FALSE
J01D	ANDERE BETA-LACTAM-ANTIBIOTIKA	FALSE
J01M	CHINOLONE	FALSE
R05C	EXPEKTORANZIEN, EXKL. KOMBINATIONEN MIT ANTI-TUSSIVA	FALSE

Table 79: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose N40-N51. There are 18 ATC-Codes that related to the Diagnosis N40-N51. In order to give a clear overview of the distribution of the ATC codes behind an ICD10 group only the ATCs are shown, which represent the 95% of the cumulative frequency.

E.51. Diagnose K70-K77: Krankheiten der Leber

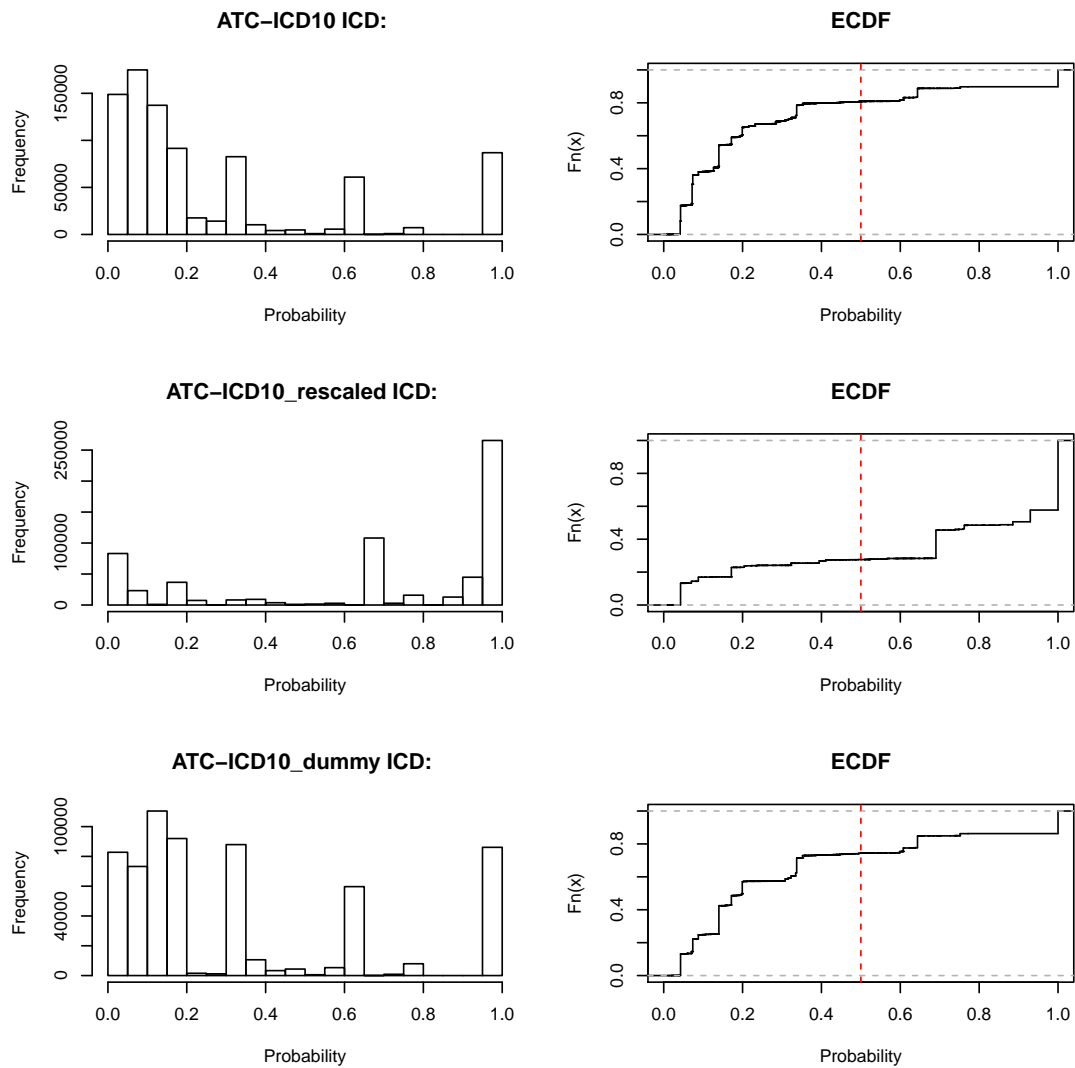


Figure 152: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group K70-K77.

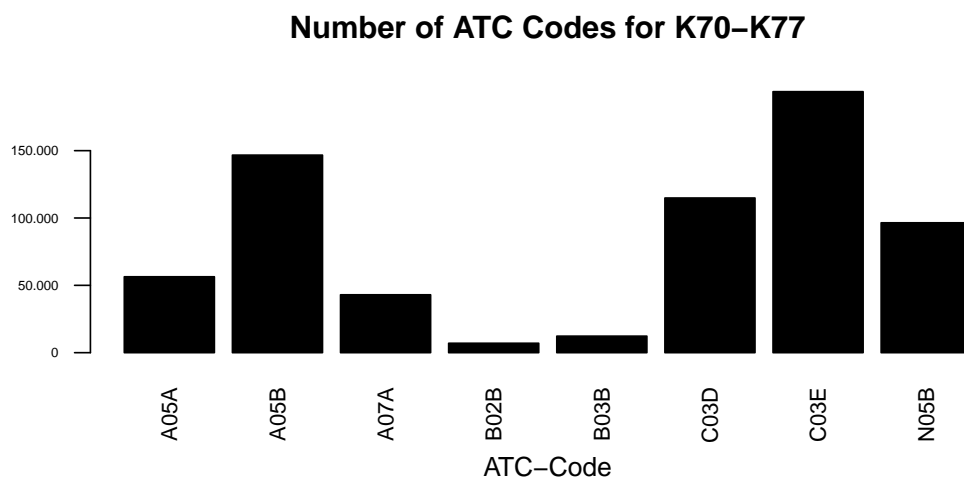
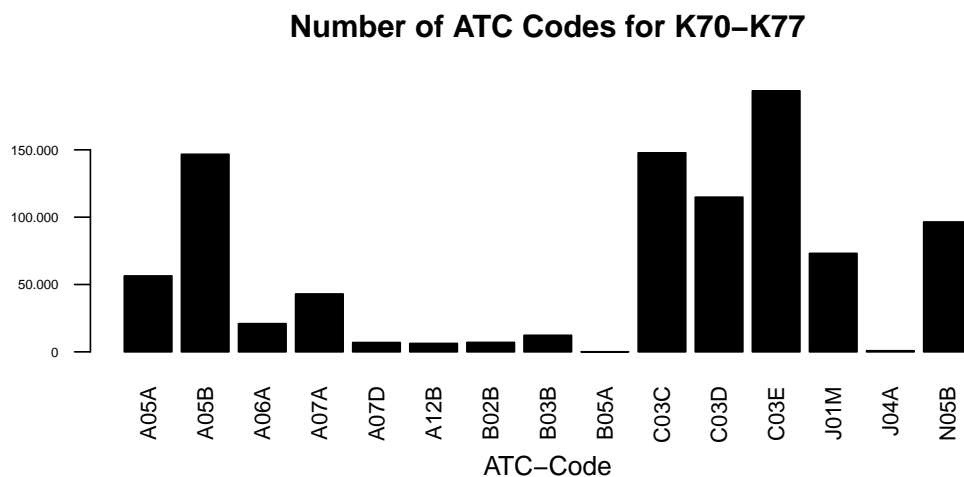


Figure 153: This figure shows the frequency of the underlying ATC codes for the given diagnose group K70-K77. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
A05A	GALLEN THERAPIE	TRUE
A05B	LEBERTHERAPIE, LIPOTROPE SUBSTANZEN	TRUE
A06A	LAXANTIEN	FALSE
A07A	INTESTINALE ANTIINFEKTIVA	TRUE
A07D	MOTILITÄTSHEMMER	FALSE
A12B	KALIUM	FALSE
B02B	VITAMIN K UND ANDERE HÄMOSTATIKA	TRUE
B03B	VITAMIN-B12 UND FOLSÄURE	TRUE
B05A	BLUT UND VERWANDTE PRODUKTE	FALSE
C03C	HIGH-CEILING-DIURETIKA	FALSE
C03D	KALIUM SPARENDE DIURETIKA	TRUE
C03E	DIURETIKA UND KALIUM SPARENDE MITTEL IN KOMBI- NATION	TRUE
J01M	CHINOLONE	FALSE
J04A	MITTEL ZUR BEHANDLUNG DER TUBERKULOSE	FALSE
N05B	ANXIOLYTIKA	TRUE

Table 80: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose K70-K77.

E.52. Diagnose L50-L54: Urtikaria und Erythem

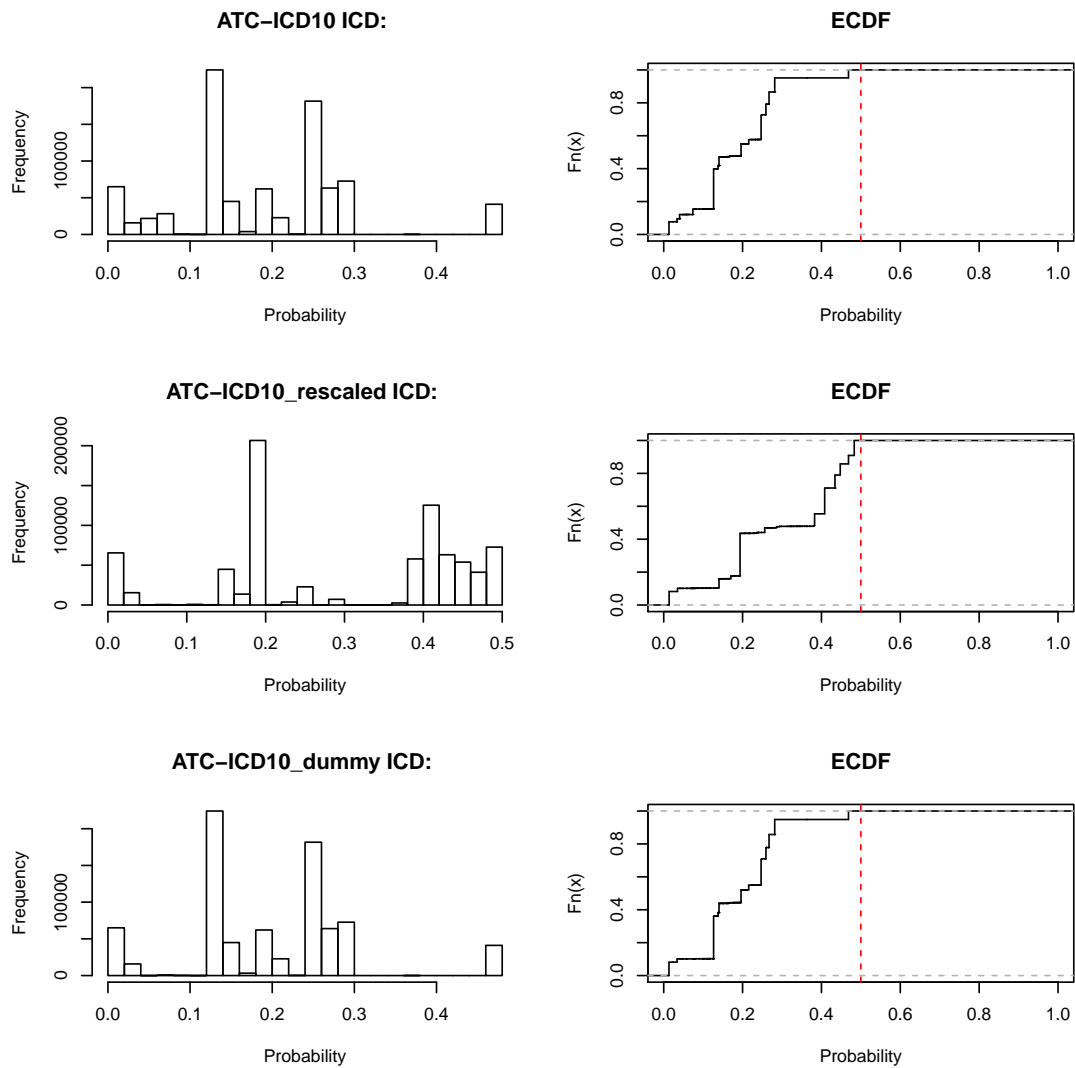
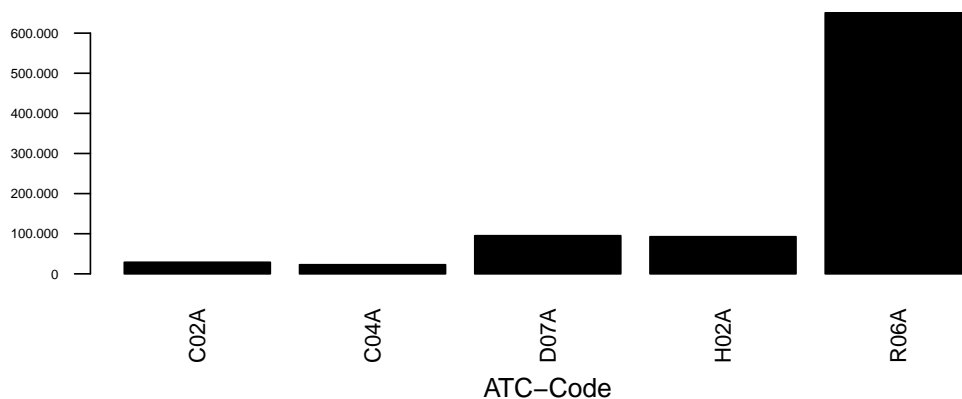


Figure 154: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group L50-L54.

Number of ATC Codes for L50-L54



Number of ATC Codes for L50-L54

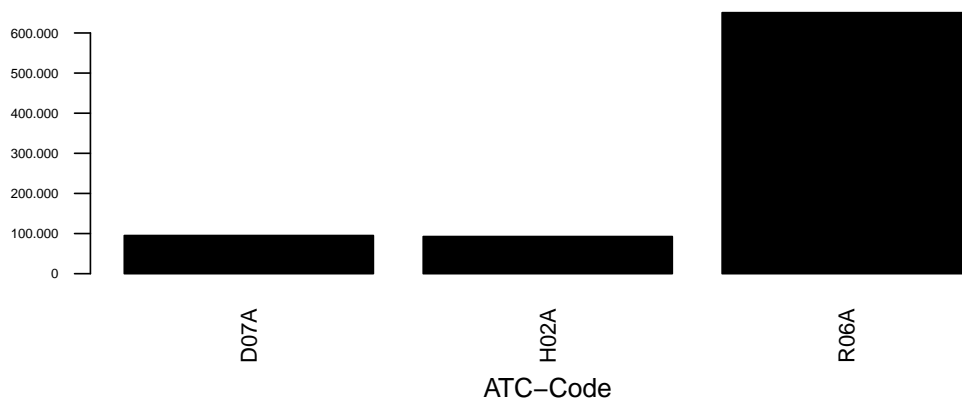


Figure 155: This figure shows the frequency of the underlying ATC codes for the given diagnose group L50-L54. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
C02A	ANTIADRENERGE MITTEL, ZENTRAL WIRKEND	FALSE
C04A	PERIPHERE VASODILATATOREN	FALSE
D07A	CORTICOSTEROIDE, REIN	TRUE
H02A	CORTICOSTEROIDE ZUR SYSTEMISCHEN ANWENDUNG, REIN	TRUE
R06A	ANTIISTAMINIKA ZUR SYSTEMISCHEN ANWENDUNG	TRUE

Table 81: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose L50-L54.

E.53. Diagnose M30-M36: Systemkrankheiten des Bindegewebes

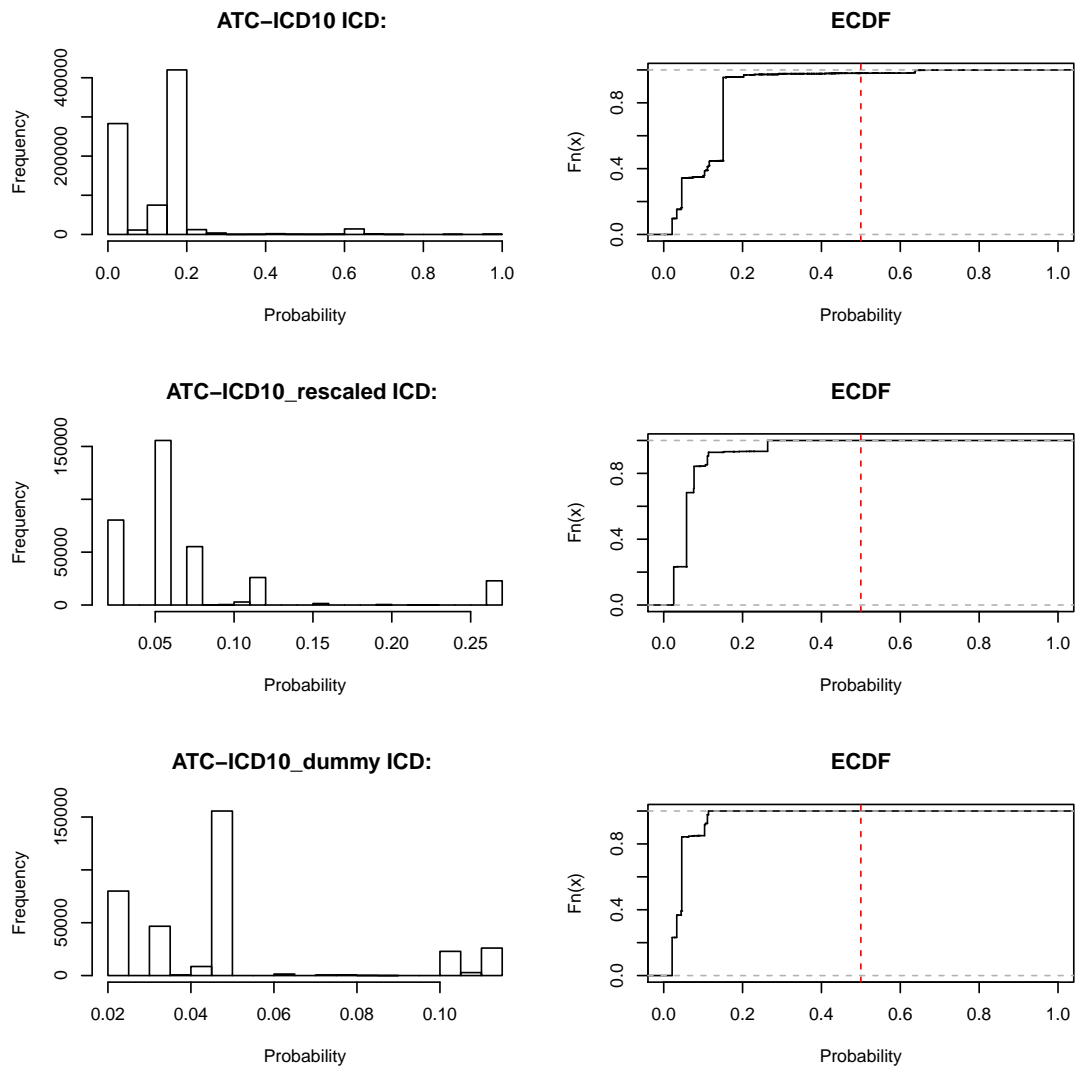
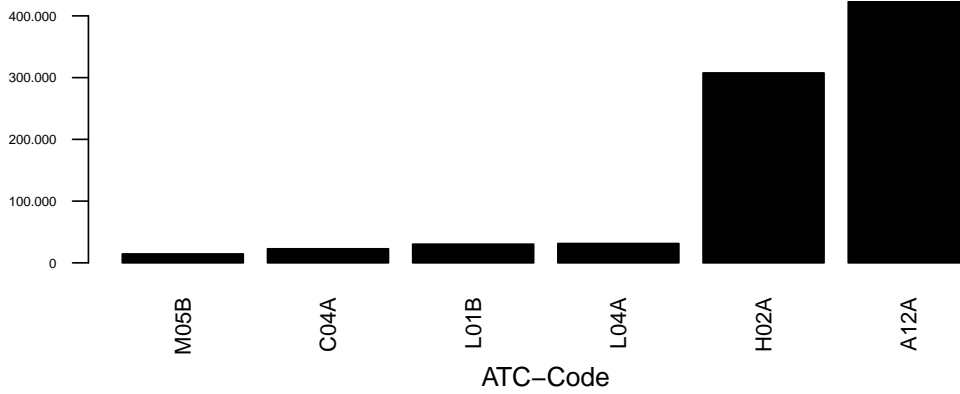


Figure 156: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group M30-M36.

Number of ATC Codes for M30–M36



Number of ATC Codes for M30–M36

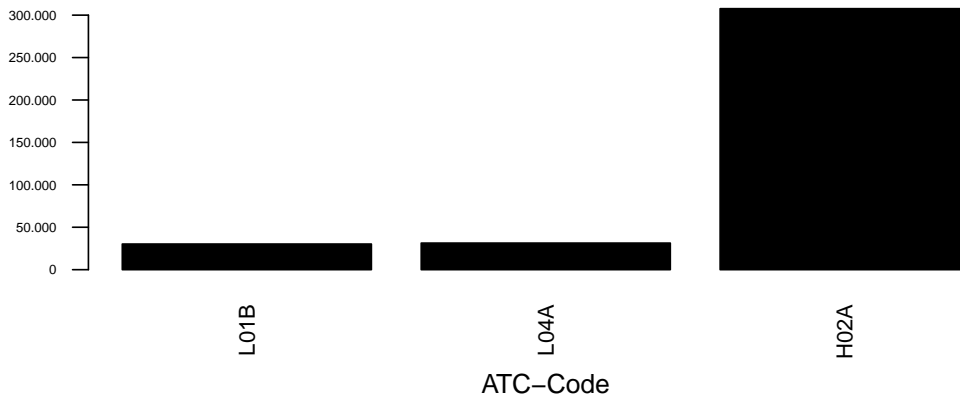


Figure 157: This figure shows the frequency of the underlying ATC codes for the given diagnose group M30-M36. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions. There are 21 ATC-Codes that related to the Diagnosis M30-M36. In order to give a clear overview of the distribution of the ATC codes behind an ICD10 group only the ATCs are shown, which represent the 95% of the cumulative frequency.

ATC	Description	Expert
A12A	CALCIUM	FALSE
C04A	PERIPHERE VASODILATATOREN	FALSE
H02A	CORTICOSTEROIDE ZUR SYSTEMISCHEN ANWENDUNG, REIN	TRUE
L01B	ANTIMETABOLITE	TRUE
L04A	IMMUNSUPPRESSIVA	TRUE
M05B	MITTEL MIT EINFLUSS AUF DIE KNOCHENSTRUKTUR UND DIE MINERALISATION	FALSE

Table 82: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose M30-M36. There are 21 ATC-Codes that related to the Diagnosis M30-M36. In order to give a clear overview of the distribution of the ATC codes behind an ICD10 group only the ATCs are shown, which represent the 95% of the cumulative frequency.

E.54. Diagnose H65-H75: Krankheiten des Mittelohres und des Warzenfortsatzes

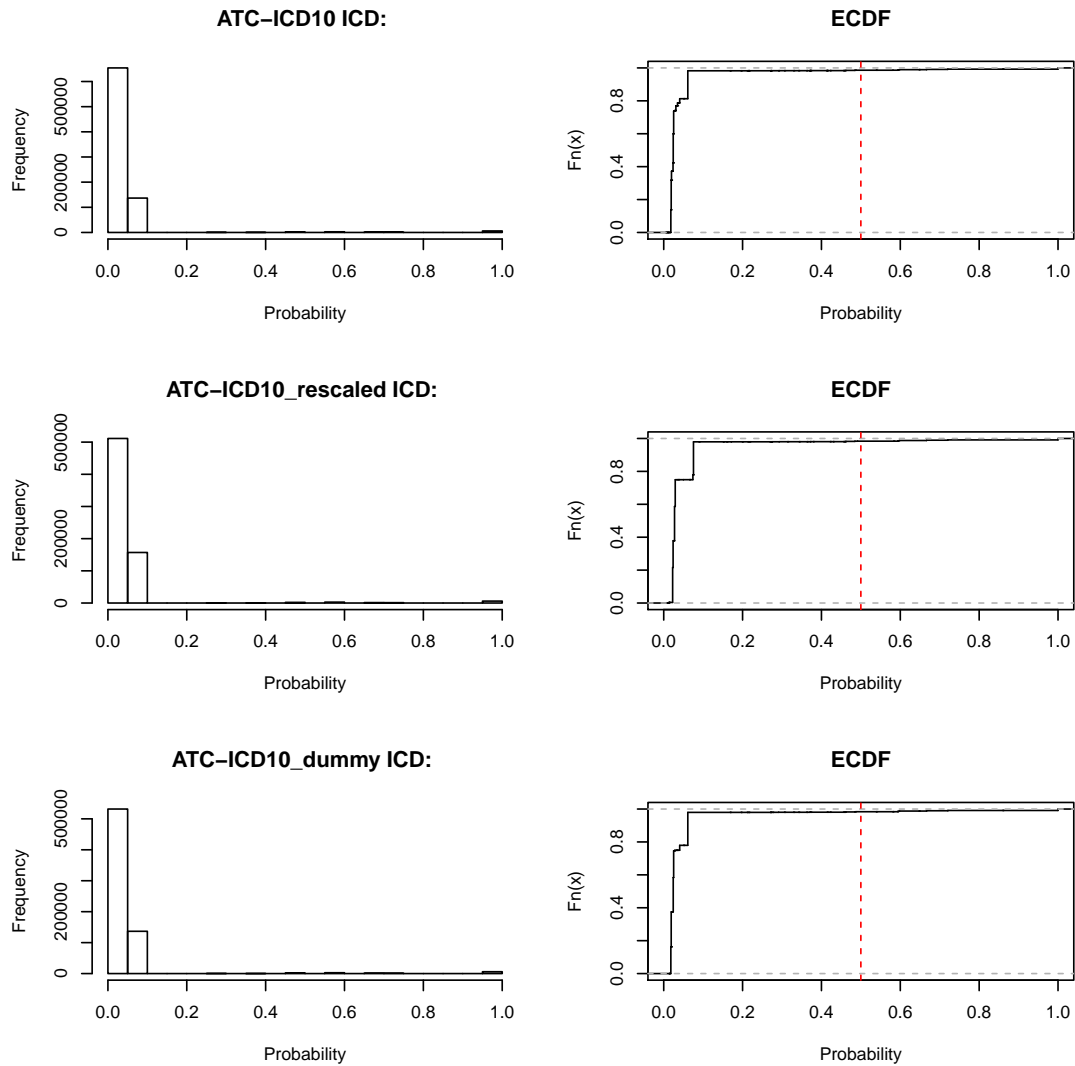


Figure 158: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group H65-H75.

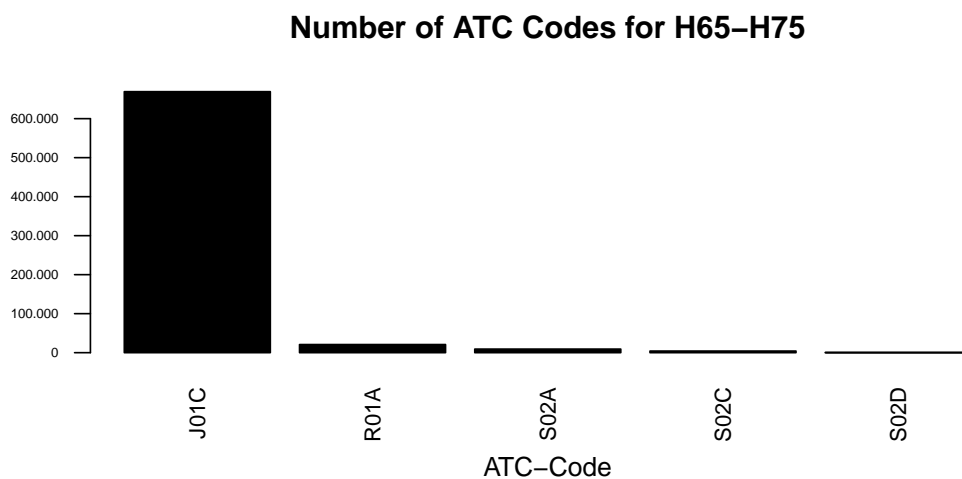
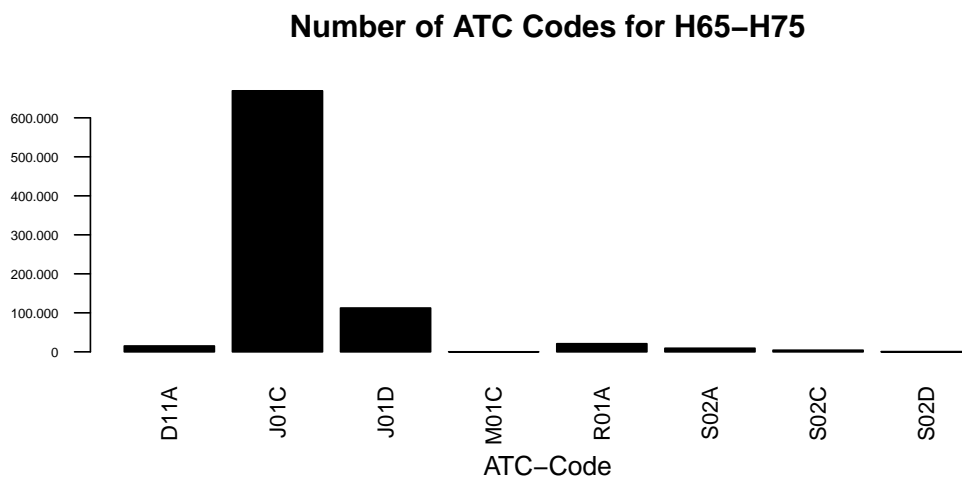


Figure 159: This figure shows the frequency of the underlying ATC codes for the given diagnose group H65-H75. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
D11A	ANDERE DERMATIKA	FALSE
J01C	BETALACTAM-ANTIBIOTIKA, PENICILLINE	TRUE
J01D	ANDERE BETA-LACTAM-ANTIBIOTIKA	FALSE
M01C	SPEZIFISCHE ANTIRHEUMATIKA	FALSE
R01A	DEKONGESTIVA UND ANDERE RHINOLOGIKA ZUR TOP- ISCHEN ANWENDUNG	TRUE
S02A	ANTIINFEKTIVA	TRUE
S02C	CORTICOSTEROIDE UND ANTIINFEKTIVA IN KOMBINA- TION	TRUE
S02D	ANDERE OTOLOGIKA	TRUE

Table 83: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose H65-H75.

E.55. Diagnose T08-T14: Verletzungen nicht näher bezeichneter Teile des Rumpfes, der Extremitäten oder anderer Körperregionen

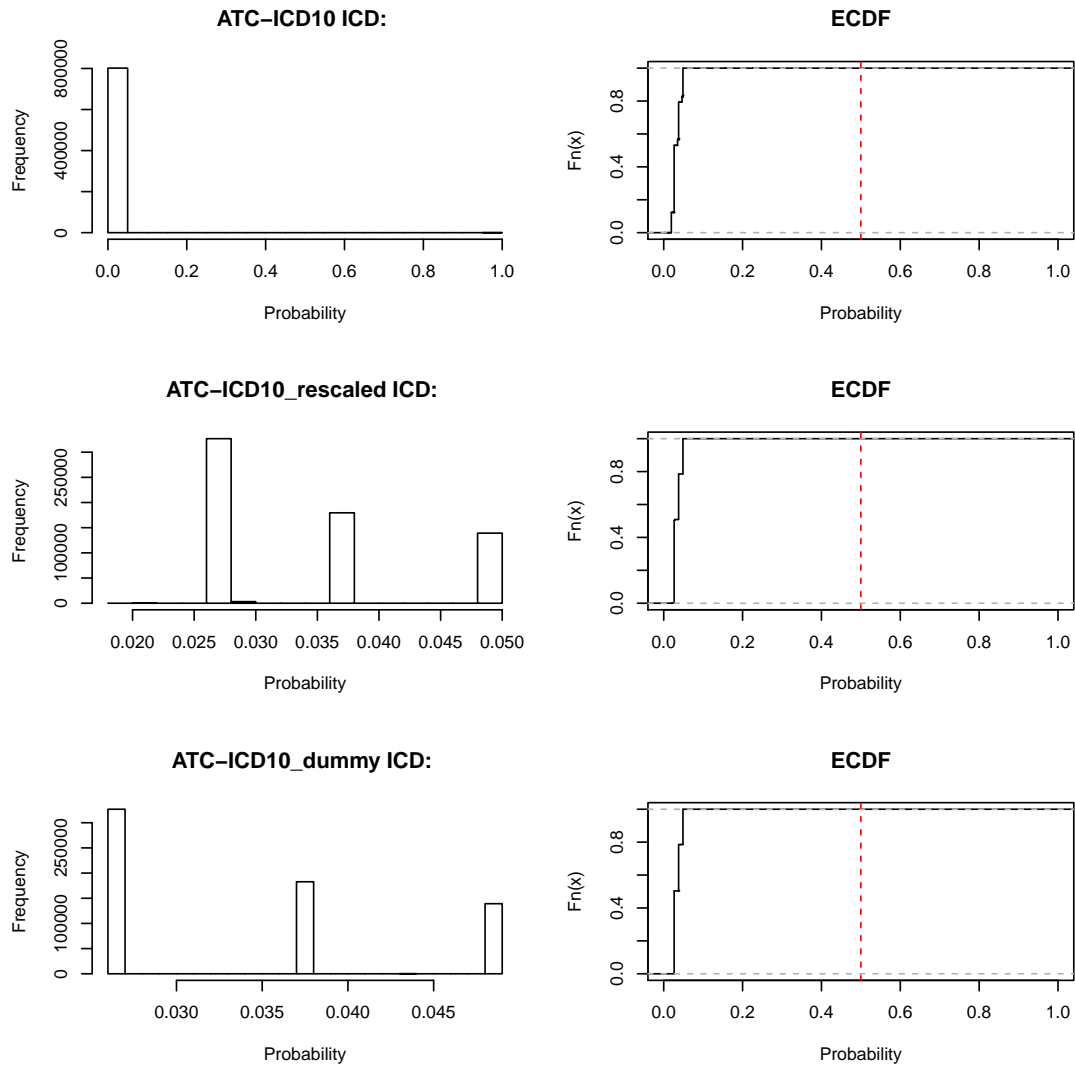
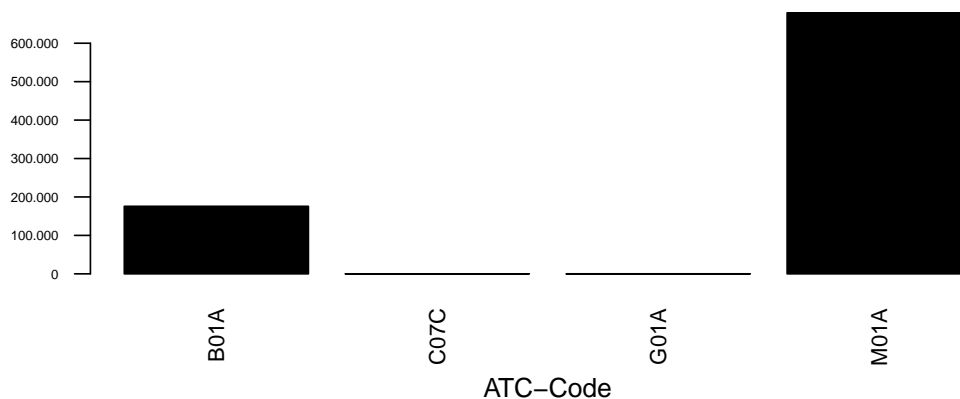


Figure 160: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group T08-T14.

Number of ATC Codes for T08-T14



Number of ATC Codes for T08-T14

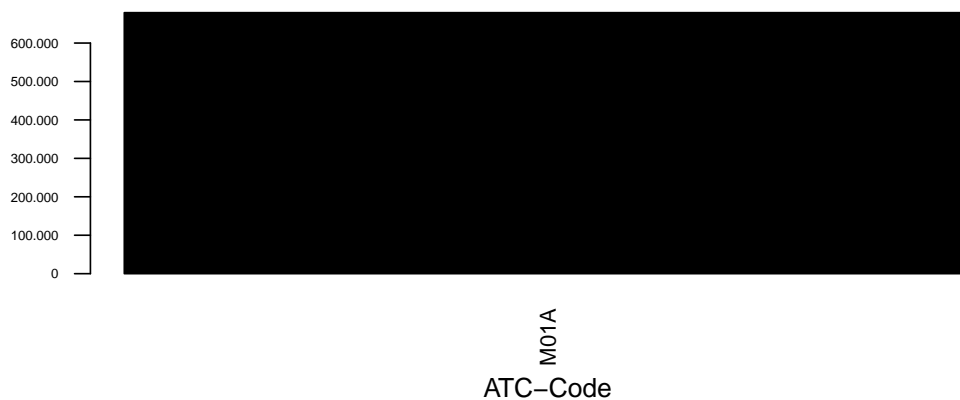


Figure 161: This figure shows the frequency of the underlying ATC codes for the given diagnose group T08-T14. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
B01A	ANTITHROMBOTISCHE MITTEL	FALSE
C07C	BETA-ADRENOREZEPTOR-ANTAGONISTEN UND AN- DERE DIURETIKA	FALSE
G01A	ANTIINFEKTIVA UND ANTISEPTIKA, EXKL. KOMBINA- TIONEN M. CORTICOSTEROIDEN	FALSE
M01A	NICHTSTEROIDALE ANTIPHLOGISTIKA UND AN- TIRHEUMATIKA	TRUE

Table 84: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose T08-T14.

E.56. Diagnose K55-K63: Sonstige Krankheiten des Darmes

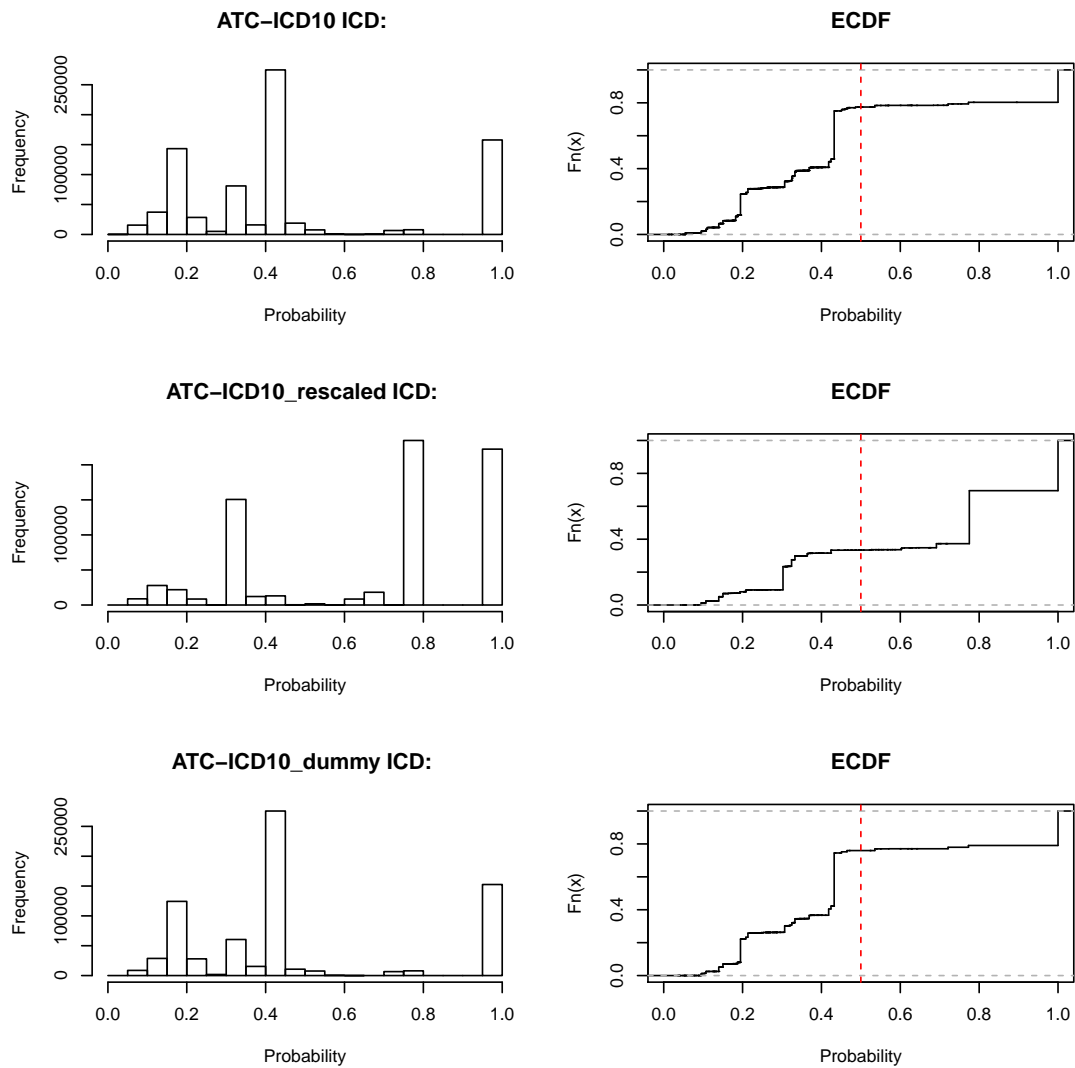
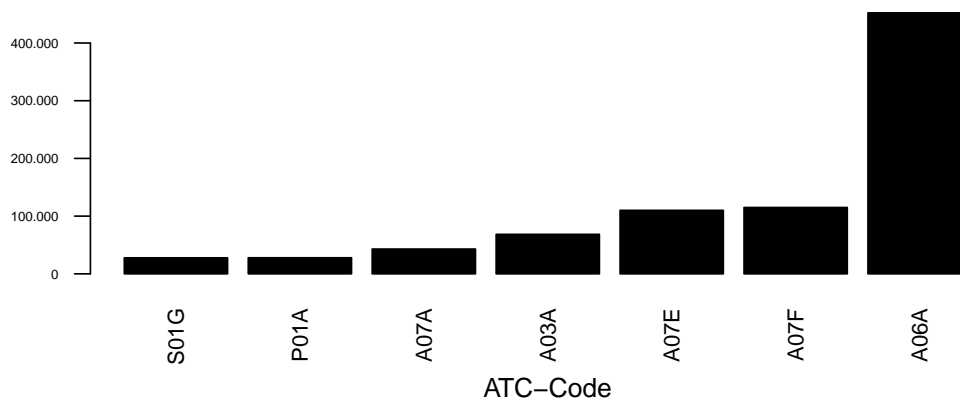


Figure 162: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group K55-K63.

Number of ATC Codes for K55–K63



Number of ATC Codes for K55–K63

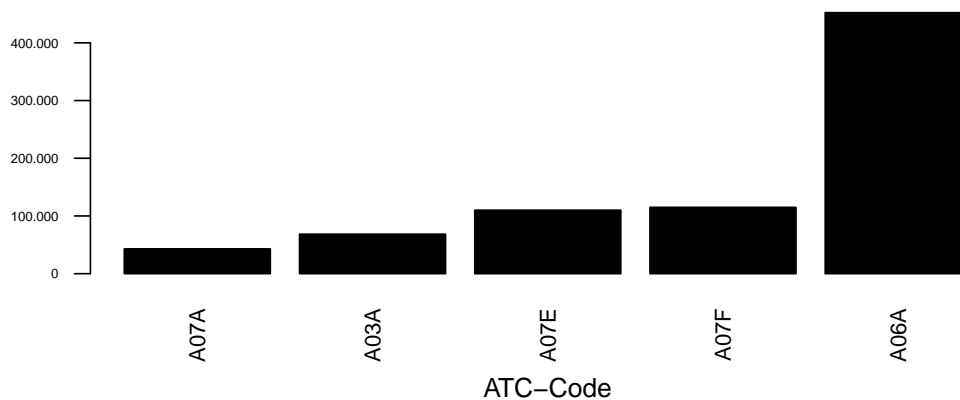


Figure 163: This figure shows the frequency of the underlying ATC codes for the given diagnose group K55-K63. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions. There are 18 ATC-Codes that related to the Diagnosis K55-K63. In order to give a clear overview of the distribution of the ATC codes behind an ICD10 group only the ATCs are shown, which represent the 95% of the cumulative frequency.

ATC	Description	Expert
A03A	MITTEL BEI FUNKTIONELLEN STÖRUNGEN DES DARMS	TRUE
A06A	LAXANTIEN	TRUE
A07A	INTESTINALE ANTIINFEKTIVA	TRUE
A07E	INTESTINALE ANTIPHLOGISTIKA	TRUE
A07F	MIKROBIELLE ANTIDIARRHOIKA	TRUE
P01A	MITTEL GEGEN AMÖBEN UND ANDERE PROTOZOEN- ERKRANKUNGEN	FALSE
S01G	DEKONGESTIVA UND ANTIALLERGIKA	FALSE

Table 85: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose K55-K63. There are 18 ATC-Codes that related to the Diagnosis K55-K63. In order to give a clear overview of the distribution of the ATC codes behind an ICD10 group only the ATCs are shown, which represent the 95% of the cumulative frequency.

E.57. Diagnose C73-C75: Bösartige Neubildungen der Schilddrüse und sonstiger endokriner Drüsen

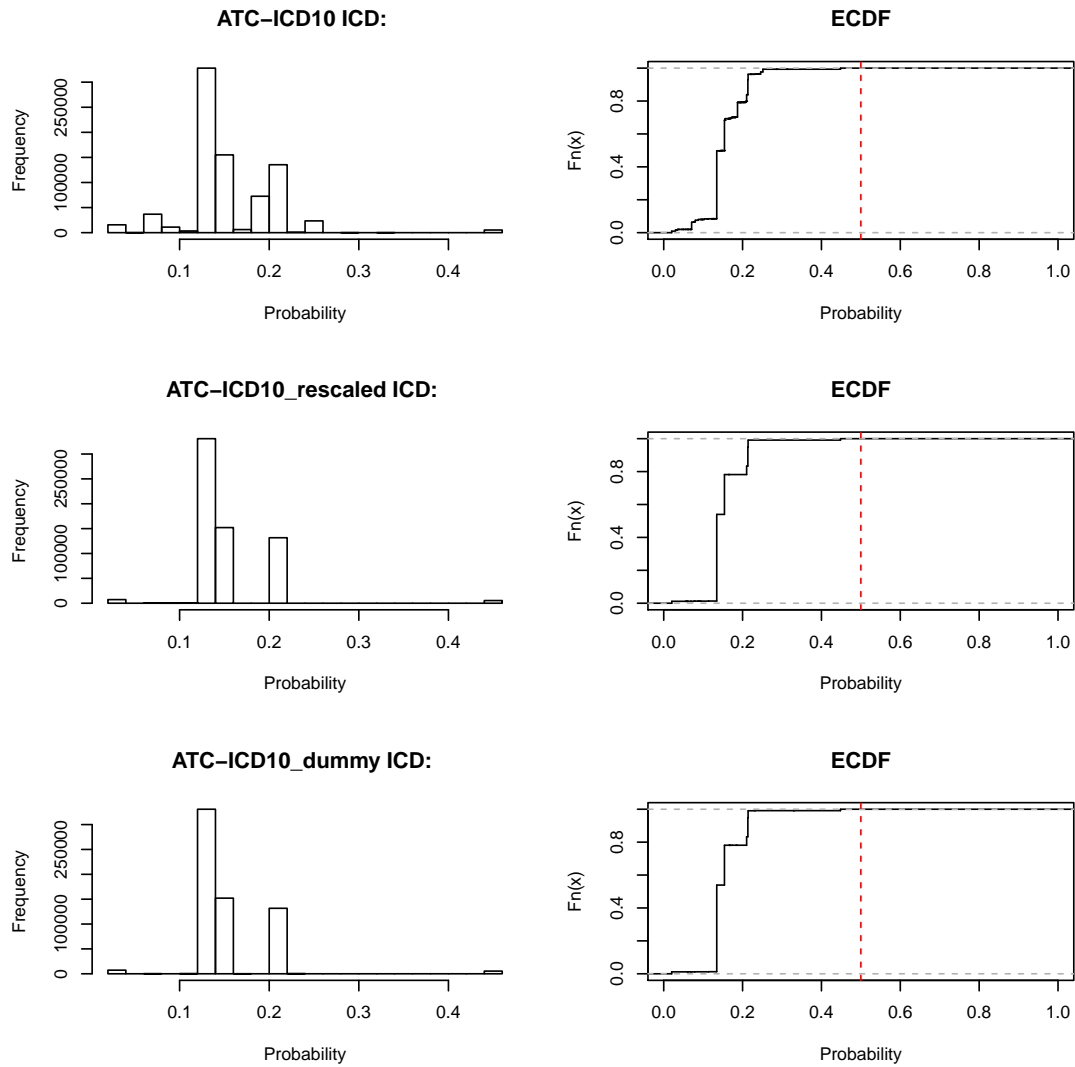


Figure 164: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group C73-C75.

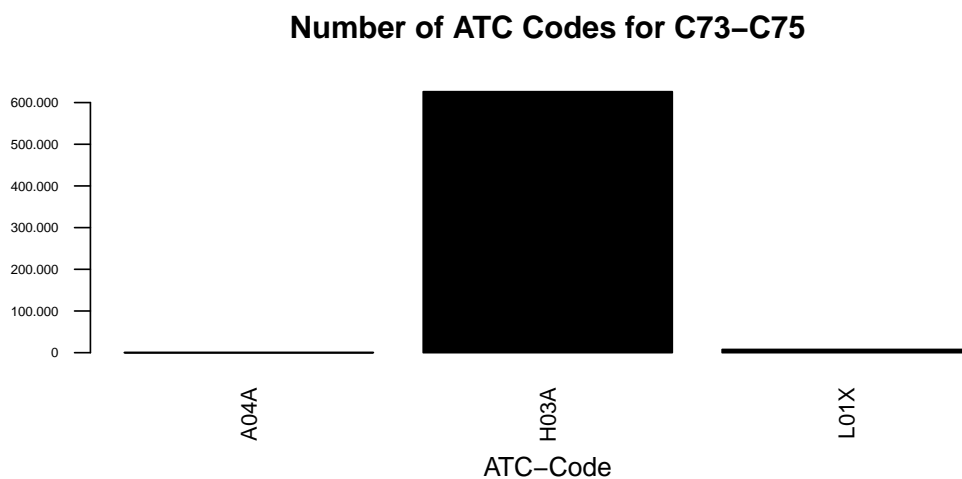
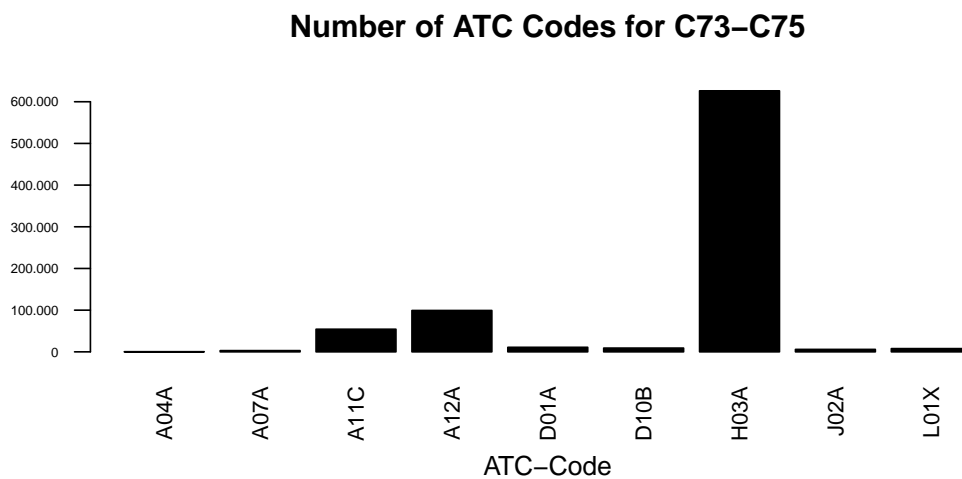


Figure 165: This figure shows the frequency of the underlying ATC codes for the given diagnose group C73-C75. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
A04A	ANTIEMETIKA UND MITTEL GEGEN ÜBELKEIT	TRUE
A07A	INTESTINALE ANTIINFEKTIVA	FALSE
A11C	VITAMIN A UND D, INKL. DEREN KOMBINATIONEN	FALSE
A12A	CALCIUM	FALSE
D01A	ANTIMYKOTIKA ZUR TOPISCHEN ANWENDUNG	FALSE
D10B	AKNEMITTEL ZUR SYSTEMISCHEN ANWENDUNG	FALSE
H03A	SCHILDDRÜSENPRÄPARATE	TRUE
J02A	Antimykotika zur systemischen Anwendung	FALSE
L01X	ANDERE ANTINEOPLASTISCHE MITTEL	TRUE

Table 86: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose C73-C75.

E.58. Diagnose G80-G83: Zerebrale Lähmung und sonstige Lähmungssyndrome

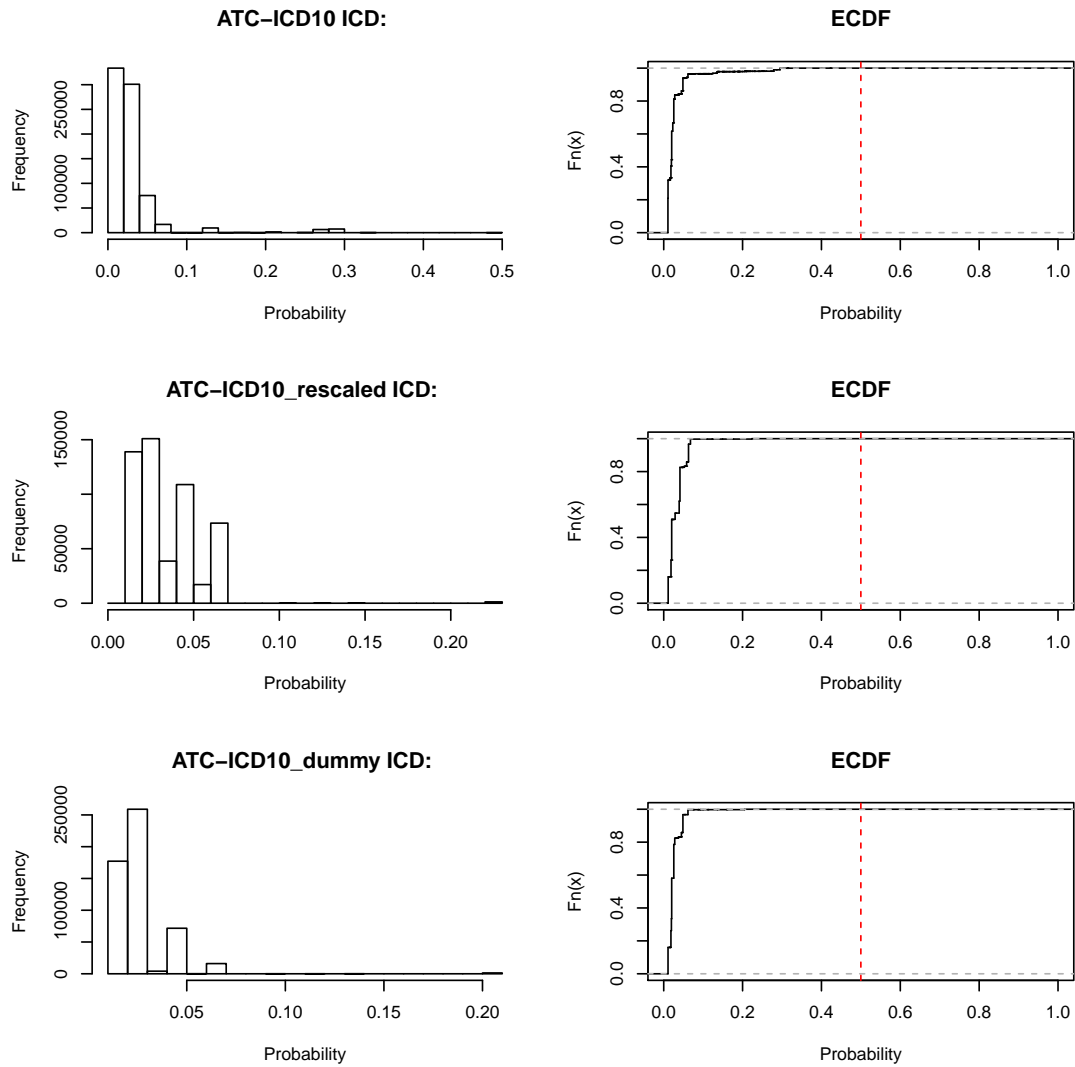
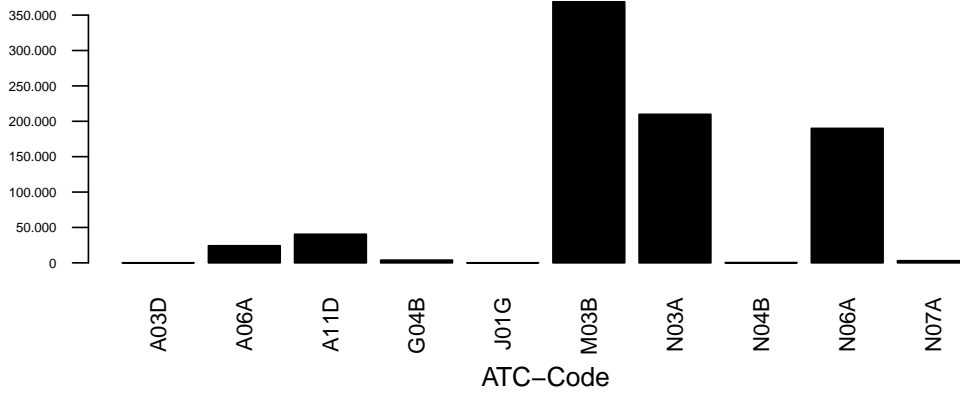


Figure 166: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group G80-G83.

Number of ATC Codes for G80–G83



Number of ATC Codes for G80–G83

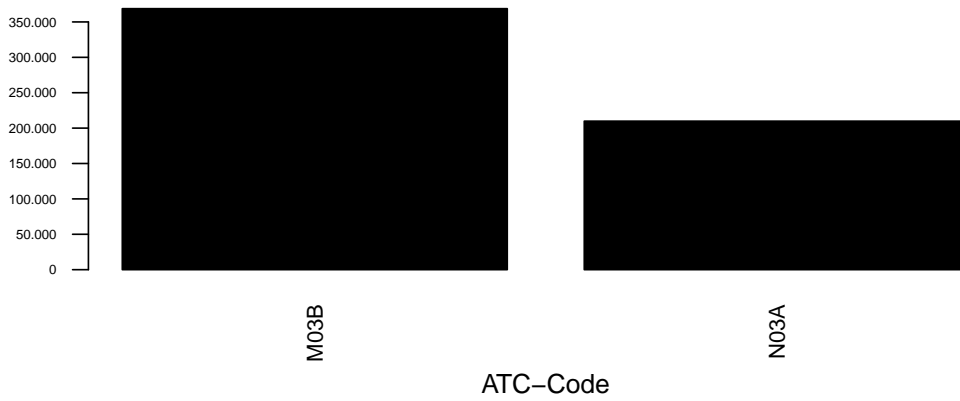


Figure 167: This figure shows the frequency of the underlying ATC codes for the given diagnose group G80-G83. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
A03D	SPASMOLYTIKA IN KOMBINATION MIT ANALGETIKA	FALSE
A06A	LAXANTIEN	FALSE
A11D	VITAMIN-B1, REIN UND IN KOMBINATION MIT VITAMIN-B6 UND VITAMIN-B12	FALSE
G04B	ANDERE UROLOGIKA, INKL. SPASMOLYTIKA	FALSE
J01G	AMINOGLYKOSID-ANTIBIOTIKA	FALSE
M03B	MUSKELRELAXANTIEN, ZENTRAL WIRKENDE MITTEL	TRUE
N03A	ANTIEPILEPTIKA	TRUE
N04B	DOPAMINERGE MITTEL	FALSE
N06A	ANTIDEPRESSIVA	FALSE
N07A	PARASYMPATHOMIMETIKA	FALSE

Table 87: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose G80-G83.

E.59. Diagnose T66-T78: Sonstige und nicht näher bezeichnete Schäden durch äußere Ursachen

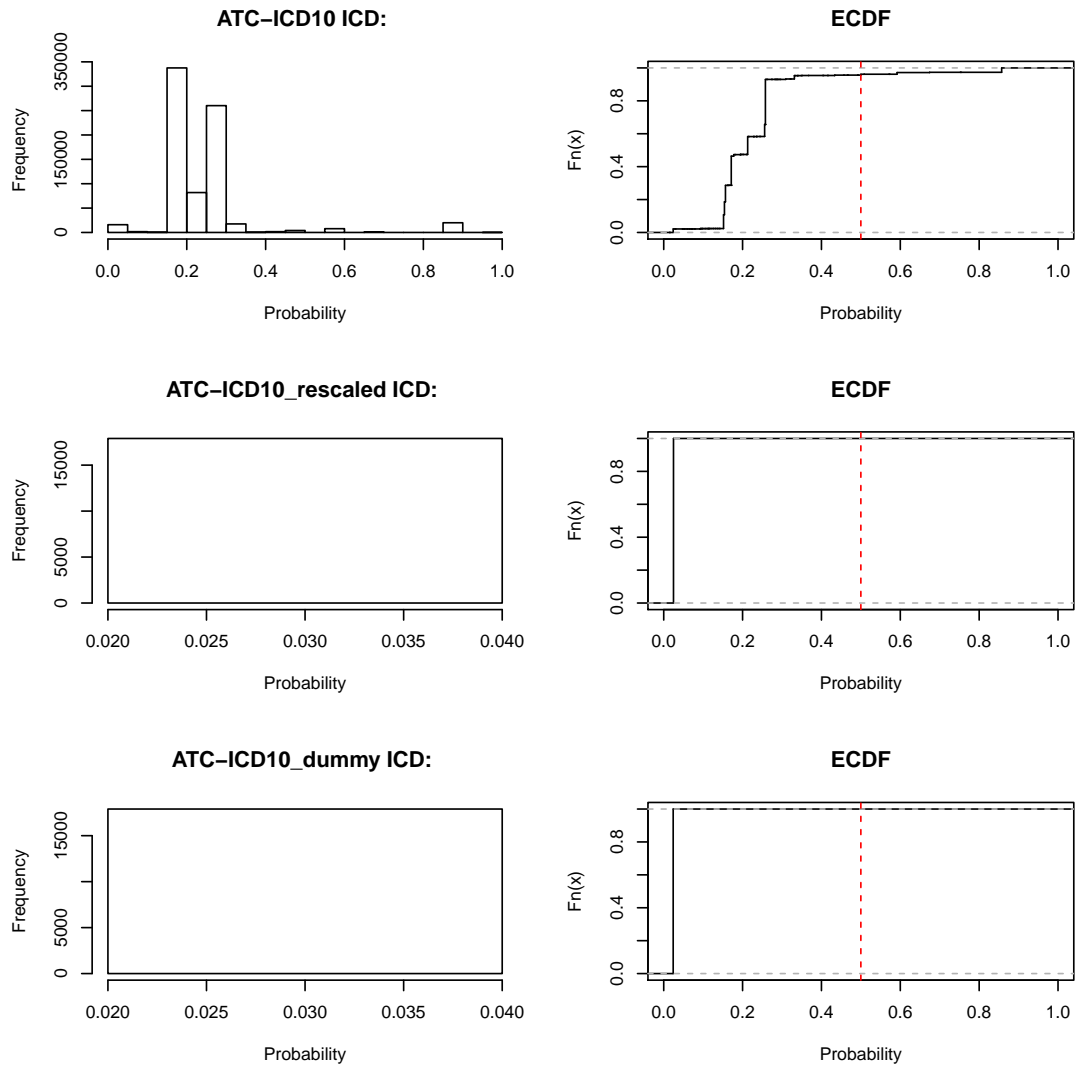
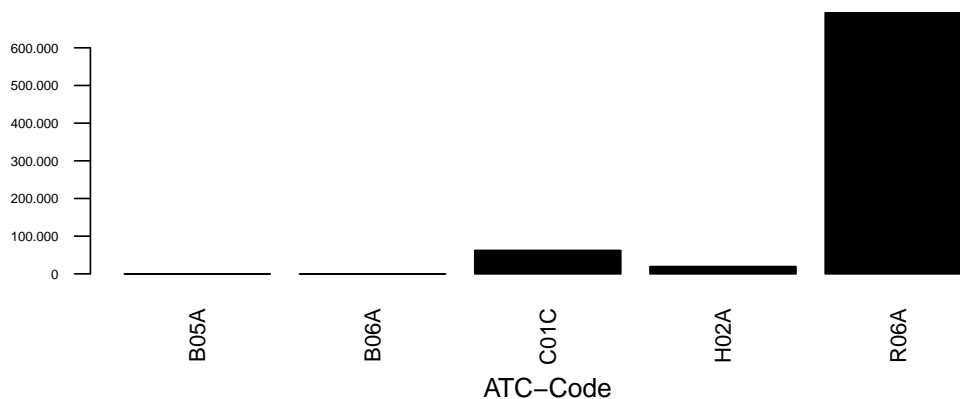


Figure 168: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group T66-T78.

Number of ATC Codes for T66-T78



Number of ATC Codes for T66-T78

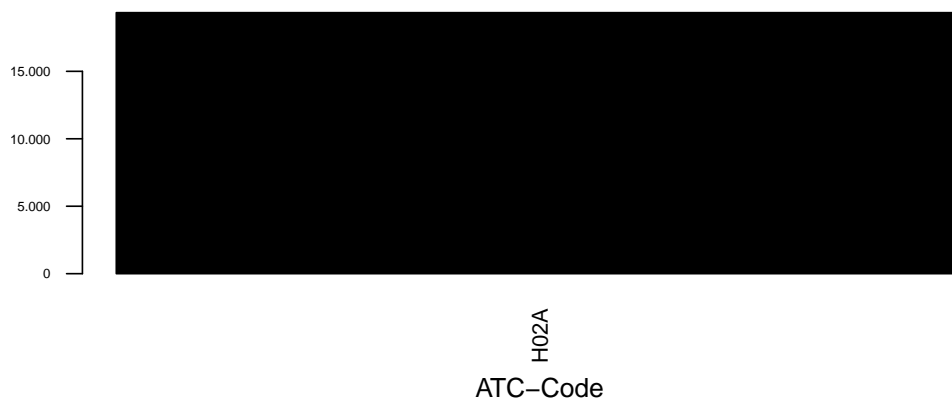


Figure 169: This figure shows the frequency of the underlying ATC codes for the given diagnose group T66-T78. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
B05A	BLUT UND VERWANDTE PRODUKTE	FALSE
B06A	ANDERE HÄMATOLOGIKA	FALSE
C01C	KARDIOSTIMULANZIEN, EXKL. HERZGLYKOSIDE	FALSE
H02A	CORTICOSTEROIDE ZUR SYSTEMISCHEN ANWENDUNG, REIN	TRUE
R06A	ANTIISTAMINIKA ZUR SYSTEMISCHEN ANWENDUNG	FALSE

Table 88: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose T66-T78.

E.60. Diagnose K50-K52: Nichtinfektiöse Enteritis und Kolitis

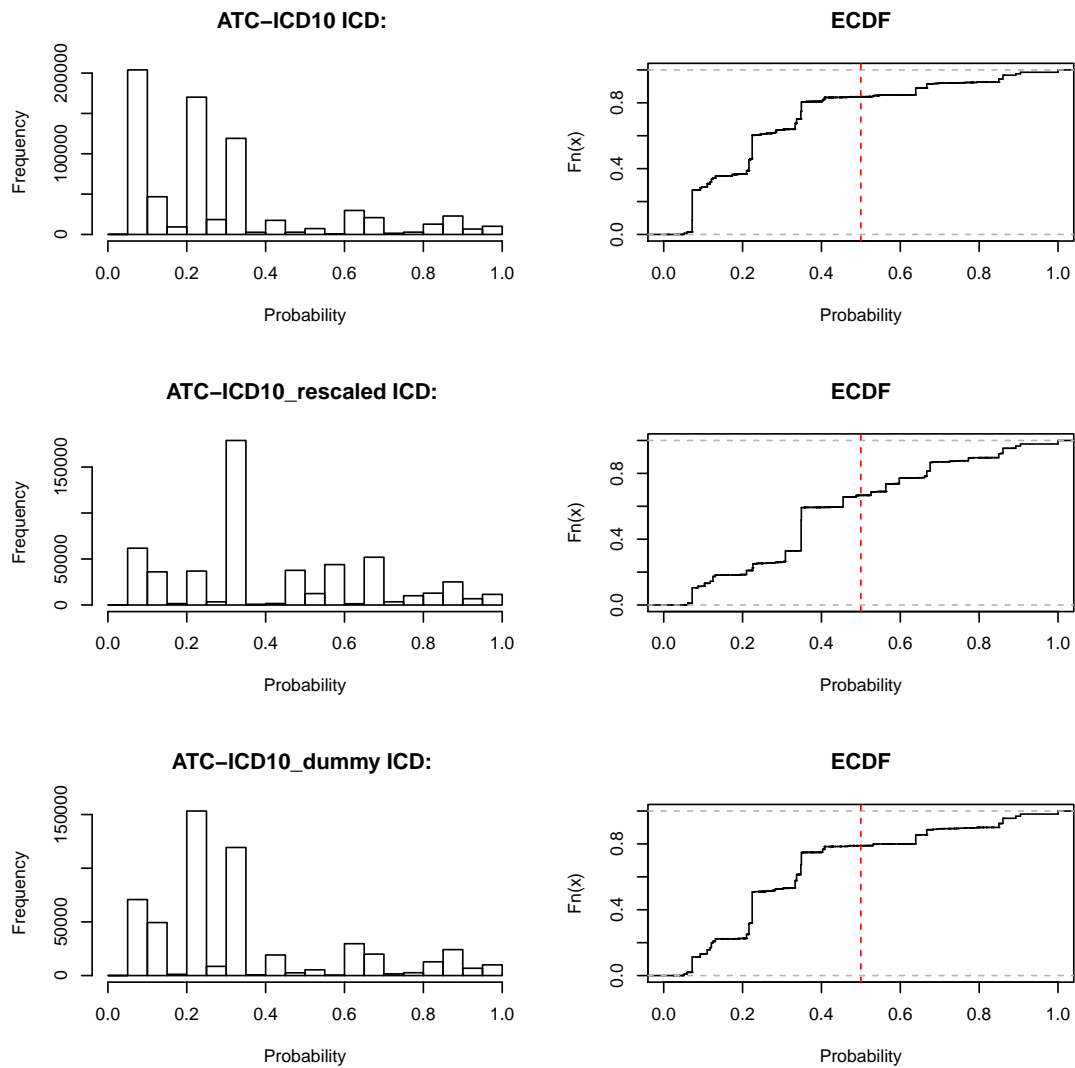
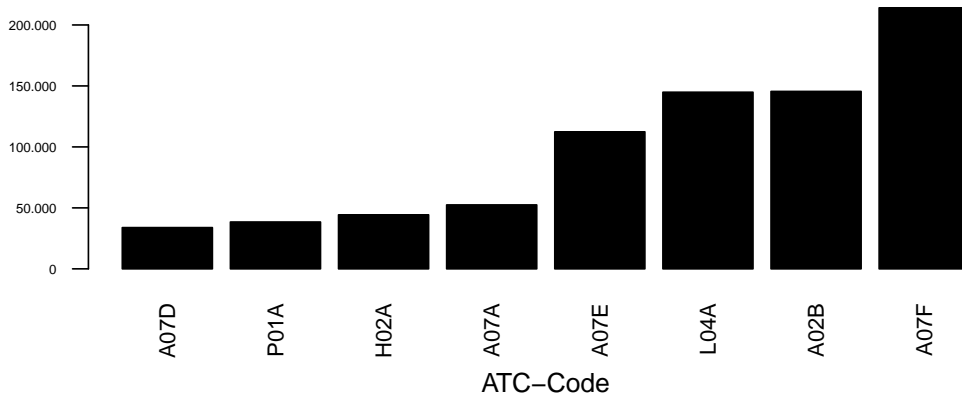


Figure 170: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group K50-K52.

Number of ATC Codes for K50–K52



Number of ATC Codes for K50–K52

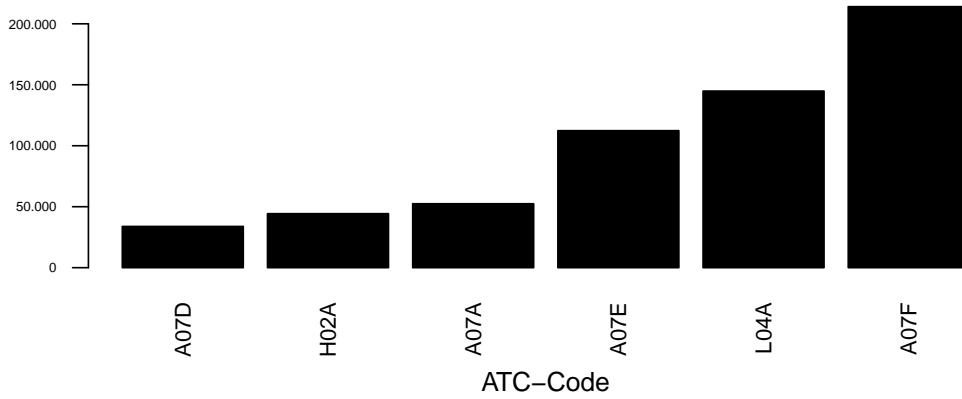


Figure 171: This figure shows the frequency of the underlying ATC codes for the given diagnose group K50-K52. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions. There are 18 ATC-Codes that related to the Diagnosis K50-K52. In order to give a clear overview of the distribution of the ATC codes behind an ICD10 group only the ATCs are shown, which represent the 95% of the cumulative frequency.

ATC	Description	Expert
A02B	MITTEL BEI PEPTISCHEM ULKUS UND GASTROE-SOPHAGEALER REFLUXKRANKHEIT	FALSE
A07A	INTESTINALE ANTIINFEKTIVA	TRUE
A07D	MOTILITÄTSCHEMMER	TRUE
A07E	INTESTINALE ANTIPHLOGISTIKA	TRUE
A07F	MIKROBIELLE ANTIDIARRHOIKA	TRUE
H02A	CORTICOSTEROIDE ZUR SYSTEMISCHEN ANWENDUNG, REIN	TRUE
L04A	IMMUNSUPPRESSIVA	TRUE
P01A	MITTEL GEGEN AMÖBEN UND ANDERE PROTOZOENERKRANKUNGEN	FALSE

Table 89: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose K50-K52. There are 18 ATC-Codes that related to the Diagnosis K50-K52. In order to give a clear overview of the distribution of the ATC codes behind an ICD10 group only the ATCs are shown, which represent the 95% of the cumulative frequency.

E.61. Diagnose H43-H45: Affektionen des Glaskörpers und des Augapfels

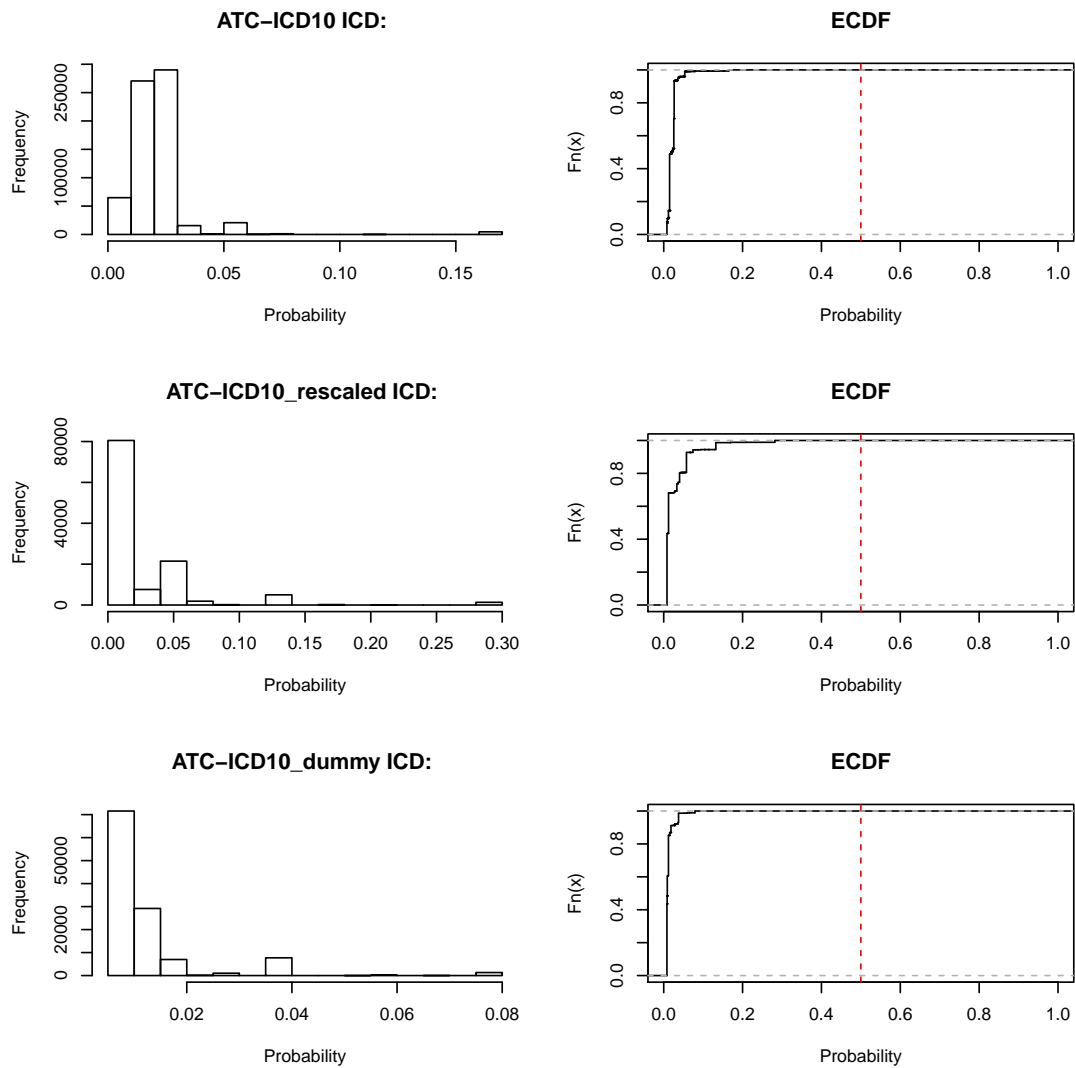


Figure 172: This figure shows the distribution of the probabilities of the diagnosis for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group H43-H45.

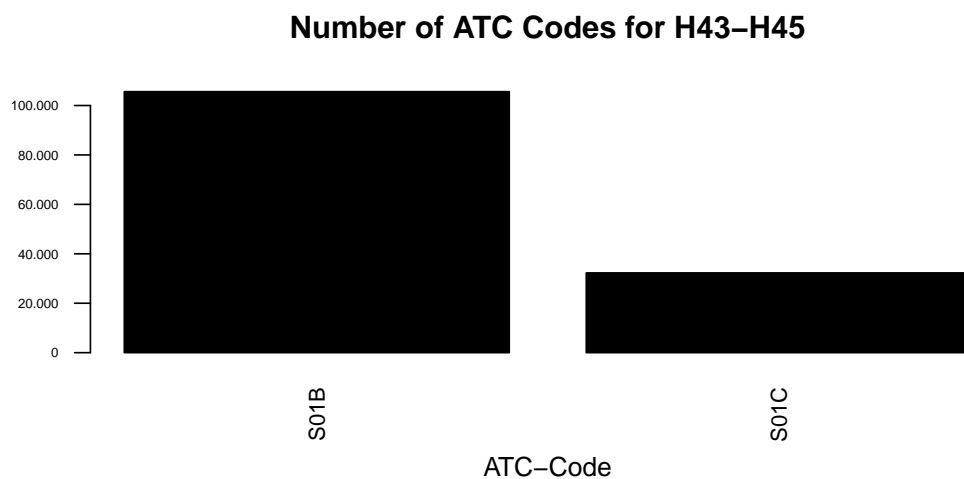
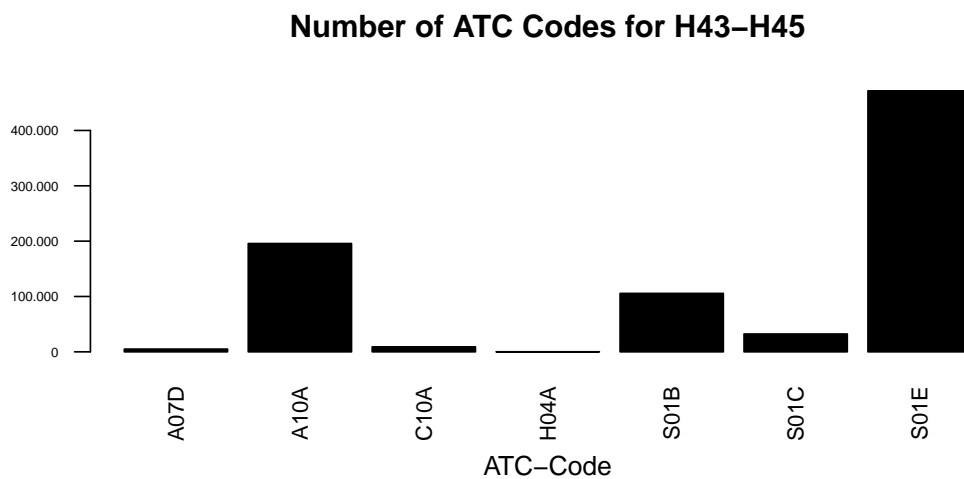


Figure 173: This figure shows the frequency of the underlying ATC codes for the given diagnose group H43-H45. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
A07D	MOTILITÄTSCHEMMER	FALSE
A10A	INSULINE UND ANALOGA	FALSE
C10A	MITTEL, DIE DEN LIPIDSTOFFWECHSEL BEEINFLUSSEN, REIN	FALSE
H04A	GLYKOGENOLYTISCHE HORMONE	FALSE
S01B	ANTIPHLOGISTIKA	TRUE
S01C	ANTIPHLOGISTIKA UND ANTIINFEKTIVA IN KOMBINA- TION	TRUE
S01E	GLAUKOMMITTEL UND MIOTIKA	FALSE

Table 90: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose H43-H45.

E.62. Diagnose R90-R94: Abnorme Befunde ohne Vorliegen einer Diagnose bei bildgebender Diagnostik und Funktionsprüfungen

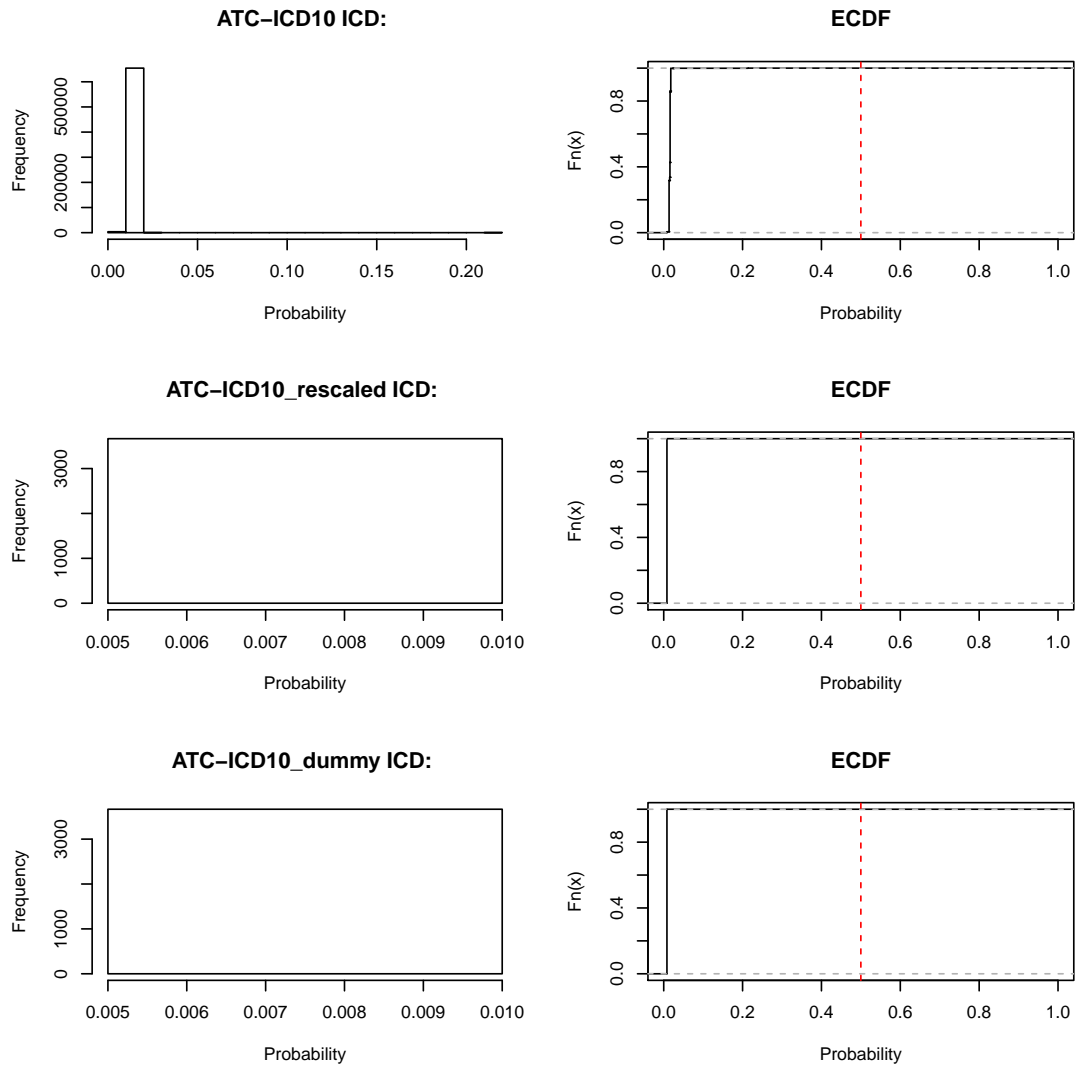
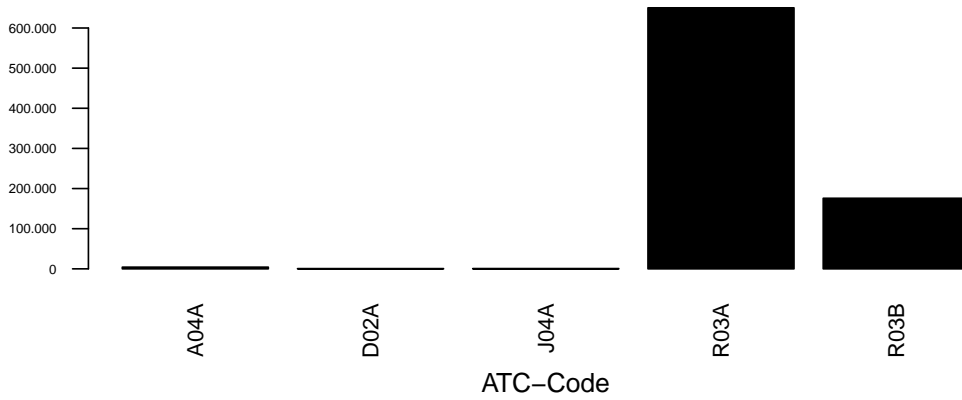


Figure 174: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group R90-R94.

Number of ATC Codes for R90–R94



Number of ATC Codes for R90–R94

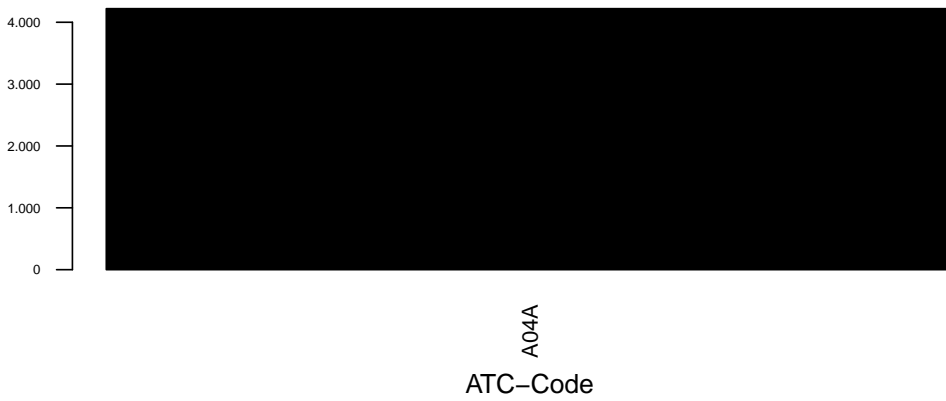


Figure 175: This figure shows the frequency of the underlying ATC codes for the given diagnose group R90-R94. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
A04A	ANTIEMETIKA UND MITTEL GEGEN ÜBELKEIT	TRUE
D02A	EMMOLENTIA UND HAUTSCHUTZMITTEL	FALSE
J04A	MITTEL ZUR BEHANDLUNG DER TUBERKULOSE	FALSE
R03A	Inhalative Sympathomimetika	FALSE
R03B	ANDERE INHALATIVE MITTEL BEI OBSTRUKTIVEN ATEMWEGSEKRANKUNGEN	FALSE

Table 91: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose R90-R94.

E.63. Diagnose C60-C63: Bösartige Neubildungen der männlichen Genitalorgane

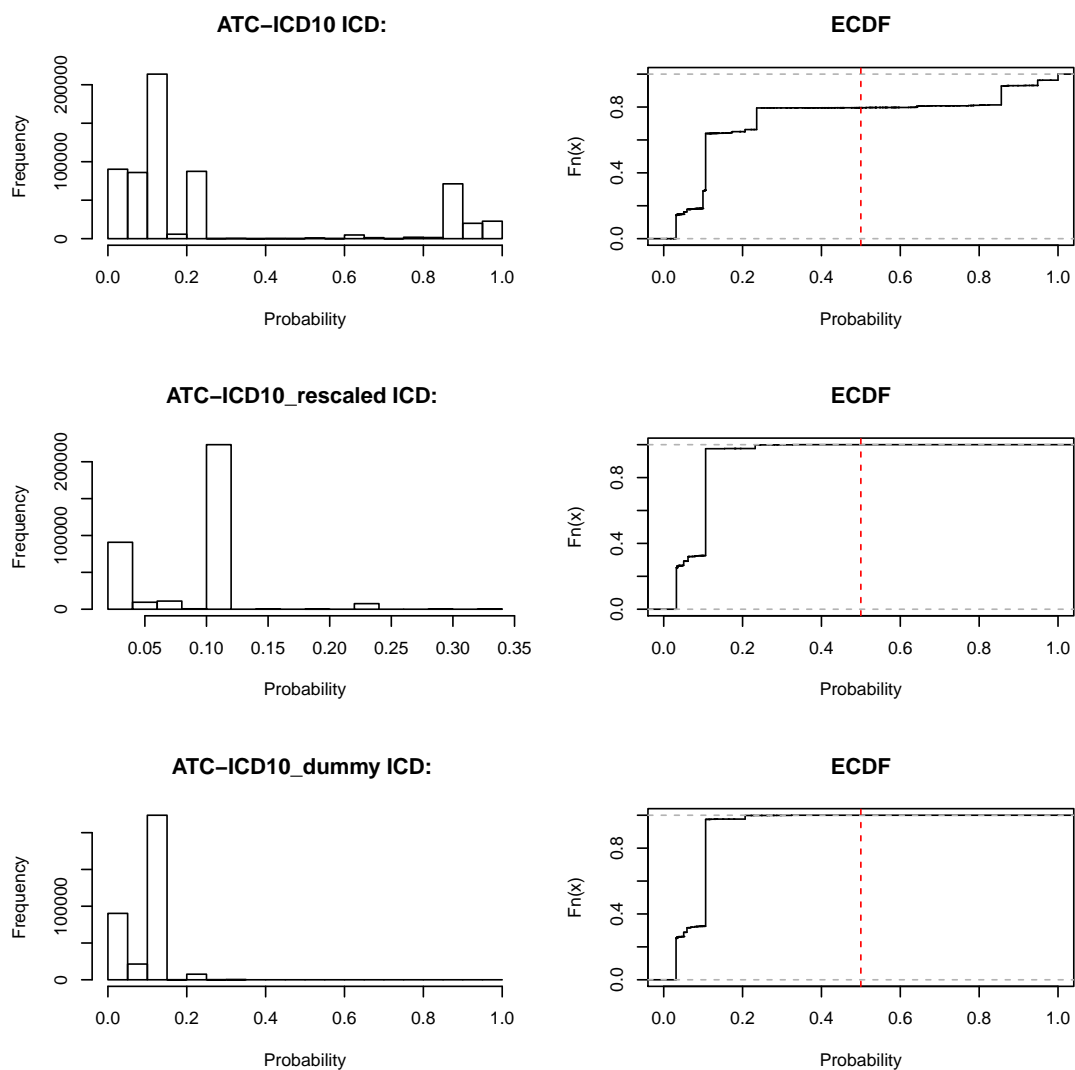
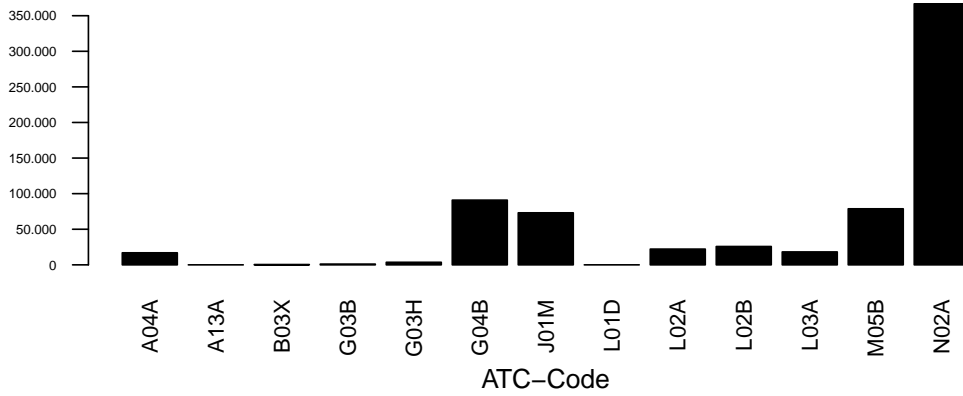


Figure 176: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group C60-C63.

Number of ATC Codes for C60–C63



Number of ATC Codes for C60–C63

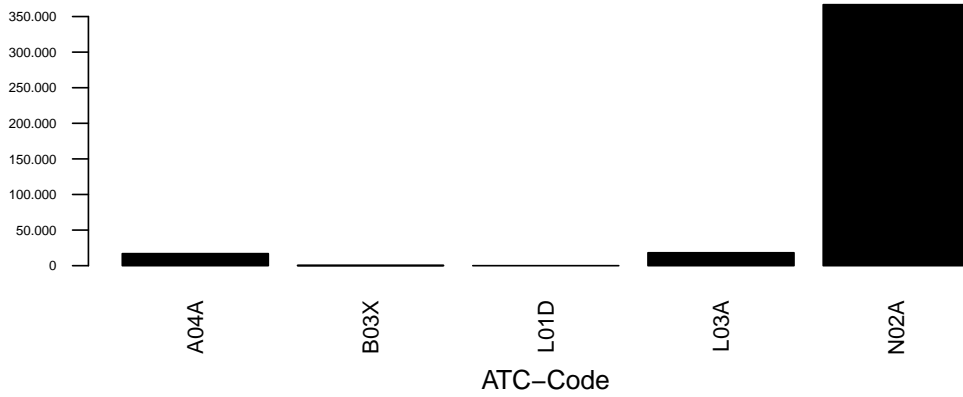


Figure 177: This figure shows the frequency of the underlying ATC codes for the given diagnose group C60-C63. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
A04A	ANTIEMETIKA UND MITTEL GEGEN ÜBELKEIT	TRUE
A13A	TONIKA	FALSE
B03X	ANDERE ANTIANÄMIKA	TRUE
G03B	ANDROGENE	FALSE
G03H	ANTIANDROGENE	FALSE
G04B	ANDERE UROLOGIKA, INKL. SPASMOLYTIKA	FALSE
J01M	CHINOLONE	FALSE
L01D	ZYTOTOXISCHE ANTIBIOTIKA UND VERWANDTE SUB- STANZEN	TRUE
L02A	HORMONE UND VERWANDTE MITTEL	FALSE
L02B	HORMONANTAGONISTEN UND VERWANDTE STOFFE	FALSE
L03A	IMMUNSTIMULANZIEN	TRUE
M05B	MITTEL MIT EINFLUSS AUF DIE KNOCHENSTRUKTUR UND DIE MINERALISATION	FALSE
N02A	OPIOIDE	TRUE

Table 92: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose C60-C63.

E.64. Diagnose R30-R39: Symptome, die das Harnsystem betreffen

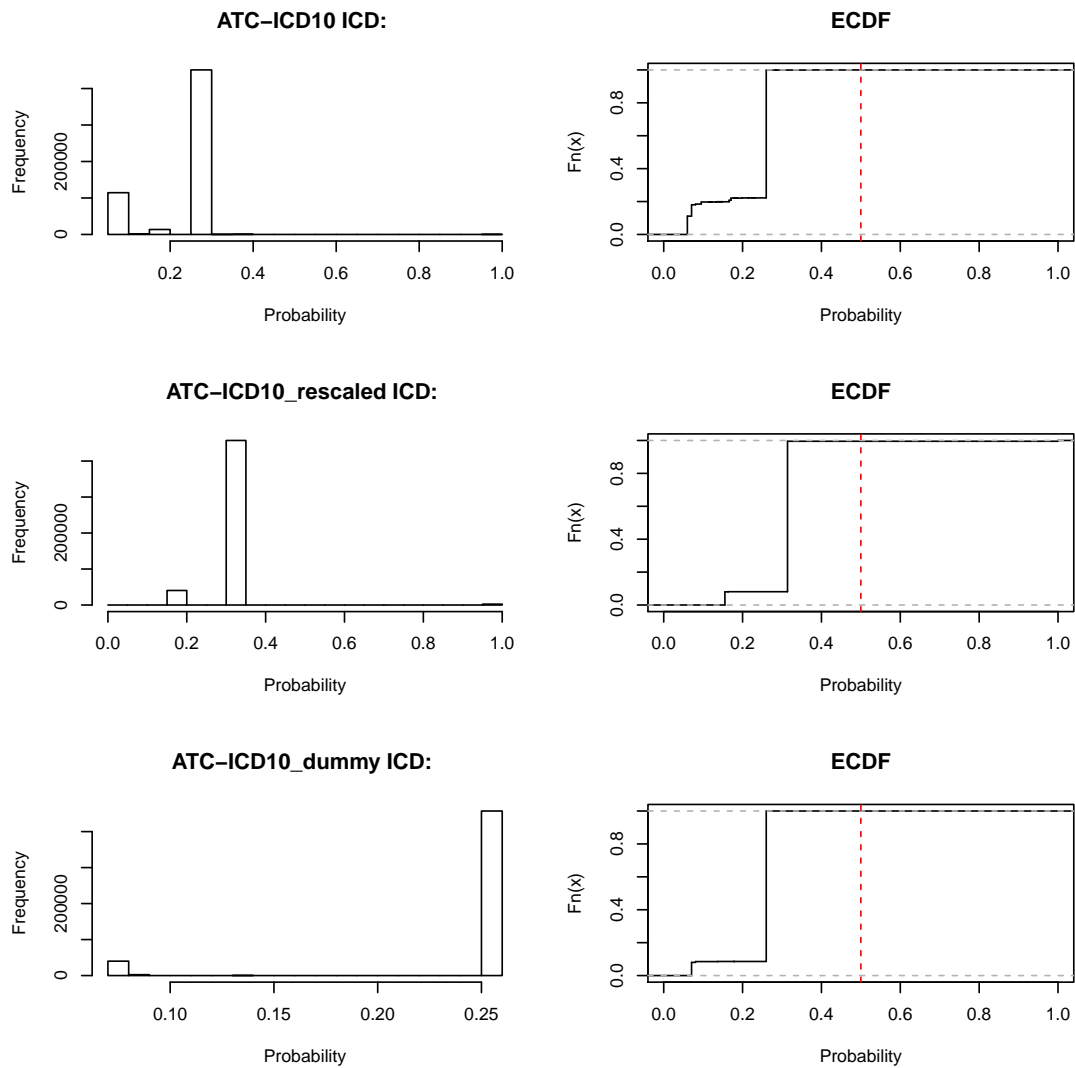
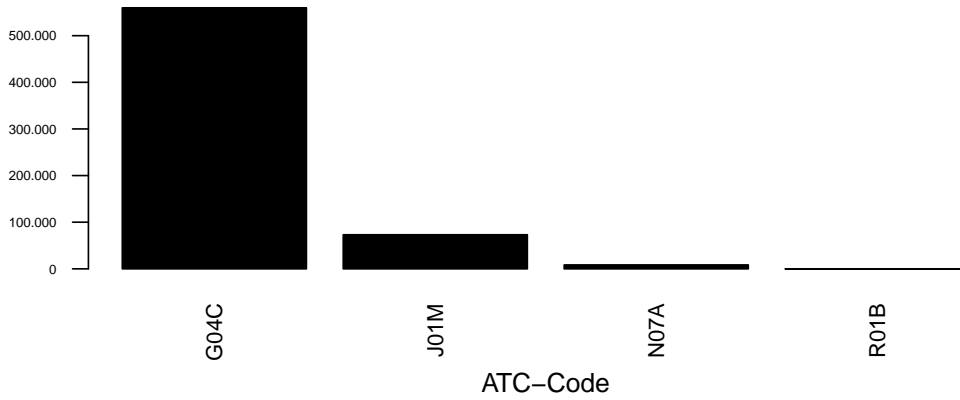


Figure 178: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group R30-R39.

Number of ATC Codes for R30–R39



Number of ATC Codes for R30–R39

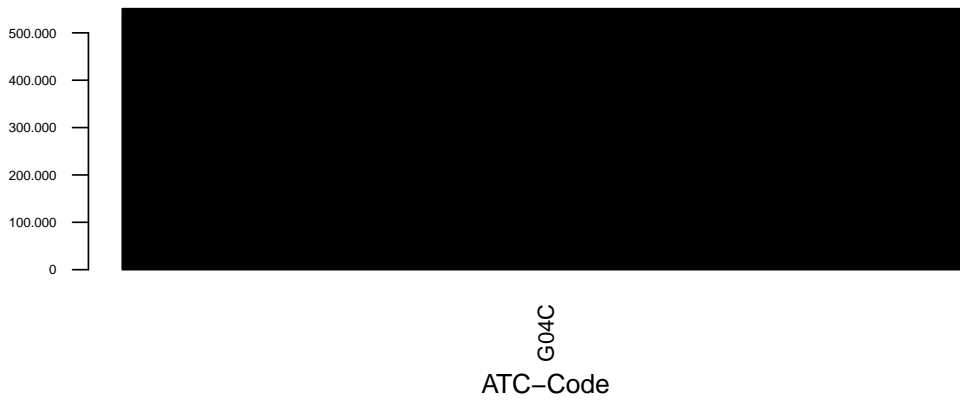


Figure 179: This figure shows the frequency of the underlying ATC codes for the given diagnose group R30-R39. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
G04C	MITTEL BEI BENIGNER PROSTATAHYPERPLASIE	TRUE
J01M	CHINOLONE	FALSE
N07A	PARASYMPATHOMIMETIKA	FALSE
R01B	NASALE DEKONGESTIVA ZUR SYSTEMISCHEN ANWENDUNG	FALSE

Table 93: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose R30-R39.

E.65. Diagnose H60-H62: Krankheiten des äußeren Ohres

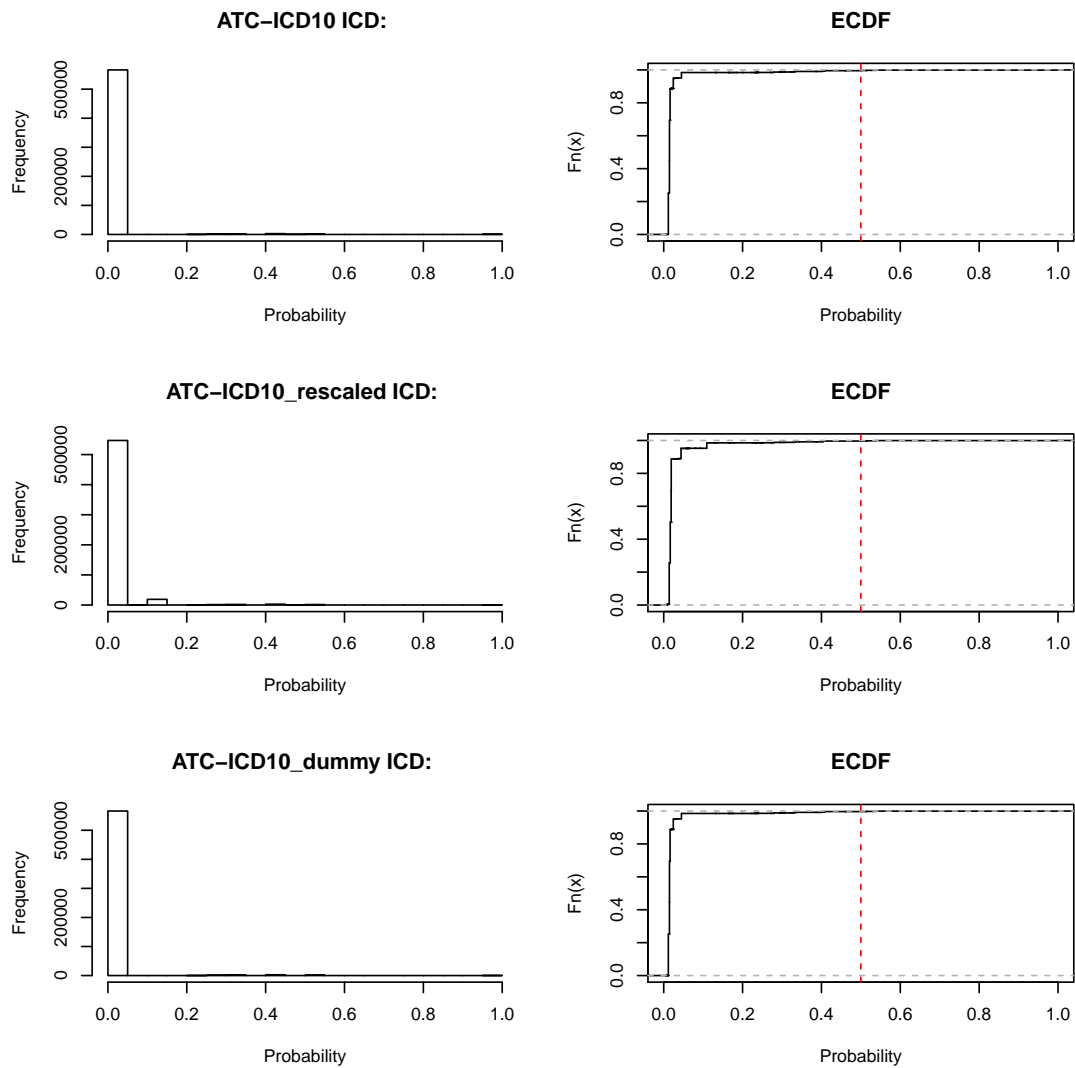
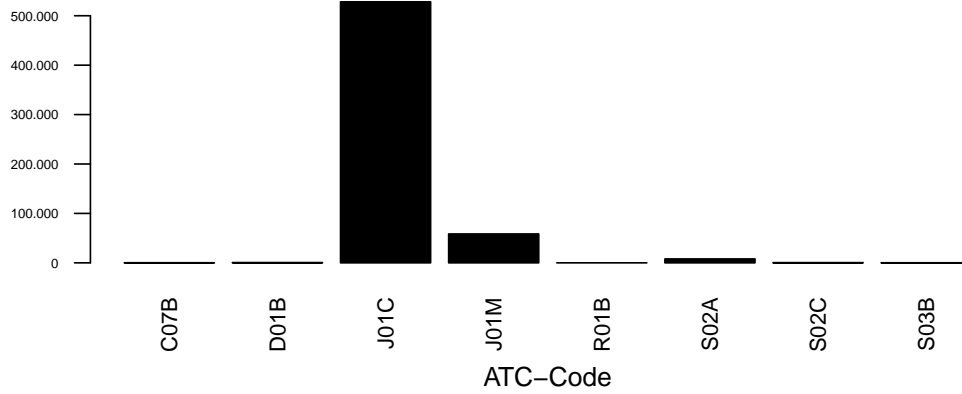


Figure 180: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group H60-H62.

Number of ATC Codes for H60–H62



Number of ATC Codes for H60–H62

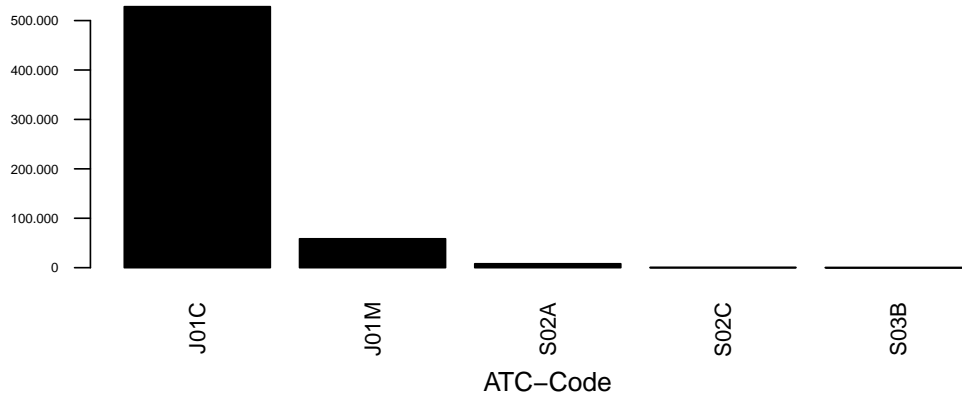


Figure 181: This figure shows the frequency of the underlying ATC codes for the given diagnose group H60-H62. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
C07B	BETA-ADRENOREZEPTOR-ANTAGONISTEN UND THIAZIDE	FALSE
D01B	ANTIMYKOTIKA ZUR SYSTEMISCHEN ANWENDUNG	FALSE
J01C	BETALACTAM-ANTIBIOTIKA, PENICILLINE	TRUE
J01M	CHINOLONE	TRUE
R01B	NASALE DEKONGESTIVA ZUR SYSTEMISCHEN ANWENDUNG	FALSE
S02A	ANTIINFEKTIVA	TRUE
S02C	CORTICOSTEROIDE UND ANTIINFEKTIVA IN KOMBINATION	TRUE
S03B	CORTICOSTEROIDE	TRUE

Table 94: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose H60-H62.

E.66. Diagnose J95-J99: Sonstige Krankheiten des Atmungssystems

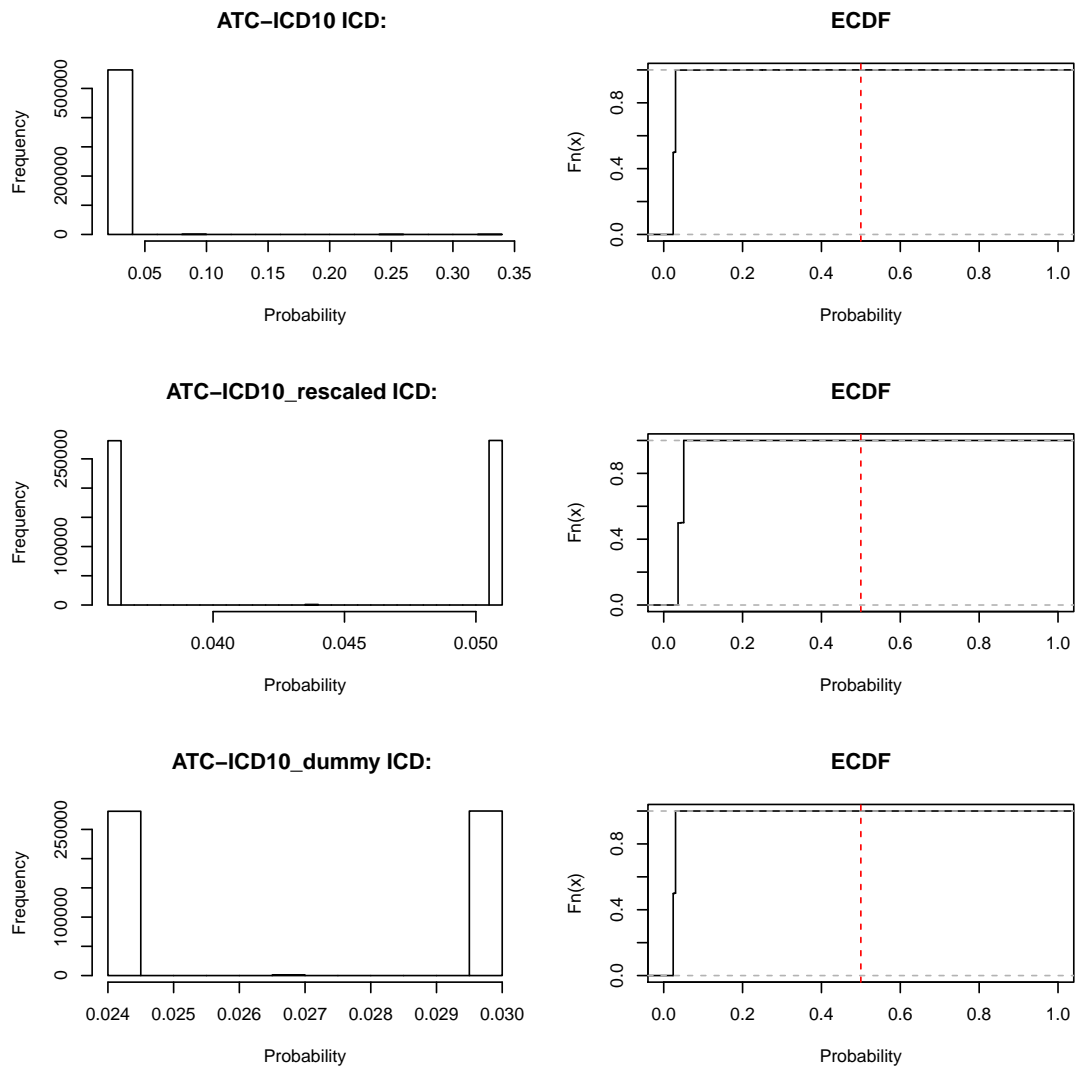
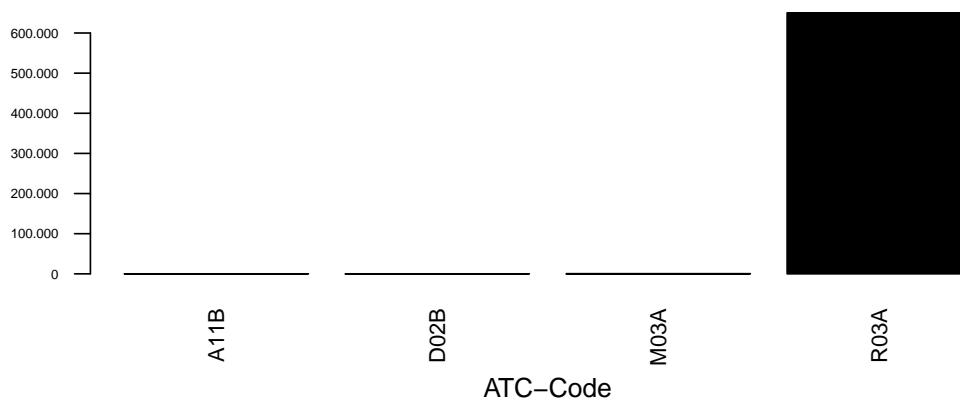


Figure 182: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group J95-J99.

Number of ATC Codes for J95–J99



Number of ATC Codes for J95–J99

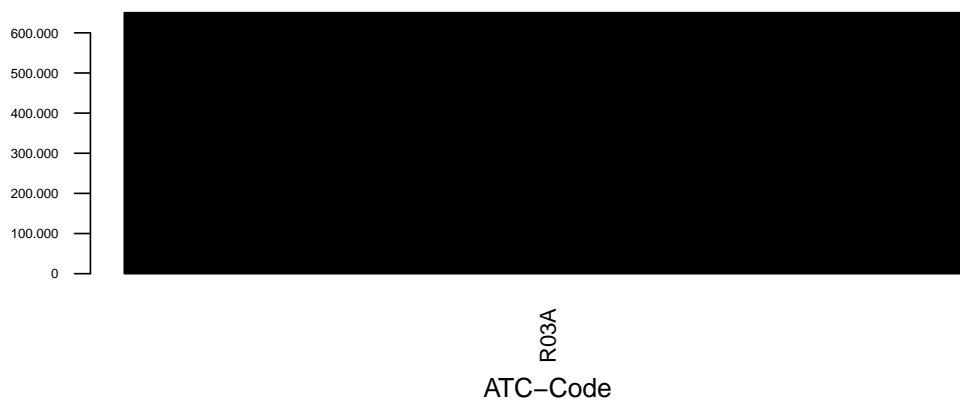


Figure 183: This figure shows the frequency of the underlying ATC codes for the given diagnose group J95-J99. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
A11B	MULTIVITAMINE, REIN	FALSE
D02B	PROTEKTIVA GEGEN UV-STRAHLUNG	FALSE
M03A	MUSKELRELAXANZIEN, PERIPHER WIRKENDE MITTEL	FALSE
R03A	Inhalative Sympathomimetika	TRUE

Table 95: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose J95-J99.

E.67. Diagnose H40-H42: Glaukom

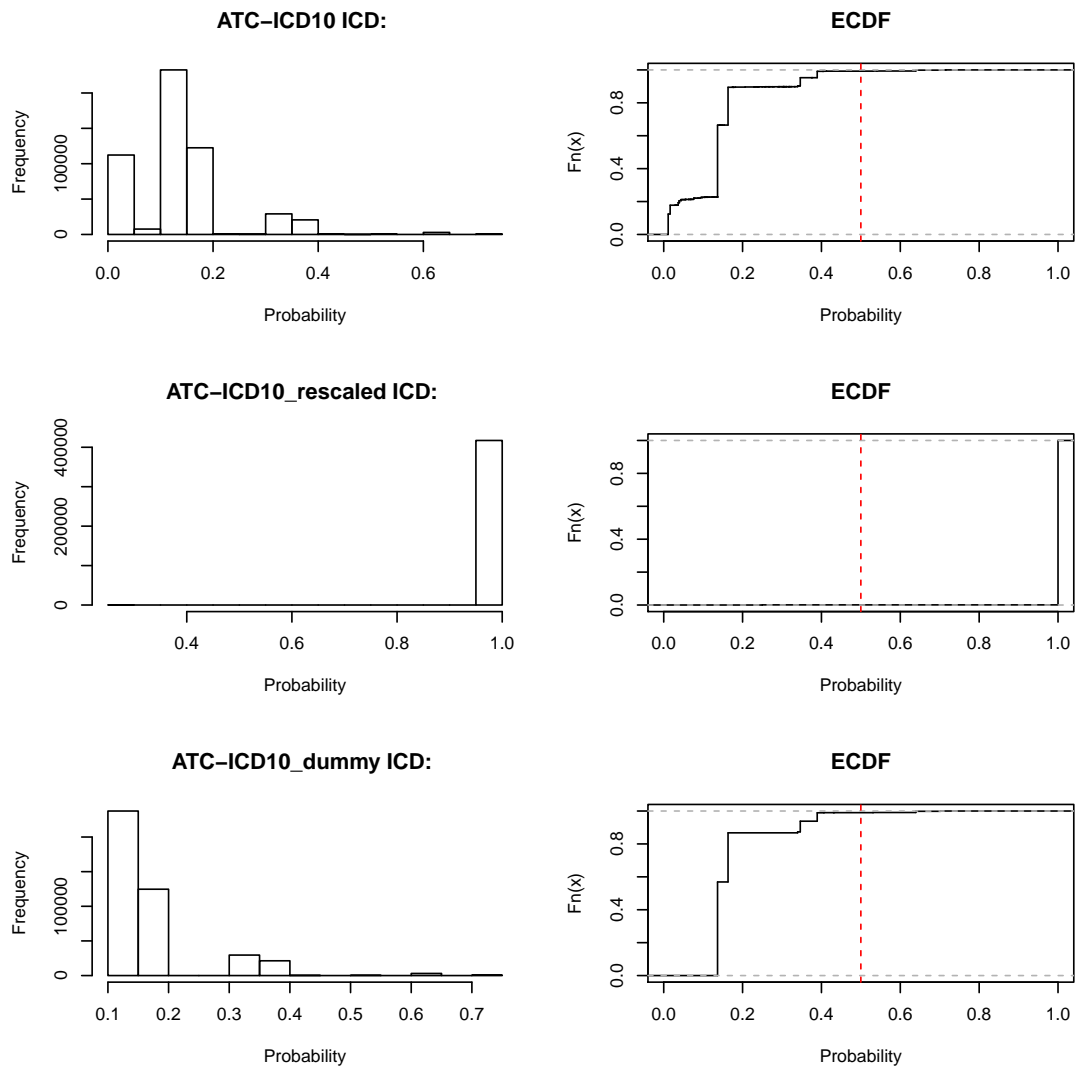
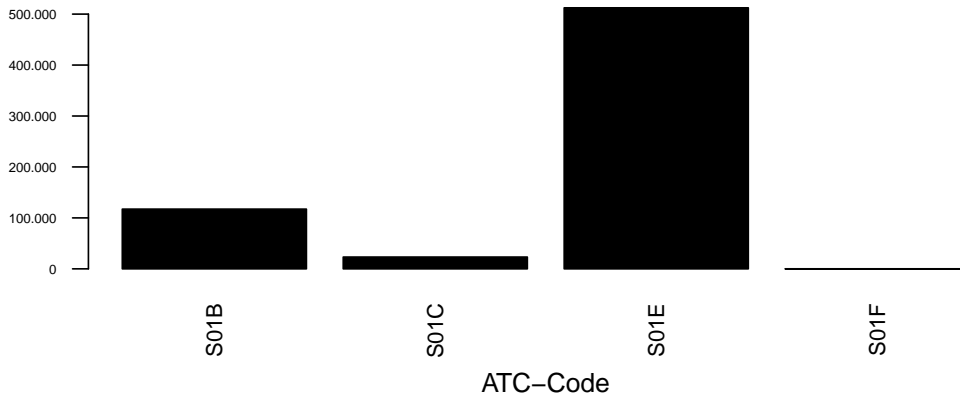


Figure 184: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group H40-H42.

Number of ATC Codes for H40–H42



Number of ATC Codes for H40–H42

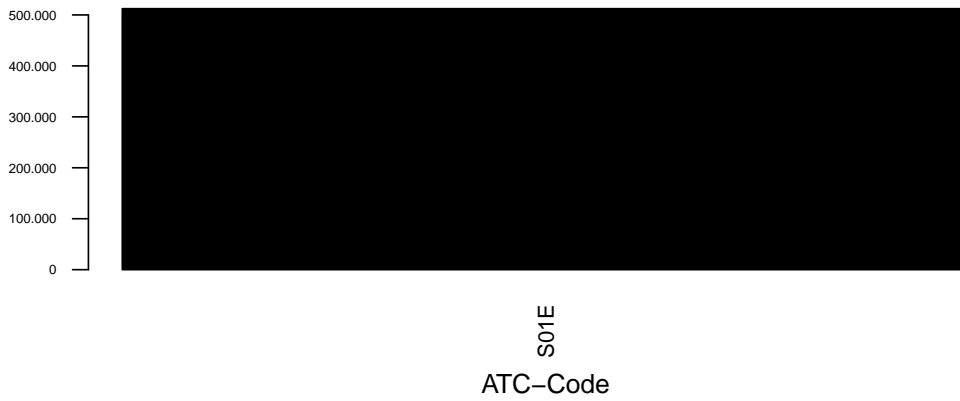


Figure 185: This figure shows the frequency of the underlying ATC codes for the given diagnose group H40-H42. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
S01B	ANTIPHLOGISTIKA	FALSE
S01C	ANTIPHLOGISTIKA UND ANTIINFEKTIVA IN KOMBINATION	FALSE
S01E	GLAUKOMMITTEL UND MIOTIKA	TRUE
S01F	MYDRIATIKA UND ZYKLOPLEGIKA	FALSE

Table 96: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose H40-H42.

E.68. Diagnose H15-H22: Affektionen der Sklera, der Hornhaut, der Iris und des Ziliarkörpers

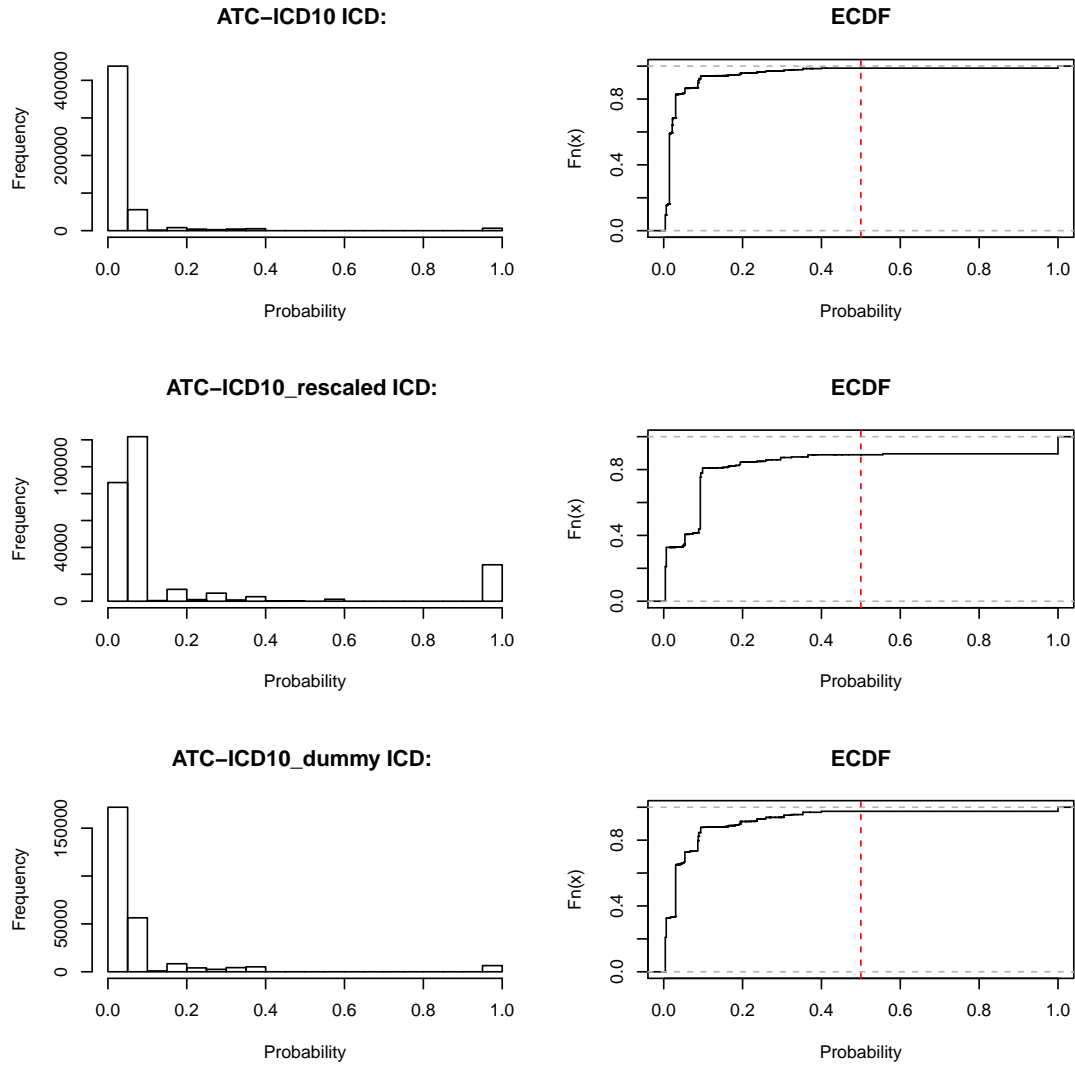


Figure 186: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group H15-H22.

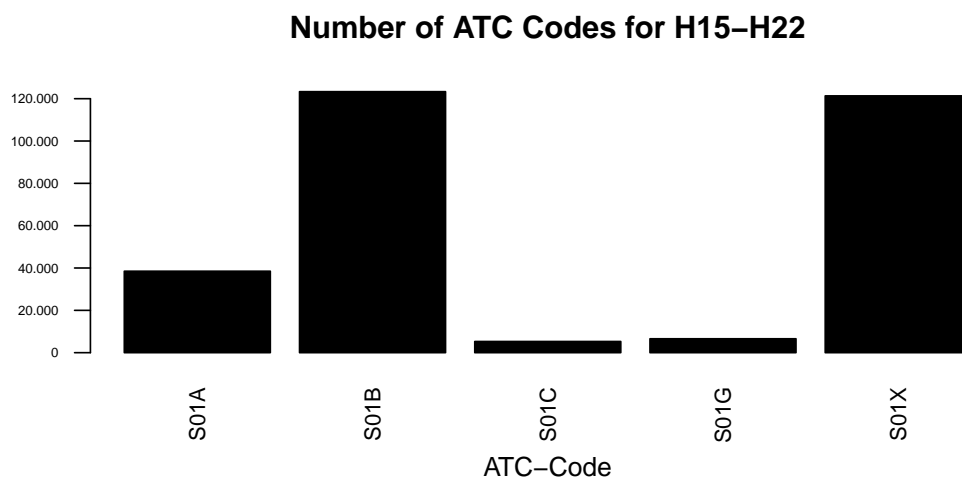
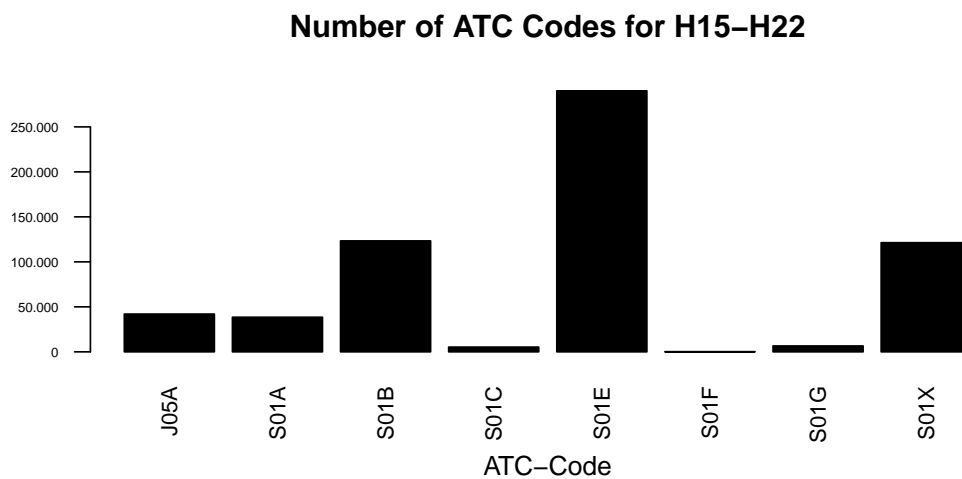


Figure 187: This figure shows the frequency of the underlying ATC codes for the given diagnose group H15-H22. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
J05A	DIREKT WIRKENDE ANTIVIRALE MITTEL	FALSE
S01A	ANTIINFEKTIVA	TRUE
S01B	ANTIPHLOGISTIKA	TRUE
S01C	ANTIPHLOGISTIKA UND ANTIINFEKTIVA IN KOMBINATION	TRUE
S01E	GLAUKOMMITTEL UND MIOTIKA	FALSE
S01F	MYDRIATIKA UND ZYKLOPLEGIKA	FALSE
S01G	DEKONGESTIVA UND ANTIALLERGIKA	TRUE
S01X	ANDERE OPHTHALMIKA	TRUE

Table 97: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose H15-H22.

E.69. Diagnose G90-G99: Sonstige Krankheiten des Nervensystems

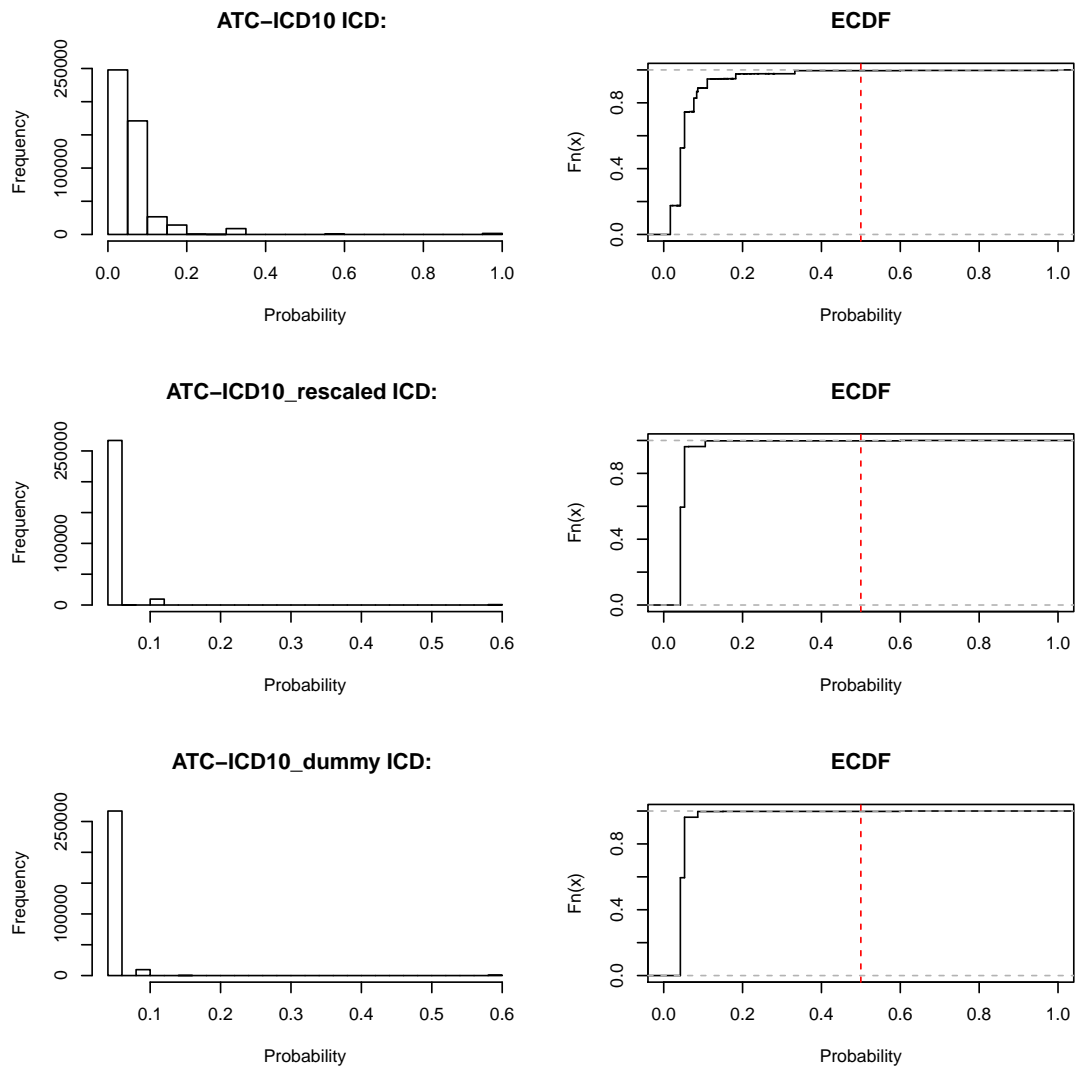
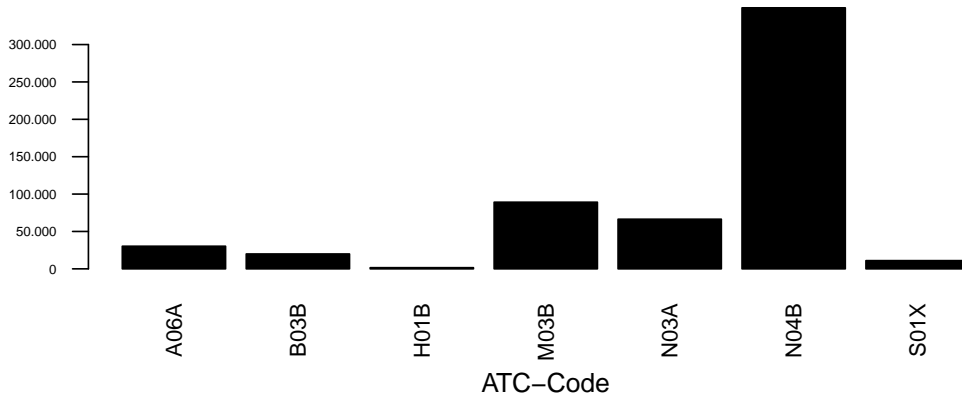


Figure 188: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group G90-G99.

Number of ATC Codes for G90–G99



Number of ATC Codes for G90–G99

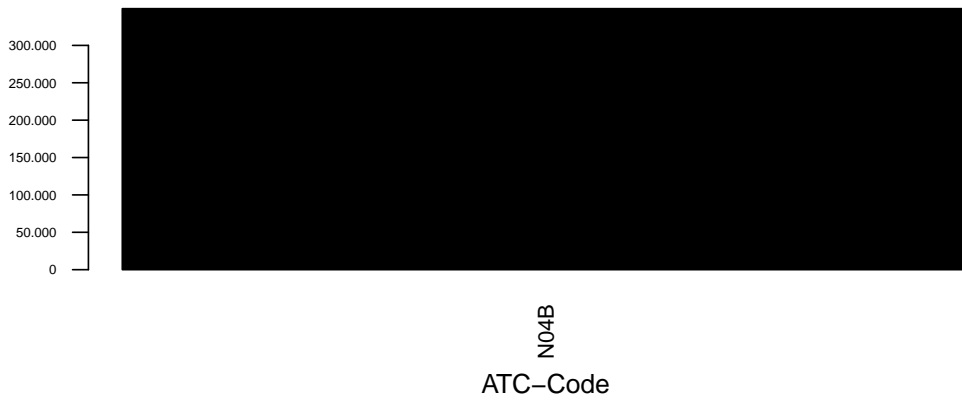


Figure 189: This figure shows the frequency of the underlying ATC codes for the given diagnose group G90-G99. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
A06A	LAXANTIEN	FALSE
B03B	VITAMIN-B12 UND FOLSÄURE	FALSE
H01B	HYPOPHYSENHINTERLAPPENHORMONE	FALSE
M03B	MUSKELRELAXANTIEN, ZENTRAL WIRKENDE MITTEL	FALSE
N03A	ANTIEPILEPTIKA	FALSE
N04B	DOPAMINERGE MITTEL	TRUE
S01X	ANDERE OPHTHALMIKA	FALSE

Table 98: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose G90-G99.

E.70. Diagnose S60-S69: Verletzungen des Handgelenkes und der Hand

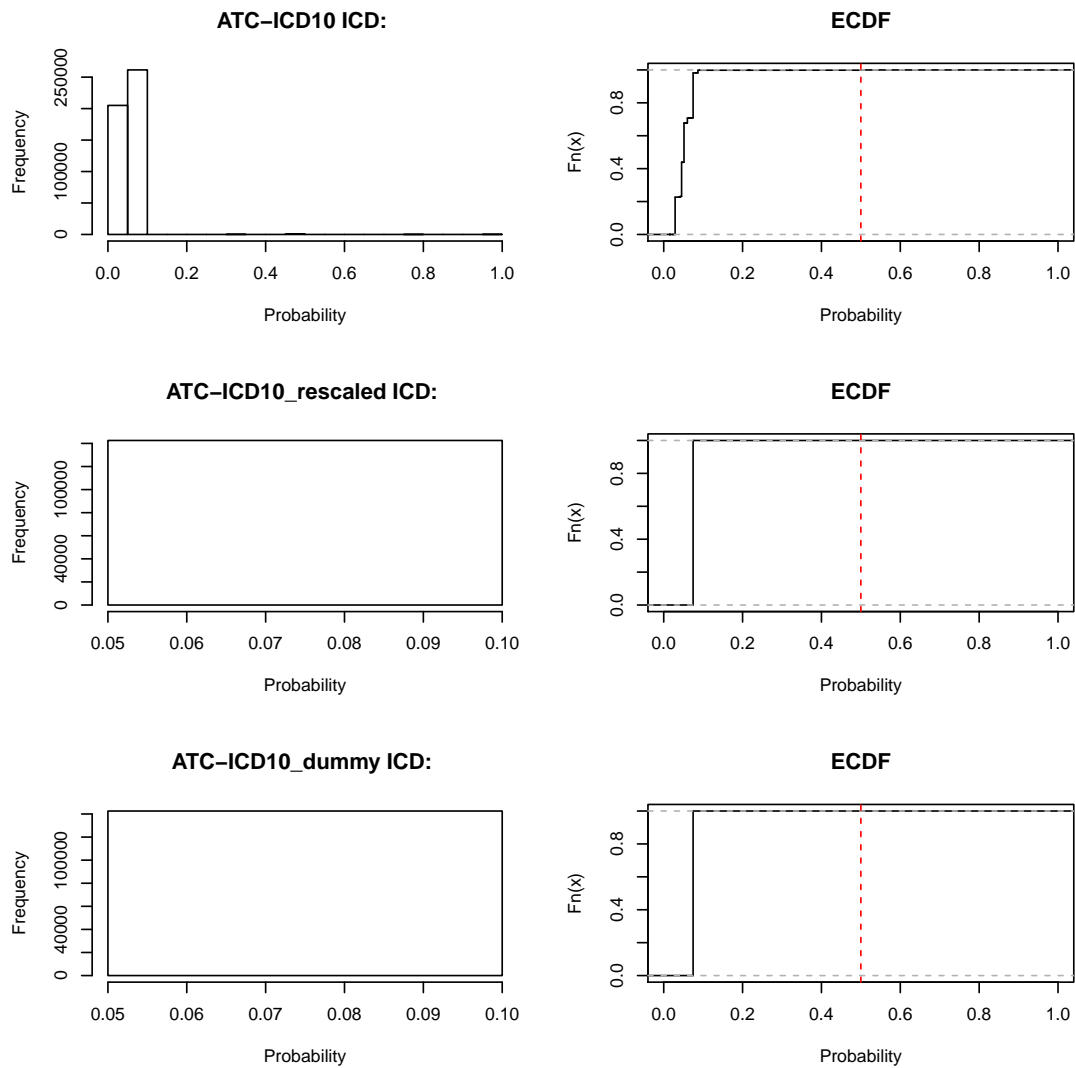


Figure 190: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group S60-S69.

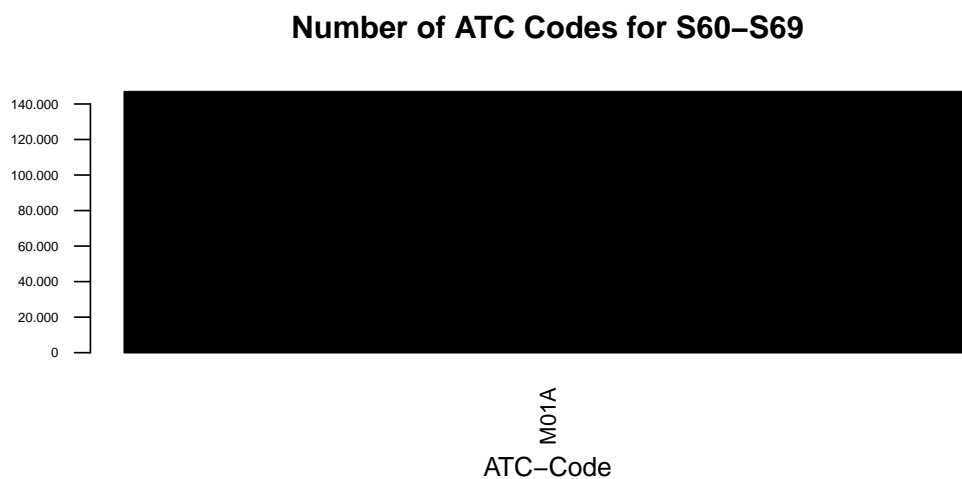
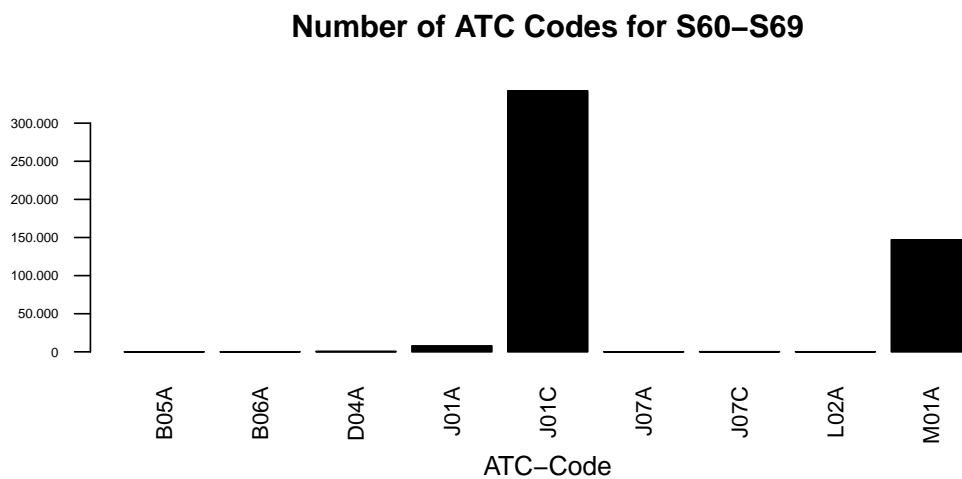


Figure 191: This figure shows the frequency of the underlying ATC codes for the given diagnose group S60-S69. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
B05A	BLUT UND VERWANDTE PRODUKTE	FALSE
B06A	ANDERE HÄMATOLOGIKA	FALSE
D04A	ANTIPRURIGINOSA, INKL. ANTIHISTAMINIKA, ANÄSTHETIKA, ETC.	FALSE
J01A	TETRACYCLINE	FALSE
J01C	BETALACTAM-ANTIBIOTIKA, PENICILLINE	FALSE
J07A	BAKTERIELLE IMPFSTOFFE	FALSE
J07C	BAKTERIELLE UND VIRALE IMPFSTOFFE, KOMBINIERT	FALSE
L02A	HORMONE UND VERWANDTE MITTEL	FALSE
M01A	NICHTSTEROIDALE ANTIPHLOGISTIKA UND AN-TIRHEUMATIKA	TRUE

Table 99: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose S60-S69.

E.71. Diagnose L40-L45: Papulosquamöse Hautkrankheiten

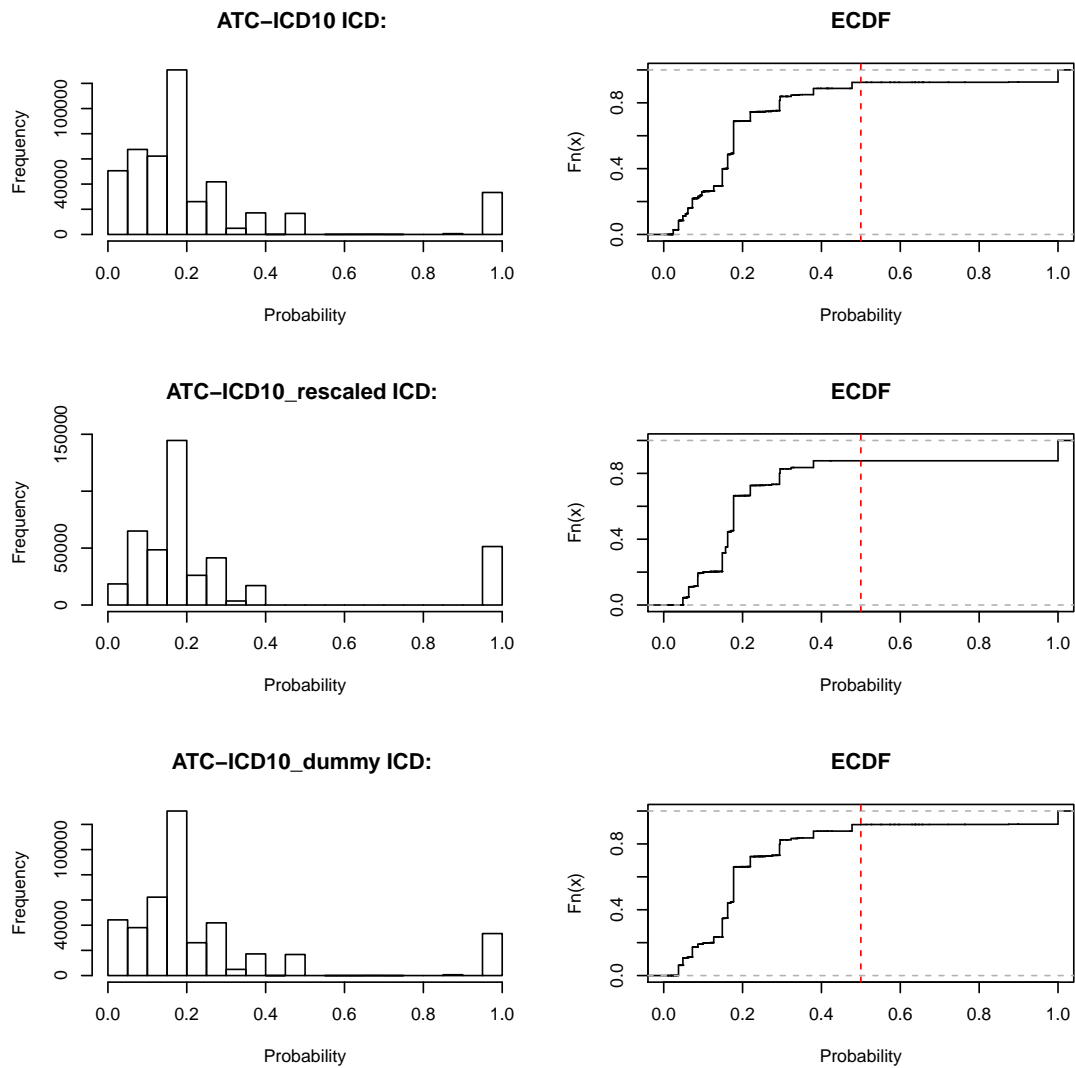


Figure 192: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group L40-L45.

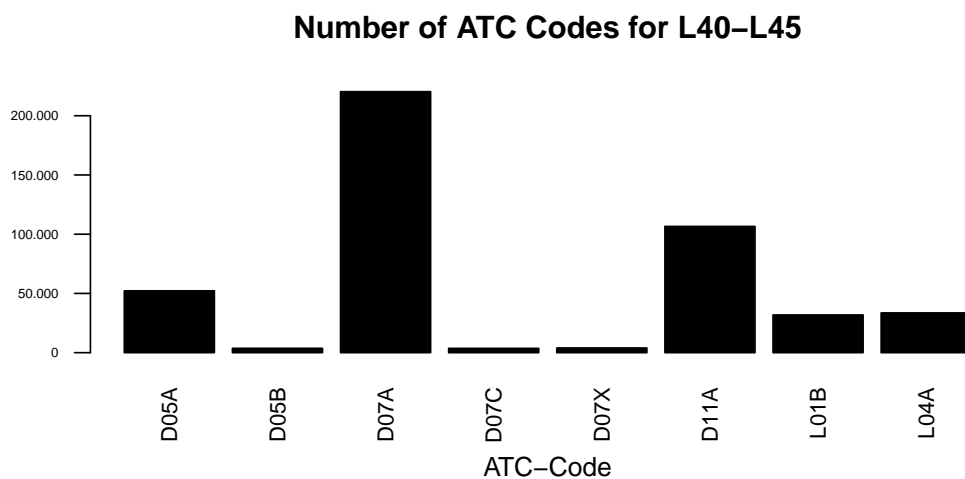
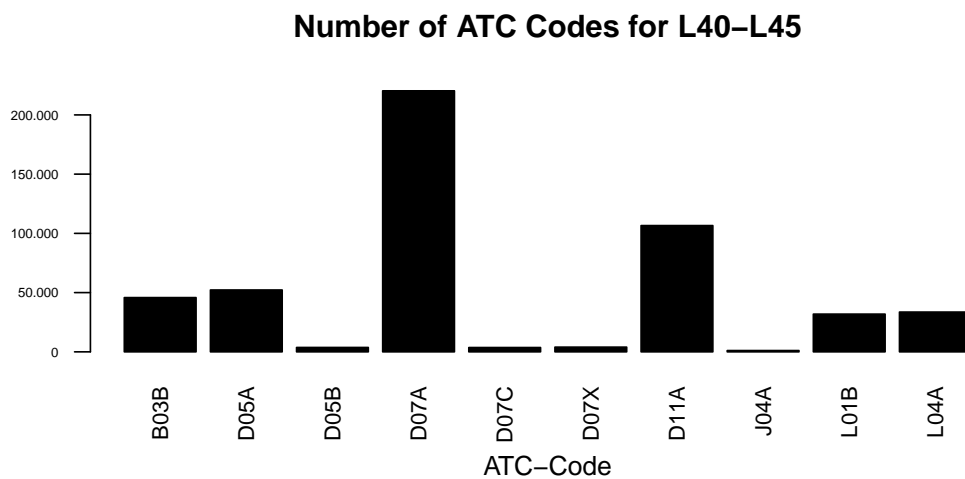


Figure 193: This figure shows the frequency of the underlying ATC codes for the given diagnose group L40-L45. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
B03B	VITAMIN-B12 UND FOLSÄURE	FALSE
D05A	ANTIPSORIATIKA ZUR TOPISCHEN ANWENDUNG	TRUE
D05B	ANTIPSORIATIKA ZUR SYSTEMISCHEN ANWENDUNG	TRUE
D07A	CORTICOSTEROIDE, REIN	TRUE
D07C	CORTICOSTEROIDE, KOMBINATIONEN MIT ANTIBIOTIKA	TRUE
D07X	CORTICOSTEROIDE, ANDERE KOMBINATIONEN	TRUE
D11A	ANDERE DERMATIKA	TRUE
J04A	MITTEL ZUR BEHANDLUNG DER TUBERKULOSE	FALSE
L01B	ANTIMETABOLITE	TRUE
L04A	IMMUNSUPPRESSIVA	TRUE

Table 100: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose L40-L45.

E.72. Diagnose M00-M03: Infektiöse Arthropathien

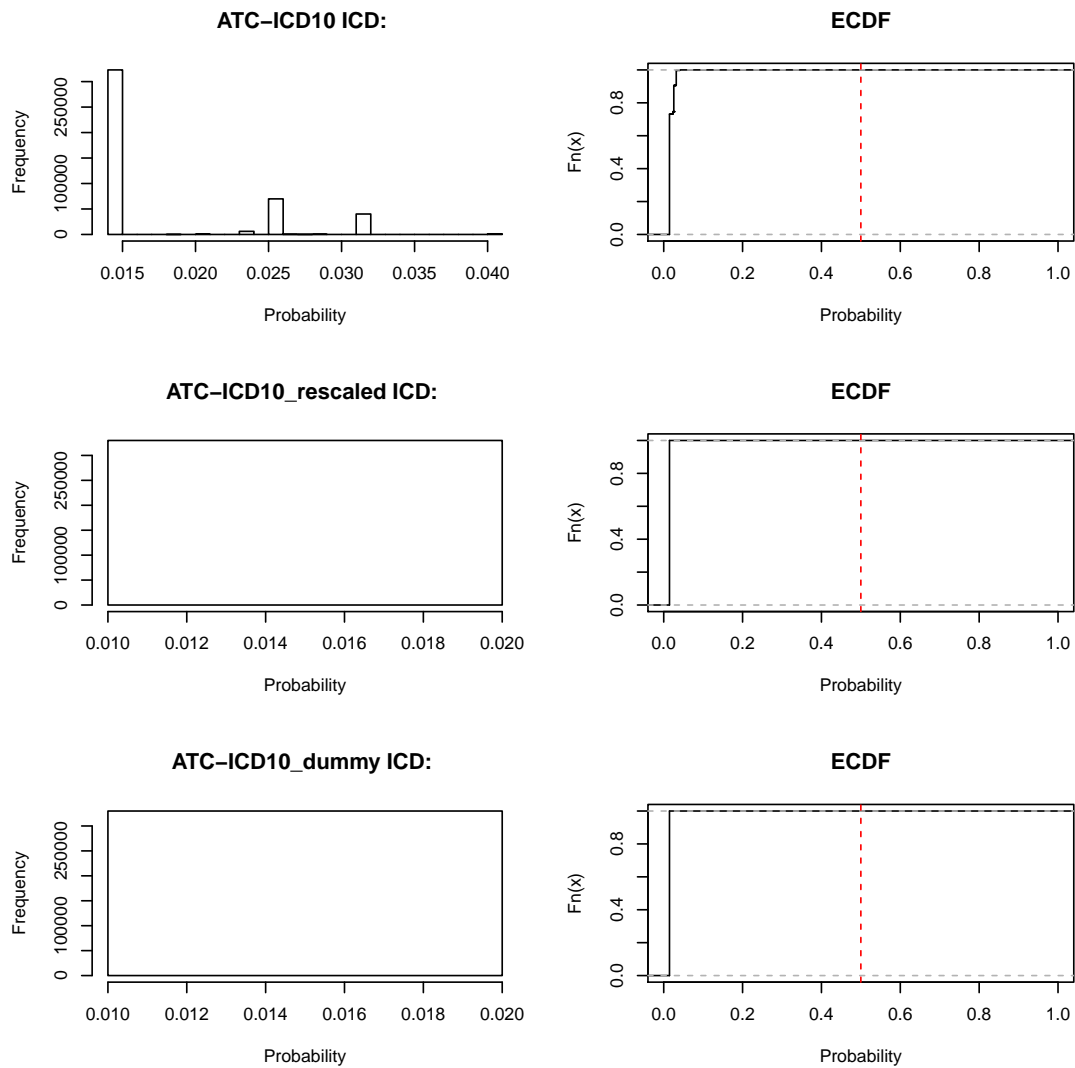
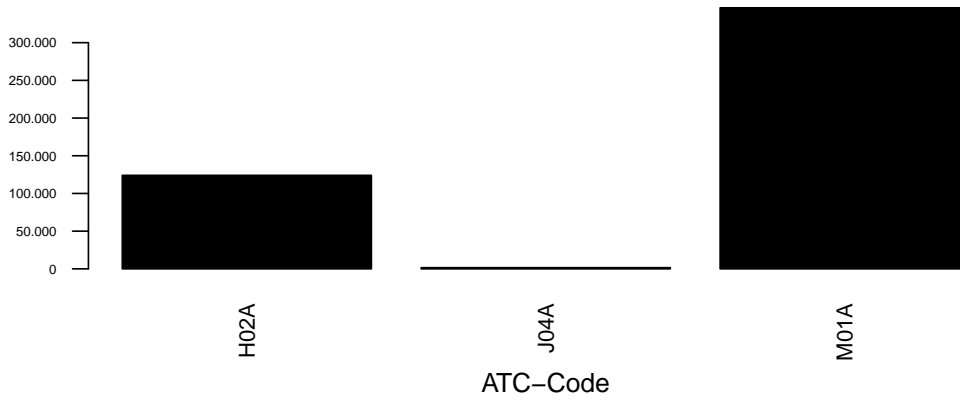


Figure 194: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group M00-M03.

Number of ATC Codes for M00–M03



Number of ATC Codes for M00–M03

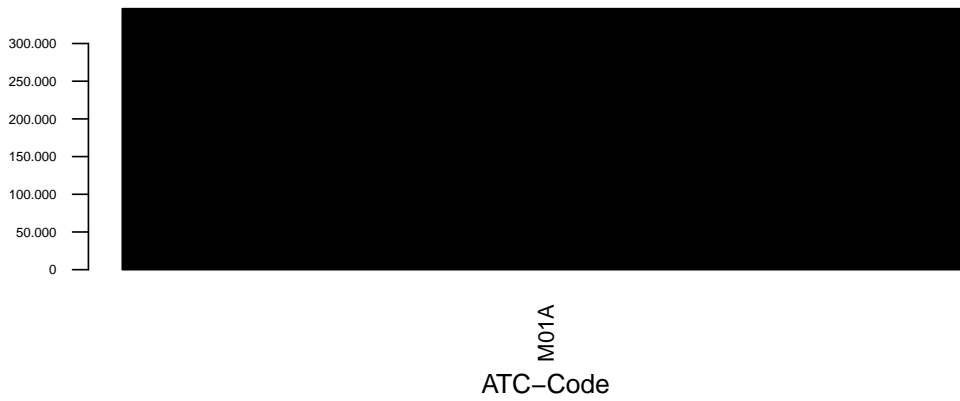


Figure 195: This figure shows the frequency of the underlying ATC codes for the given diagnose group M00-M03. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
H02A	CORTICOSTEROIDE ZUR SYSTEMISCHEN ANWENDUNG, REIN	FALSE
J04A	MITTEL ZUR BEHANDLUNG DER TUBERKULOSE	FALSE
M01A	NICHTSTEROIDALE ANTIPHLOGISTIKA UND AN- TIRHEUMATIKA	TRUE

Table 101: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose M00-M03.

E.73. Diagnose G10-G13: Systematrophien, die vorwiegend das Zentralnervensystem betreffen

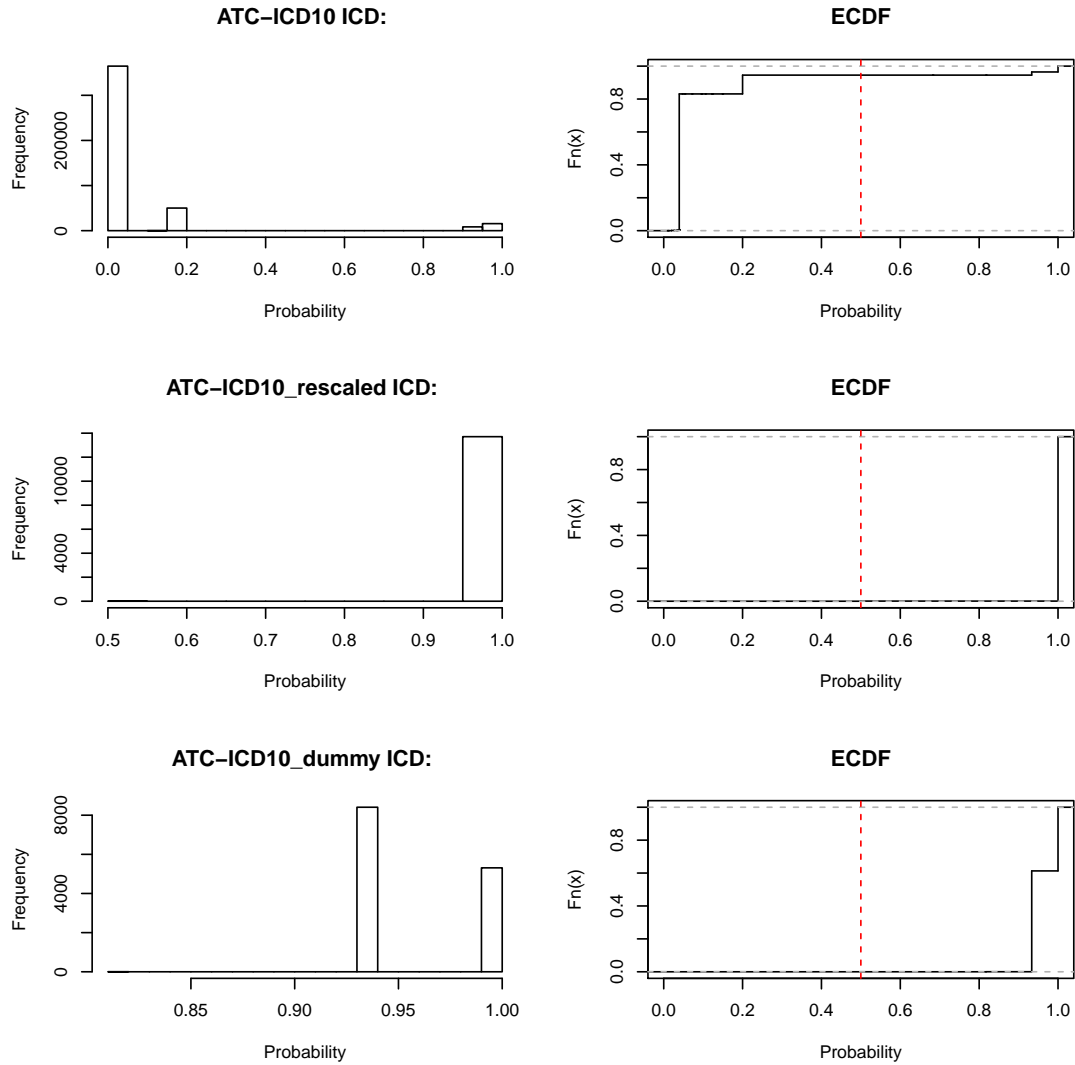
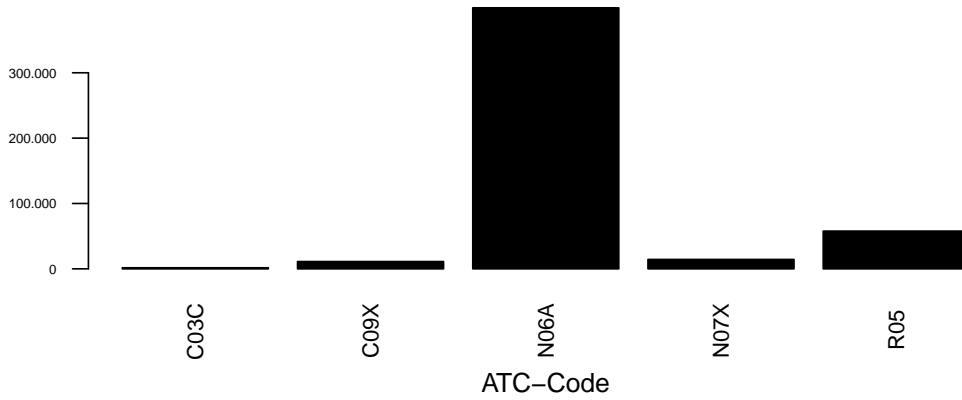


Figure 196: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group G10-G13.

Number of ATC Codes for G10–G13



Number of ATC Codes for G10–G13

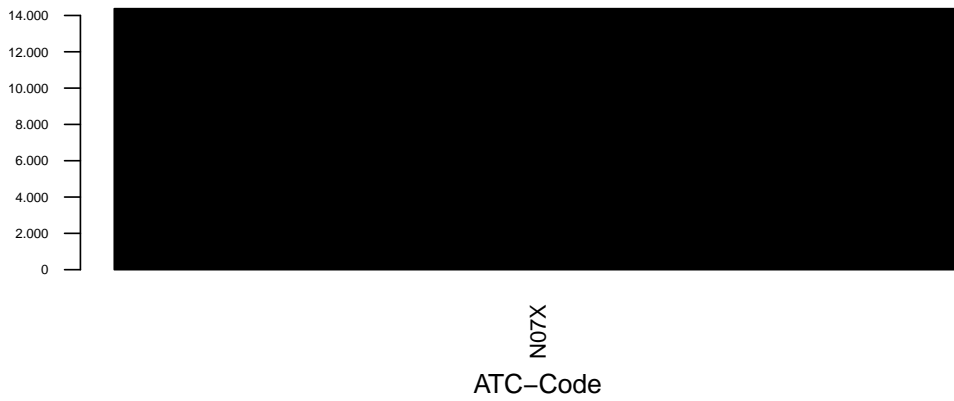


Figure 197: This figure shows the frequency of the underlying ATC codes for the given diagnose group G10-G13. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
C03C	HIGH-CEILING-DIURETIKA	FALSE
C09X	ANDERE MITTEL MIT WIRKUNG AUF DAS RENIN- ANGIOTENSIN-SYSTEM	FALSE
N06A	ANTIDEPRESSIVA	FALSE
N07X	ANDERE MITTEL FÜR DAS NERVENSYSTEM	TRUE
R05	HUSTEN- UND ERKÄLTUNGSPRÄPARATE	FALSE

Table 102: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose G10-G13.

E.74. Diagnose N80-N98: Nichtentzündliche Krankheiten des weiblichen Genitaltraktes

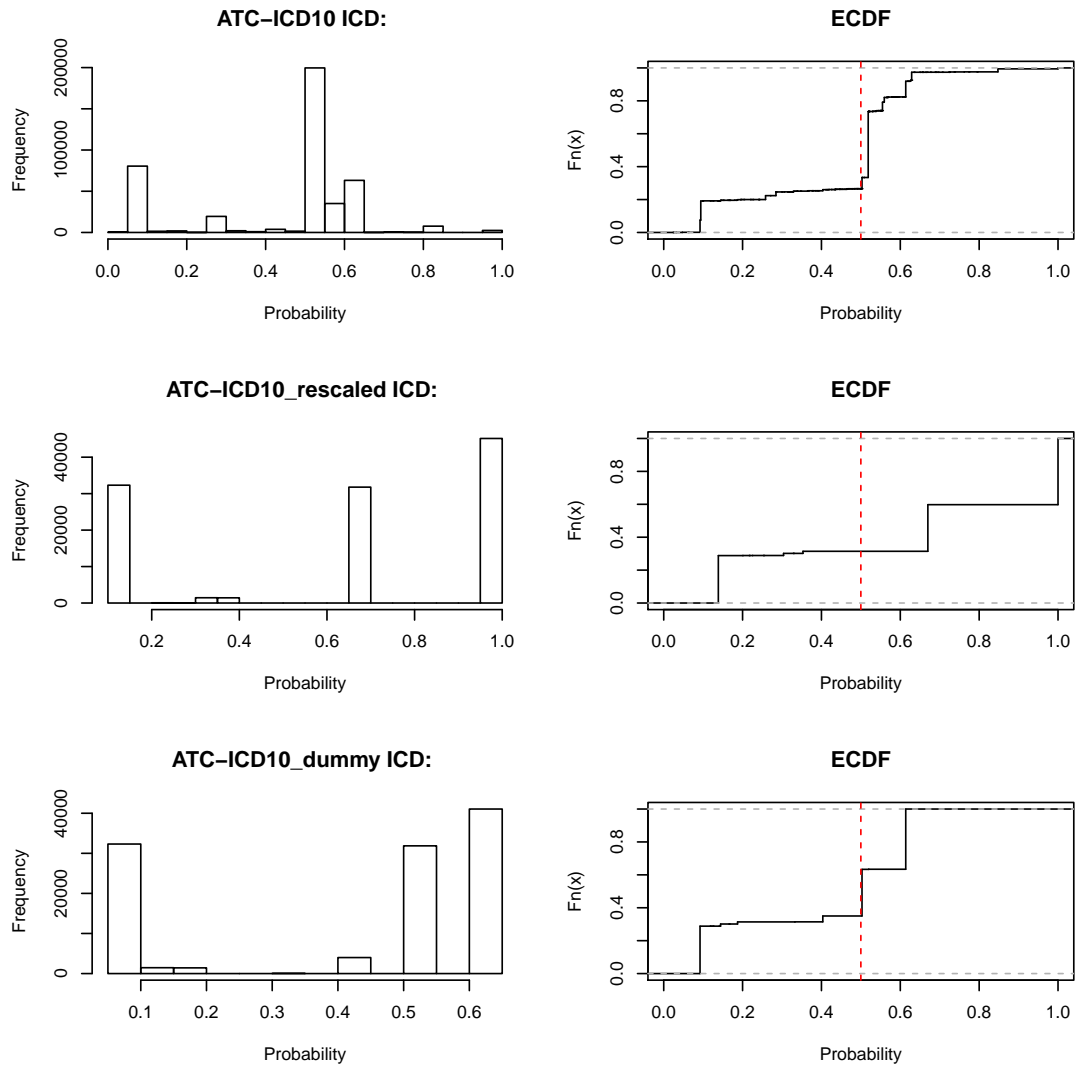


Figure 198: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group N80-N98.

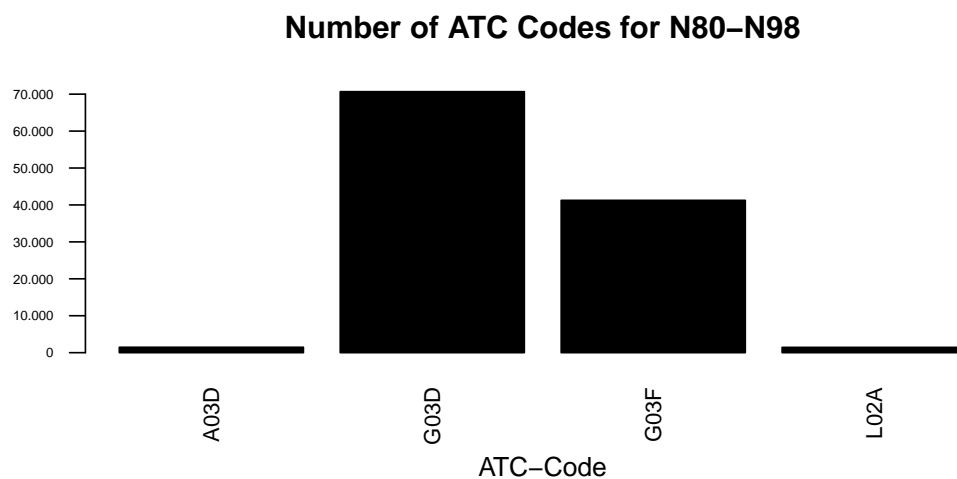
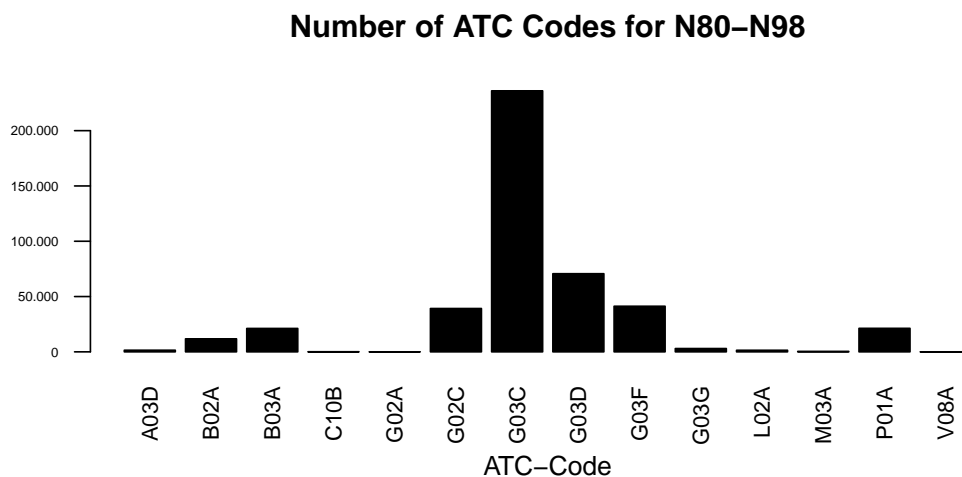


Figure 199: This figure shows the frequency of the underlying ATC codes for the given diagnose group N80-N98. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
A03D	SPASMOLYTIKA IN KOMBINATION MIT ANALGETIKA	TRUE
B02A	ANTIFIBRINOLYTIKA	FALSE
B03A	EISEN-HALTIGE ZUBEREITUNGEN	FALSE
C10B	MITTEL, DIE DEN LIPIDSTOFFWECHSEL BEEINFLUSSEN, KOMBINATIONEN	FALSE
G02A	WEHEN FÖRDERNDE MITTEL	FALSE
G02C	ANDERE GYNÄKOLOGIKA	FALSE
G03C	ESTROGENE	FALSE
G03D	GESTAGENE	TRUE
G03F	GESTAGENE UND ESTROGENE IN KOMBINATION	TRUE
G03G	GONADOTROPINE UND ANDERE OVULATION-SAUSLÖSER	FALSE
L02A	HORMONE UND VERWANDTE MITTEL	TRUE
M03A	MUSKELRELAXANZIEN, PERIPHER WIRKENDE MITTEL	FALSE
P01A	MITTEL GEGEN AMÖBEN UND ANDERE PROTOZOEN-ERKRANKUNGEN	FALSE
V08A	RÖNTGENKONTRASTMITTEL, IOD-HALTIG	FALSE

Table 103: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose N80-N98.

E.75. Diagnose B00-B09: Virusinfektionen, die durch Haut- und Schleimhautläsionen gekennzeichnet sind

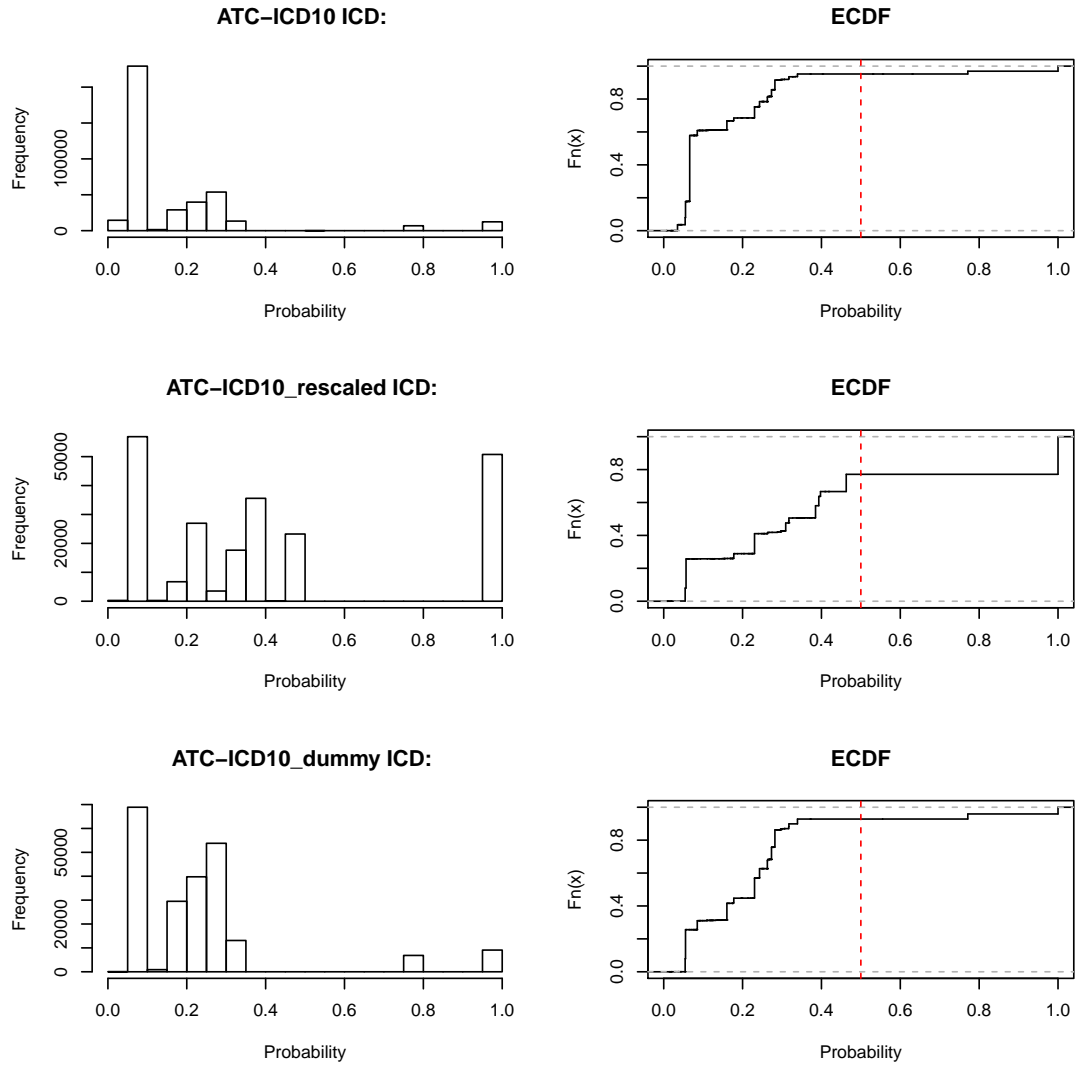


Figure 200: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group B00-B09.

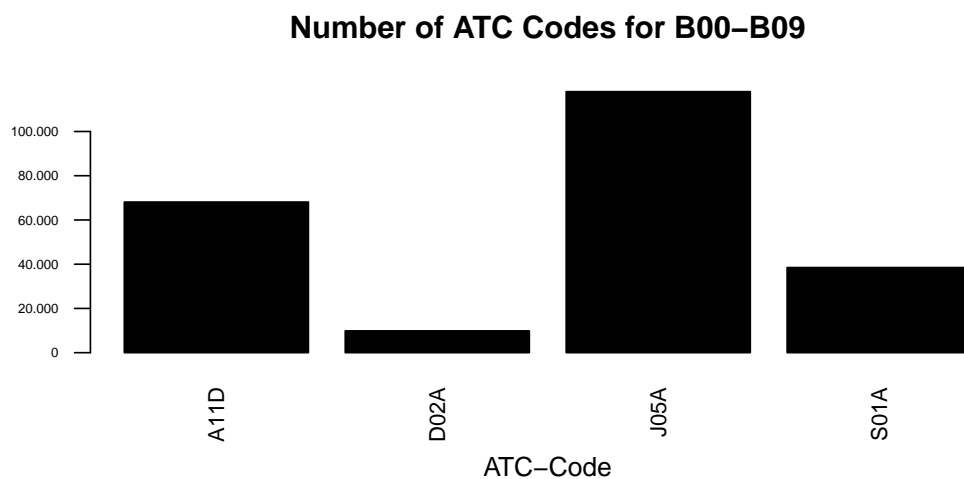
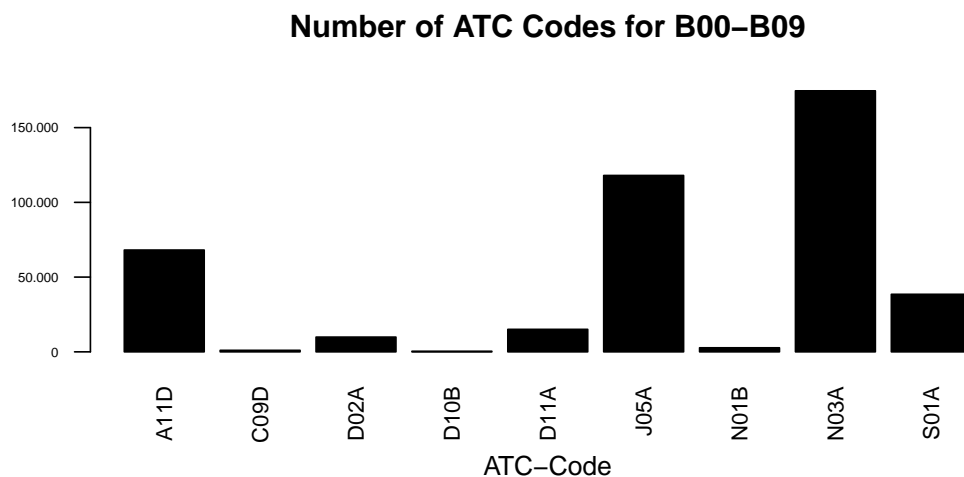


Figure 201: This figure shows the frequency of the underlying ATC codes for the given diagnose group B00-B09. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
A11D	VITAMIN-B1, REIN UND IN KOMBINATION MIT VITAMIN-B6 UND VITAMIN-B12	TRUE
C09D	ANGIOTENSIN-II-ANTAGONISTEN, KOMBINATIONEN	FALSE
D02A	EMMOLENTIA UND HAUTSCHUTZMITTEL	TRUE
D10B	AKNEMITTEL ZUR SYSTEMISCHEN ANWENDUNG	FALSE
D11A	ANDERE DERMATIKA	FALSE
J05A	DIREKT WIRKENDE ANTIVIRALE MITTEL	TRUE
N01B	LOKALANÄSTHETIKA	FALSE
N03A	ANTIPILEPTIKA	FALSE
S01A	ANTIINFEKTIVA	TRUE

Table 104: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose B00-B09.

E.76. Diagnose E15-E16: Sonstige Störungen der Blutglukose-Regulation und der inneren Sekretion des Pankreas

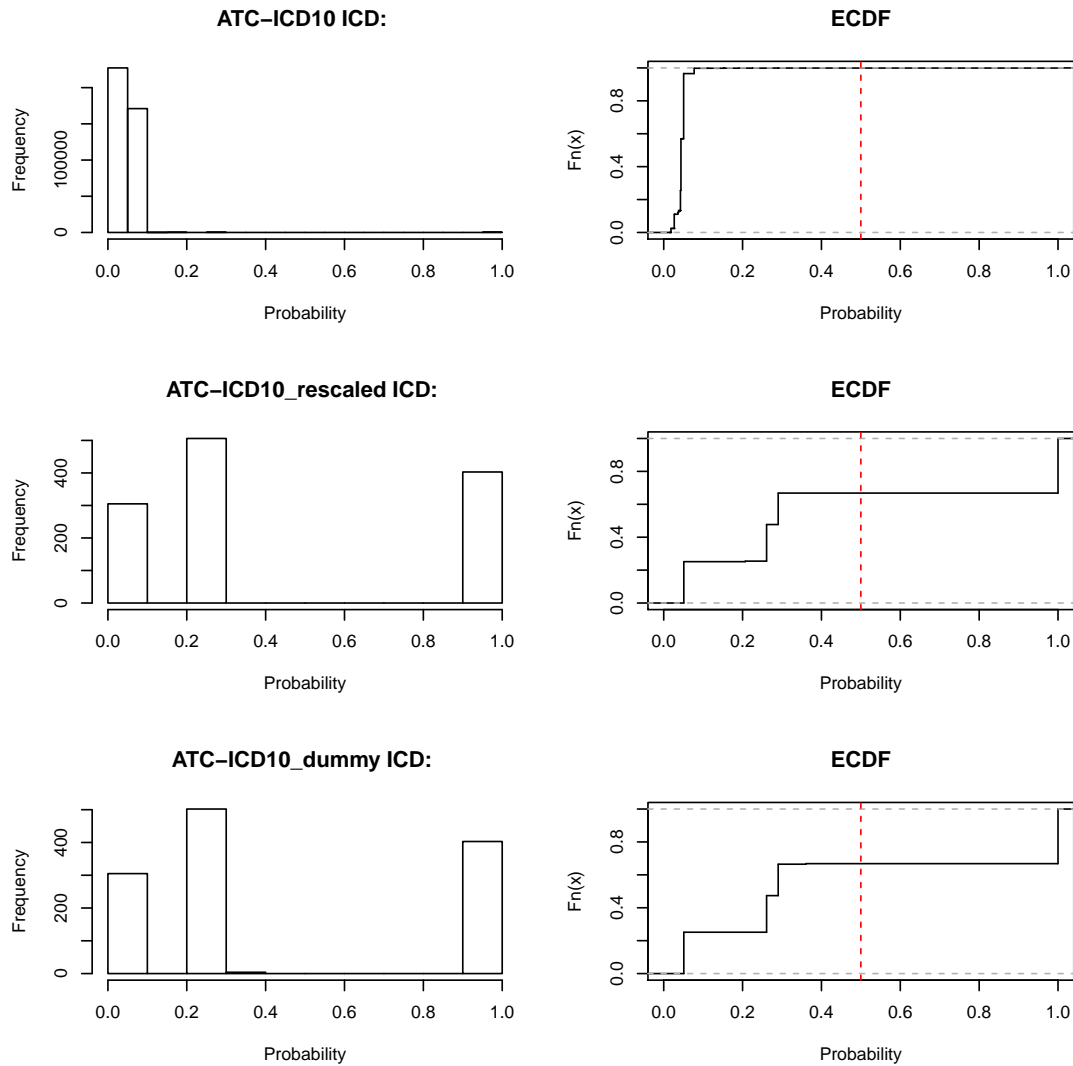
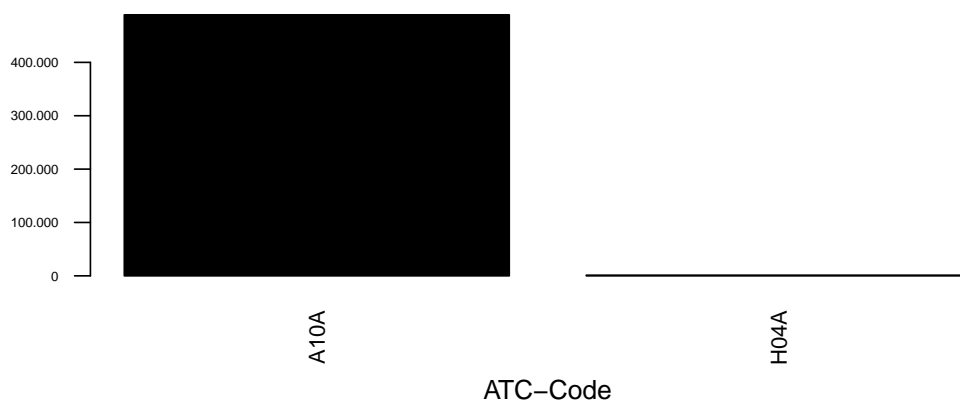


Figure 202: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group E15-E16.

Number of ATC Codes for E15–E16



Number of ATC Codes for E15–E16

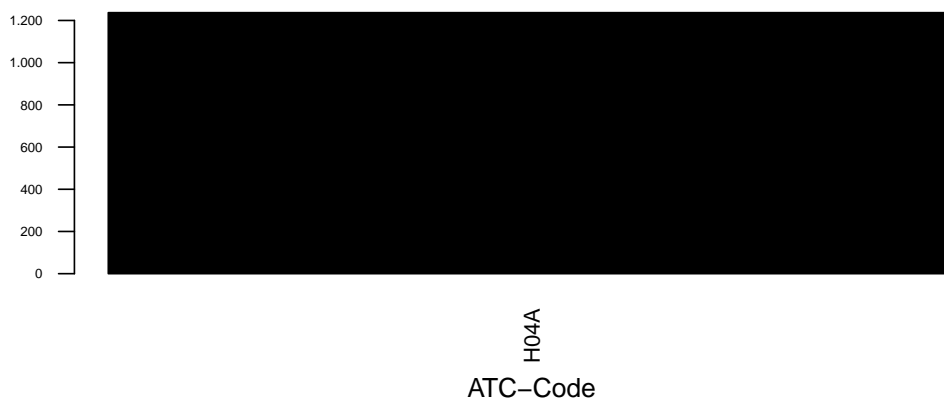


Figure 203: This figure shows the frequency of the underlying ATC codes for the given diagnose group E15-E16. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
A10A	INSULINE UND ANALOGA	FALSE
H04A	GLYKOGENOLYTISCHE HORMONE	TRUE

Table 105: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose E15-E16.

E.77. Diagnose G60-G64: Polyneuropathien und sonstige Krankheiten des peripheren Nervensystems

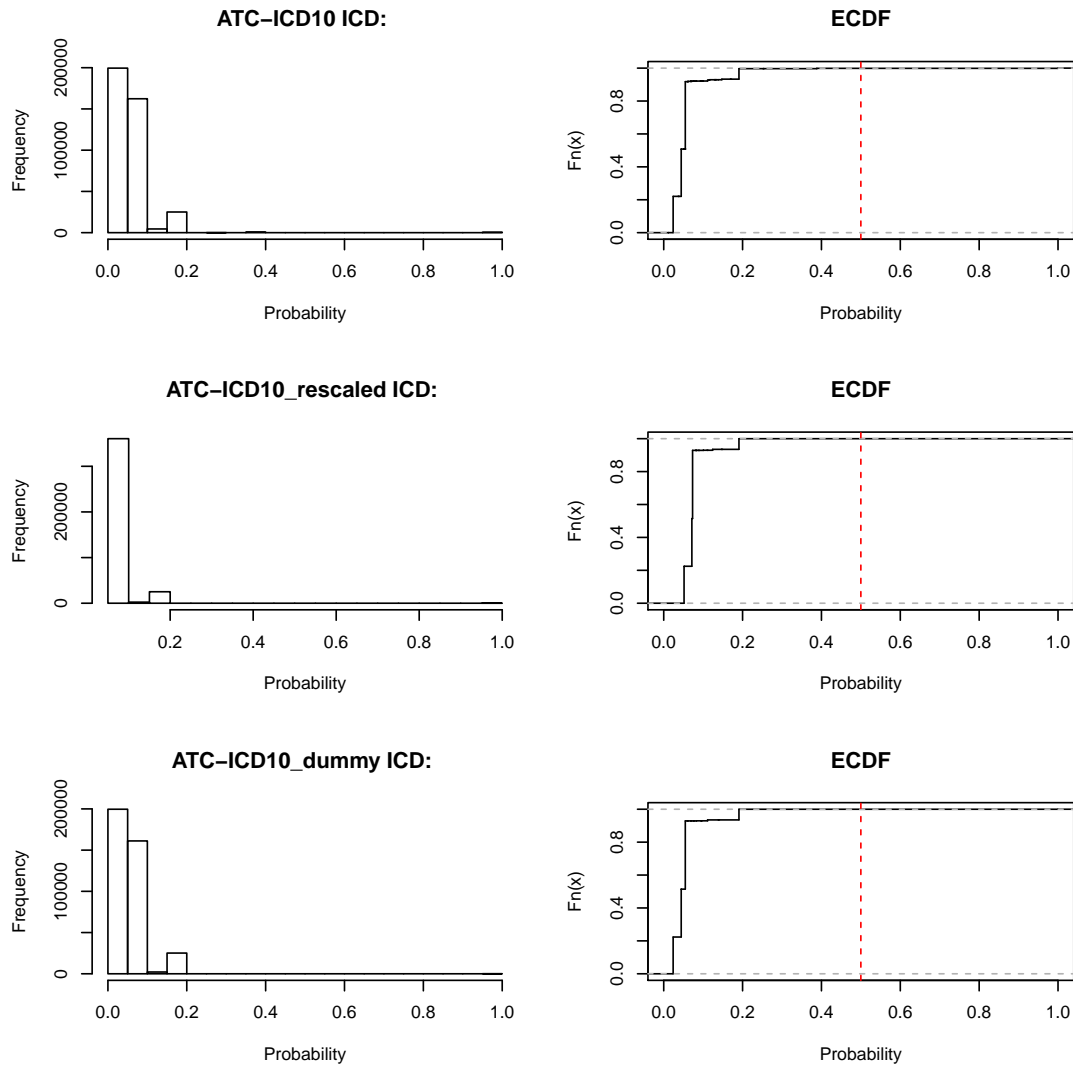
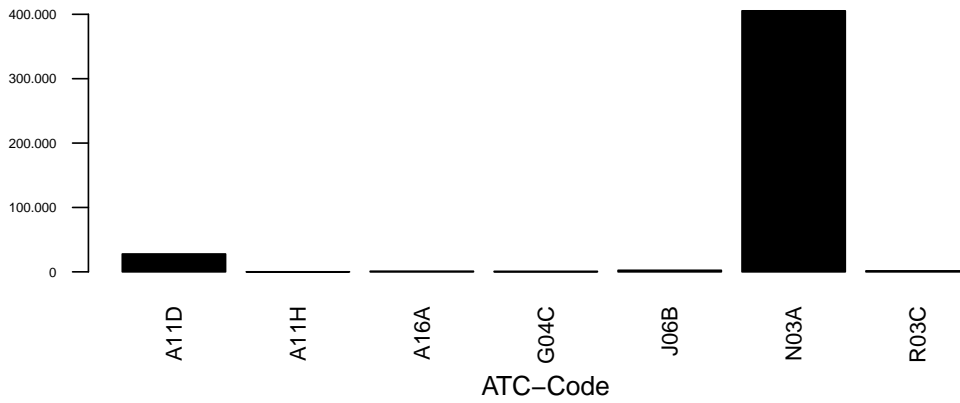


Figure 204: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group G60-G64.

Number of ATC Codes for G60–G64



Number of ATC Codes for G60–G64

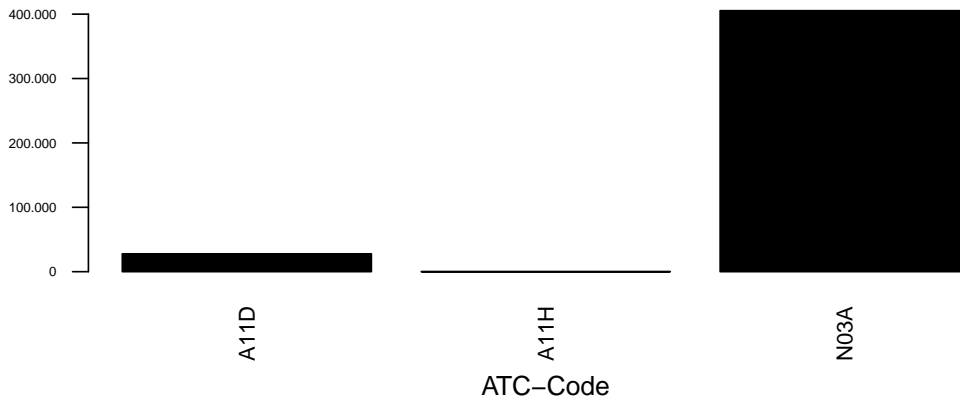


Figure 205: This figure shows the frequency of the underlying ATC codes for the given diagnose group G60-G64. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
A11D	VITAMIN-B1, REIN UND IN KOMBINATION MIT VITAMIN-B6 UND VITAMIN-B12	TRUE
A11H	ANDERE VITAMINPRÄPARATE, REIN	TRUE
A16A	ANDERE MITTEL FÜR DAS ALIMENTÄRE SYSTEM UND DEN STOFFWECHSEL	FALSE
G04C	MITTEL BEI BENIGNER PROSTATAHYPERPLASIE	FALSE
J06B	IMMUNGLOBULINE	FALSE
N03A	ANTIEPILEPTIKA	TRUE
R03C	SYMPATHOMIMETIKA ZUR SYSTEMISCHEN ANWENDUNG	FALSE

Table 106: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose G60-G64.

E.78. Diagnose L60-L75: Krankheiten der Hautanhangsgebilde

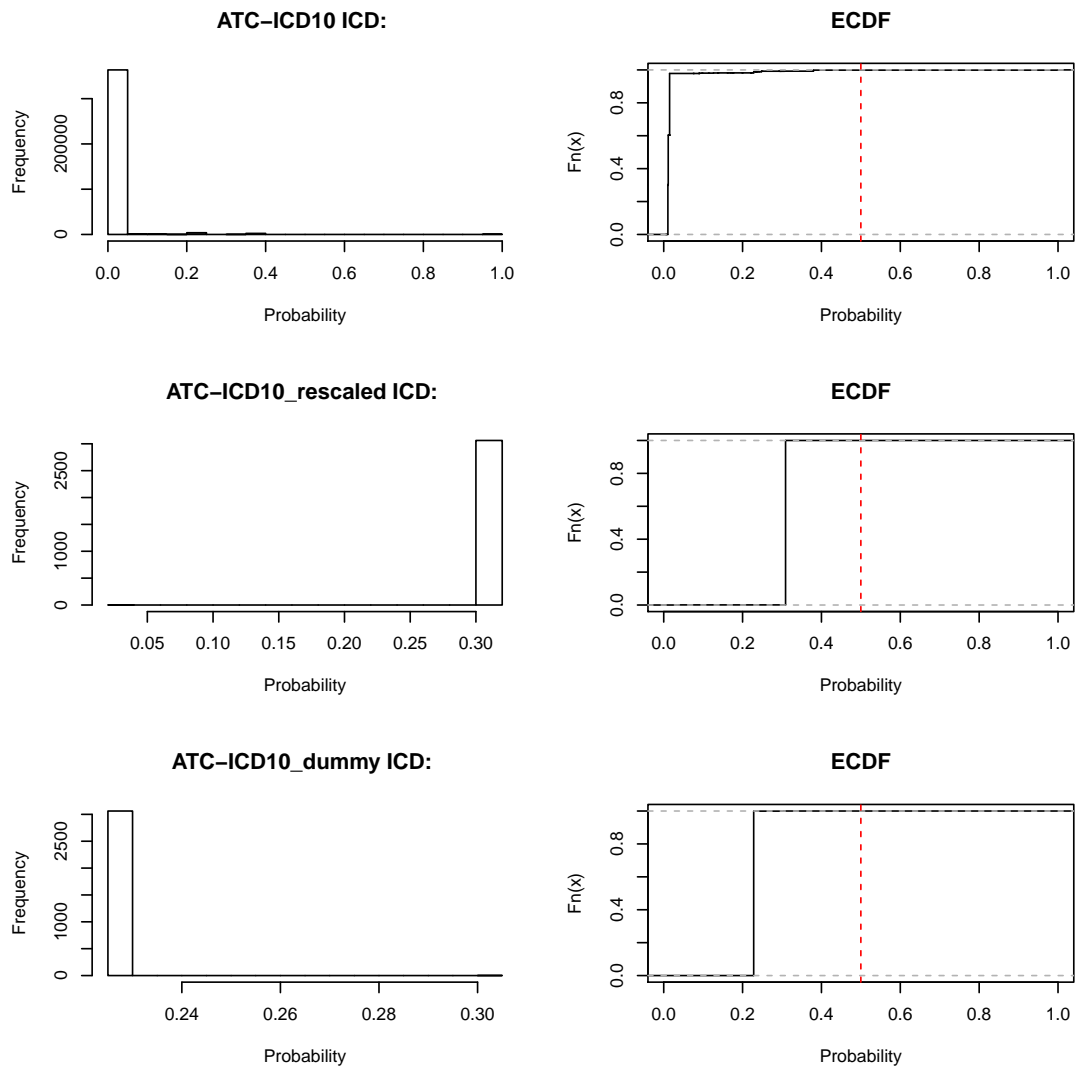


Figure 206: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group L60-L75.

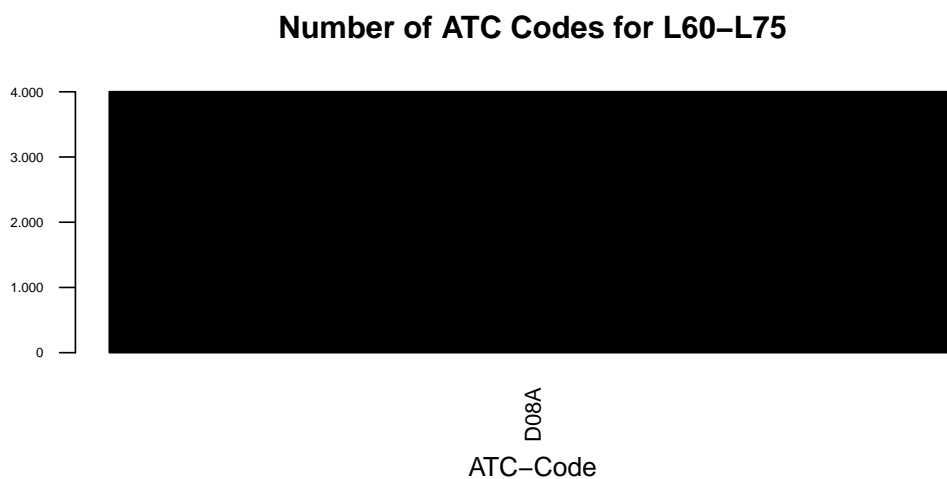
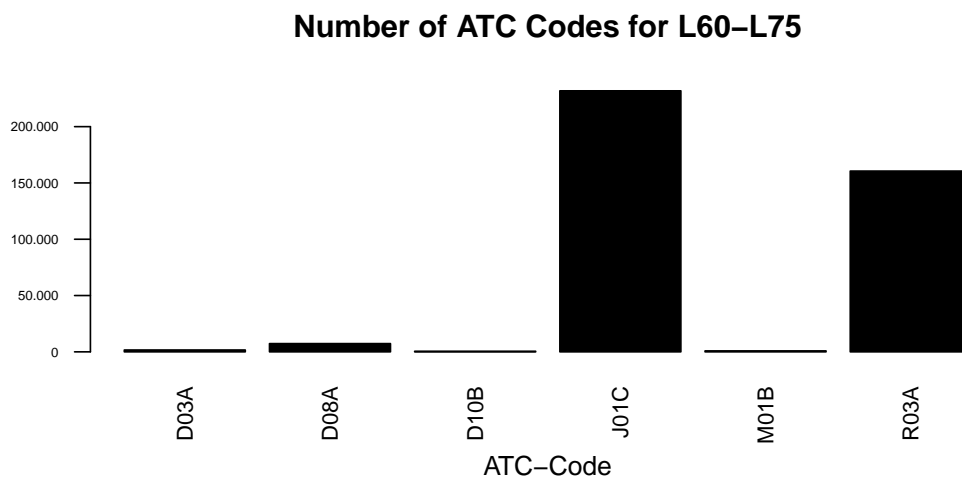


Figure 207: This figure shows the frequency of the underlying ATC codes for the given diagnose group L60-L75. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
D03A	Wundbehandlungsmittel	FALSE
D08A	ANTISEPTIKA UND DESINFEKTIONSMITTEL	TRUE
D10B	AKNEMITTEL ZUR SYSTEMISCHEN ANWENDUNG	FALSE
J01C	BETALACTAM-ANTIBIOTIKA, PENICILLINE	FALSE
M01B	ANTIPHLOGISTIKA/ANTIRHEUMATIKA IN KOMBINATION	FALSE
R03A	Inhalative Sympathomimetika	FALSE

Table 107: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose L60-L75.

E.79. Diagnose R20-R23: Symptome, die die Haut und das Unterhautgewebe betreffen

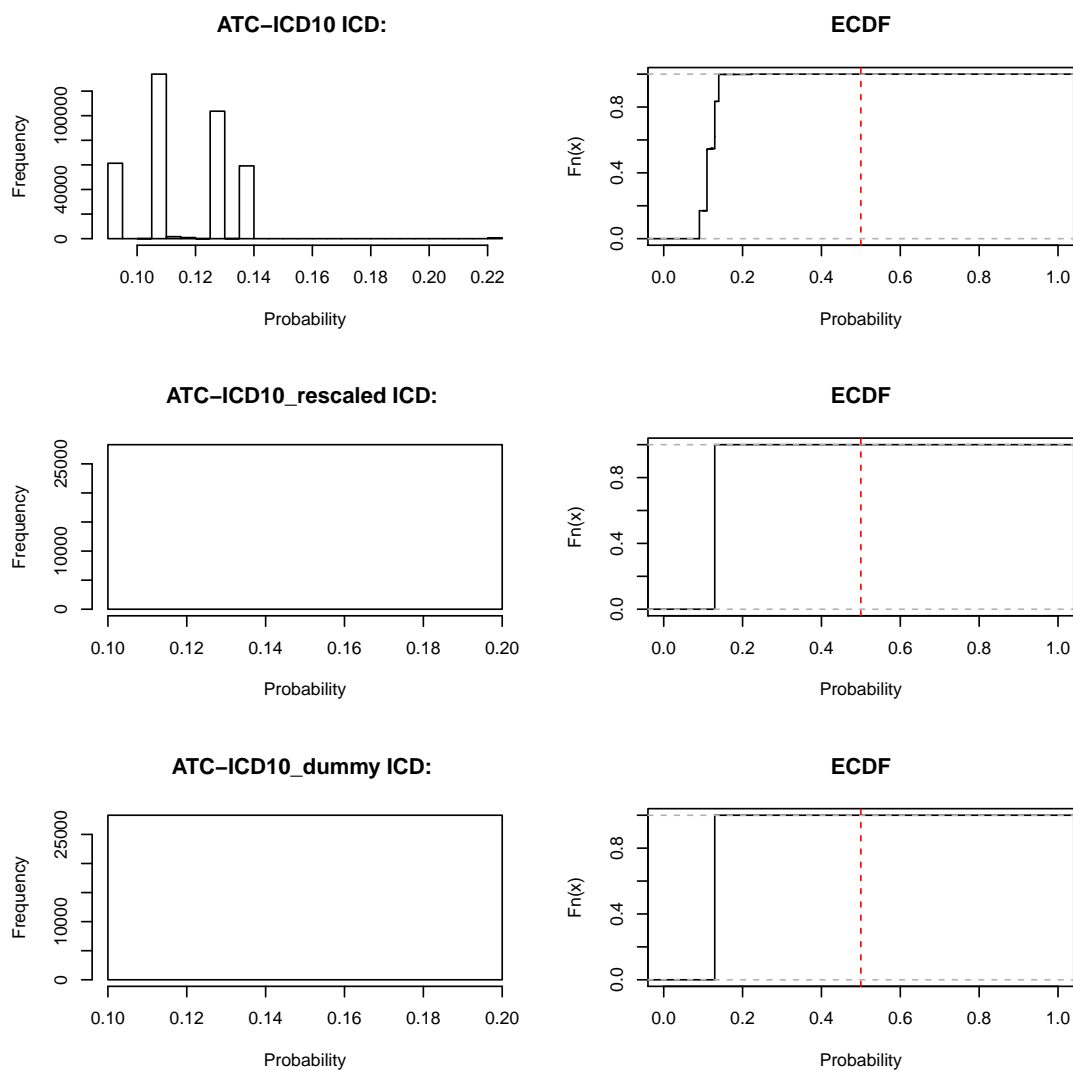
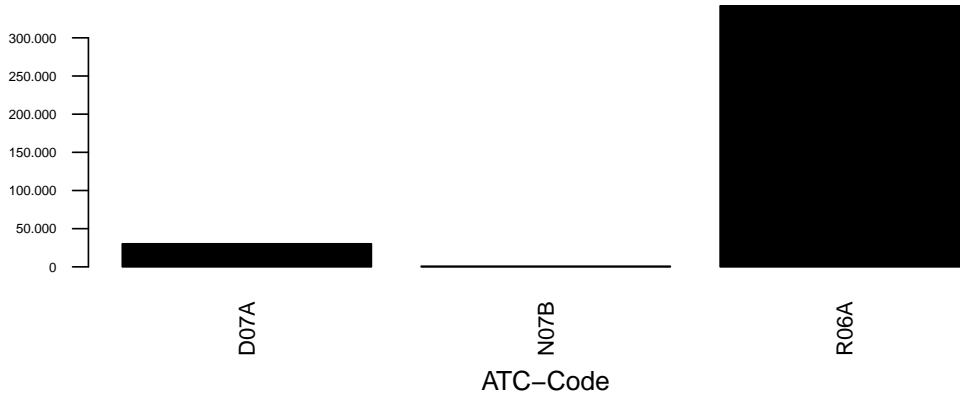


Figure 208: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group R20-R23.

Number of ATC Codes for R20–R23



Number of ATC Codes for R20–R23

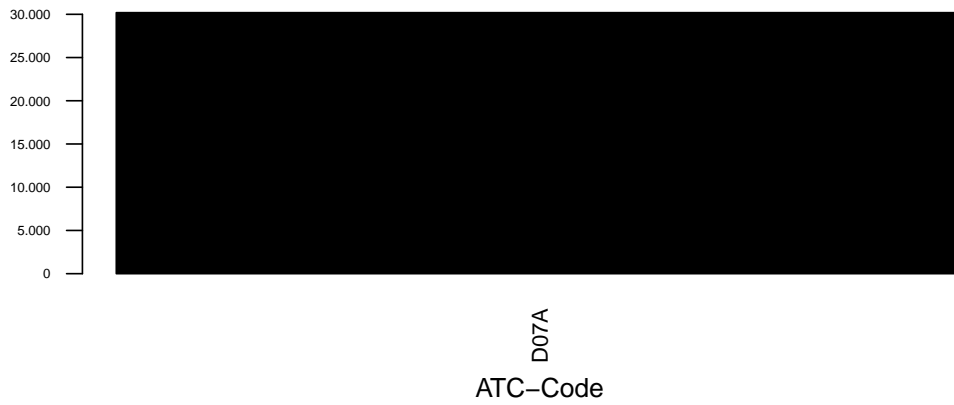


Figure 209: This figure shows the frequency of the underlying ATC codes for the given diagnose group R20-R23. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
D07A	CORTICOSTEROIDE, REIN	TRUE
N07B	MITTEL ZUR BEHANDLUNG VON SUCHTERKRANKUN- GEN	FALSE
R06A	ANTIISTAMINIKA ZUR SYSTEMISCHEN ANWENDUNG	FALSE

Table 108: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose R20-R23.

E.80. Diagnose D60-D64: Aplastische und sonstige Anämien

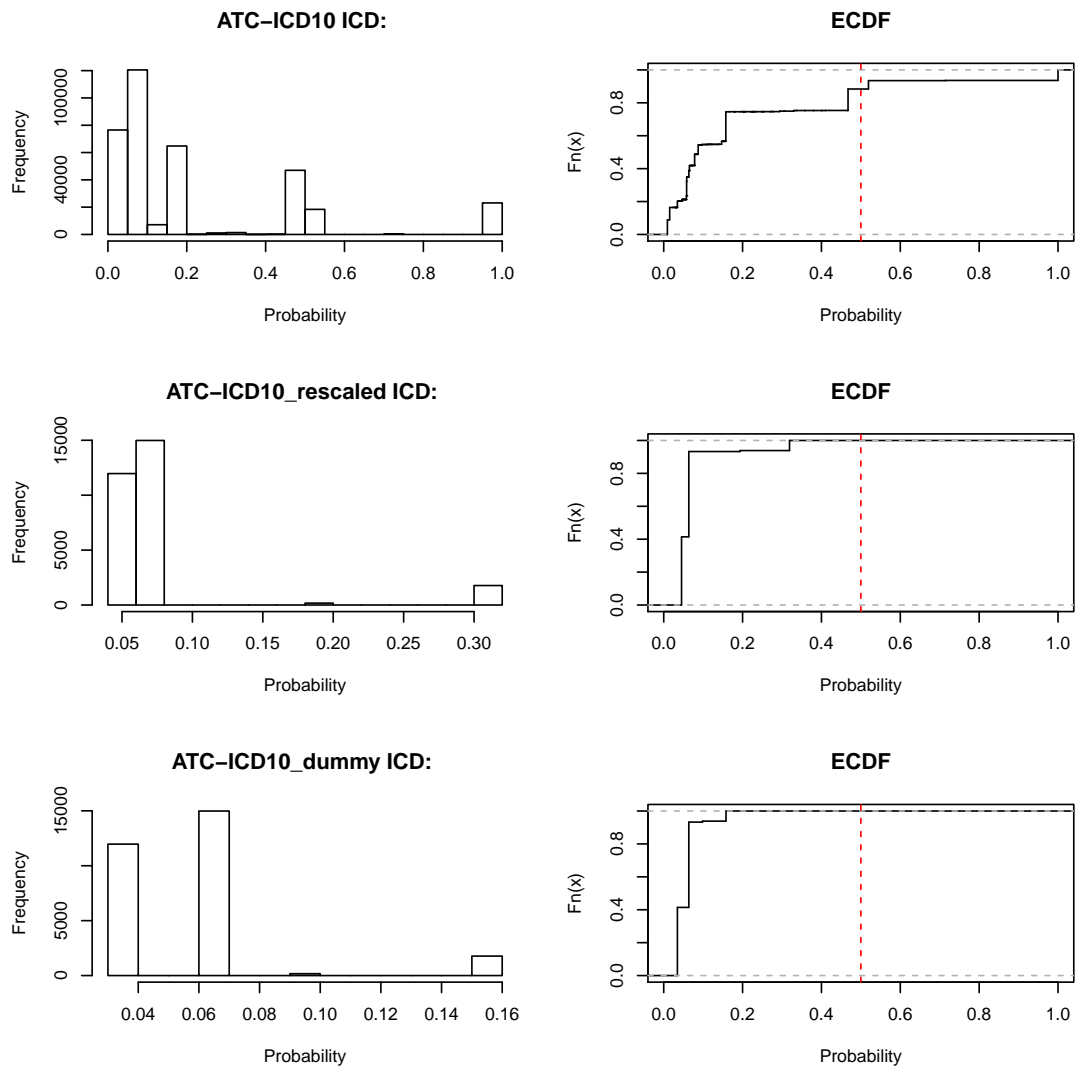


Figure 210: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group D60-D64.

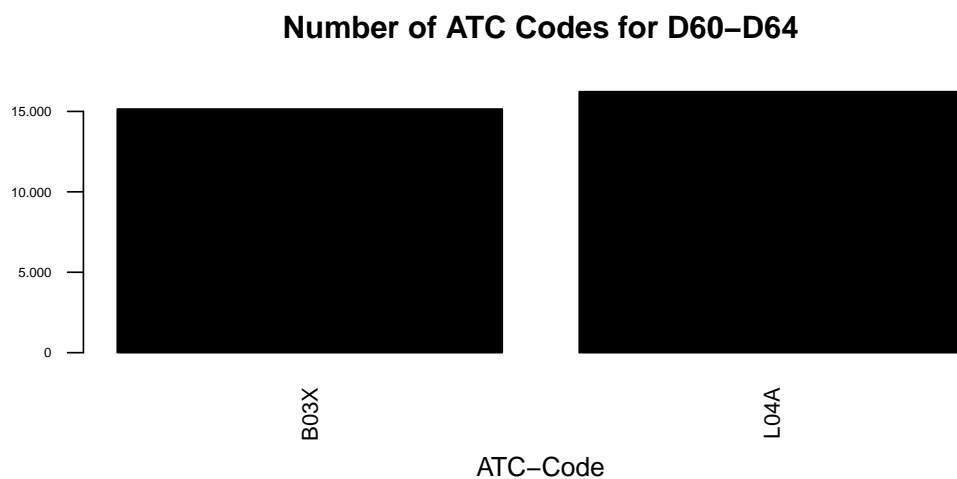
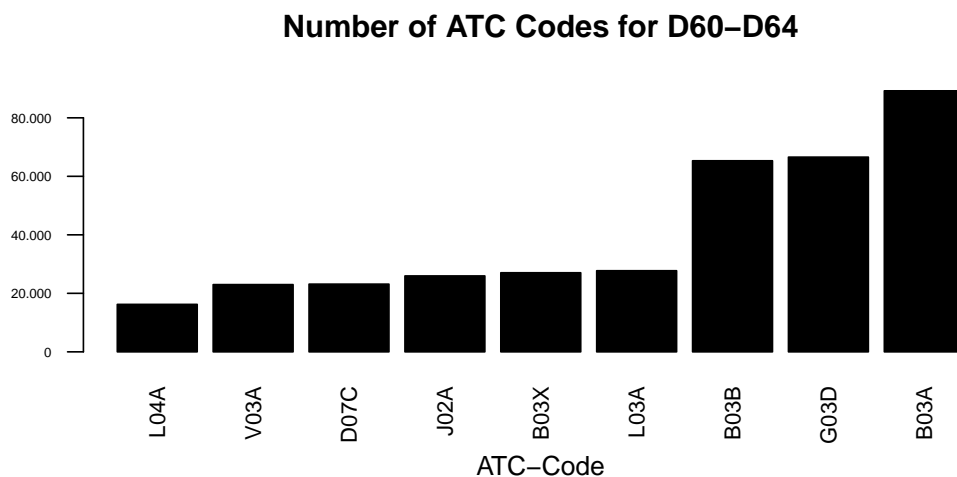


Figure 211: This figure shows the frequency of the underlying ATC codes for the given diagnose group D60-D64. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions. There are 16 ATC-Codes that related to the Diagnosis D60-D64. In order to give a clear overview of the distribution of the ATC codes behind an ICD10 group only the ATCs are shown, which represent the 95% of the cumulative frequency.

ATC	Description	Expert
B03A	EISEN-HALTIGE ZUBEREITUNGEN	FALSE
B03B	VITAMIN-B12 UND FOLSÄURE	FALSE
B03X	ANDERE ANTIANÄMIKA	TRUE
D07C	CORTICOSTEROIDE, KOMBINATIONEN MIT ANTIBIOTIKA	FALSE
G03D	GESTAGENE	FALSE
J02A	Antimykotika zur systemischen Anwendung	FALSE
L03A	IMMUNSTIMULANZIEN	FALSE
L04A	IMMUNSUPPRESSIVA	TRUE
V03A	ALLE ÜBRIGEN THERAPEUTISCHEN MITTEL	FALSE

Table 109: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose D60-D64. There are 16 ATC-Codes that related to the Diagnosis D60-D64. In order to give a clear overview of the distribution of the ATC codes behind an ICD10 group only the ATCs are shown, which represent the 95% of the cumulative frequency.

E.81. Diagnose R00-R09: Symptome, die das Kreislaufsystem und das Atmungssystem betreffen

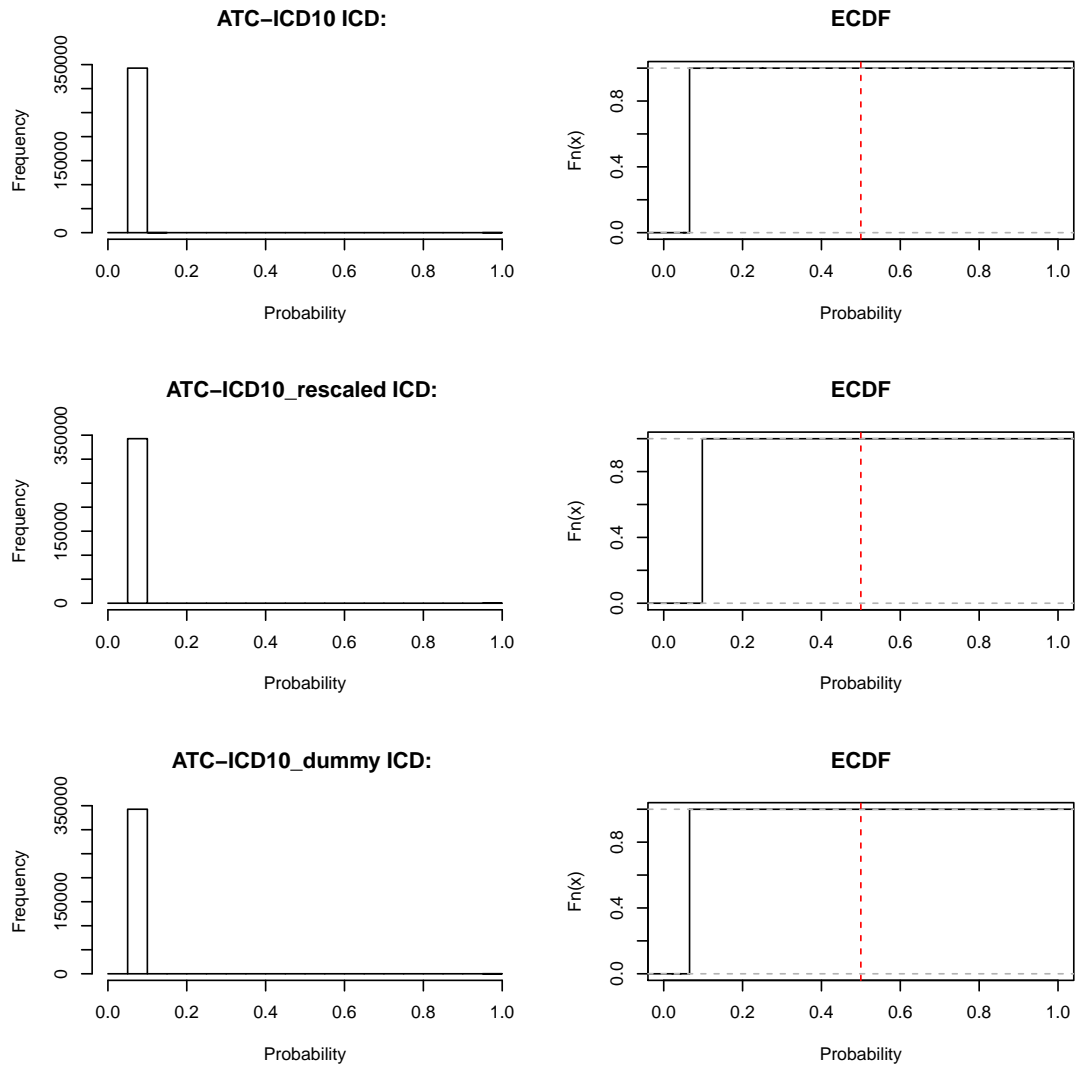
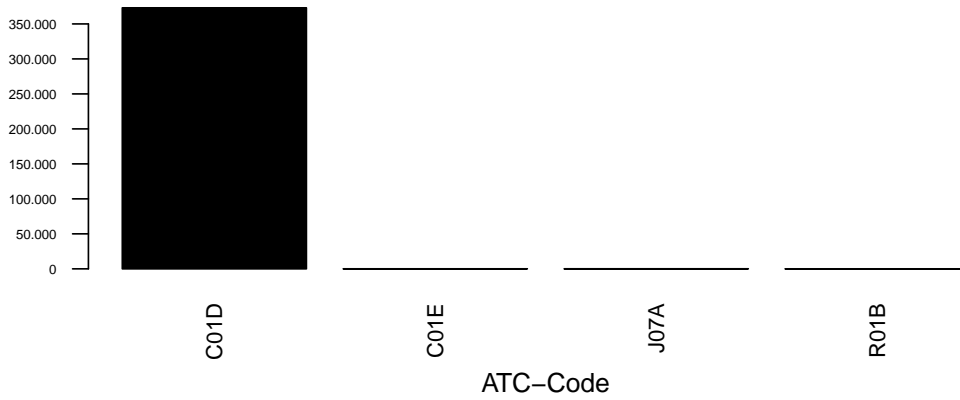


Figure 212: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group R00-R09.

Number of ATC Codes for R00–R09



Number of ATC Codes for R00–R09

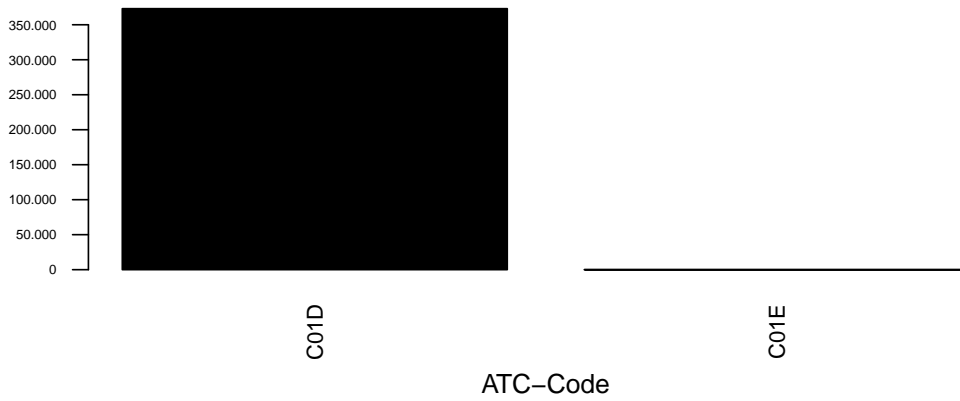


Figure 213: This figure shows the frequency of the underlying ATC codes for the given diagnose group R00-R09. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
C01D	BEI HERZERKRANKUNGEN EINGESETZTE VASODILATATOREN	TRUE
C01E	ANDERE HERZMITTEL	TRUE
J07A	BAKTERIELLE IMPFSTOFFE	FALSE
R01B	NASALE DEKONGESTIVA ZUR SYSTEMISCHEN ANWENDUNG	FALSE

Table 110: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose R00-R09.

E.82. Diagnose B15-B19: Virushepatitis

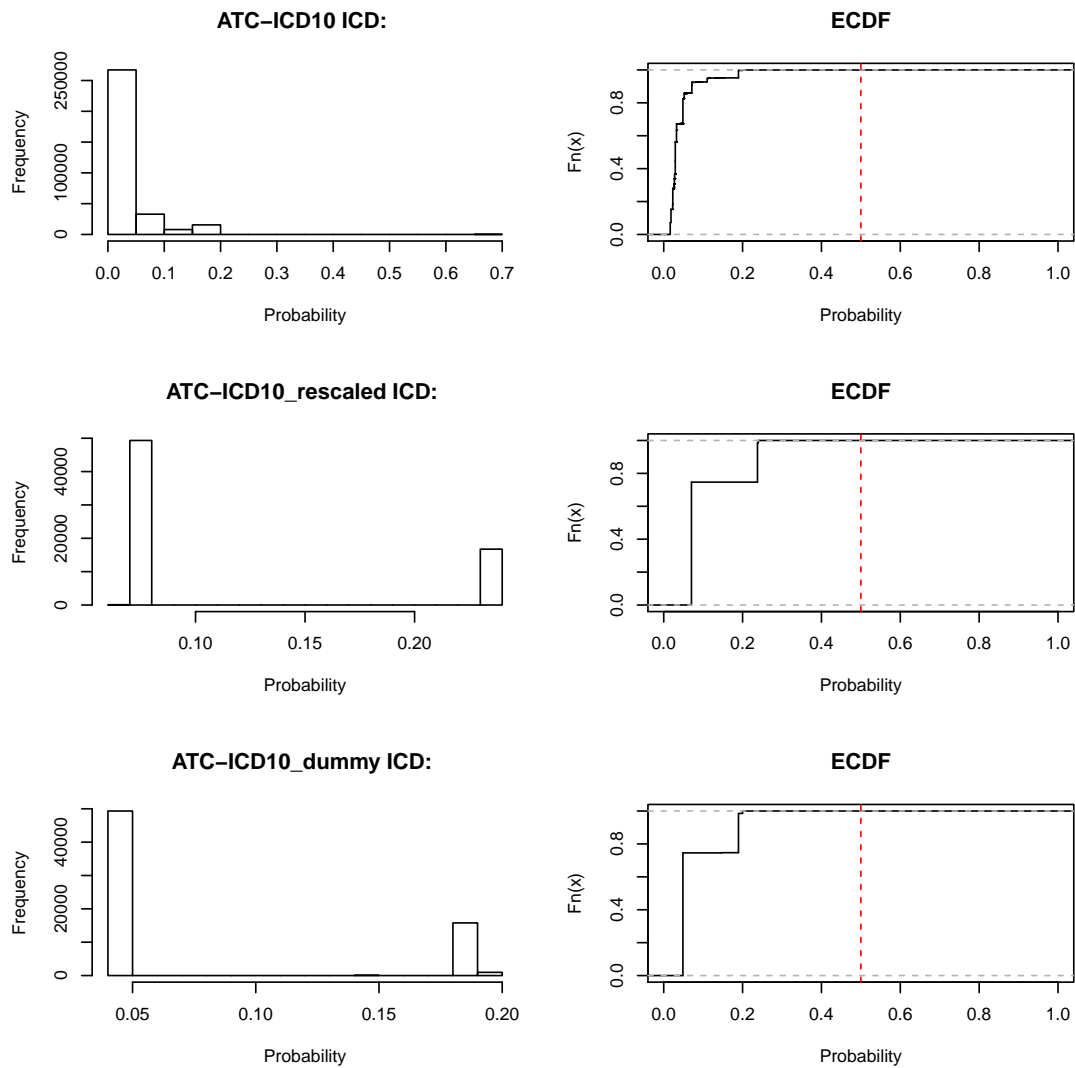


Figure 214: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group B15-B19.

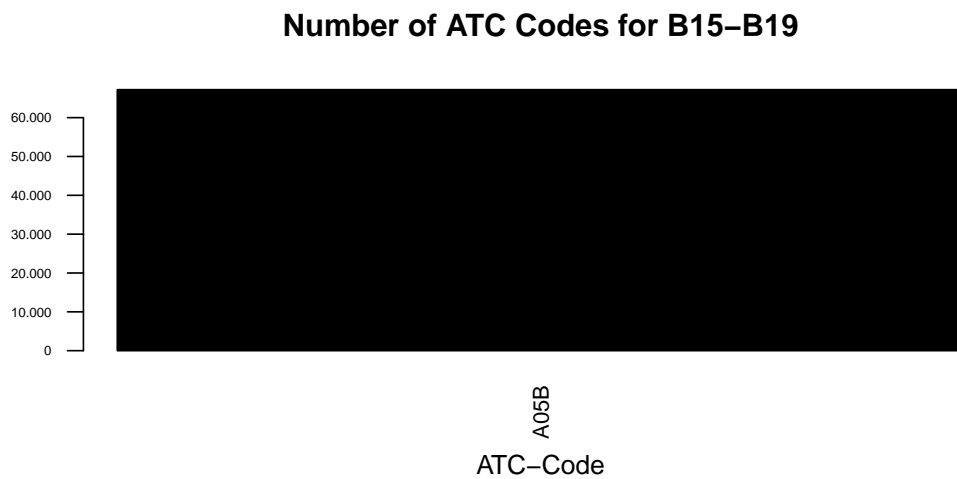
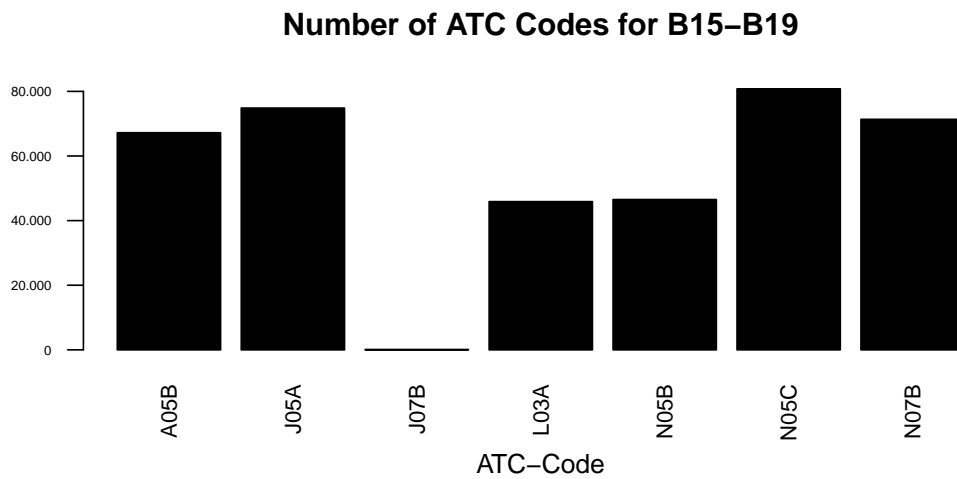


Figure 215: This figure shows the frequency of the underlying ATC codes for the given diagnose group B15-B19. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
A05B	LEBERTHERAPIE, LIPOTROPE SUBSTANZEN	TRUE
J05A	DIREKT WIRKENDE ANTIVIRALE MITTEL	FALSE
J07B	VIRALE IMPFSTOFFE	FALSE
L03A	IMMUNSTIMULANZIEN	FALSE
N05B	ANXIOLYTIKA	FALSE
N05C	HYPNOTIKA UND SEDATIVA	FALSE
N07B	MITTEL ZUR BEHANDLUNG VON SUCHTERKRANKUN- GEN	FALSE

Table 111: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose B15-B19.

E.83. Diagnose H46-H48: Affektionen des Nervus opticus und der Sehbahn

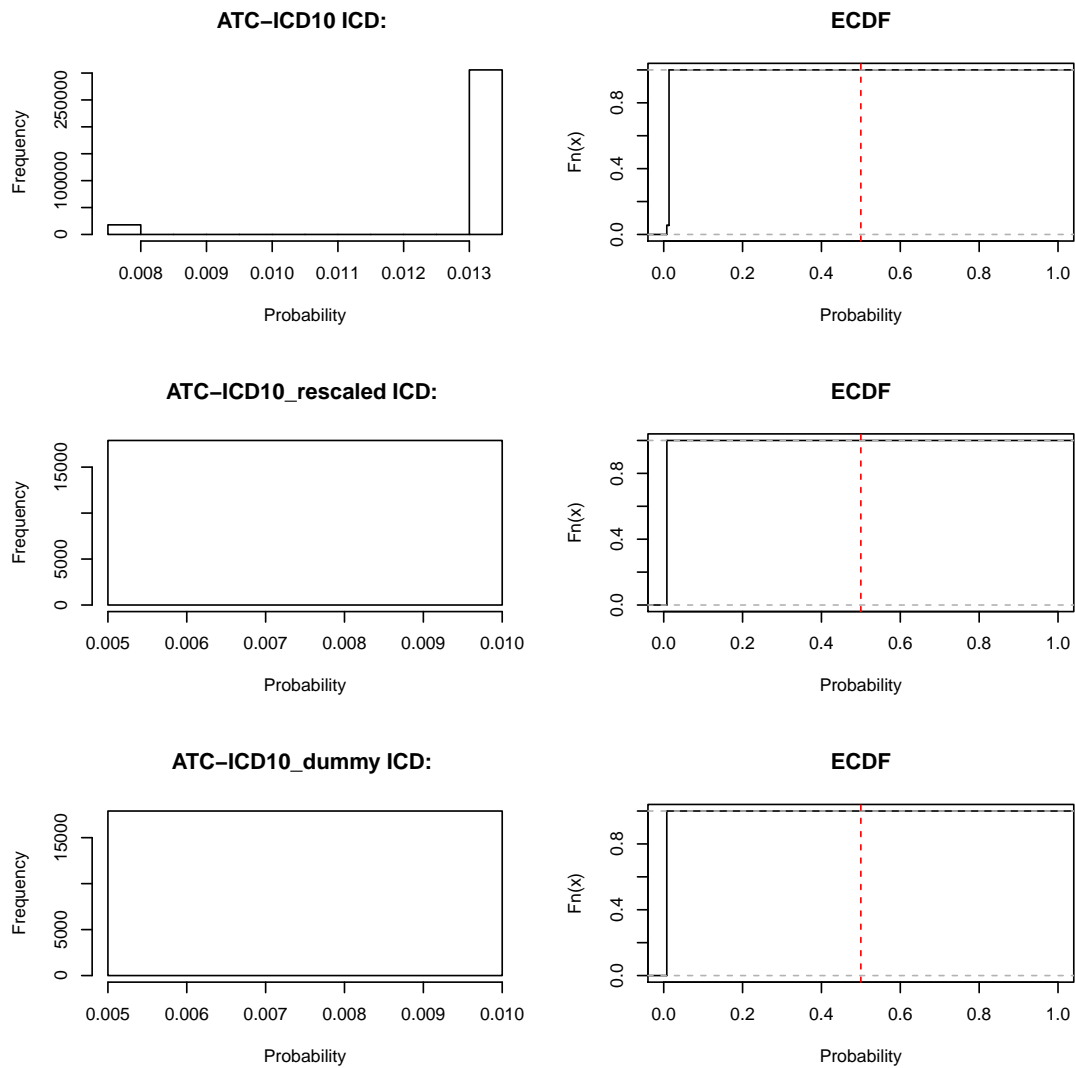
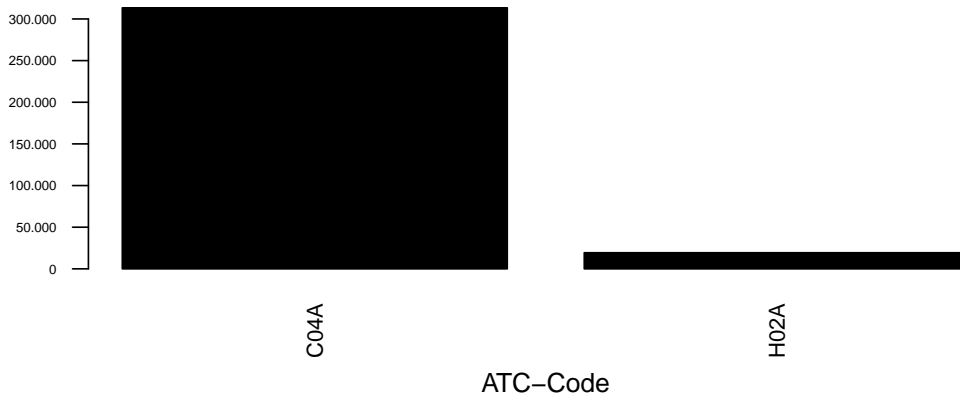


Figure 216: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group H46-H48.

Number of ATC Codes for H46–H48



Number of ATC Codes for H46–H48

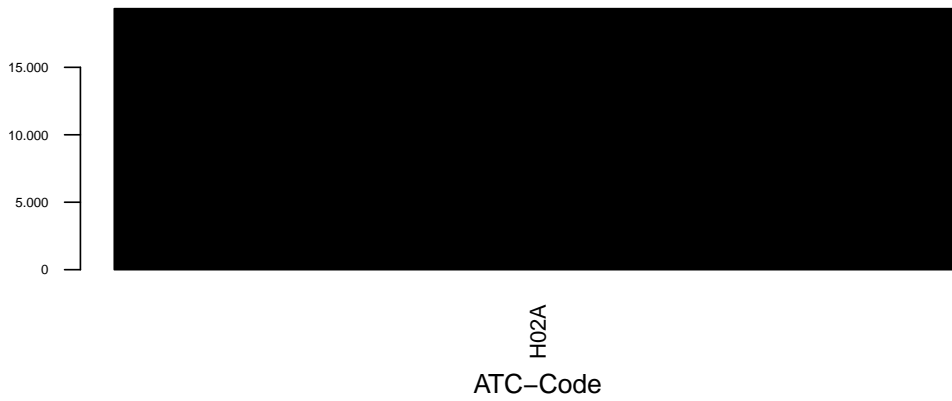


Figure 217: This figure shows the frequency of the underlying ATC codes for the given diagnose group H46-H48. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
C04A	PERIPHERE VASODILATATOREN	FALSE
H02A	CORTICOSTEROIDE ZUR SYSTEMISCHEN ANWENDUNG, REIN	TRUE

Table 112: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose H46-H48.

E.84. Diagnose C45-C49: Bösartige Neubildungen des mesothelialen Gewebes und des Weichteilgewebes

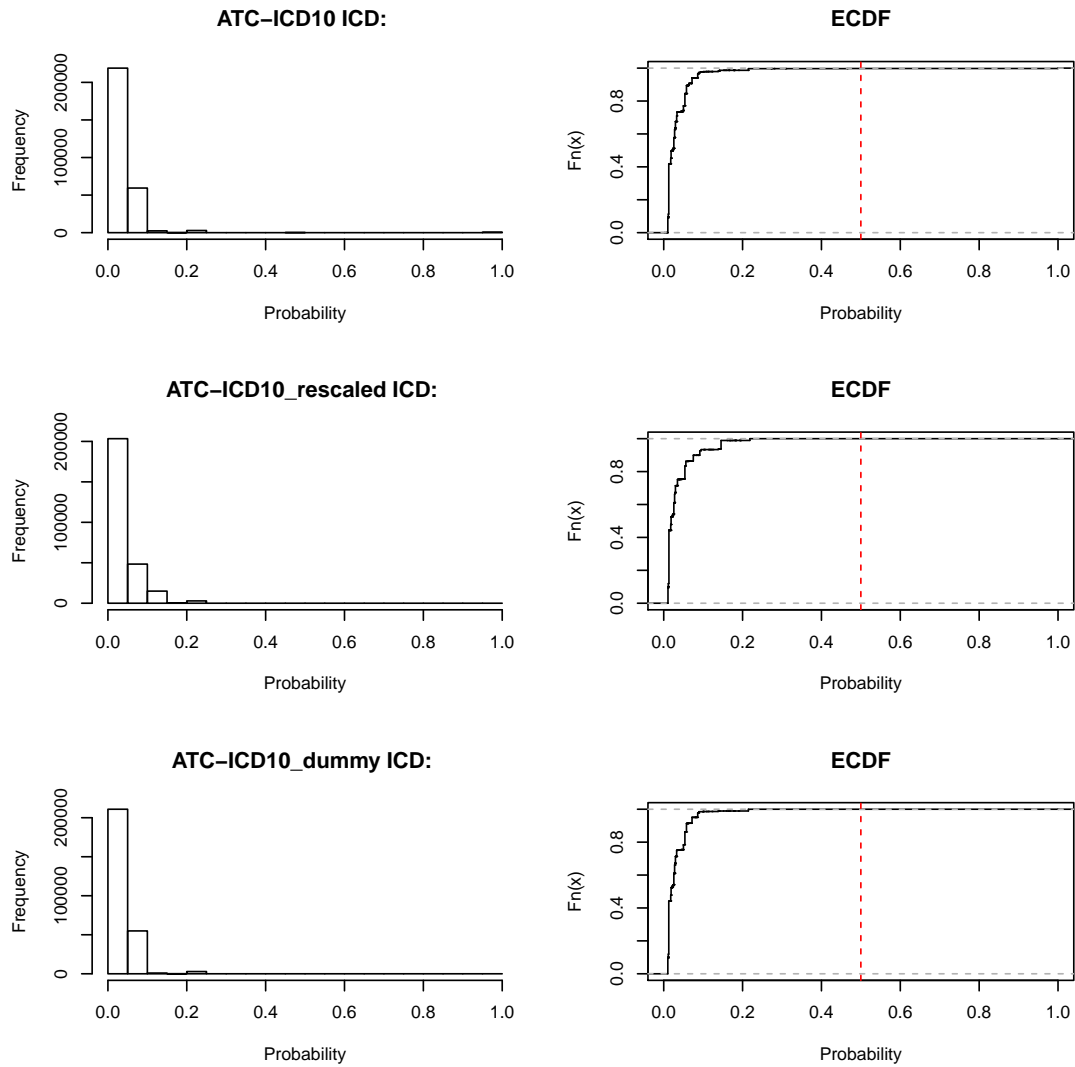


Figure 218: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group C45-C49.

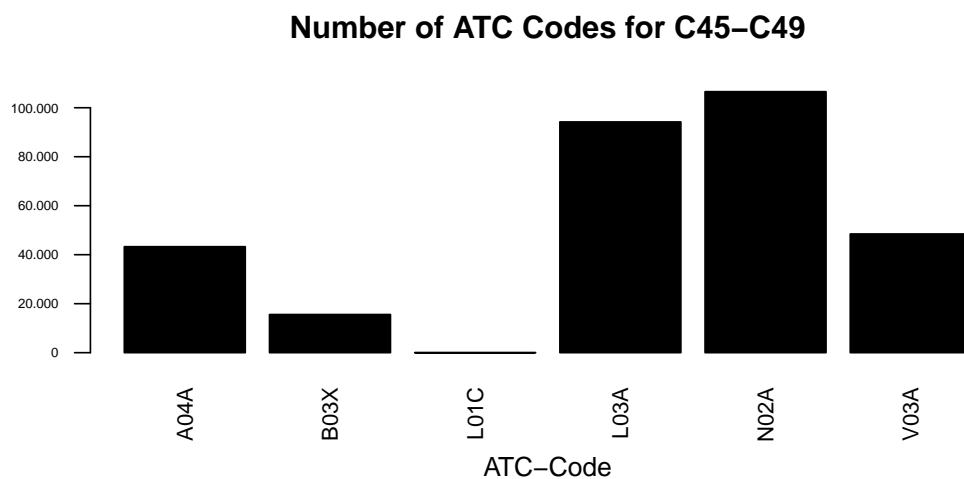
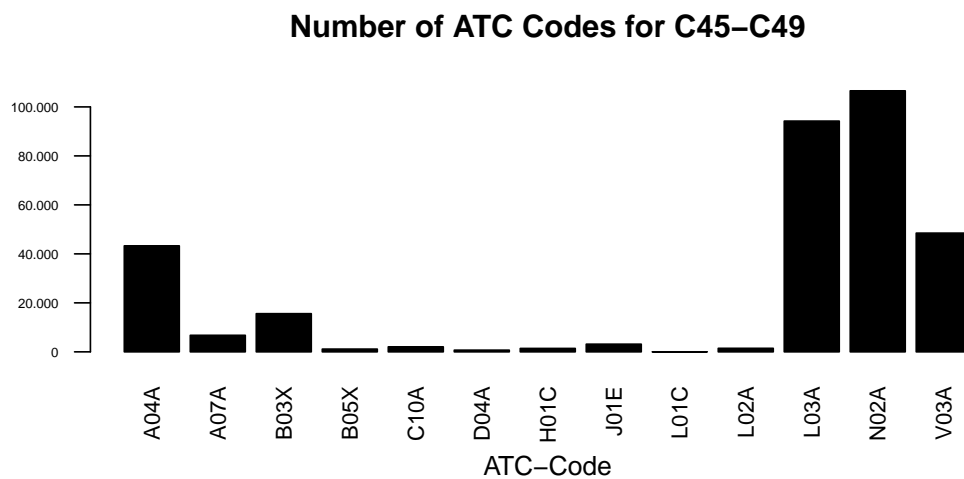


Figure 219: This figure shows the frequency of the underlying ATC codes for the given diagnose group C45-C49. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
A04A	ANTIEMETIKA UND MITTEL GEGEN ÜBELKEIT	TRUE
A07A	INTESTINALE ANTIINFEKTIVA	FALSE
B03X	ANDERE ANTIANÄMIKA	TRUE
B05X	ADDITIVA ZU I.V.-LÖSUNGEN	FALSE
C10A	MITTEL, DIE DEN LIPIDSTOFFWECHSEL BEEINFLUSSEN, REIN	FALSE
D04A	ANTIPRURIGINOSA, INKL. ANTIHISTAMINIKA, ANÄSTHETIKA, ETC.	FALSE
H01C	HYPOTHALAMUSHORMONE	FALSE
J01E	SULFONAMIDE UND TRIMETHOPRIM	FALSE
L01C	PFLANZLICHE ALKALOIDE UND ANDERE NATÜRLICHE MITTEL	TRUE
L02A	HORMONE UND VERWANDTE MITTEL	FALSE
L03A	IMMUNSTIMULANZIEN	TRUE
N02A	OPIOIDE	TRUE
V03A	ALLE ÜBRIGEN THERAPEUTISCHEN MITTEL	TRUE

Table 113: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose C45-C49.

E.85. Diagnose F50-F59: Verhaltensauffälligkeiten mit körperlichen Störungen und Faktoren

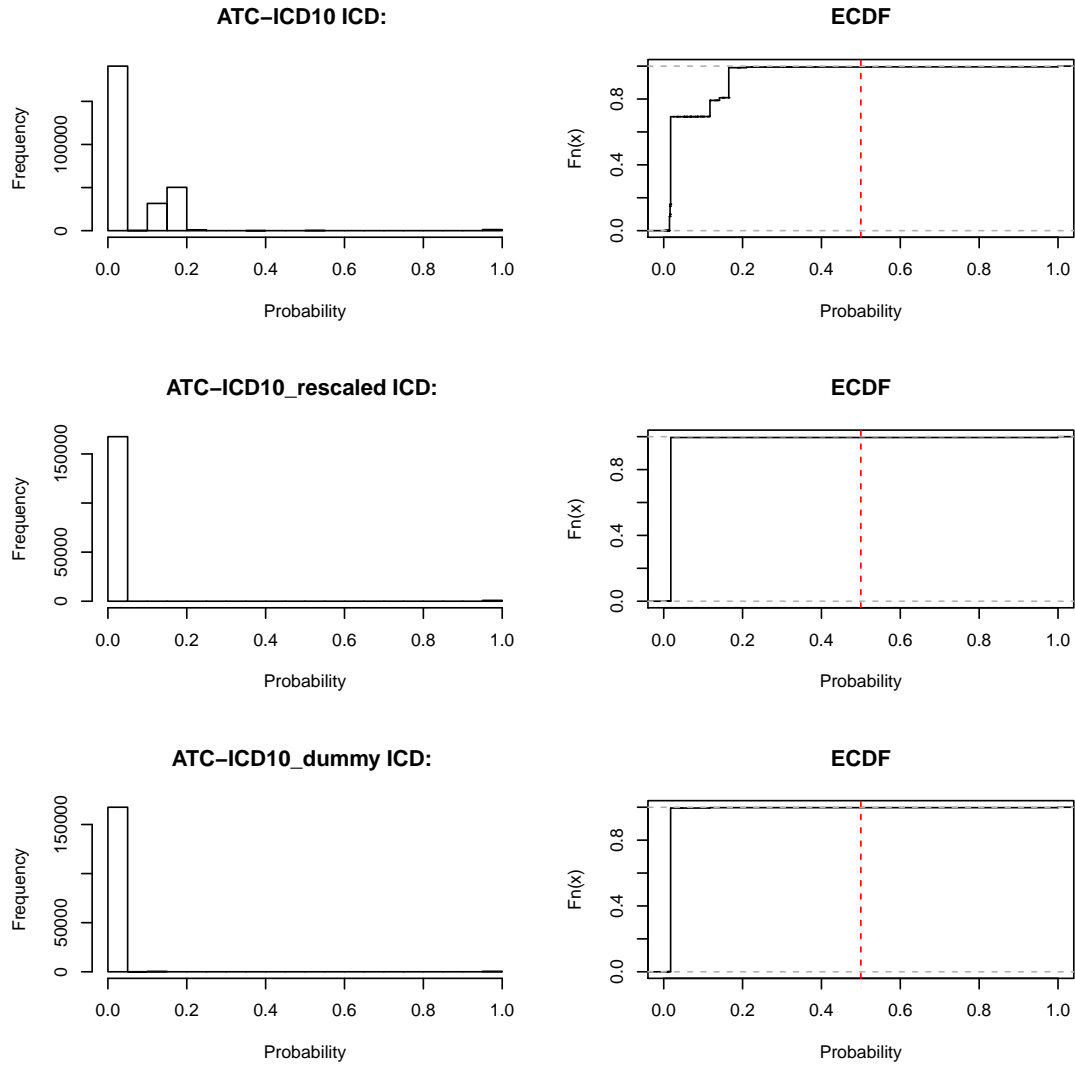


Figure 220: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group F50-F59.

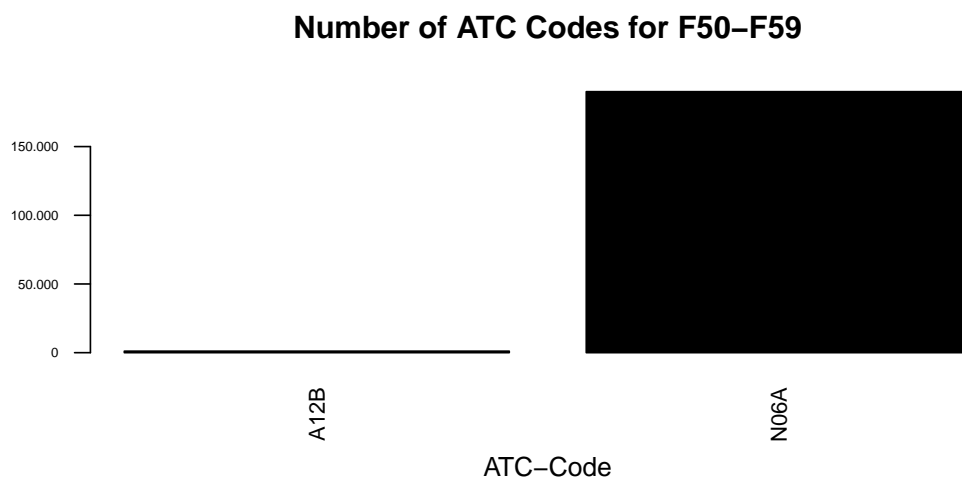
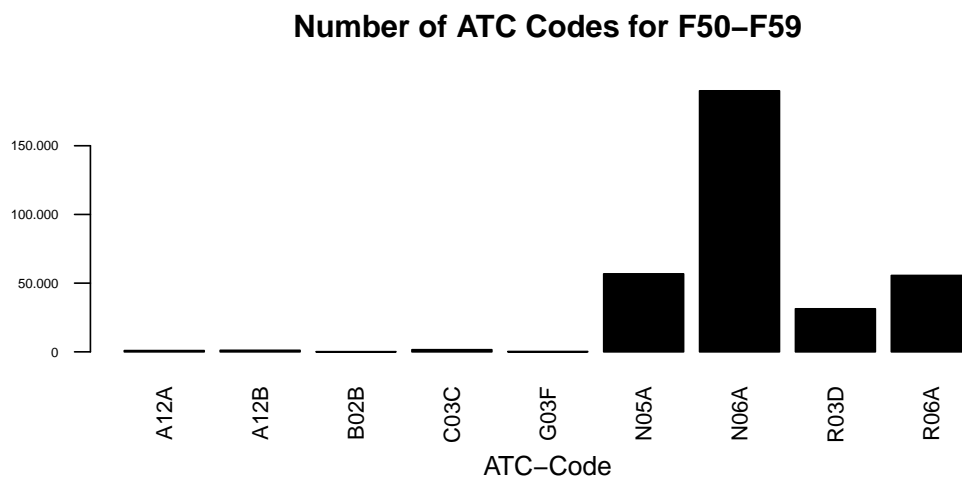


Figure 221: This figure shows the frequency of the underlying ATC codes for the given diagnose group F50-F59. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
A12A	CALCIUM	FALSE
A12B	KALIUM	TRUE
B02B	VITAMIN K UND ANDERE HÄMOSTATIKA	FALSE
C03C	HIGH-CEILING-DIURETIKA	FALSE
G03F	GESTAGENE UND ESTROGENE IN KOMBINATION	FALSE
N05A	ANTIPSYCHOTIKA	FALSE
N06A	ANTIDEPRESSIVA	TRUE
R03D	ANDERE MITTEL BEI OBSTRUKTIVEN ATEMWEGSEKRANKUNGEN Z.SYSTEM.ANWENDUNG	FALSE
R06A	ANTI-HISTAMINIKA ZUR SYSTEMISCHEN ANWENDUNG	FALSE

Table 114: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose F50-F59.

E.86. Diagnose N70-N77: Entzündliche Krankheiten der weiblichen Beckenorgane

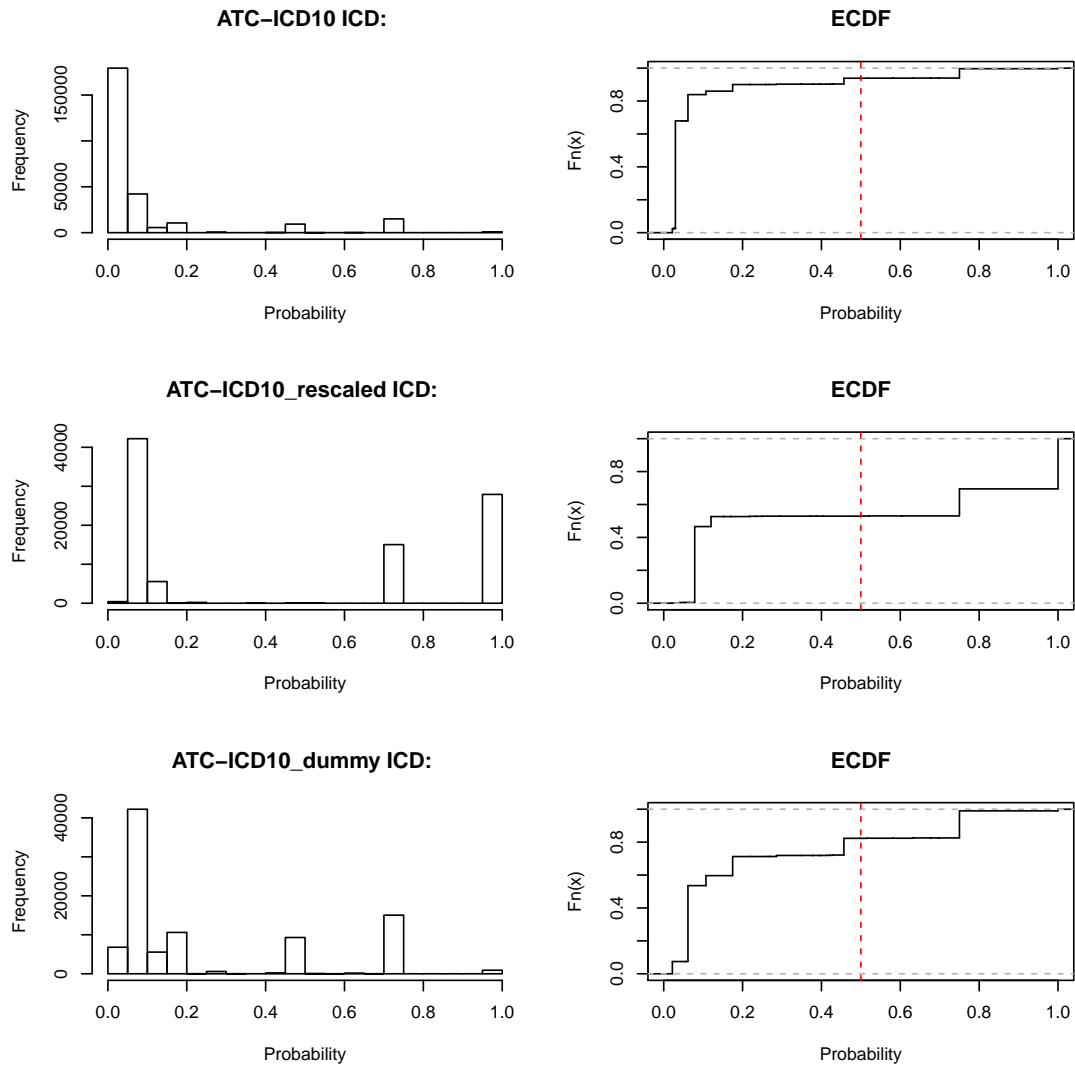


Figure 222: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group N70-N77.

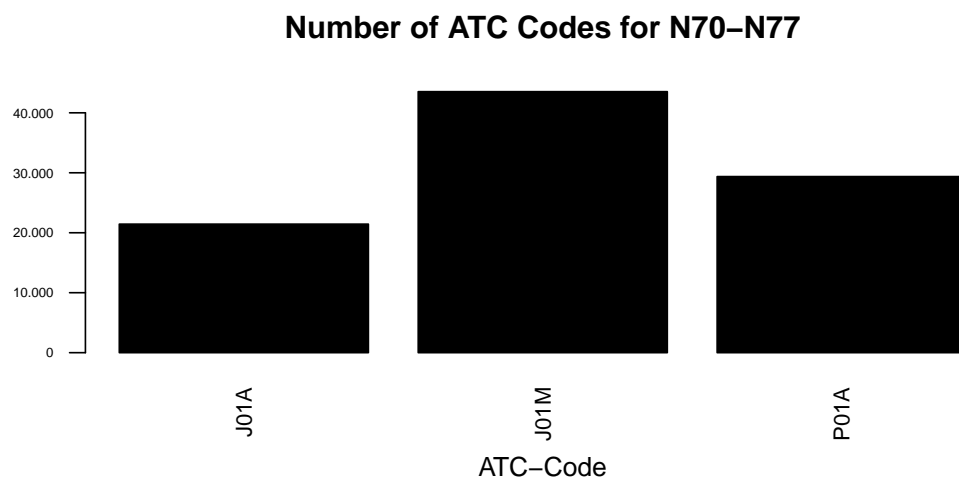
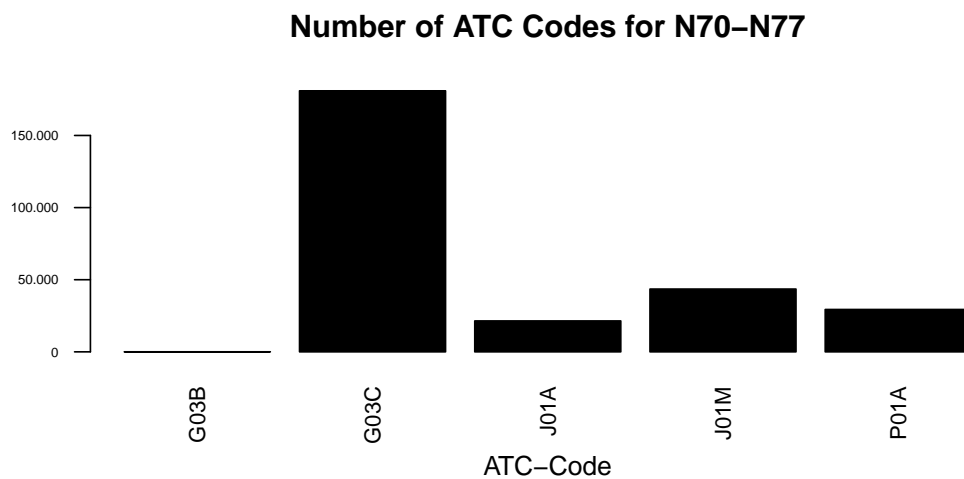


Figure 223: This figure shows the frequency of the underlying ATC codes for the given diagnose group N70-N77. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
G03B	ANDROGENE	FALSE
G03C	ESTROGENE	FALSE
J01A	TETRACYCLINE	TRUE
J01M	CHINOLONE	TRUE
P01A	MITTEL GEGEN AMÖBEN UND ANDERE PROTOZOEN- ERKRANKUNGEN	TRUE

Table 115: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose N70-N77.

E.87. Diagnose O30-O48: Betreuung der Mutter im Hinblick auf den Feten und die Amnionhöhle sowie mögliche Entbindungskomplikationen

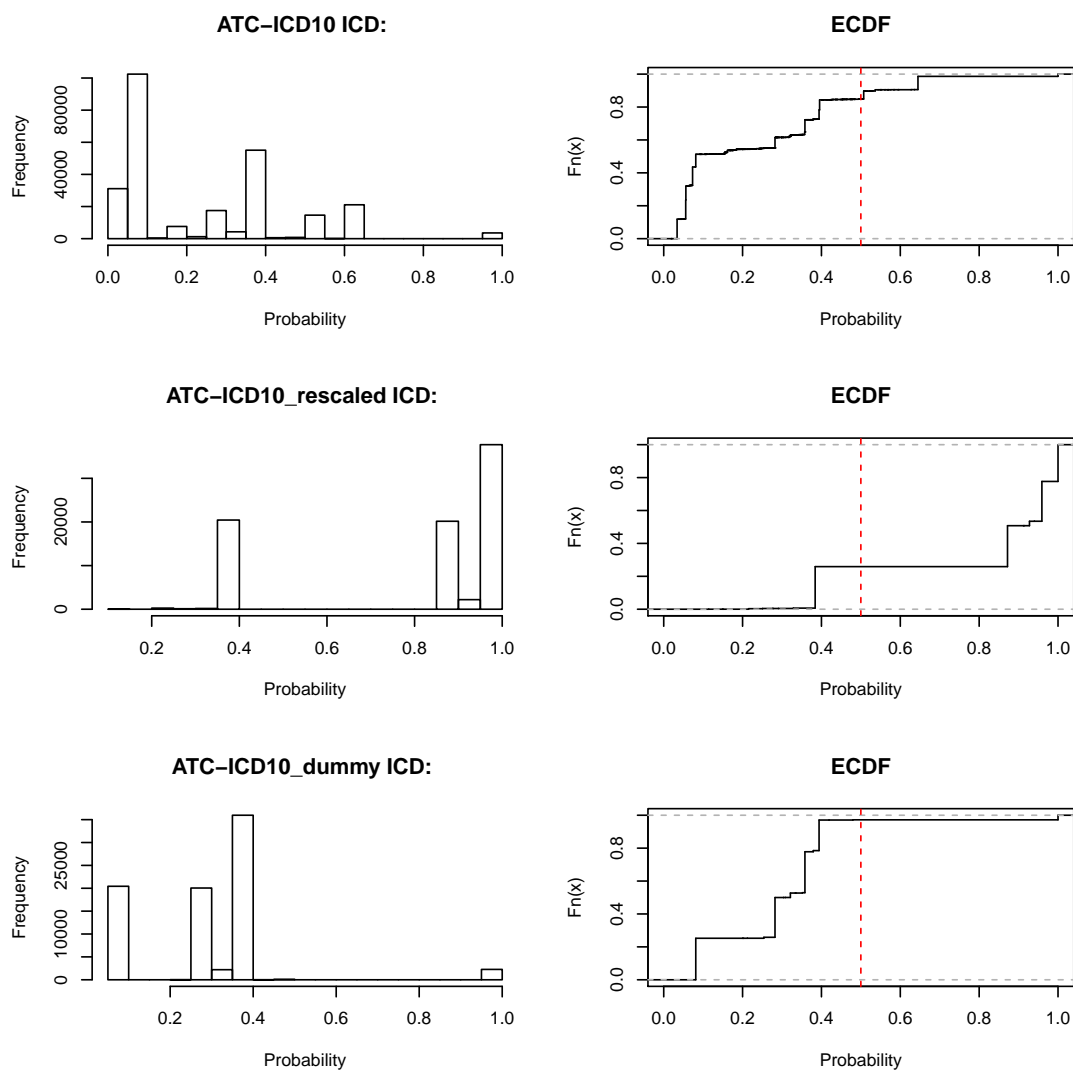


Figure 224: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group O30-O48.

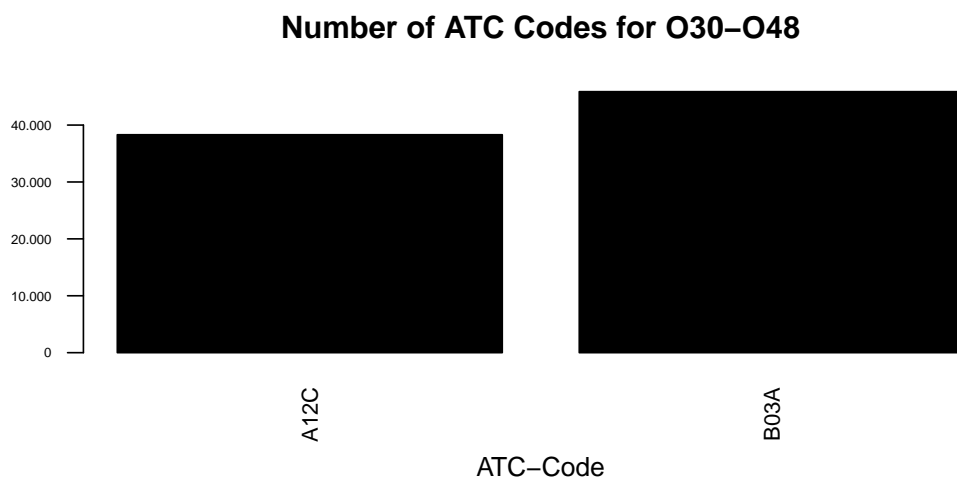
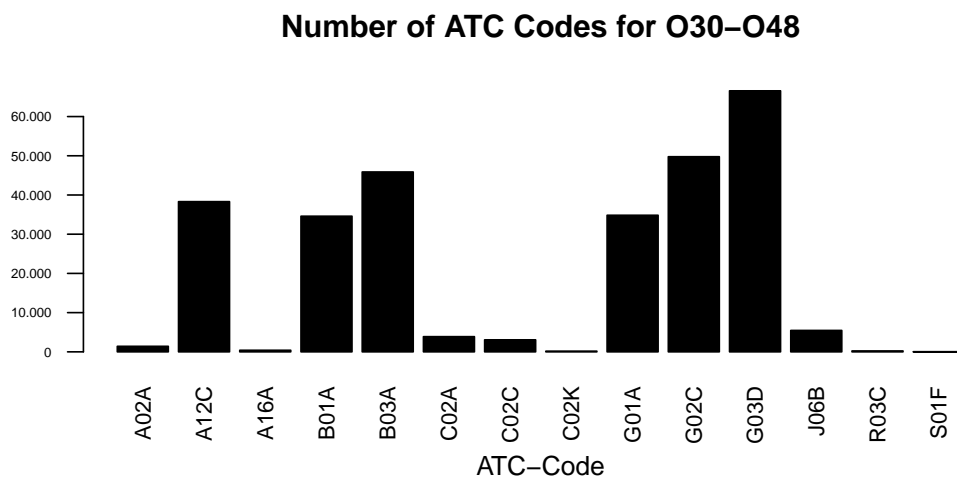


Figure 225: This figure shows the frequency of the underlying ATC codes for the given diagnose group O30-O48. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
A02A	ANTACIDA	FALSE
A12C	ANDERE MINERALSTOFFE	TRUE
A16A	ANDERE MITTEL FÜR DAS ALIMENTÄRE SYSTEM UND DEN STOFFWECHSEL	FALSE
B01A	ANTITHROMBOTISCHE MITTEL	FALSE
B03A	EISEN-HALTIGE ZUBEREITUNGEN	TRUE
C02A	ANTIADRENERGE MITTEL, ZENTRAL WIRKEND	FALSE
C02C	ANTIADRENERGE MITTEL, PERIPHER WIRKEND	FALSE
C02K	ANDERE ANTIHYPERTONIKA	FALSE
G01A	ANTIINFEKTIVA UND ANTISEPTIKA, EXKL. KOMBINATIONEN M. CORTICOSTEROIDEN	FALSE
G02C	ANDERE GYNÄKOLOGIKA	FALSE
G03D	GESTAGENE	FALSE
J06B	IMMUNGLOBULINE	FALSE
R03C	SYMPATHOMIMETIKA ZUR SYSTEMISCHEN ANWENDUNG	FALSE
S01F	MYDRIATIKA UND ZYKLOPLEGIKA	FALSE

Table 116: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose O30-O48.

E.88. Diagnose O20-O29: Sonstige Krankheiten der Mutter, die vorwiegend mit der Schwangerschaft verbunden sind

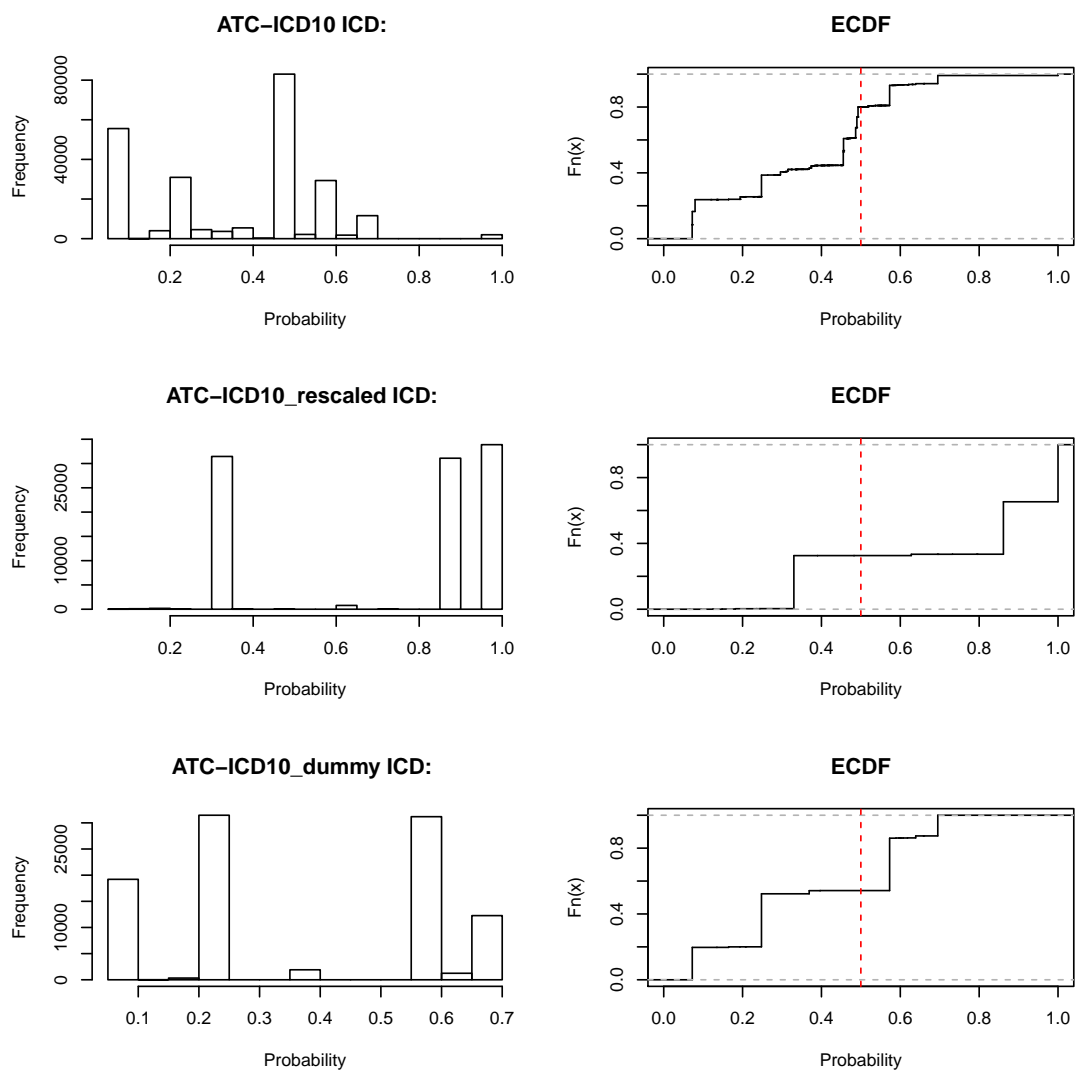
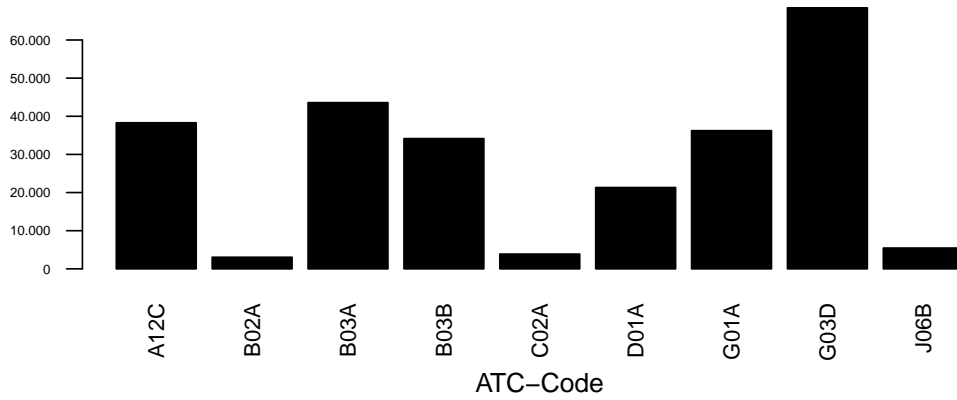


Figure 226: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group O20-O29.

Number of ATC Codes for O20–O29



Number of ATC Codes for O20–O29

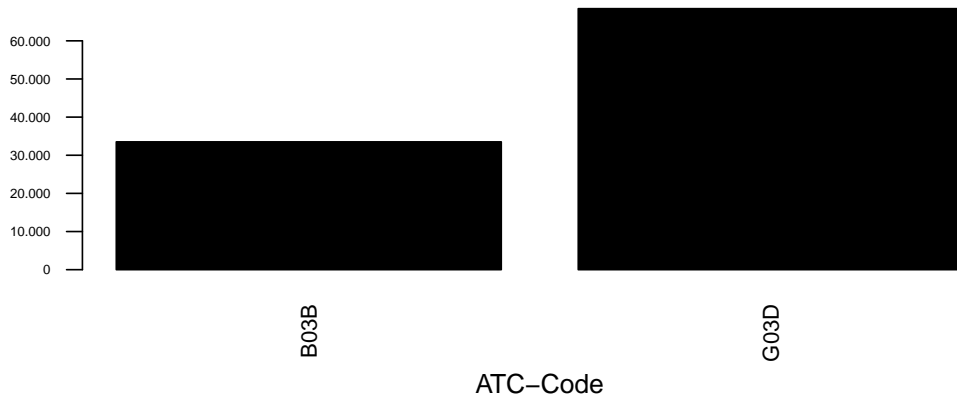


Figure 227: This figure shows the frequency of the underlying ATC codes for the given diagnose group O20-O29. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
A12C	ANDERE MINERALSTOFFE	FALSE
B02A	ANTIFIBRINOLYTIKA	FALSE
B03A	EISEN-HALTIGE ZUBEREITUNGEN	FALSE
B03B	VITAMIN-B12 UND FOLSÄURE	TRUE
C02A	ANTIADRENERGE MITTEL, ZENTRAL WIRKEND	FALSE
D01A	ANTIMYKOTIKA ZUR TOPISCHEN ANWENDUNG	FALSE
G01A	ANTIINFEKTIVA UND ANTISEPTIKA, EXKL. KOMBINATIONEN M. CORTICOSTEROIDEN	FALSE
G03D	GESTAGENE	TRUE
J06B	IMMUNGLOBULINE	FALSE

Table 117: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose O20-O29.

E.89. Diagnose B85-B89: PedikULOse [Läusebefall], AkarinoSe [Milbenbefall] und sonstiger Parasitenbefall der Haut

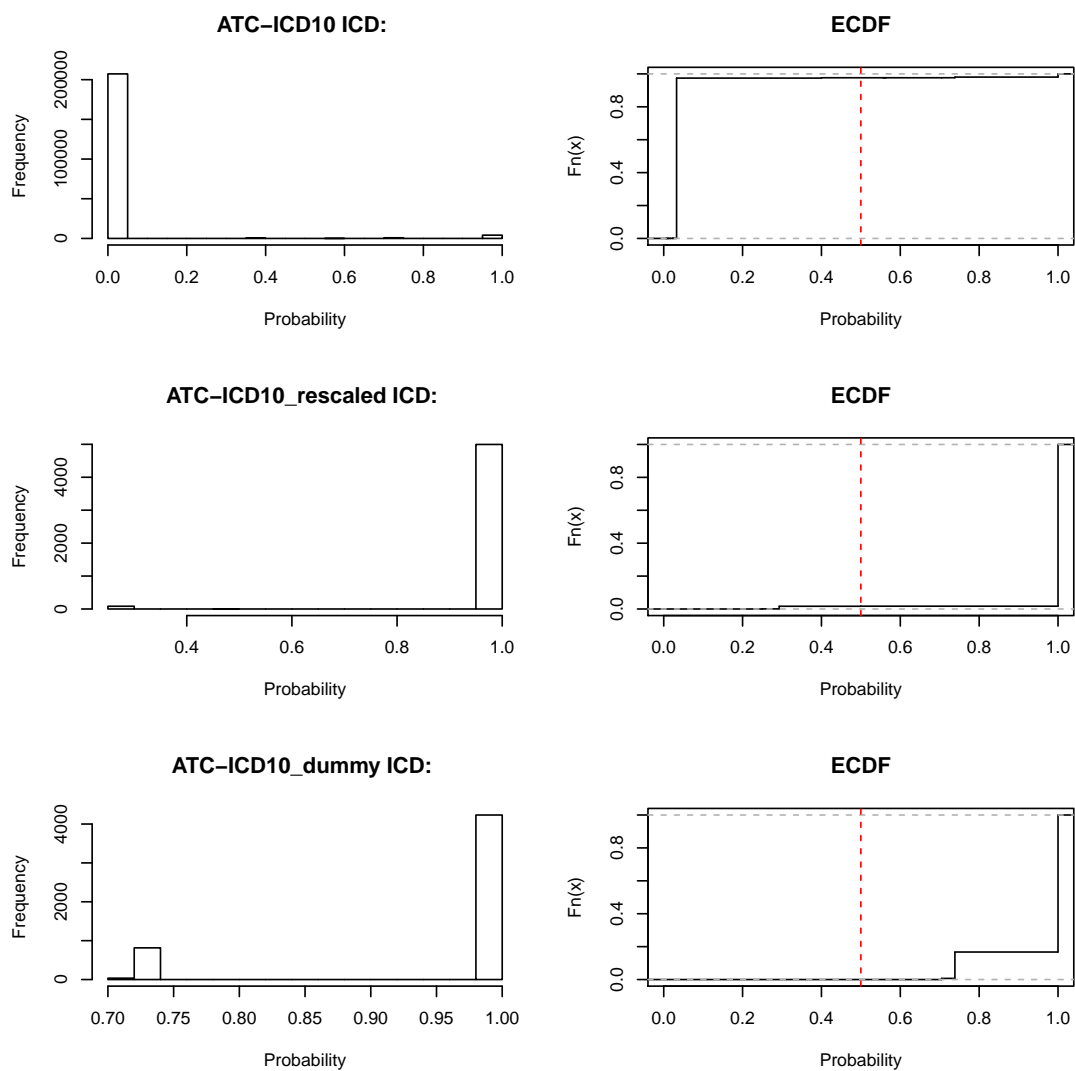
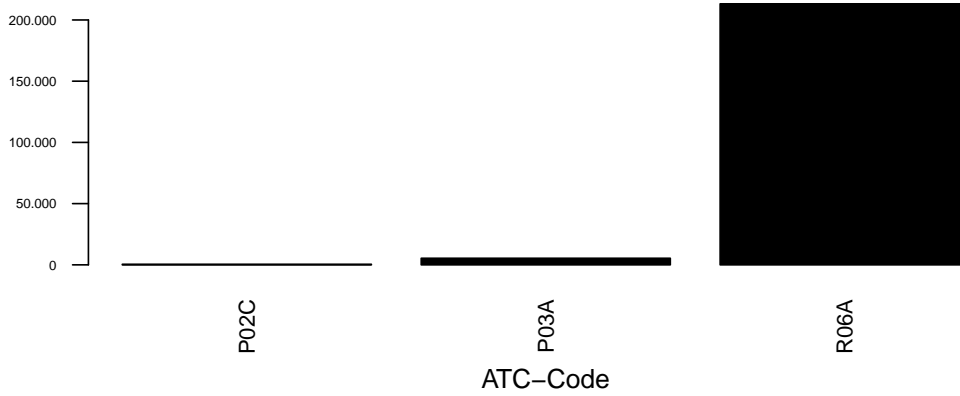


Figure 228: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group B85-B89.

Number of ATC Codes for B85–B89



Number of ATC Codes for B85–B89

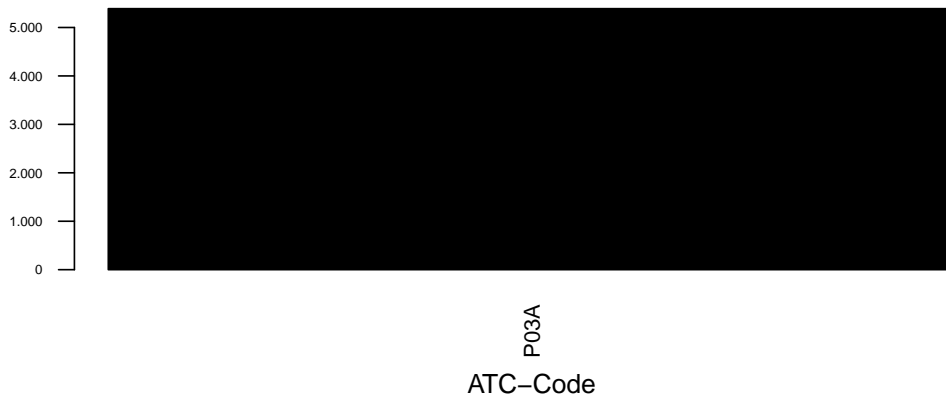


Figure 229: This figure shows the frequency of the underlying ATC codes for the given diagnose group B85-B89. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
P02C	NEMATODENMITTEL	FALSE
P03A	MITTEL GEGEN EKTOPARASITEN, INKL. ANTISCABIOSA	TRUE
R06A	ANTI-HISTAMINIKA ZUR SYSTEMISCHEN ANWENDUNG	FALSE

Table 118: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose B85-B89.

E.90. Diagnose E20-E35: Krankheiten sonstiger endokriner Drüsen

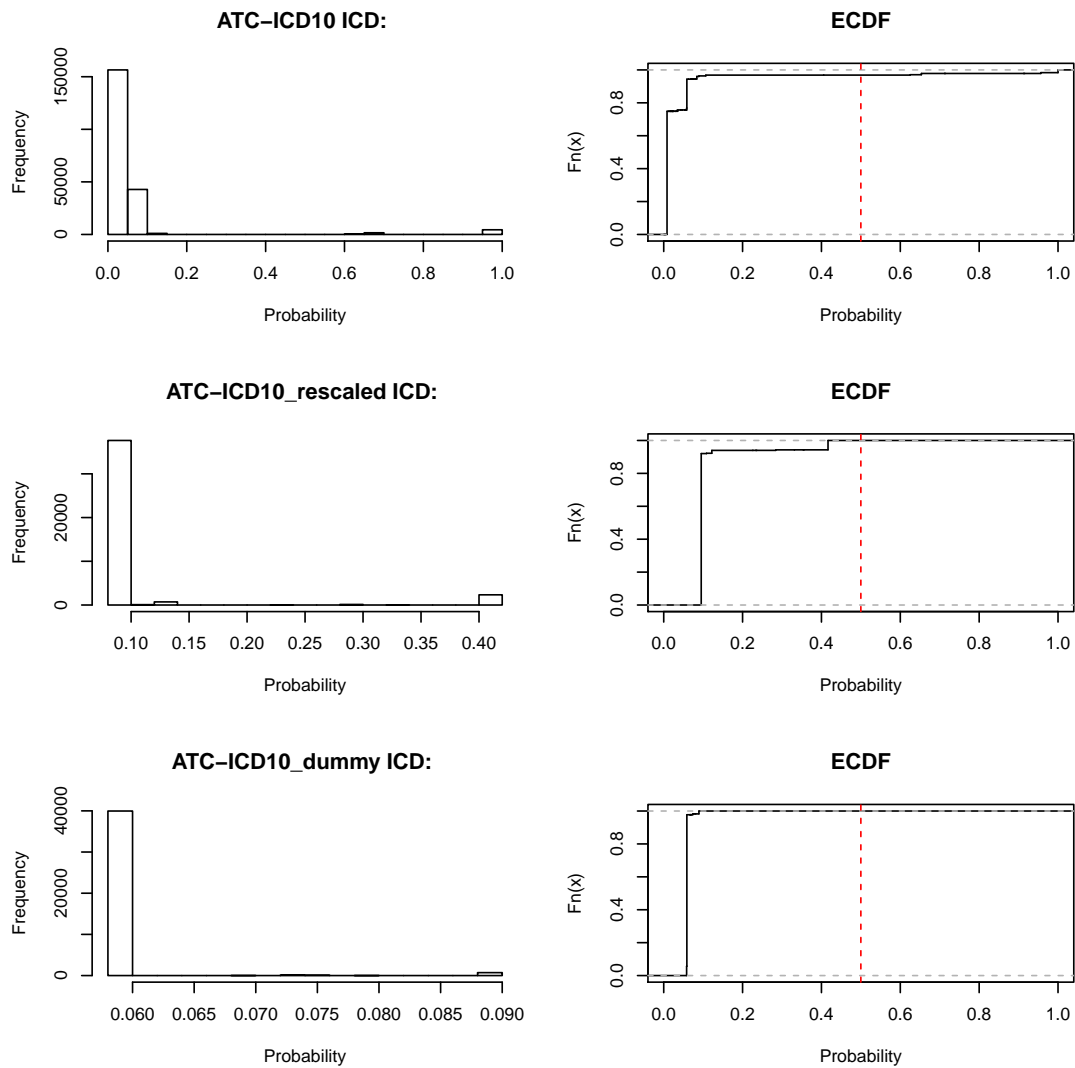


Figure 230: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group E20-E35.

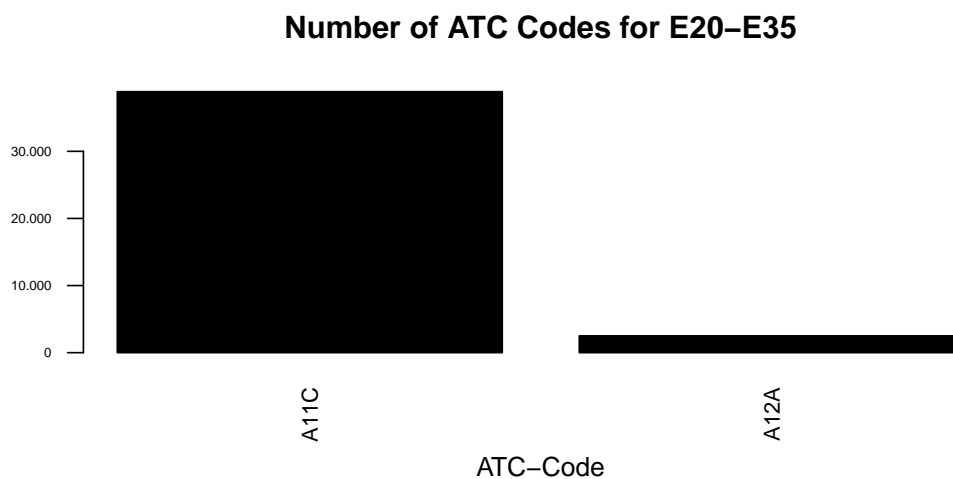
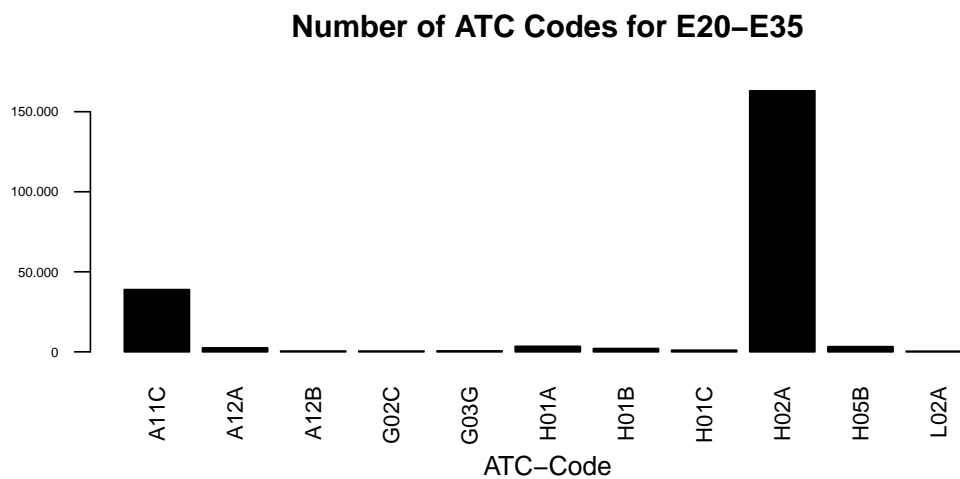


Figure 231: This figure shows the frequency of the underlying ATC codes for the given diagnose group E20-E35. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
A11C	VITAMIN A UND D, INKL. DEREN KOMBINATIONEN	TRUE
A12A	CALCIUM	TRUE
A12B	KALIUM	FALSE
G02C	ANDERE GYNÄKOLOGIKA	FALSE
G03G	GONADOTROPINE UND ANDERE OVULATION- SAUSLÖSER	FALSE
H01A	HYPOPHYSENVORDERLAPPENHORMONE UND ANALOGA	FALSE
H01B	HYPOPHYSENHINTERLAPPENHORMONE	FALSE
H01C	HYPOTHALAMUSHORMONE	FALSE
H02A	CORTICOSTEROIDE ZUR SYSTEMISCHEN ANWENDUNG, REIN	FALSE
H05B	NEBENSCHILDDRÜSEN-ANTAGONISTEN	FALSE
L02A	HORMONE UND VERWANDTE MITTEL	FALSE

Table 119: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose E20-E35.

E.91. Diagnose J80-J84: Sonstige Krankheiten der Atmungsorgane, die hauptsächlich das Interstitium betreffen

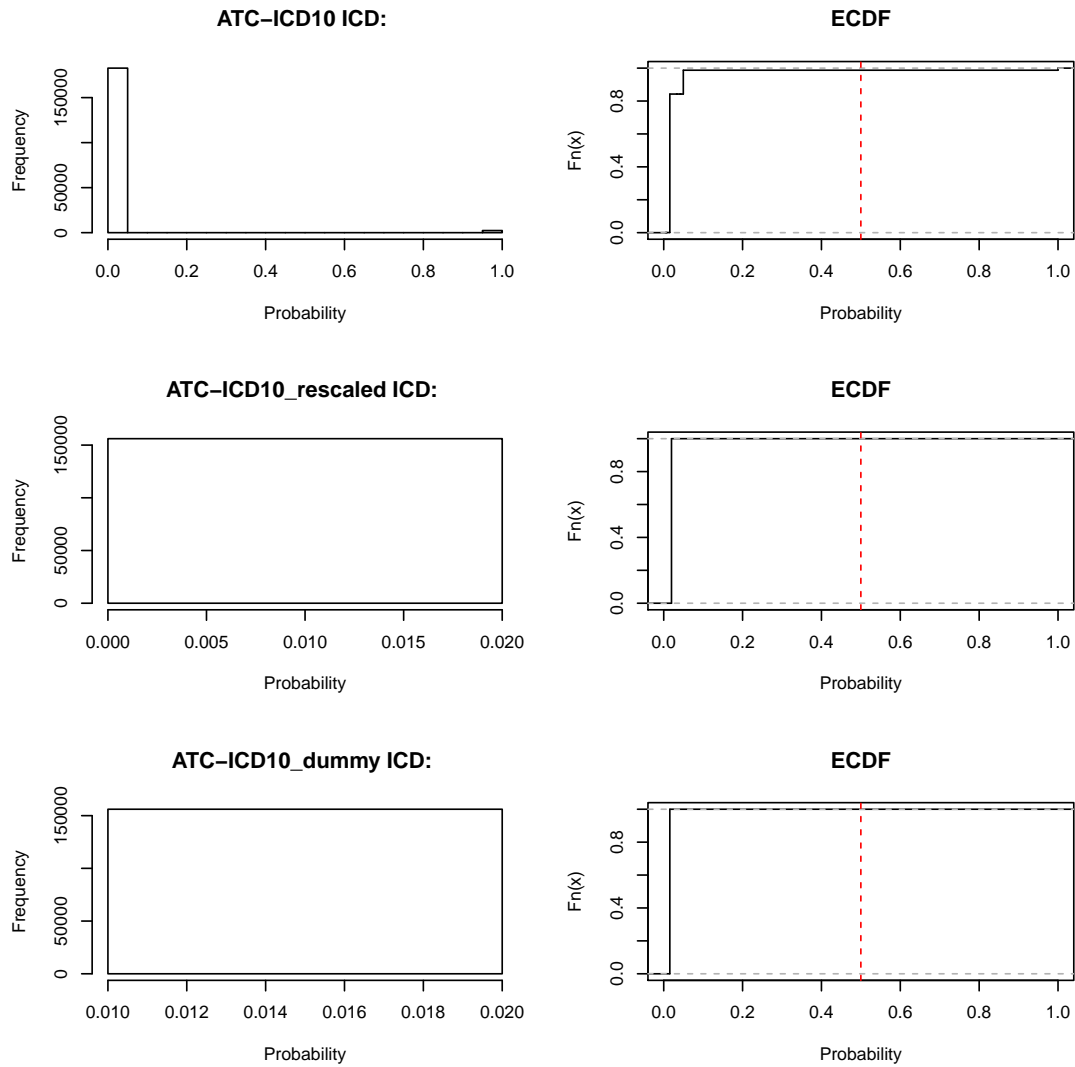


Figure 232: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group J80-J84.

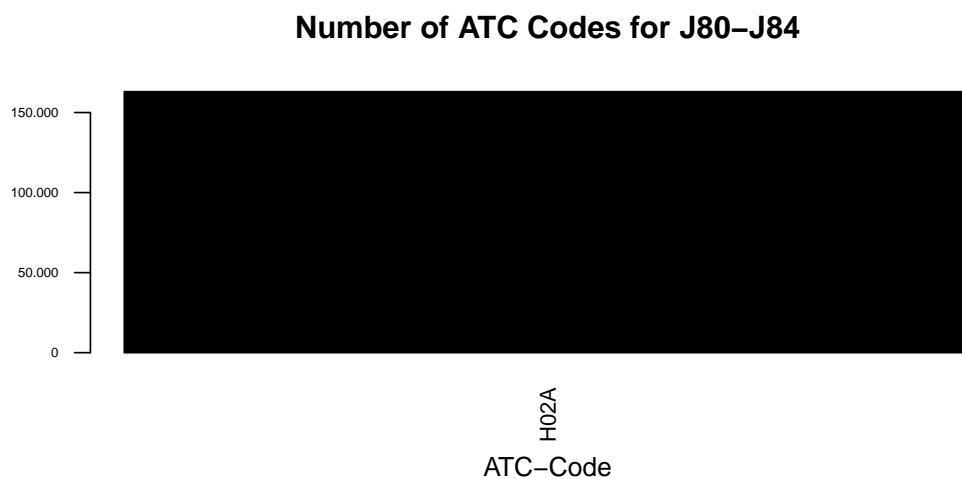


Figure 233: This figure shows the frequency of the underlying ATC codes for the given diagnose group J80-J84. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
C02K	ANDERE ANTIHYPERTONIKA	FALSE
H02A	CORTICOSTEROIDE ZUR SYSTEMISCHEN ANWENDUNG, REIN	TRUE
L04A	IMMUNSUPPRESSIVA	FALSE
M01C	SPEZIFISCHE ANTIRHEUMATIKA	FALSE

Table 120: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose J80-J84.

E.92. Diagnose R25-R29: Symptome, die das Nervensystem und das Muskel-Skelett-System betreffen

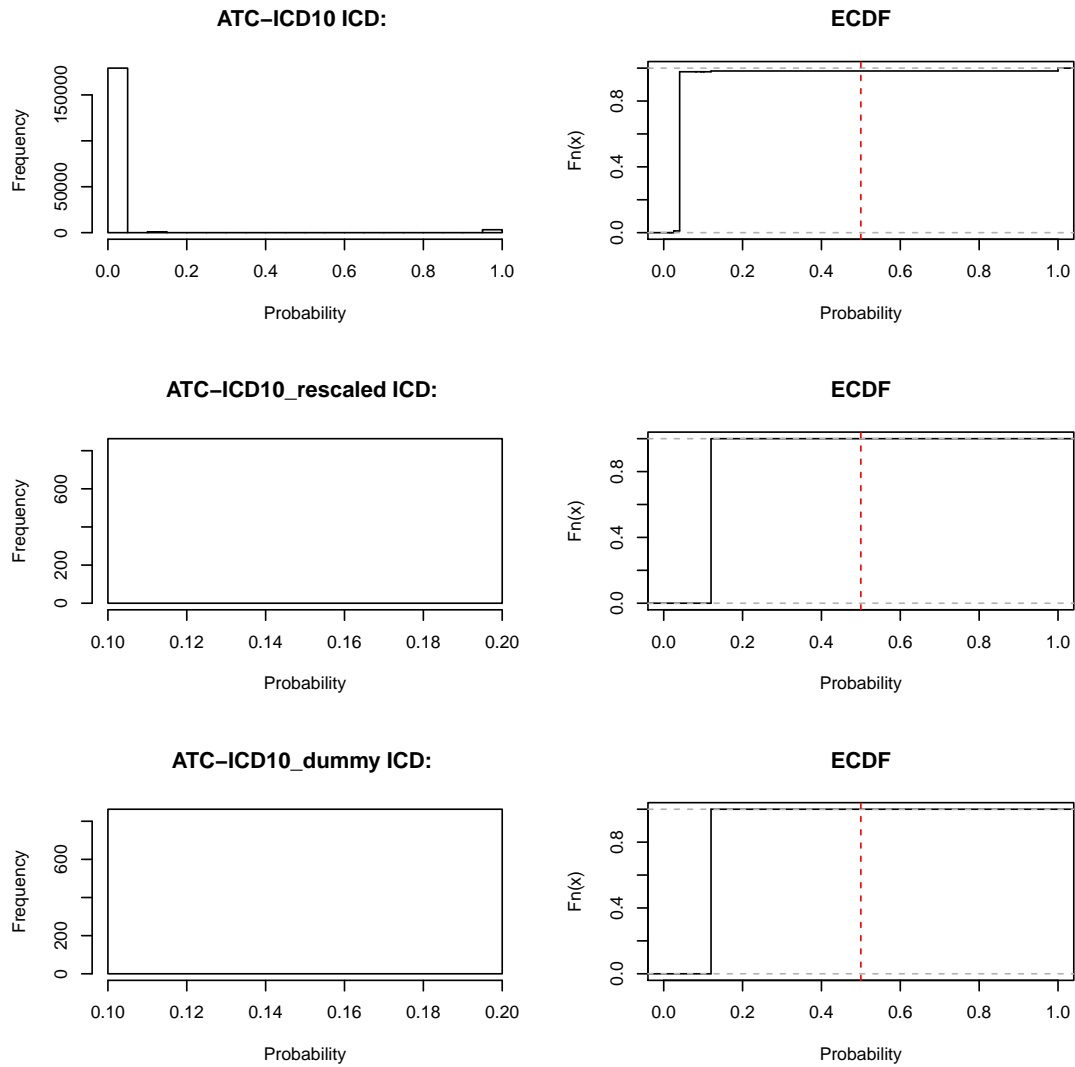


Figure 234: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group R25-R29.

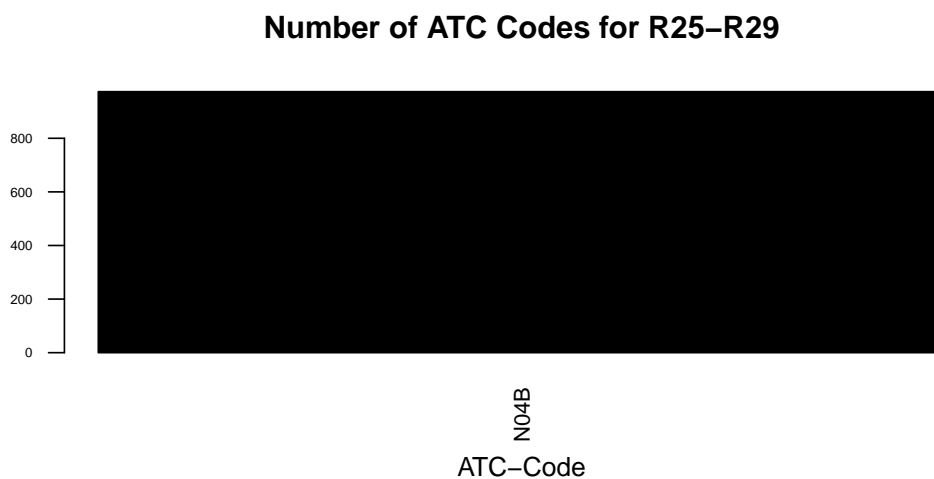
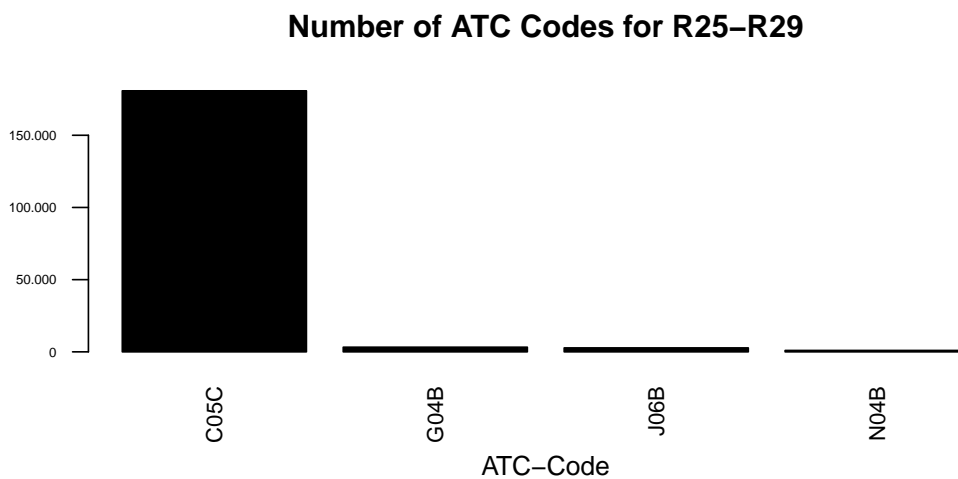


Figure 235: This figure shows the frequency of the underlying ATC codes for the given diagnose group R25-R29. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
C05C	KAPILLARSTABILISIERENDE MITTEL	FALSE
G04B	ANDERE UROLOGIKA, INKL. SPASMOLYTIKA	FALSE
J06B	IMMUNGLOBULINE	FALSE
N04B	DOPAMINERGE MITTEL	TRUE

Table 121: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose R25-R29.

E.93. Diagnose Q60-Q64: Angeborene Fehlbildungen des Harnsystems

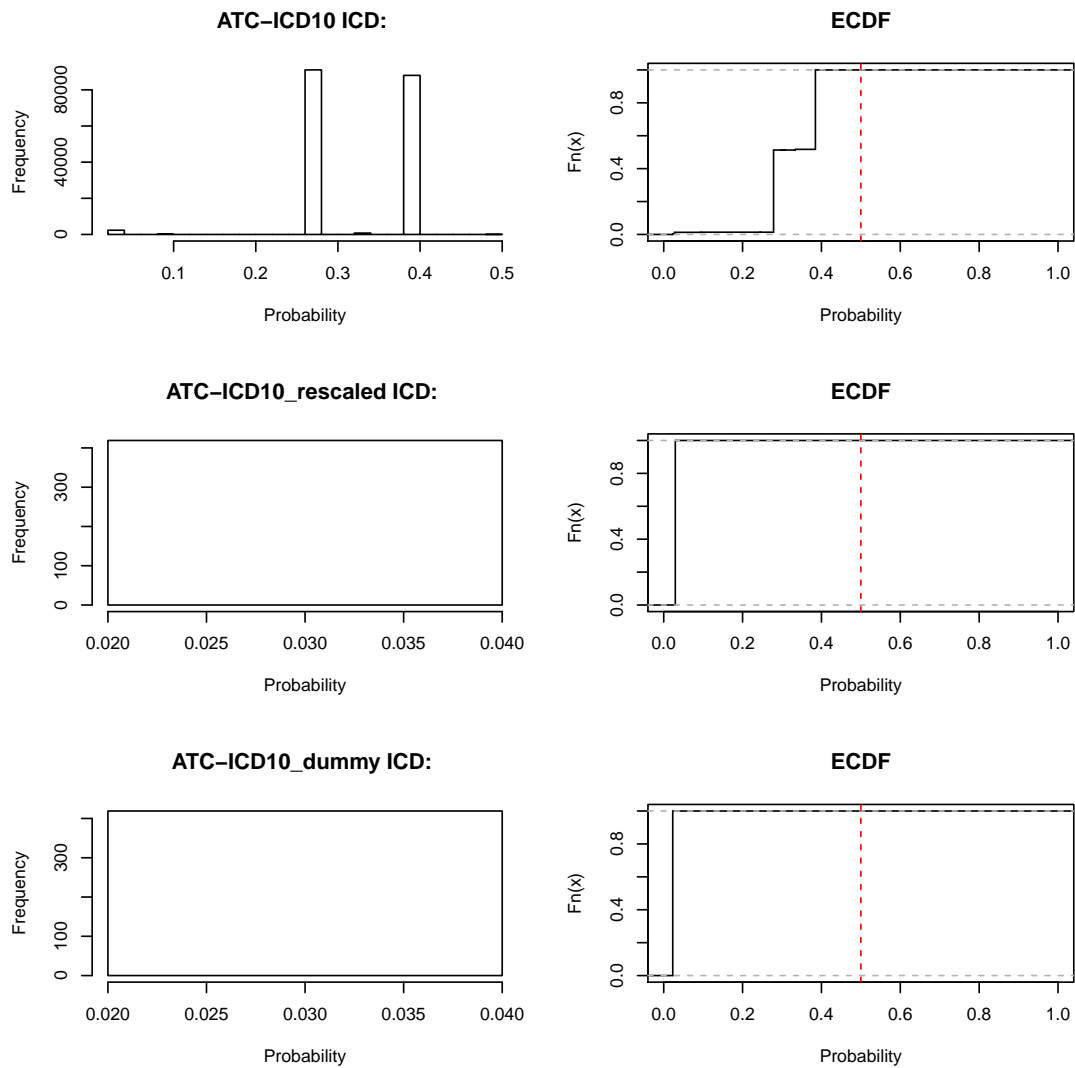


Figure 236: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group Q60-Q64.

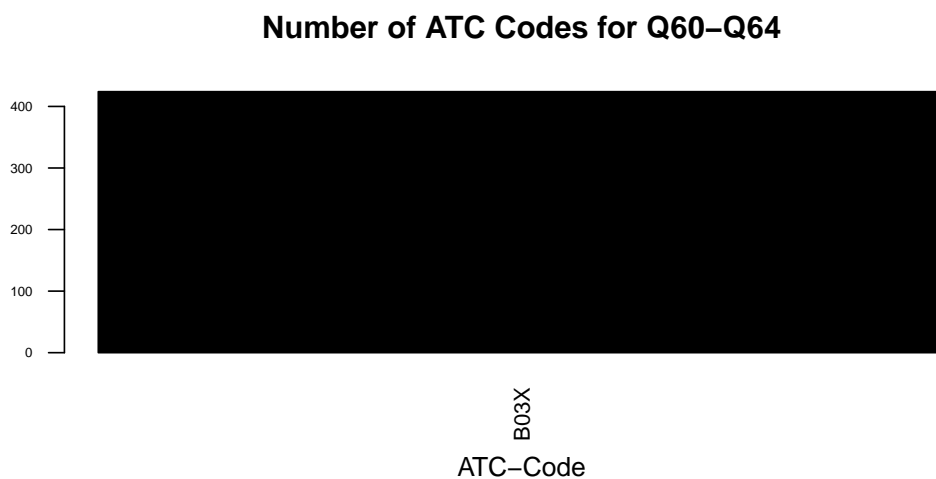
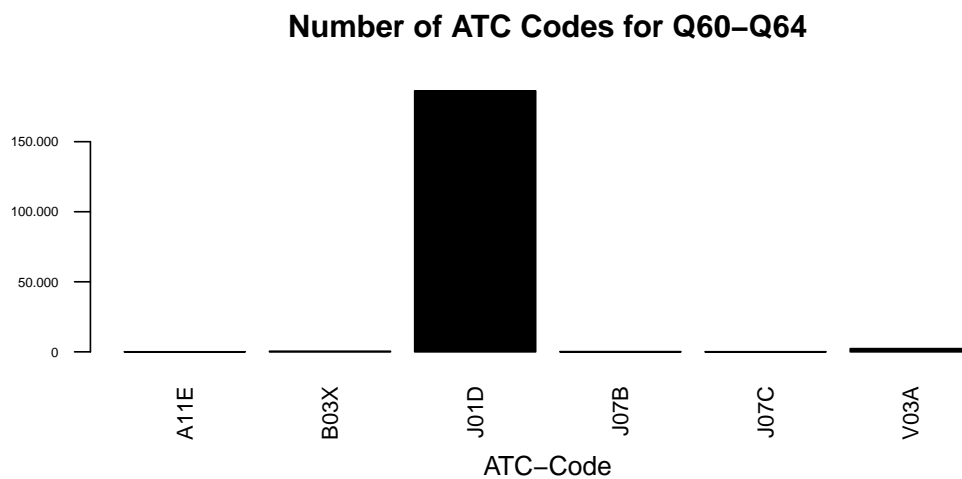


Figure 237: This figure shows the frequency of the underlying ATC codes for the given diagnose group Q60-Q64. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
A11E	VITAMIN-B-KOMPLEX, INKL. KOMBINATIONEN	FALSE
B03X	ANDERE ANTIANÄMIKA	TRUE
J01D	ANDERE BETA-LACTAM-ANTIBIOTIKA	FALSE
J07B	VIRALE IMPFSTOFFE	FALSE
J07C	BAKTERIELLE UND VIRALE IMPFSTOFFE, KOMBINIERT	FALSE
V03A	ALLE ÜBRIGEN THERAPEUTISCHEN MITTEL	FALSE

Table 122: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose Q60-Q64.

E.94. Diagnose D37-D48: Neubildungen unsicheren oder unbekanntem Verhaltens

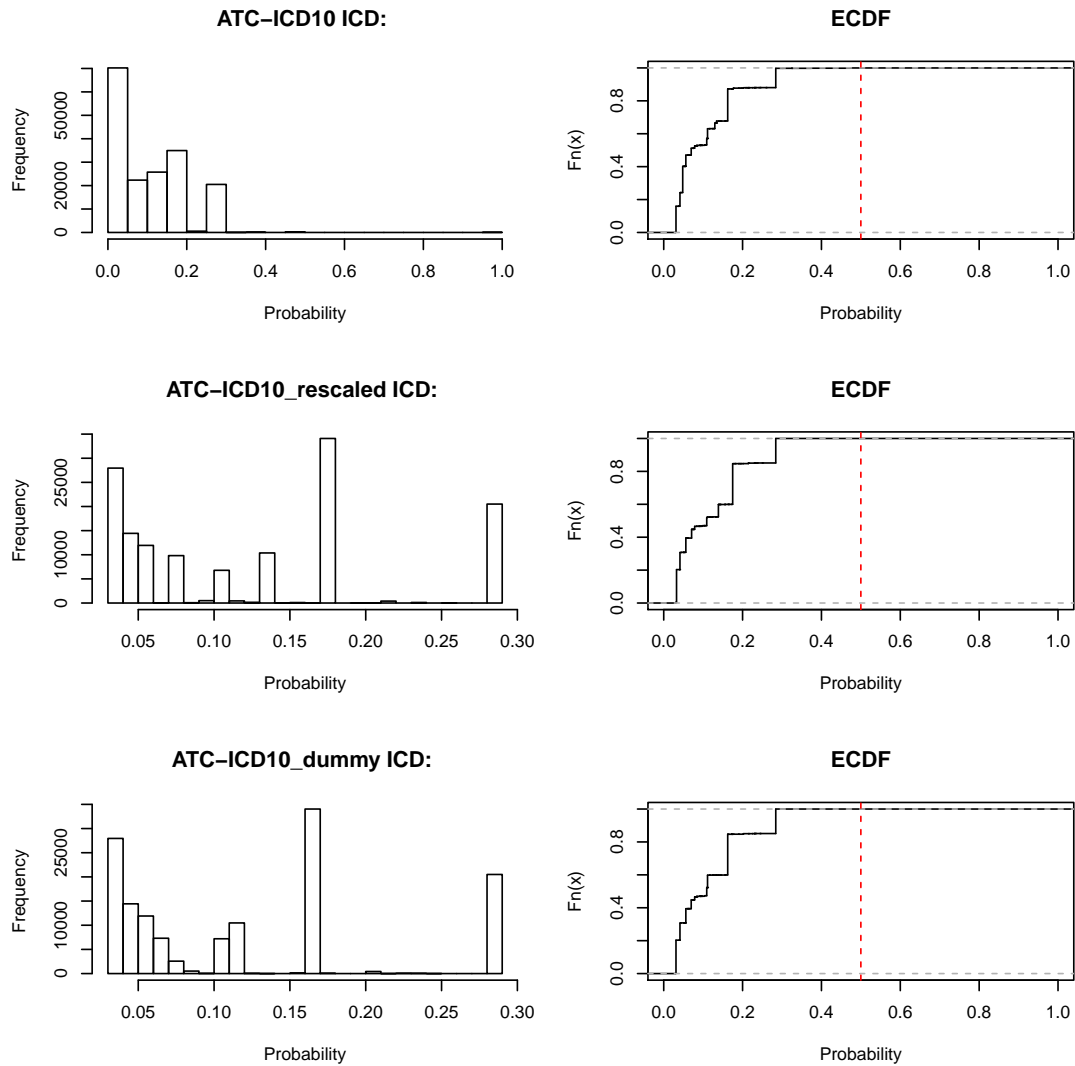


Figure 238: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group D37-D48.

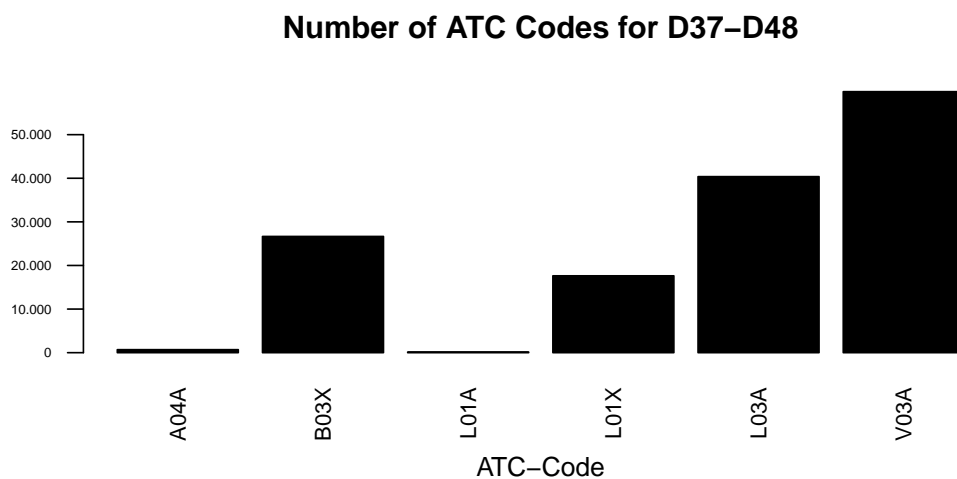
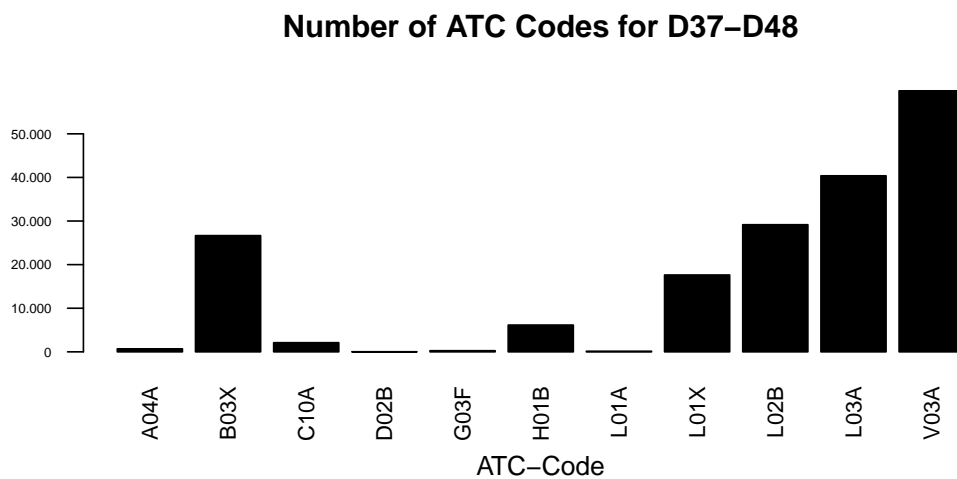


Figure 239: This figure shows the frequency of the underlying ATC codes for the given diagnose group D37-D48. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
A04A	ANTIEMETIKA UND MITTEL GEGEN ÜBELKEIT	TRUE
B03X	ANDERE ANTIANÄMIKA	TRUE
C10A	MITTEL, DIE DEN LIPIDSTOFFWECHSEL BEEINFLUSSEN, REIN	FALSE
D02B	PROTEKTIVA GEGEN UV-STRAHLUNG	FALSE
G03F	GESTAGENE UND ESTROGENE IN KOMBINATION	FALSE
H01B	HYPOPHYSENHINTERLAPPENHORMONE	FALSE
L01A	ALKYLIERENDE MITTEL	TRUE
L01X	ANDERE ANTINEOPLASTISCHE MITTEL	TRUE
L02B	HORMONANTAGONISTEN UND VERWANDTE STOFFE	FALSE
L03A	IMMUNSTIMULANZIEN	TRUE
V03A	ALLE ÜBRIGEN THERAPEUTISCHEN MITTEL	TRUE

Table 123: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose D37-D48.

E.95. Diagnose O85-O92: Komplikationen, die vorw. im Wochenbett auftreten

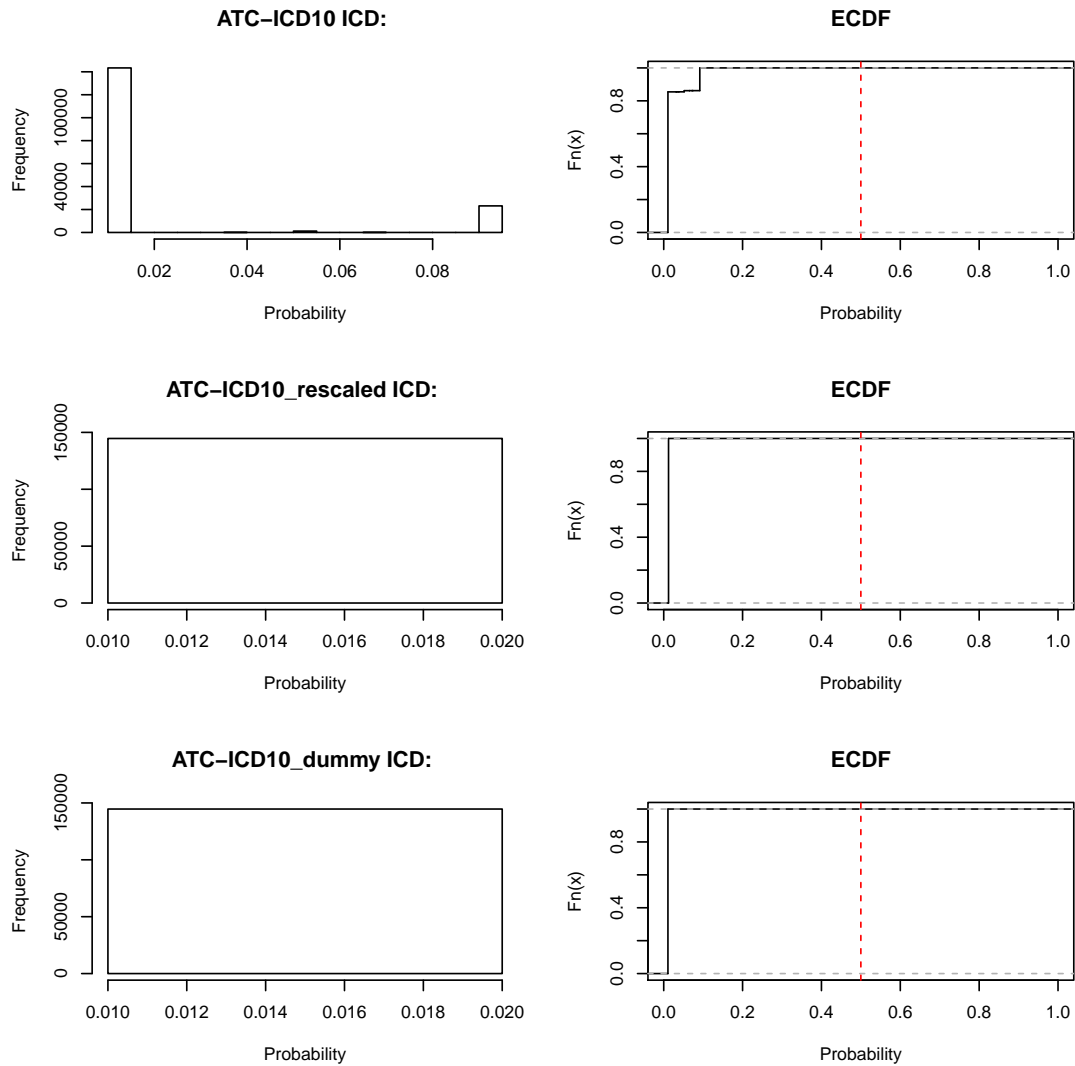
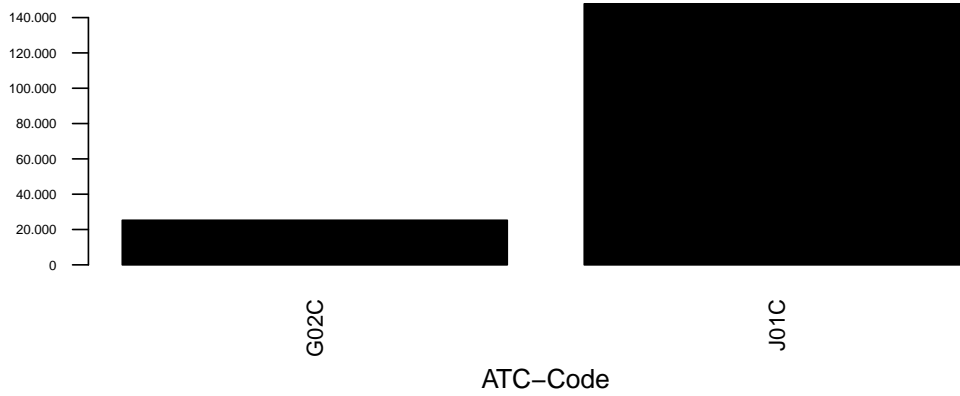


Figure 240: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group O85-O92.

Number of ATC Codes for O85–O92



Number of ATC Codes for O85–O92

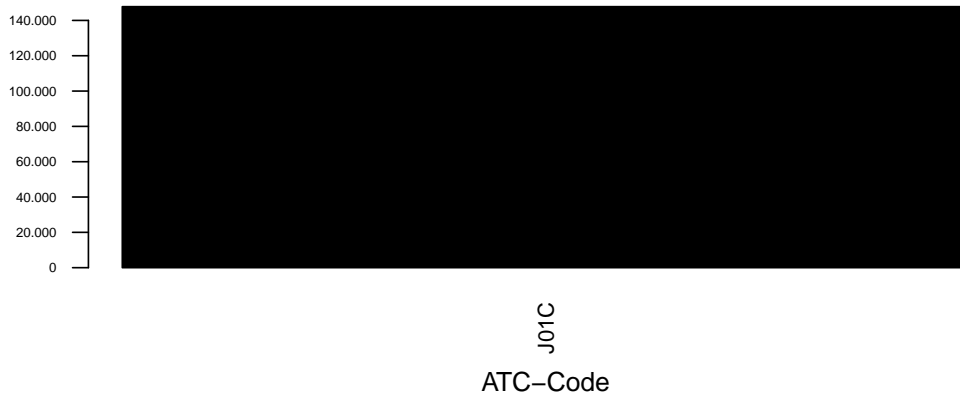


Figure 241: This figure shows the frequency of the underlying ATC codes for the given diagnose group O85-O92. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
G02C	ANDERE GYNÄKOLOGIKA	FALSE
J01C	BETALACTAM-ANTIBIOTIKA, PENICILLINE	TRUE

Table 124: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose O85-O92.

E.96. Diagnose G70-G73: Krankheiten im Bereich der neuromuskulären Synapse und des Muskels

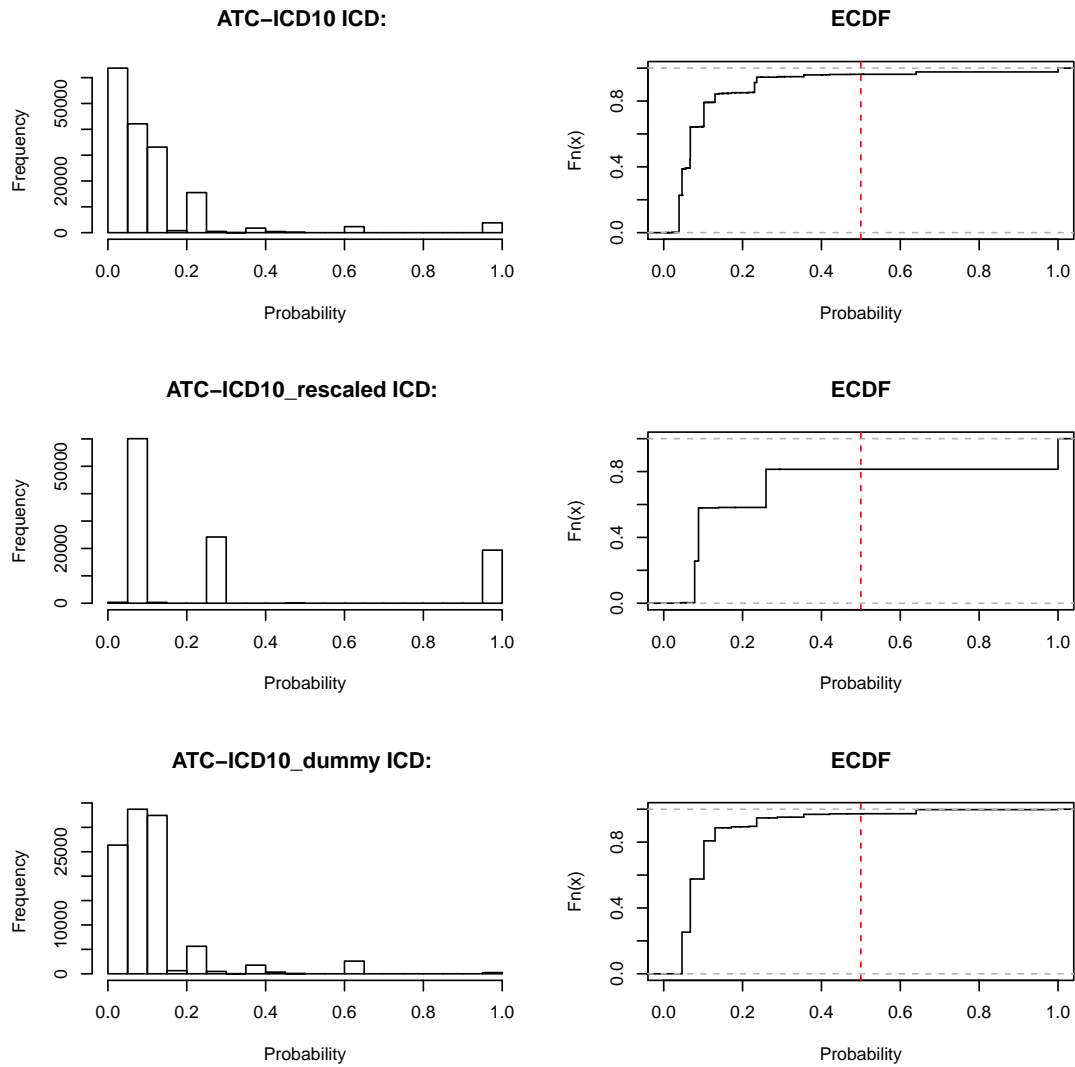


Figure 242: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group G70-G73.

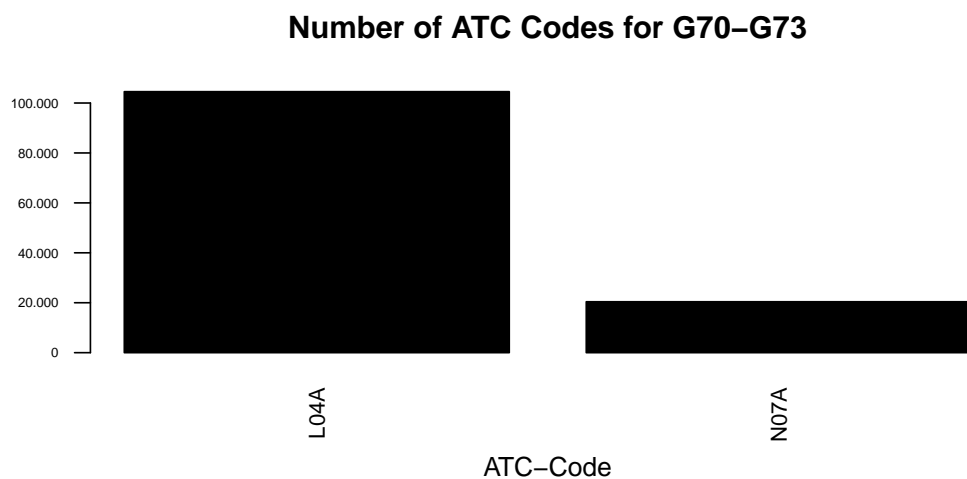
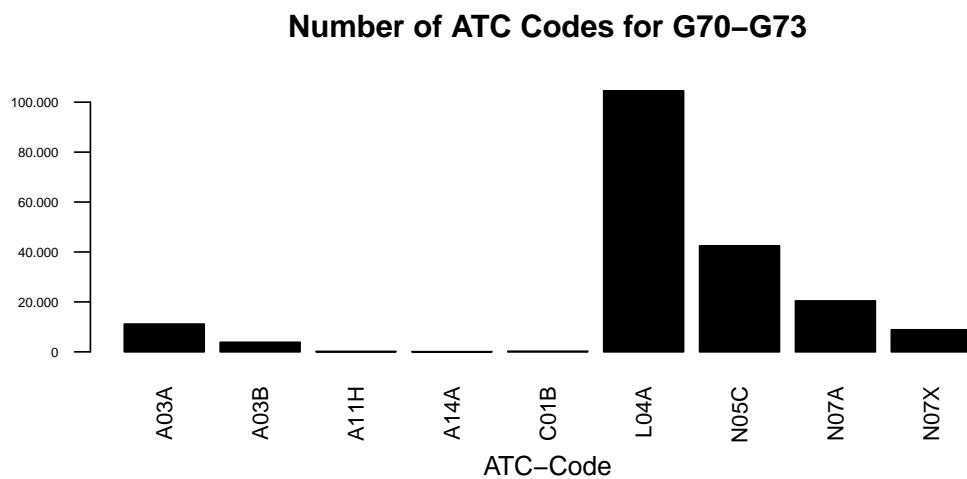


Figure 243: This figure shows the frequency of the underlying ATC codes for the given diagnose group G70-G73. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
A03A	MITTEL BEI FUNKTIONELLEN STÖRUNGEN DES DARMS	FALSE
A03B	BELLADONNA UND DERIVATE, REIN	FALSE
A11H	ANDERE VITAMINPRÄPARATE, REIN	FALSE
A14A	ANABOLE STEROIDE	FALSE
C01B	ANTIARRHYTHMIKA, KLASSE I UND III	FALSE
L04A	IMMUNSUPPRESSIVA	TRUE
N05C	HYPNOTIKA UND SEDATIVA	FALSE
N07A	PARASYMPATHOMIMETIKA	TRUE
N07X	ANDERE MITTEL FÜR DAS NERVENSYSTEM	FALSE

Table 125: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose G70-G73.

E.97. Diagnose R50-R69: Allgemeinsymptome

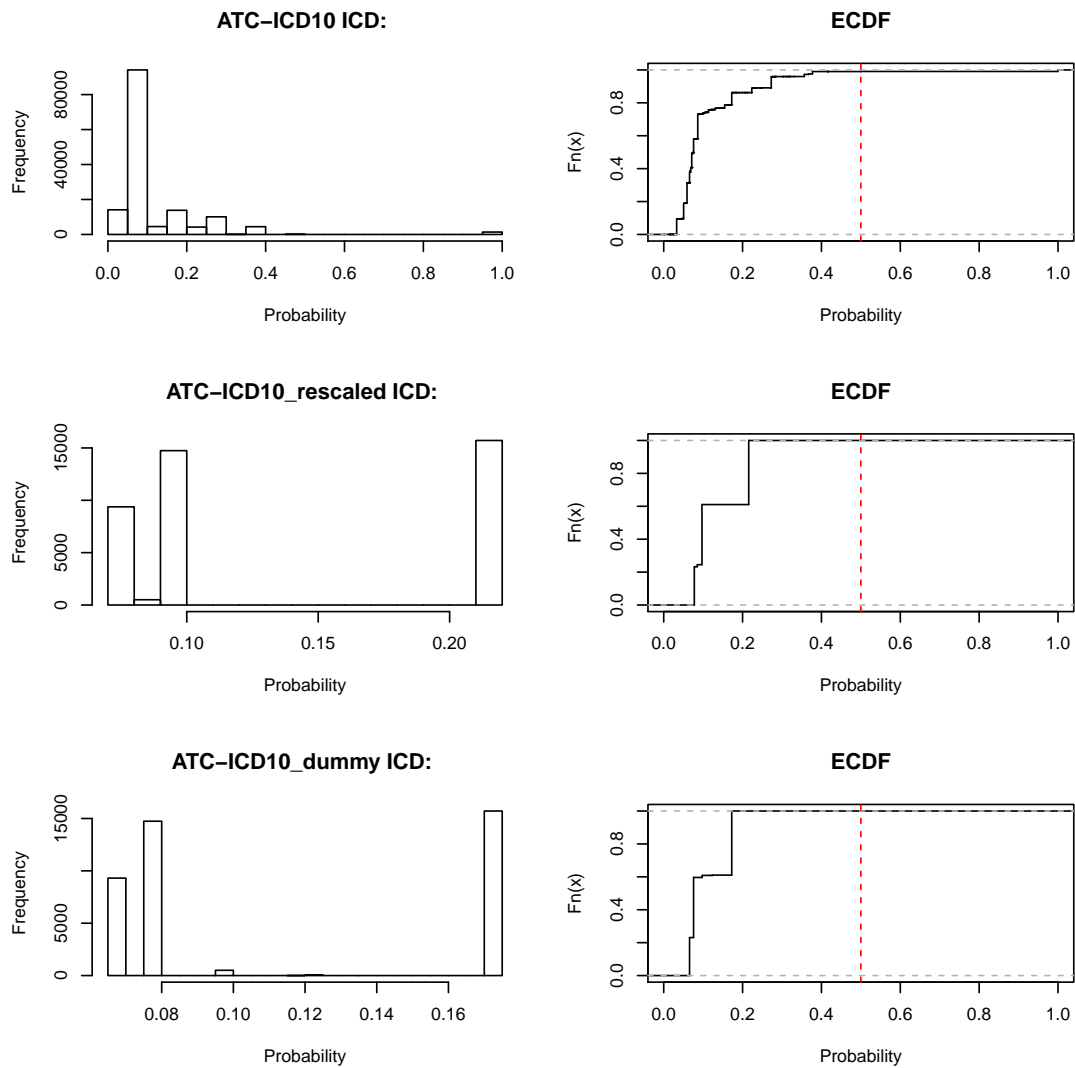


Figure 244: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group R50-R69.

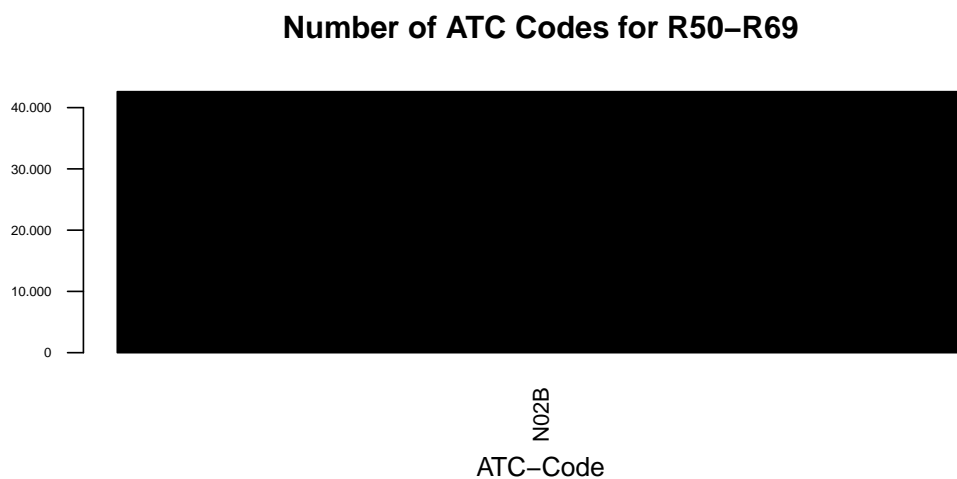
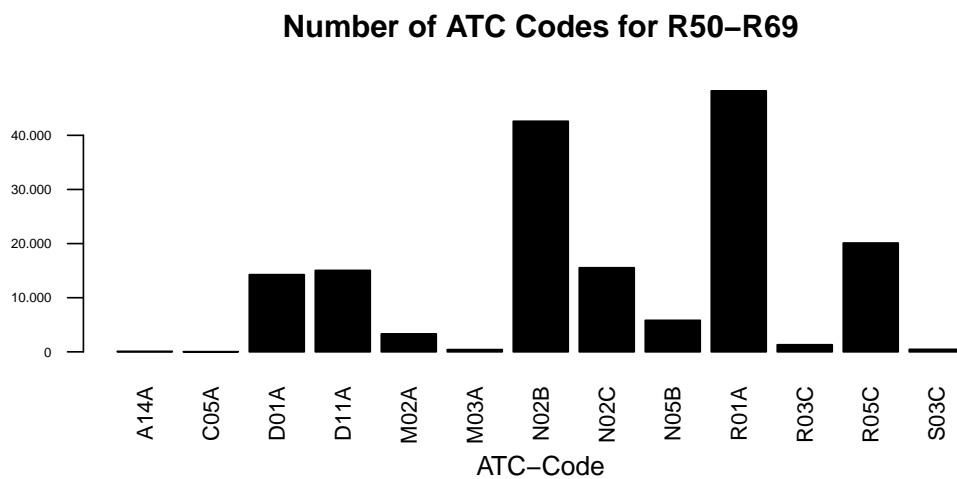


Figure 245: This figure shows the frequency of the underlying ATC codes for the given diagnose group R50-R69. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
A14A	ANABOLE STEROIDE	FALSE
C05A	MITTEL ZUR BEH. HÄMORRH.+ANALFISSUREN Z.TOPISCH.ANWEND.	FALSE
D01A	ANTIMYKOTIKA ZUR TOPISCHEN ANWENDUNG	FALSE
D11A	ANDERE DERMATIKA	FALSE
M02A	TOPISCHE MITTEL GEGEN GELENK- UND MUSKELSCHMERZEN	FALSE
M03A	MUSKELRELAXANZIEN, PERIPHER WIRKENDE MITTEL	FALSE
N02B	ANDERE ANALGETIKA UND ANTIPYRETIKA	TRUE
N02C	MIGRÄNEMITTEL	FALSE
N05B	ANXIOLYTIKA	FALSE
R01A	DEKONGESTIVA UND ANDERE RHINOLOGIKA ZUR TOP- ISCHEN ANWENDUNG	FALSE
R03C	SYMPATHOMIMETIKA ZUR SYSTEMISCHEN ANWEN- DUNG	FALSE
R05C	EXPEKTORANZIEN, EXKL. KOMBINATIONEN MIT ANTI- TUSSIVA	FALSE
S03C	CORTICOSTEROIDE UND ANTIINFEKTIVA IN KOMBINA- TION	FALSE

Table 126: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose R50-R69.

E.98. Diagnose L10-L14: Bullöse Dermatosen

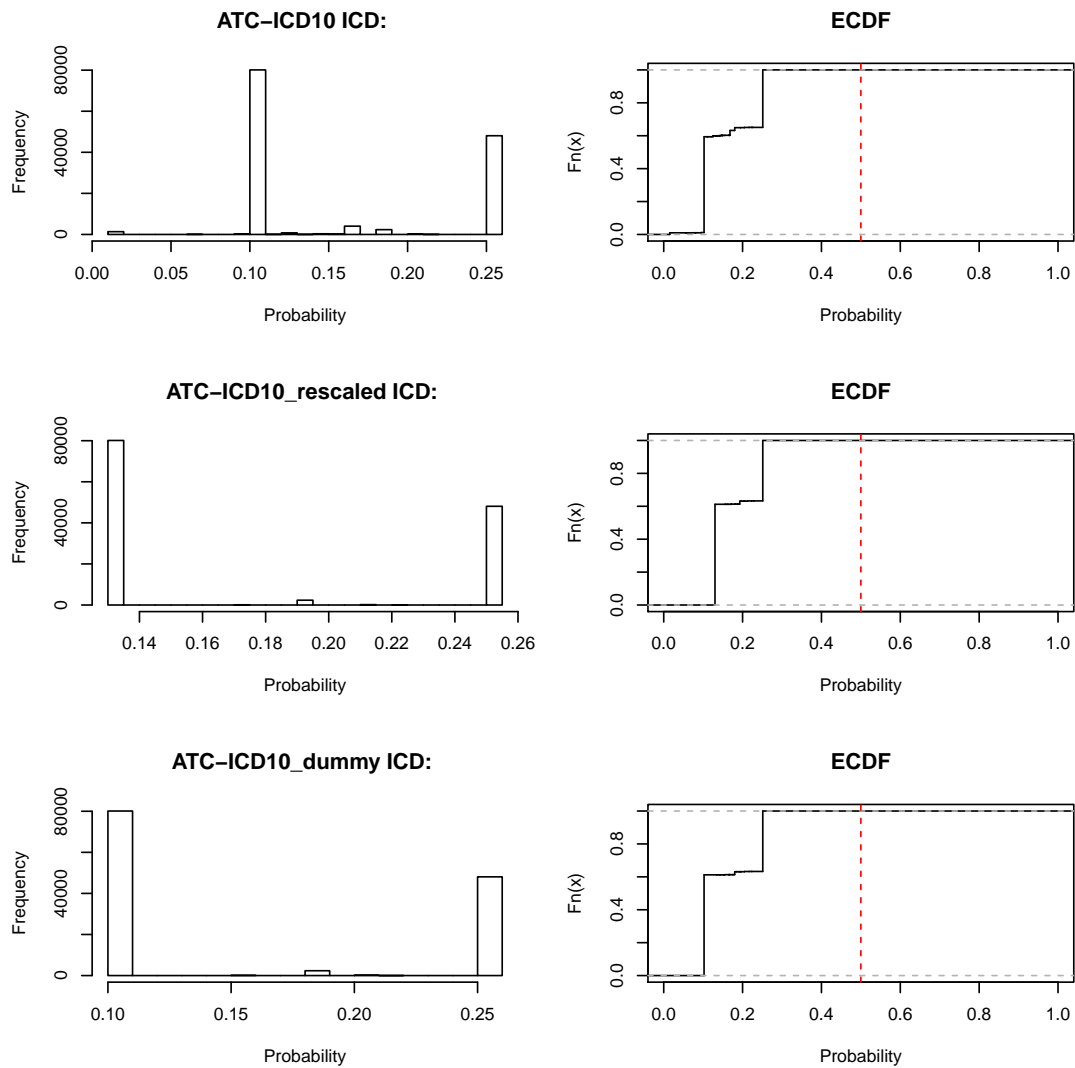


Figure 246: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group L10-L14.

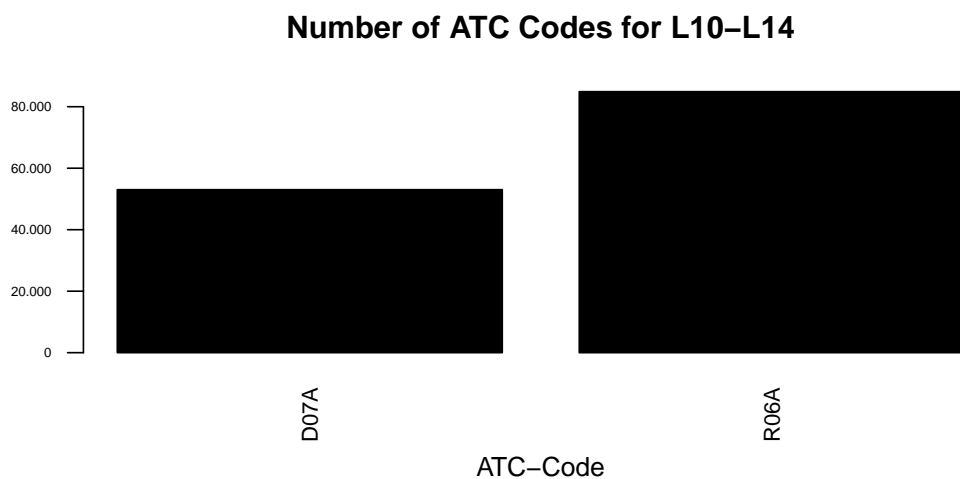
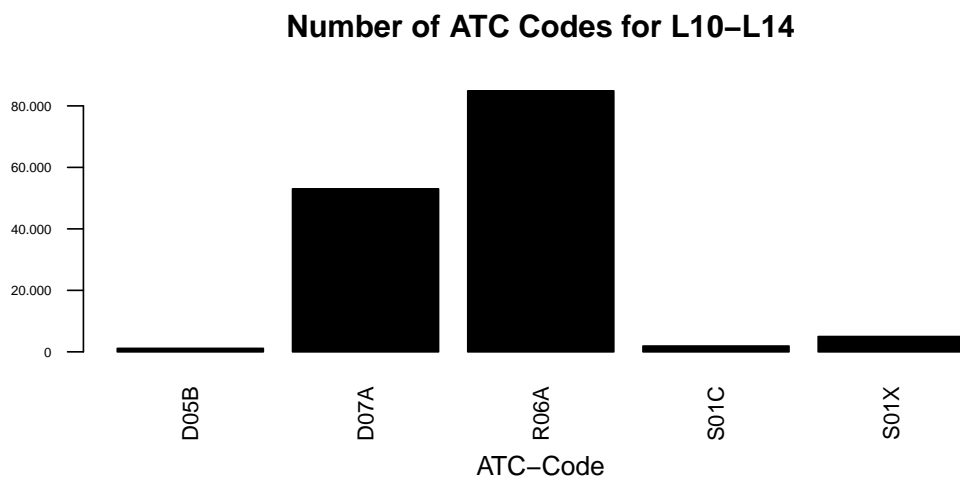


Figure 247: This figure shows the frequency of the underlying ATC codes for the given diagnose group L10-L14. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
D05B	ANTIPSORIATIKA ZUR SYSTEMISCHEN ANWENDUNG	FALSE
D07A	CORTICOSTEROIDE, REIN	TRUE
R06A	ANTIHISTAMINIKA ZUR SYSTEMISCHEN ANWENDUNG	TRUE
S01C	ANTIPHLOGISTIKA UND ANTIINFEKTIVA IN KOMBINATION	FALSE
S01X	ANDERE OPHTHALMIKA	FALSE

Table 127: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose L10-L14.

E.99. Diagnose D55-D59: Hämolytische Anämien

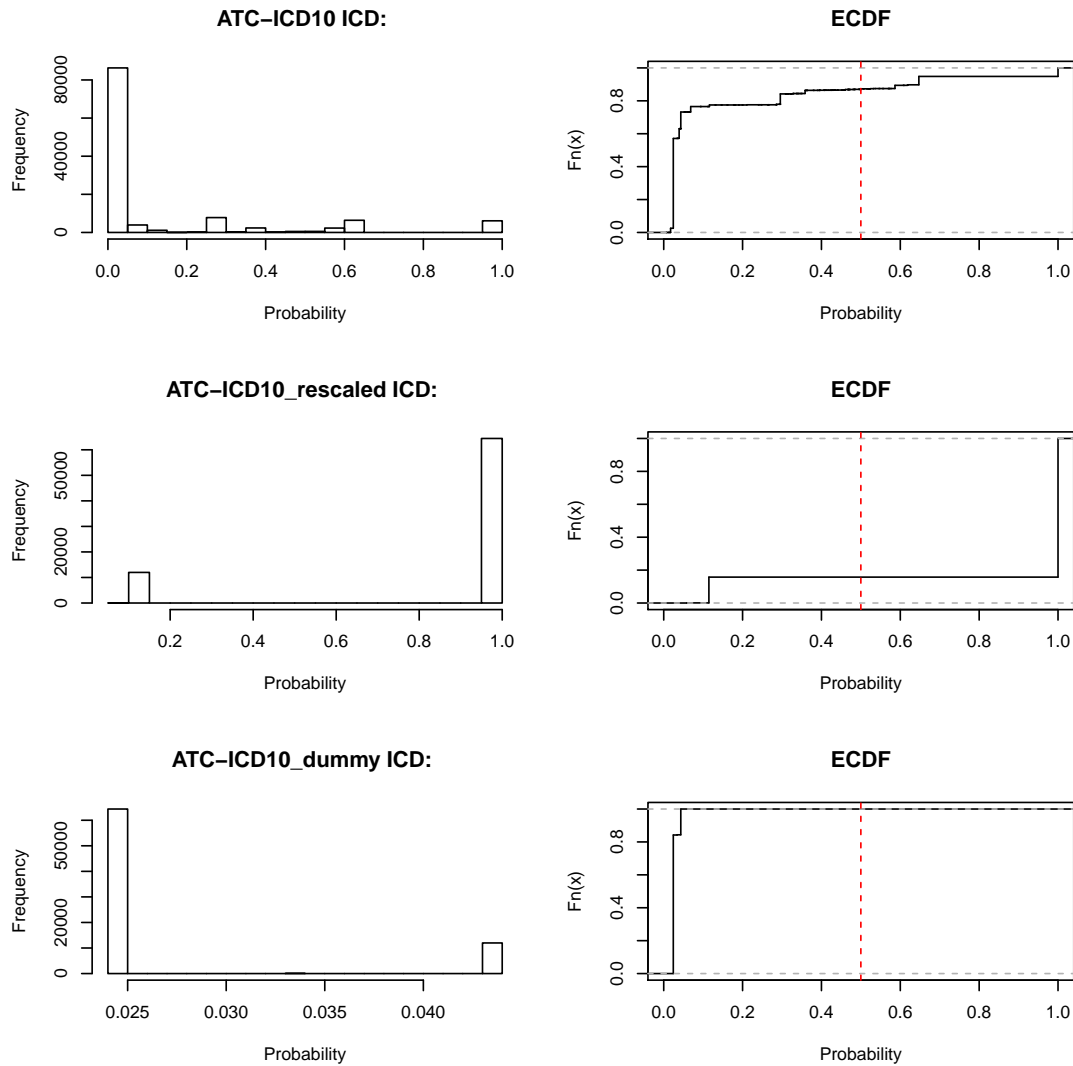


Figure 248: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group D55-D59.

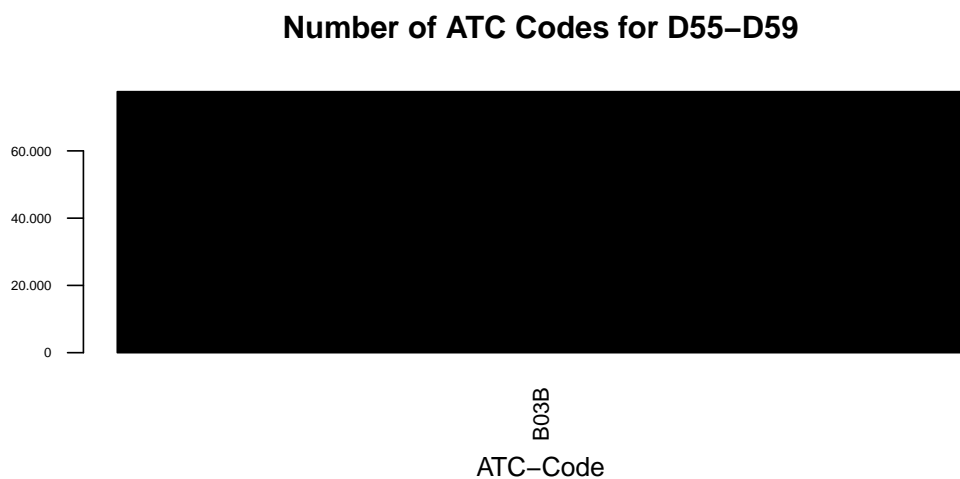
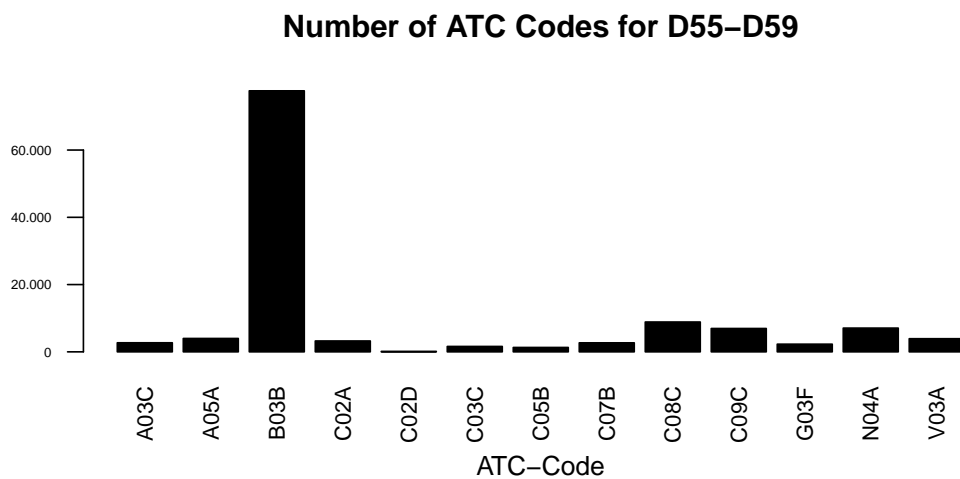


Figure 249: This figure shows the frequency of the underlying ATC codes for the given diagnose group D55-D59. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
A03C	SPASMOLYTIKA IN KOMBINATION MIT PSYCHOLEPTIKA	FALSE
A05A	GALLEN THERAPIE	FALSE
B03B	VITAMIN-B12 UND FOLSÄURE	TRUE
C02A	ANTIADRENERGE MITTEL, ZENTRAL WIRKEND	FALSE
C02D	MITTEL MIT WIRKUNG AUF DIE ARTERIELLE GEFÄSS- MUSKULATUR	FALSE
C03C	HIGH-CEILING-DIURETIKA	FALSE
C05B	ANTIVARIKOSA	FALSE
C07B	BETA-ADRENOREZEPTOR-ANTAGONISTEN UND THI- AZIDE	FALSE
C08C	SELEKTIVE CALCIUMKANALBLOCKER MIT VOR- WIEGENDER GEFÄSSWIRKUNG	FALSE
C09C	ANGIOTENSIN-II-ANTAGONISTEN, REIN	FALSE
G03F	GESTAGENE UND ESTROGENE IN KOMBINATION	FALSE
N04A	ANITCHOLINERGIKA	FALSE
V03A	ALLE ÜBRIGEN THERAPEUTISCHEN MITTEL	FALSE

Table 128: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose D55-D59.

E.100. Diagnose C43-C44: Melanom und sonstige bösartige Neubildungen der Haut

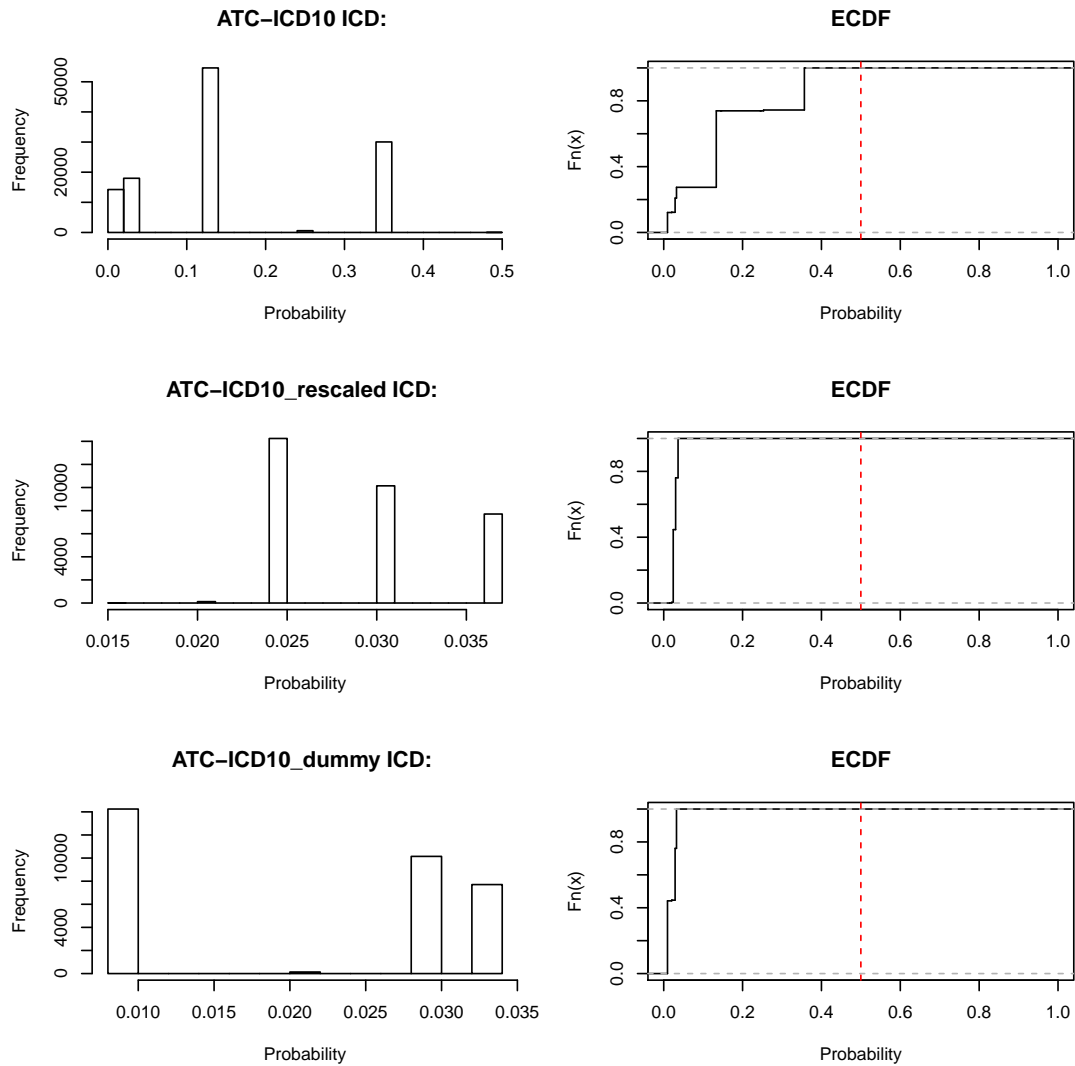
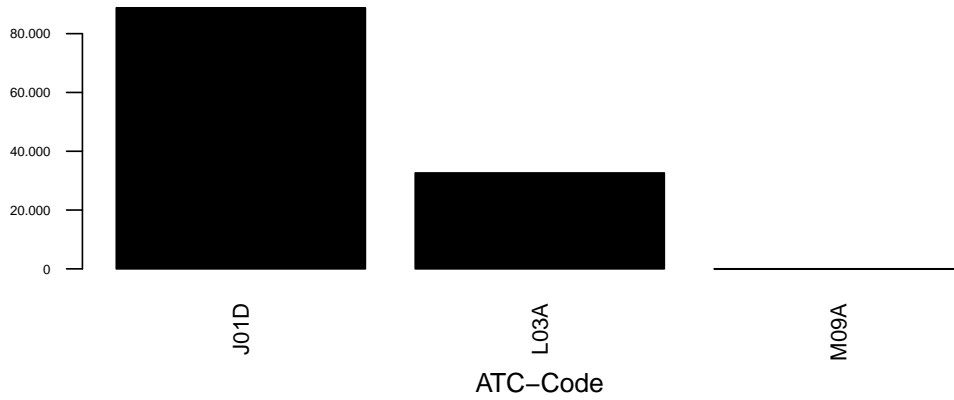


Figure 250: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group C43-C44.

Number of ATC Codes for C43–C44



Number of ATC Codes for C43–C44

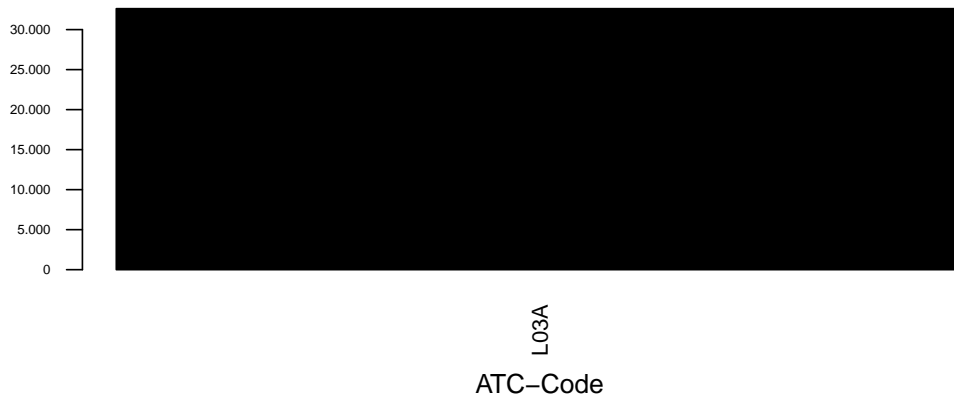


Figure 251: This figure shows the frequency of the underlying ATC codes for the given diagnose group C43-C44. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
J01D	ANDERE BETA-LACTAM-ANTIBIOTIKA	FALSE
L03A	IMMUNSTIMULANZIEN	TRUE
M09A	ANDERE MITTEL GEGEN STÖRUNGEN DES MUSKEL- UND SKELETTSYSTEMS	FALSE

Table 129: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose C43-C44.

E.101. Diagnose J90-J94: Sonstige Krankheiten der Pleura

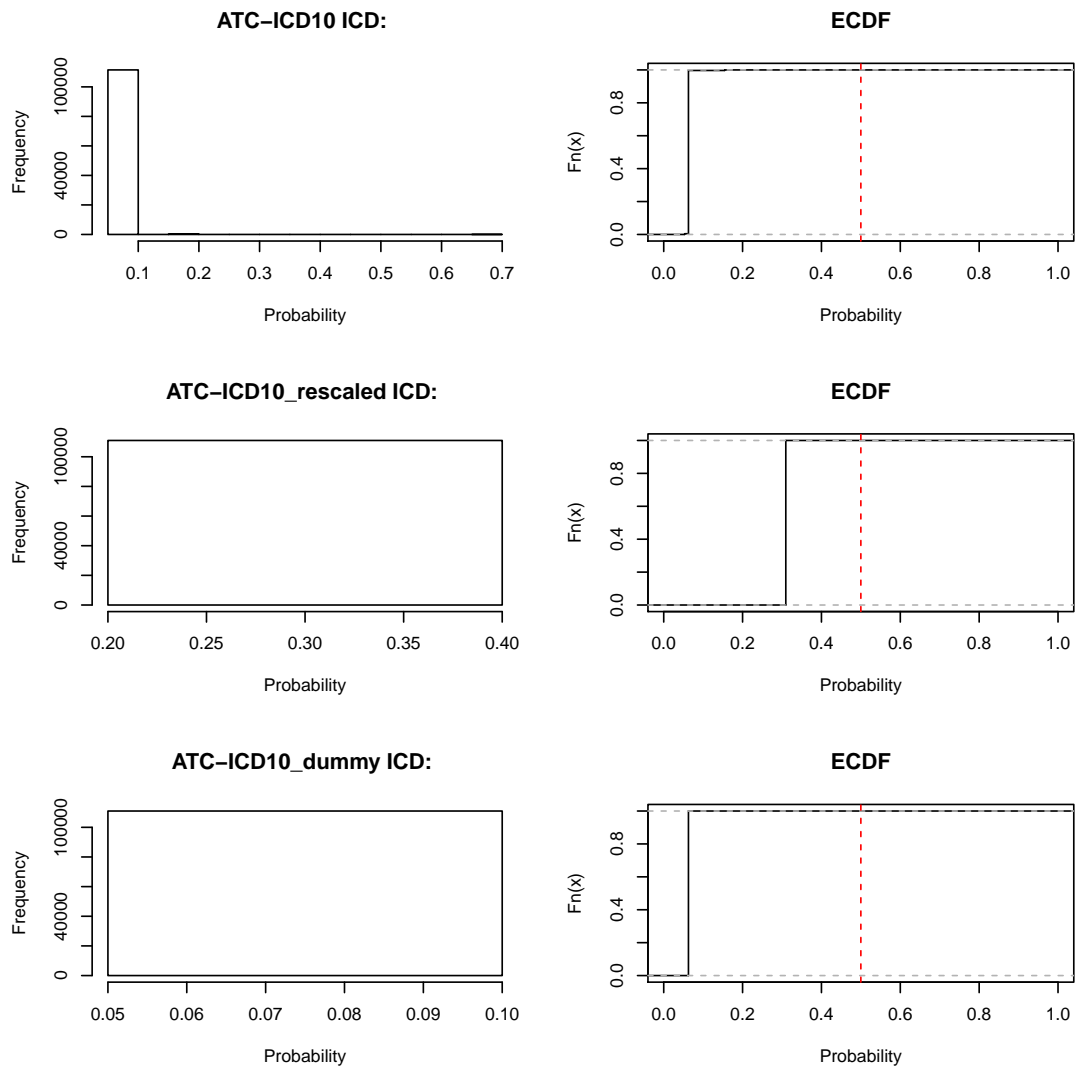
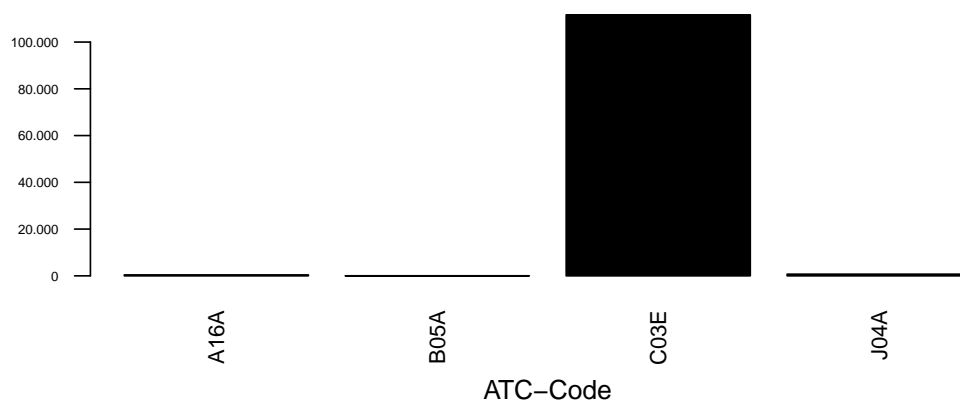


Figure 252: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group J90-J94.

Number of ATC Codes for J90–J94



Number of ATC Codes for J90–J94

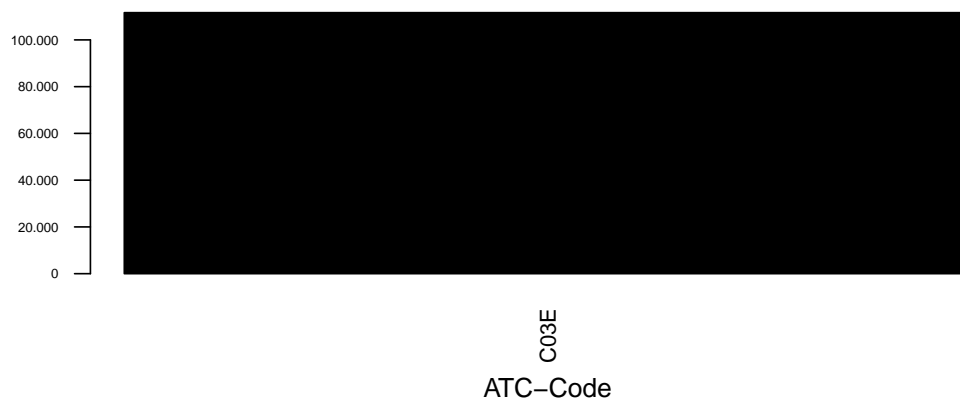


Figure 253: This figure shows the frequency of the underlying ATC codes for the given diagnose group J90-J94. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
A16A	ANDERE MITTEL FÜR DAS ALIMENTÄRE SYSTEM UND DEN STOFFWECHSEL	FALSE
B05A	BLUT UND VERWANDTE PRODUKTE	FALSE
C03E	DIURETIKA UND KALIUM SPARENDE MITTEL IN KOMBINATION	TRUE
J04A	MITTEL ZUR BEHANDLUNG DER TUBERKULOSE	FALSE

Table 130: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose J90-J94.

E.102. Diagnose B35-B49: Mykosen

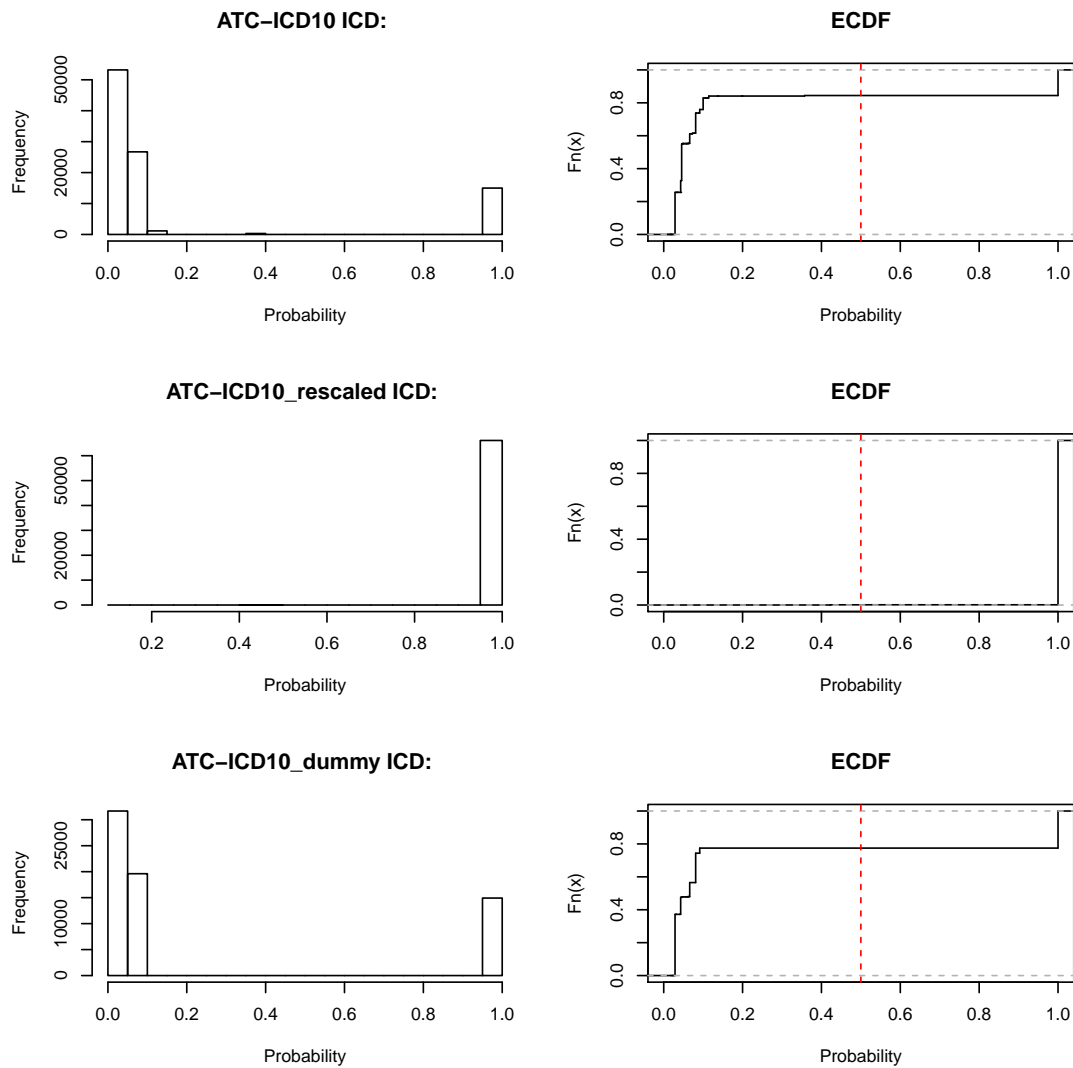


Figure 254: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group B35-B49.

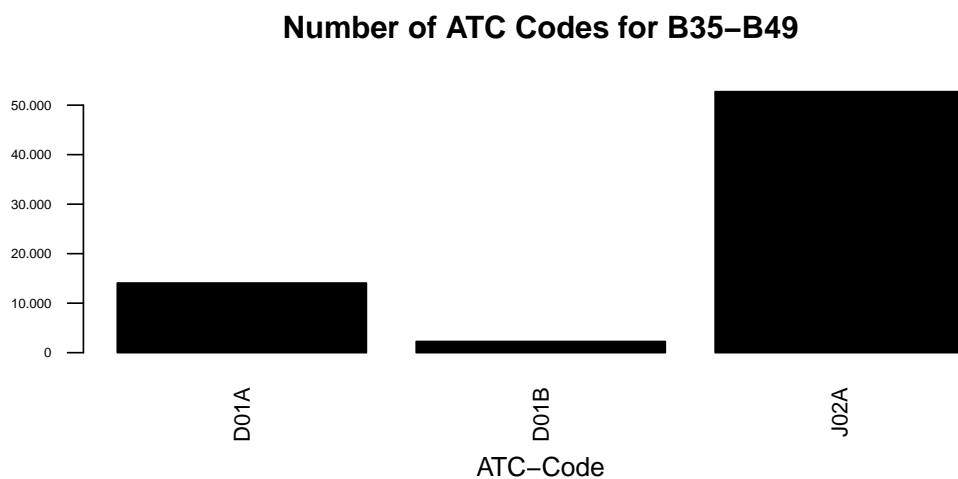
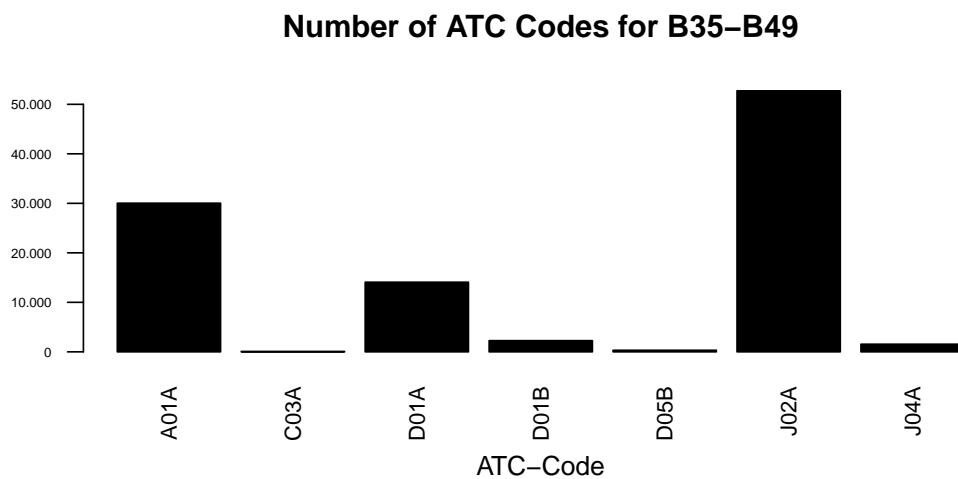


Figure 255: This figure shows the frequency of the underlying ATC codes for the given diagnose group B35-B49. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
A01A	STOMATOLOGIKA	FALSE
C03A	LOW-CEILING-DIURETIKA, THIAZIDE	FALSE
D01A	ANTIMYKOTIKA ZUR TOPISCHEN ANWENDUNG	TRUE
D01B	ANTIMYKOTIKA ZUR SYSTEMISCHEN ANWENDUNG	TRUE
D05B	ANTIPSORIATIKA ZUR SYSTEMISCHEN ANWENDUNG	FALSE
J02A	Antimykotika zur systemischen Anwendung	TRUE
J04A	MITTEL ZUR BEHANDLUNG DER TUBERKULOSE	FALSE

Table 131: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose B35-B49.

E.103. Diagnose N60-N64: Krankheiten der Mamma [Brustdrüse]

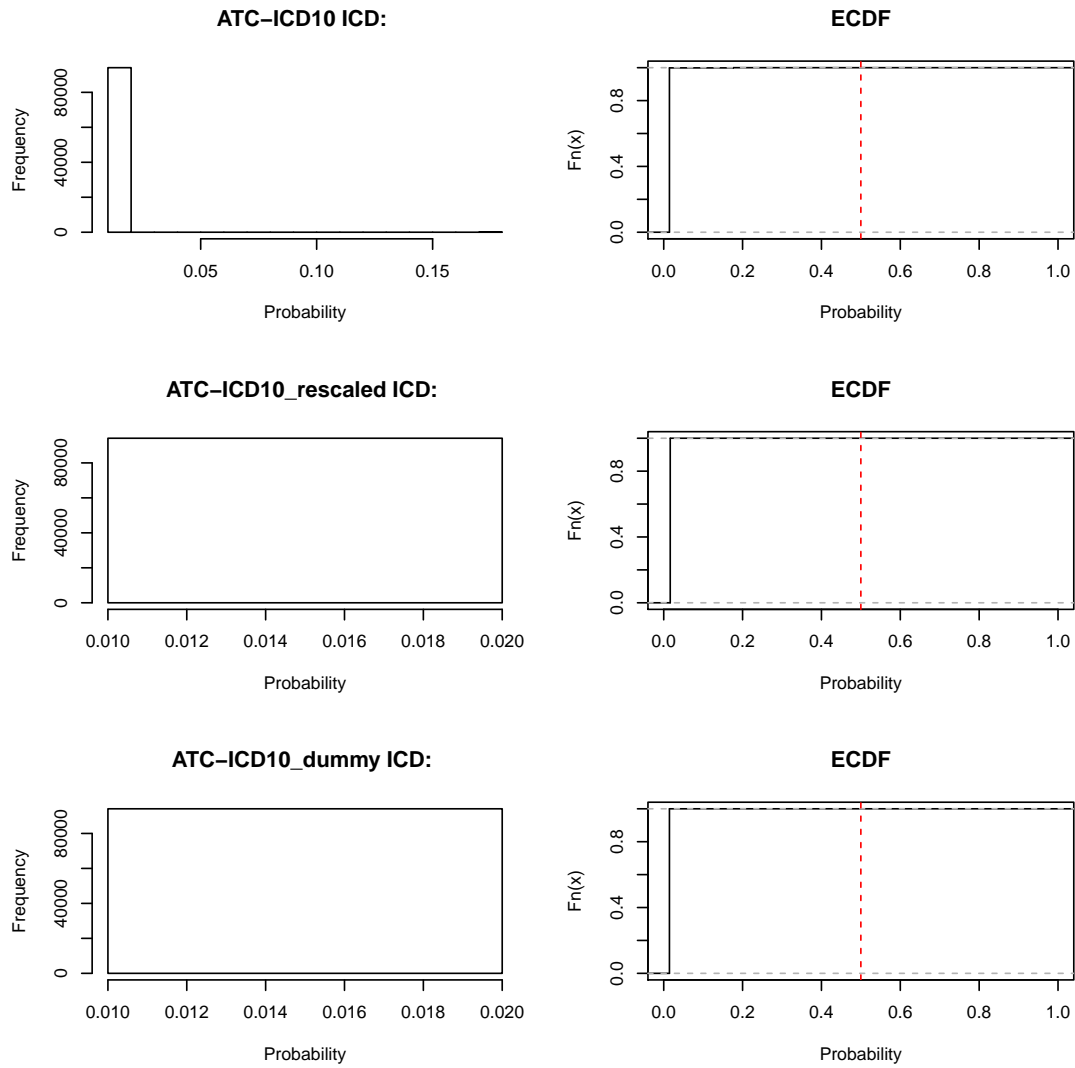
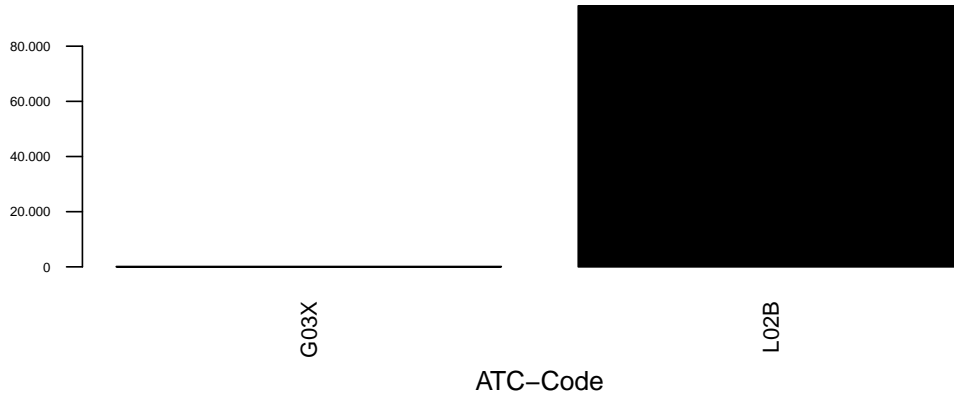


Figure 256: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group N60-N64.

Number of ATC Codes for N60–N64



Number of ATC Codes for N60–N64

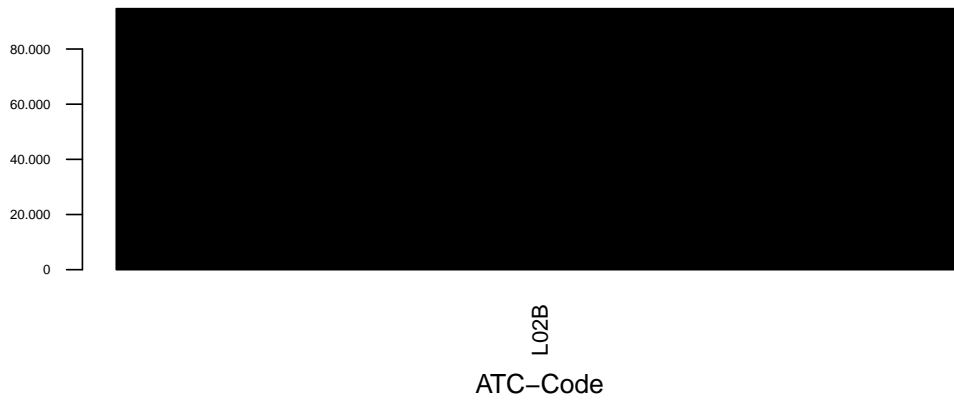


Figure 257: This figure shows the frequency of the underlying ATC codes for the given diagnose group N60-N64. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
G03X	ANDERE SEXUALHORMONE UND MODULATOREN DES GENITALSYSTEMS	FALSE
L02B	HORMONANTAGONISTEN UND VERWANDTE STOFFE	TRUE

Table 132: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose N60-N64.

E.104. Diagnose H10-H13: Affektionen der Konjunktiva

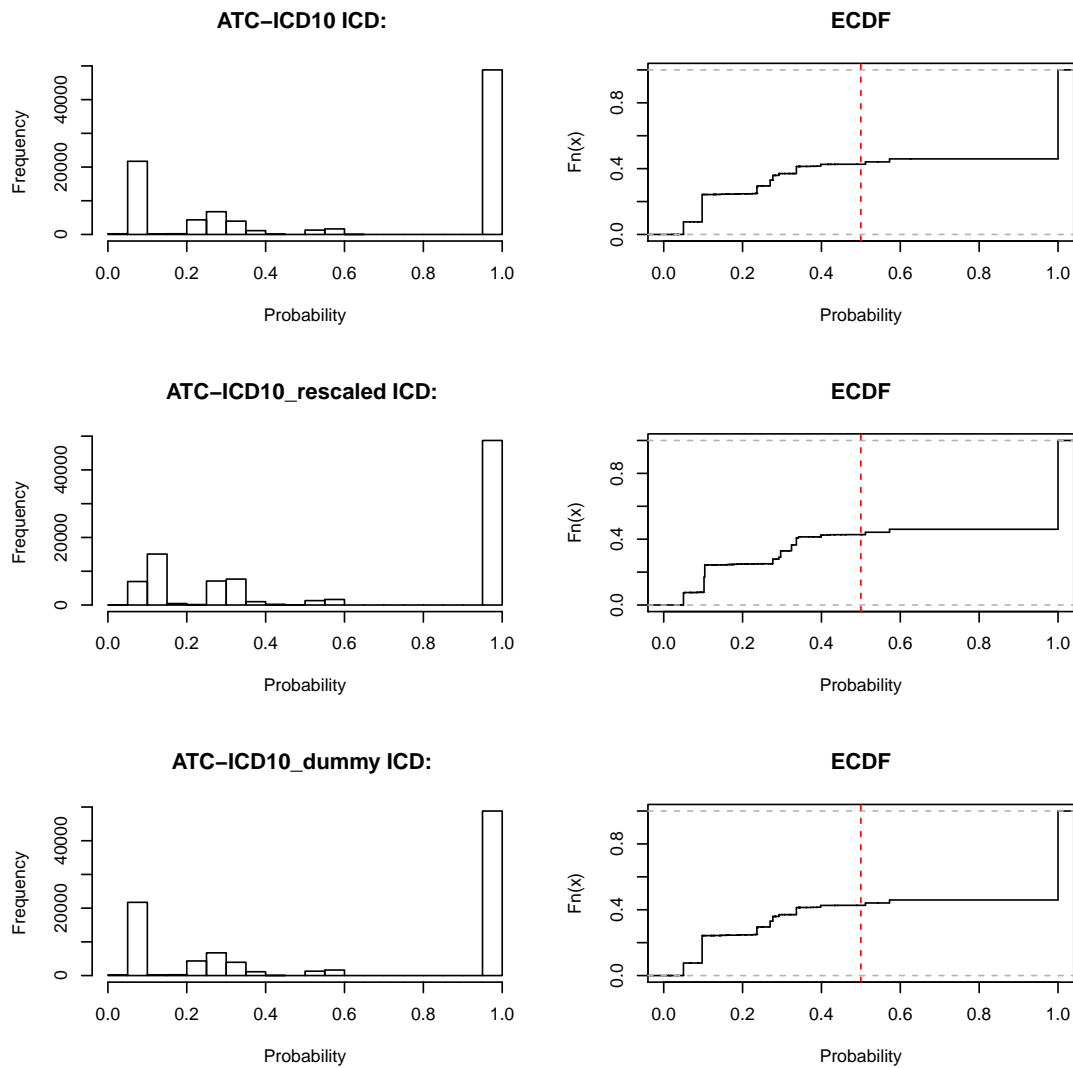


Figure 258: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group H10-H13.

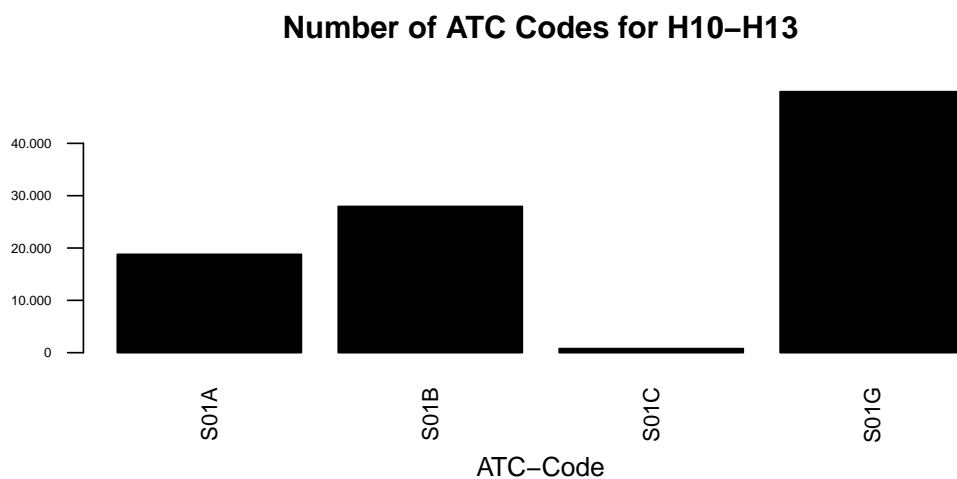
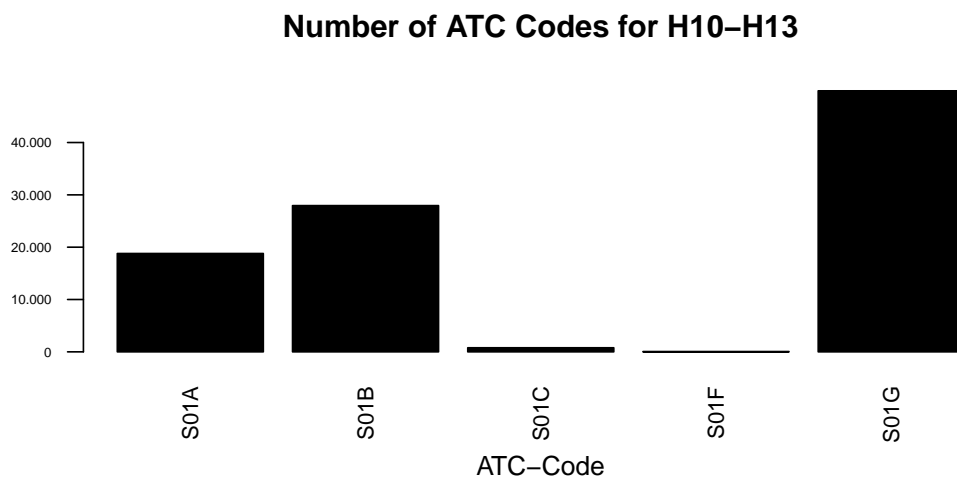


Figure 259: This figure shows the frequency of the underlying ATC codes for the given diagnose group H10-H13. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
S01A	ANTIINFEKTIVA	TRUE
S01B	ANTIPHLOGISTIKA	TRUE
S01C	ANTIPHLOGISTIKA UND ANTIINFEKTIVA IN KOMBINATION	TRUE
S01F	MYDRIATIKA UND ZYKLOPLEGIKA	FALSE
S01G	DEKONGESTIVA UND ANTIALLERGIKA	TRUE

Table 133: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose H10-H13.

E.105. Diagnose M91-M94: Chondropathien

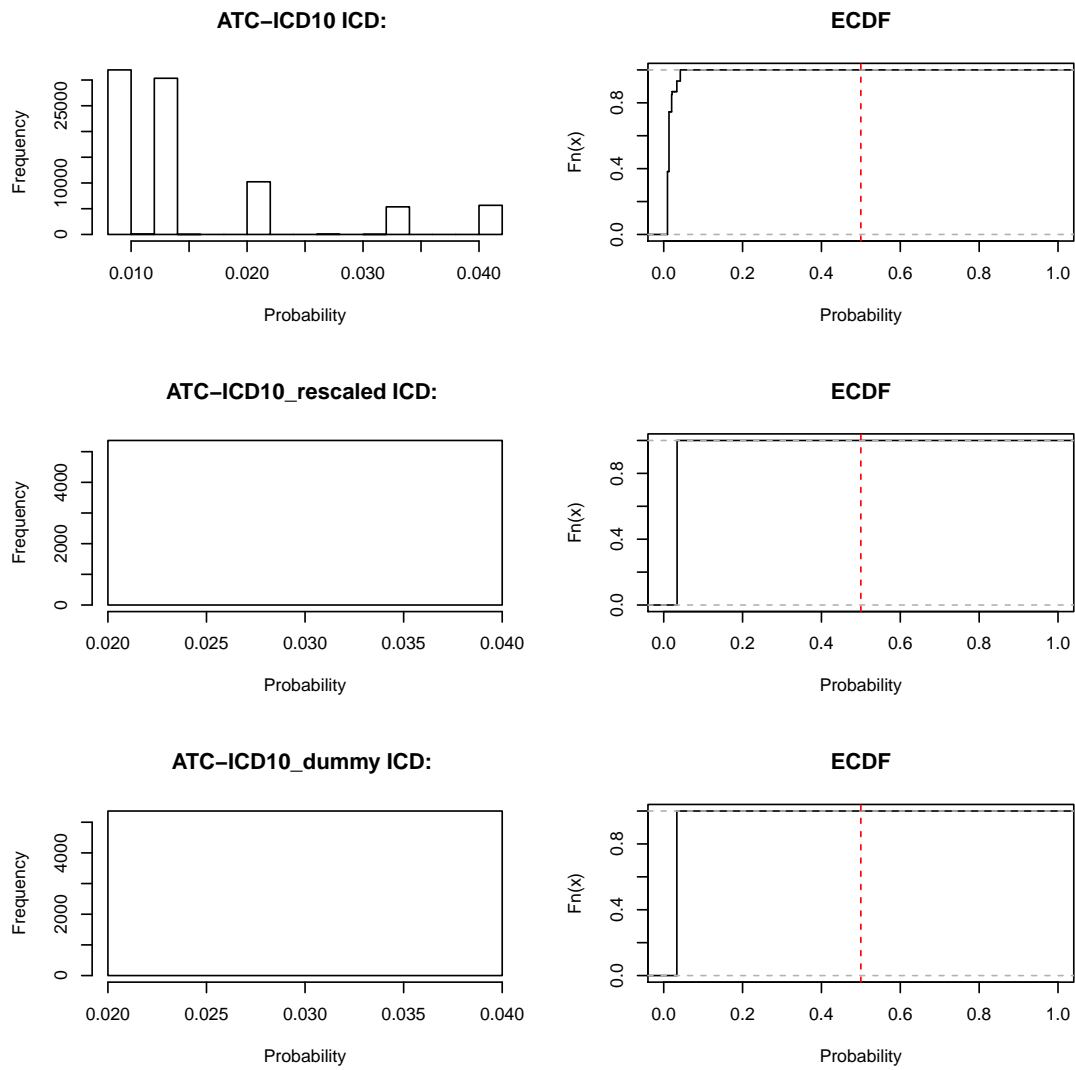
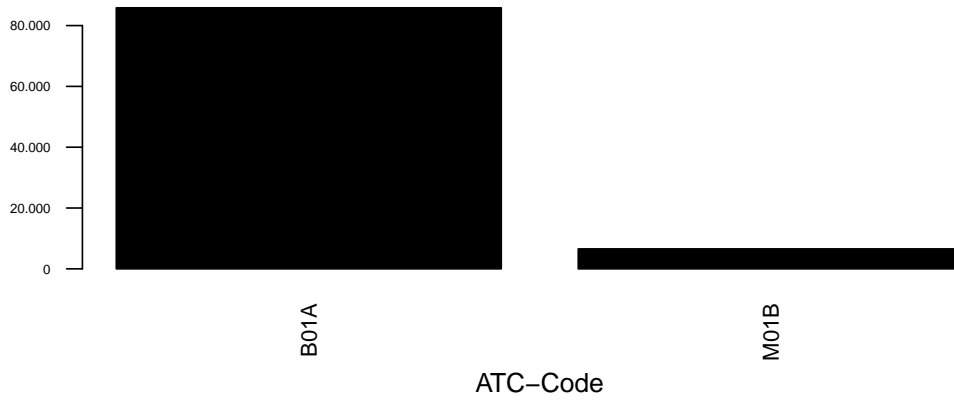


Figure 260: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group M91-M94.

Number of ATC Codes for M91–M94



Number of ATC Codes for M91–M94

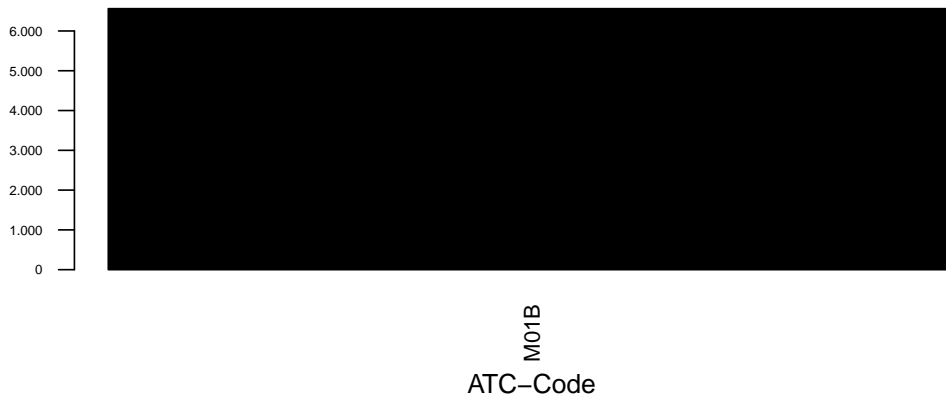


Figure 261: This figure shows the frequency of the underlying ATC codes for the given diagnose group M91-M94. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
B01A	ANTITHROMBOTISCHE MITTEL	FALSE
M01B	ANTIPHLOGISTIKA/ANTIRHEUMATIKA IN KOMBINATION	TRUE

Table 134: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose M91-M94.

E.106. Diagnose O60-O75: Komplikationen bei Wehentätigkeit und Entbindung

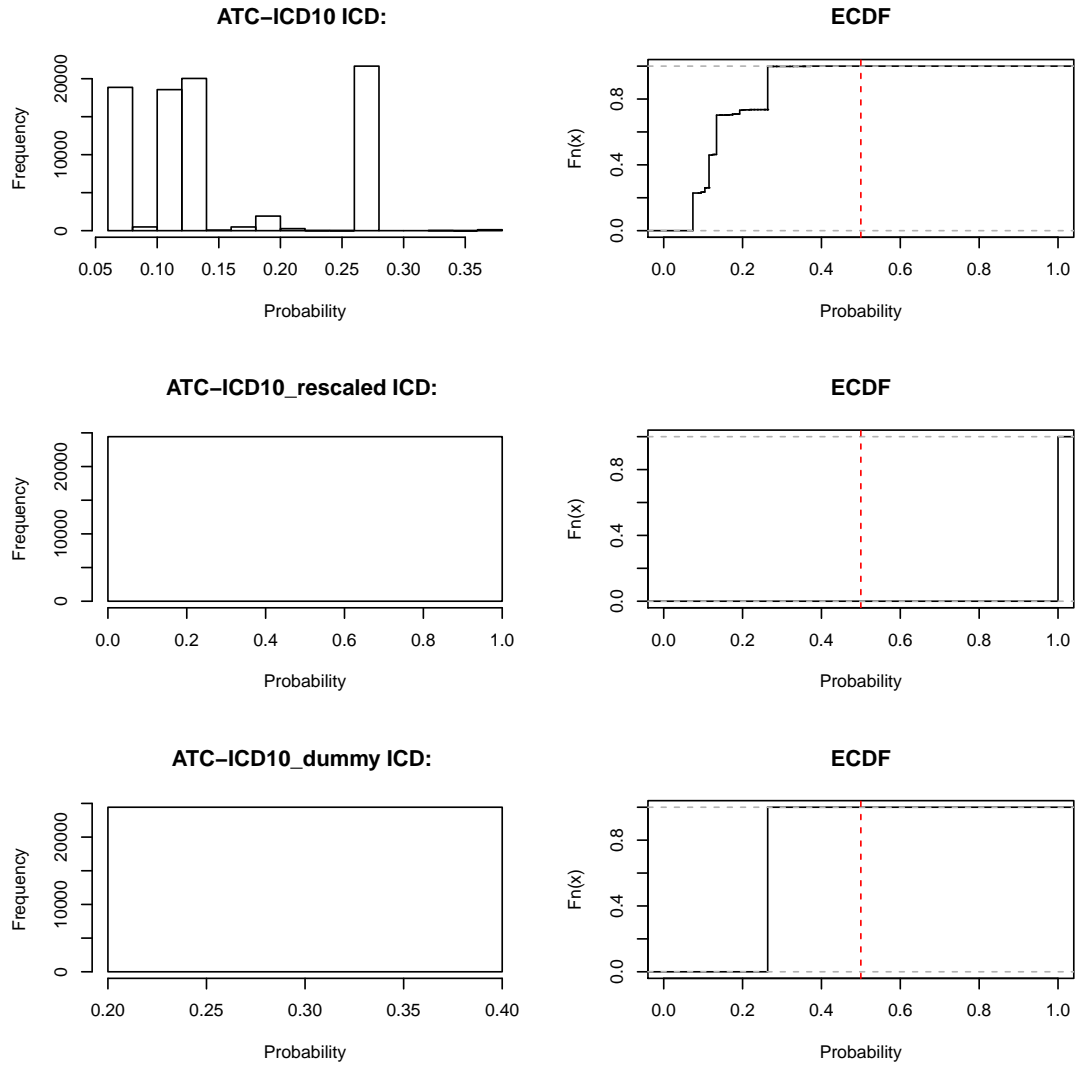
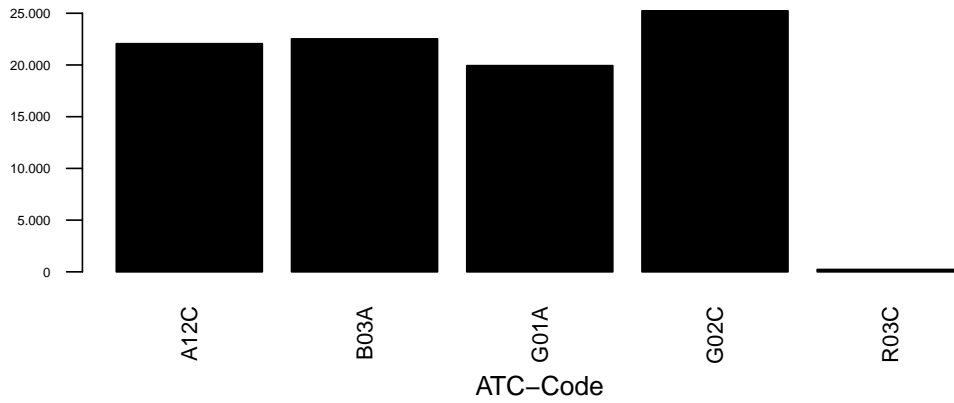


Figure 262: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group O60-O75.

Number of ATC Codes for O60–O75



Number of ATC Codes for O60–O75

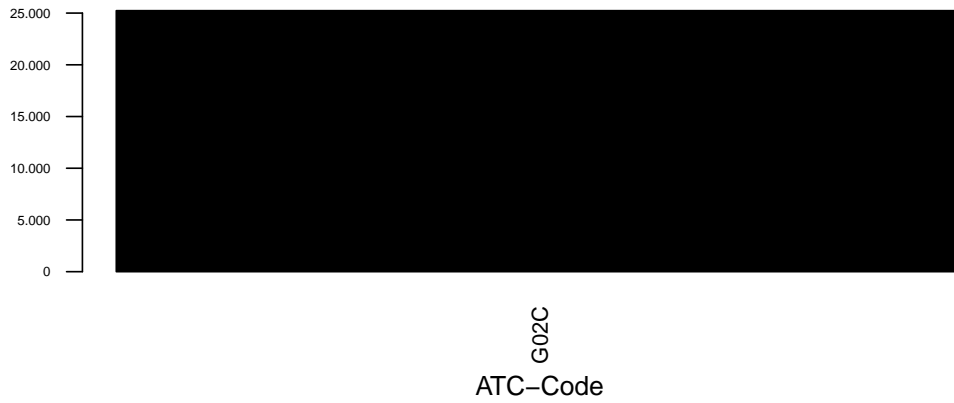


Figure 263: This figure shows the frequency of the underlying ATC codes for the given diagnose group O60-O75. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
A12C	ANDERE MINERALSTOFFE	FALSE
B03A	EISEN-HALTIGE ZUBEREITUNGEN	FALSE
G01A	ANTIINFEKTIVA UND ANTISEPTIKA, EXKL. KOMBINATIONEN M. CORTICOSTEROIDEN	FALSE
G02C	ANDERE GYNÄKOLOGIKA	TRUE
R03C	SYMPATHOMIMETIKA ZUR SYSTEMISCHEN ANWENDUNG	FALSE

Table 135: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose O60-O75.

E.107. Diagnose B90-B94: Folgezustände von infektiösen und parasitären Krankheiten

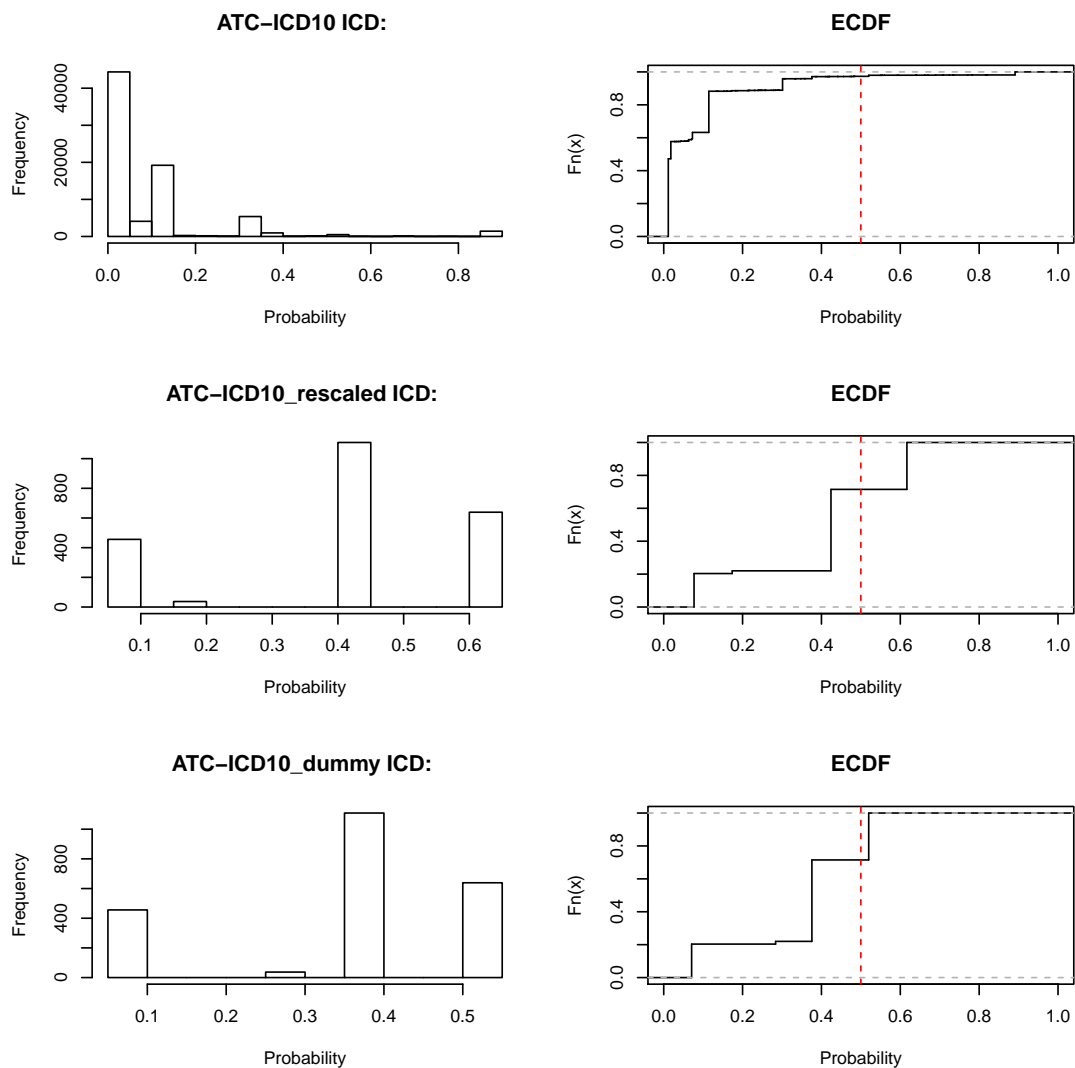


Figure 264: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group B90-B94.

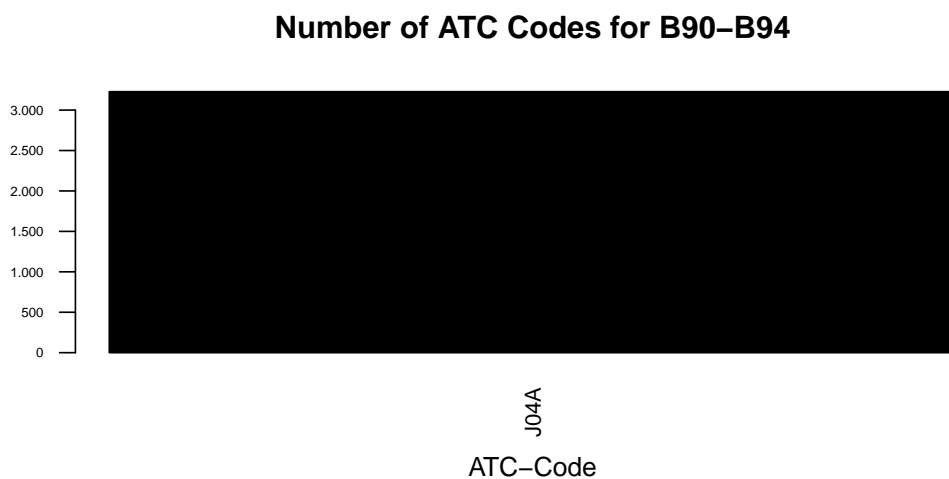
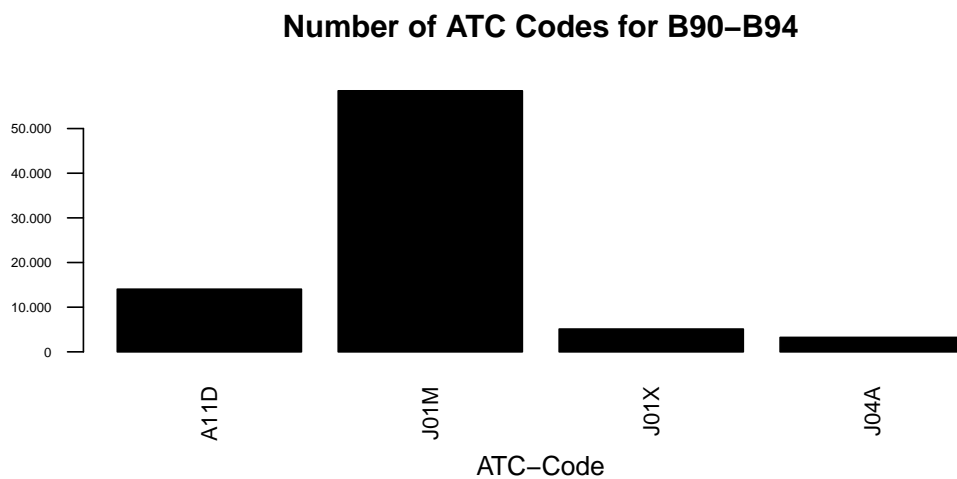


Figure 265: This figure shows the frequency of the underlying ATC codes for the given diagnose group B90-B94. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
A11D	VITAMIN-B1, REIN UND IN KOMBINATION MIT VITAMIN-B6 UND VITAMIN-B12	FALSE
J01M	CHINOLONE	FALSE
J01X	ANDERE ANTIBIOTIKA	FALSE
J04A	MITTEL ZUR BEHANDLUNG DER TUBERKULOSE	TRUE

Table 136: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose B90-B94.

E.108. Diagnose Q20-Q28: Angeborene Fehlbildungen des Kreislaufsystems

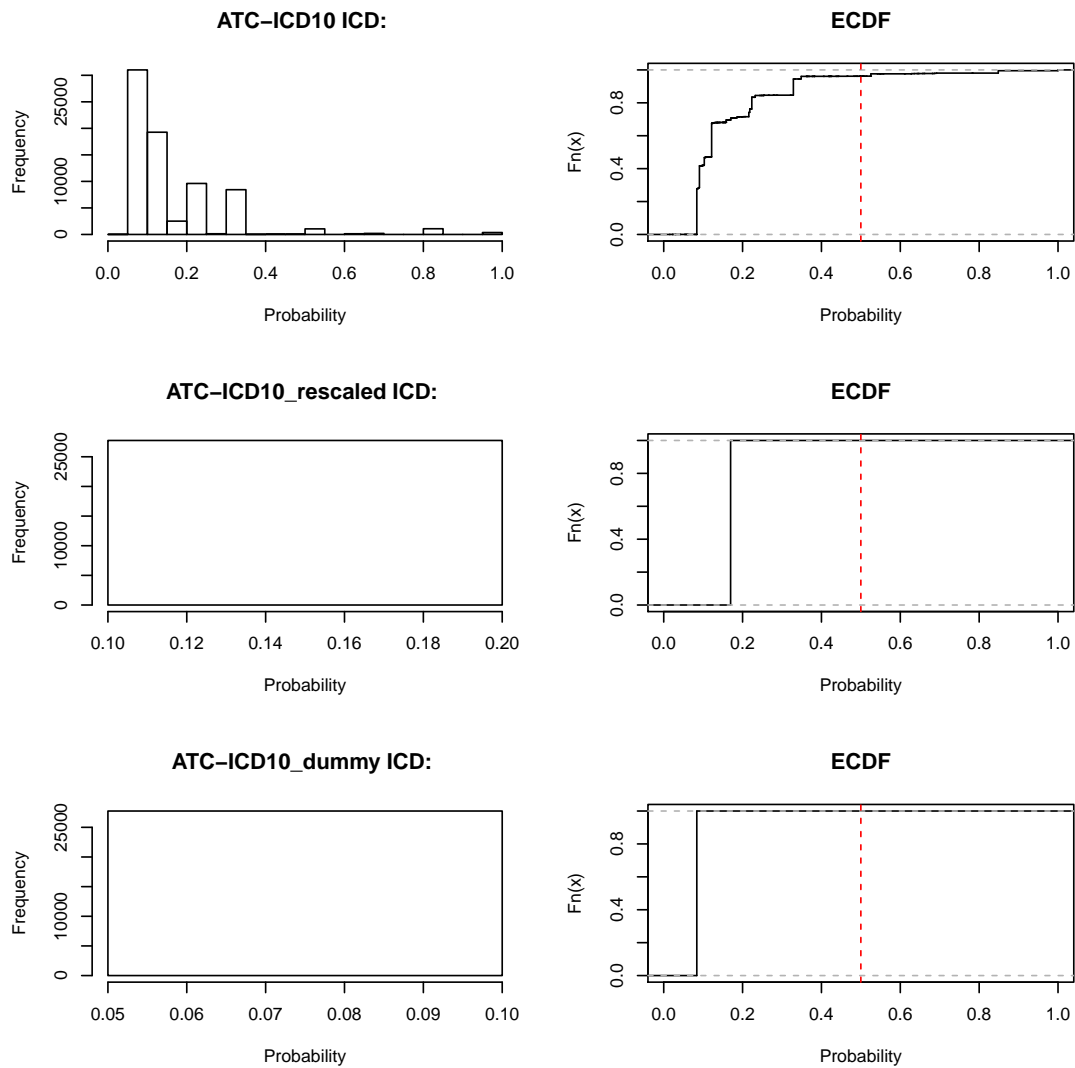
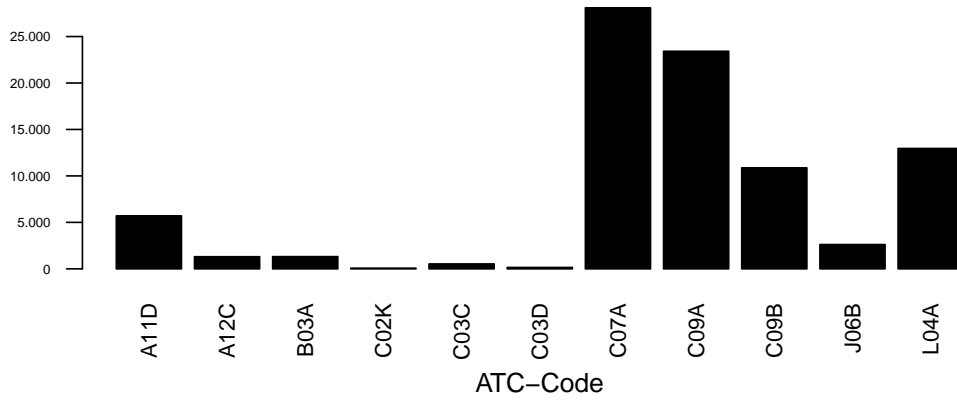


Figure 266: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group Q20-Q28.

Number of ATC Codes for Q20–Q28



Number of ATC Codes for Q20–Q28

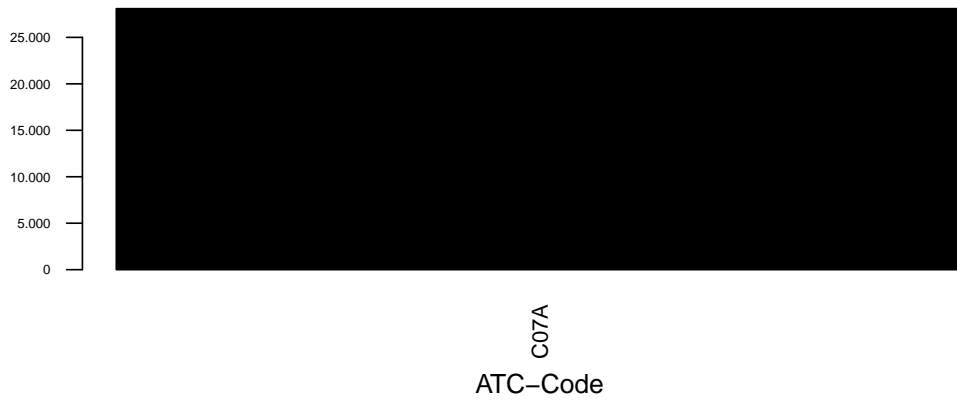


Figure 267: This figure shows the frequency of the underlying ATC codes for the given diagnose group Q20-Q28. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
A11D	VITAMIN-B1, REIN UND IN KOMBINATION MIT VITAMIN-B6 UND VITAMIN-B12	FALSE
A12C	ANDERE MINERALSTOFFE	FALSE
B03A	EISEN-HALTIGE ZUBEREITUNGEN	FALSE
C02K	ANDERE ANTIHYPERTONIKA	FALSE
C03C	HIGH-CEILING-DIURETIKA	FALSE
C03D	KALIUM SPARENDE DIURETIKA	FALSE
C07A	BETA-ADRENOREZEPTOR-ANTAGONISTEN	TRUE
C09A	ACE-HEMMER, REIN	FALSE
C09B	ACE-HEMMER, KOMBINATIONEN	FALSE
J06B	IMMUNGLOBULINE	FALSE
L04A	IMMUNSUPPRESSIVA	FALSE

Table 137: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose Q20-Q28.

E.109. Diagnose C40-C41: Bösartige Neubildungen des Knochens und des Gelenkknorpels

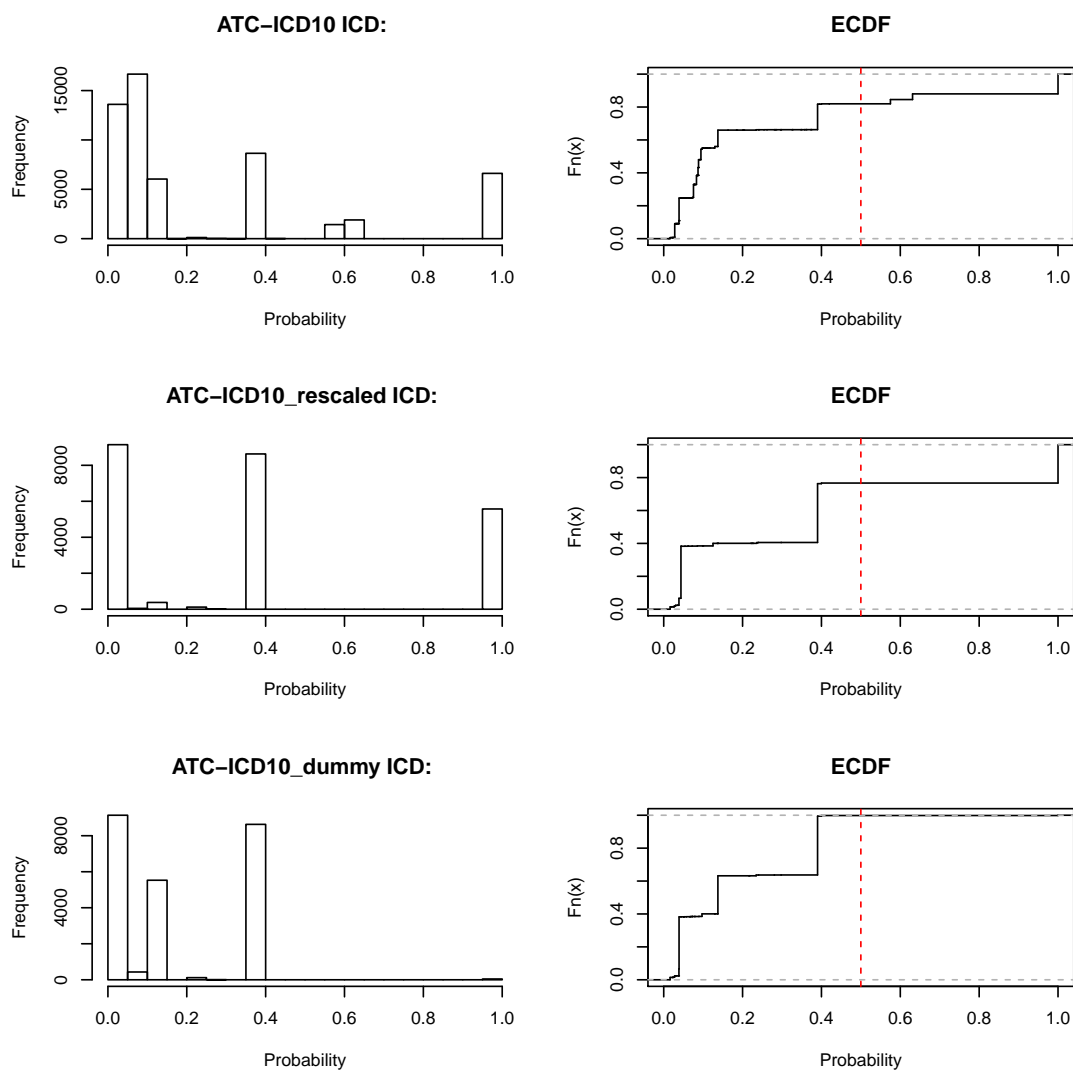


Figure 268: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group C40-C41.

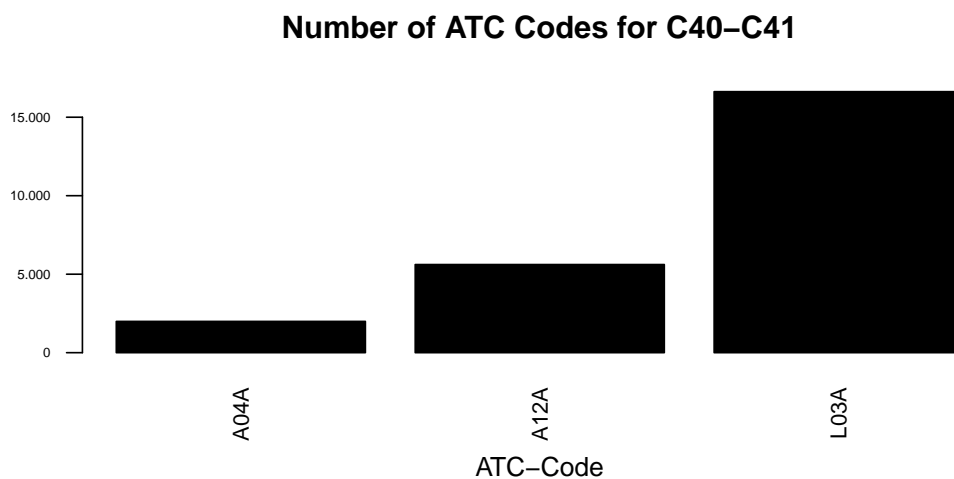
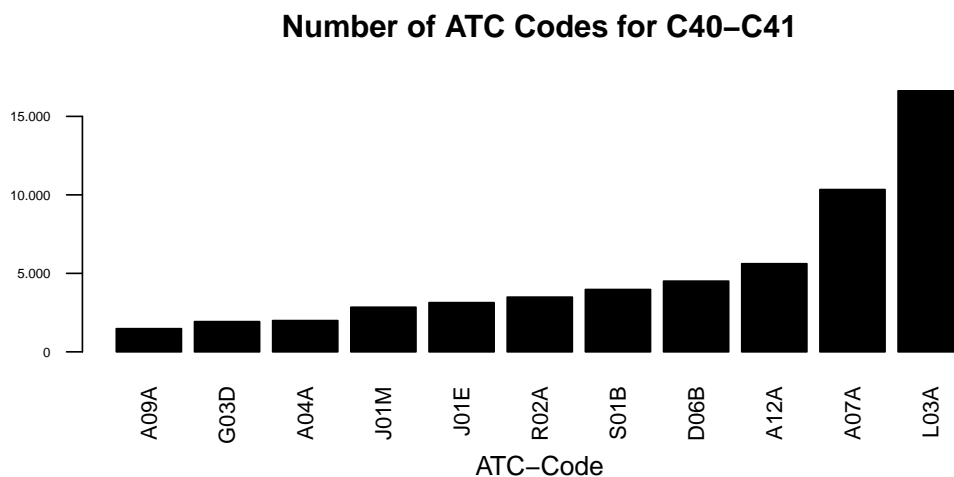


Figure 269: This figure shows the frequency of the underlying ATC codes for the given diagnose group C40-C41. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions. There are 17 ATC-Codes that related to the Diagnosis C40-C41. In order to give a clear overview of the distribution of the ATC codes behind an ICD10 group only the ATCs are shown, which represent the 95% of the cumulative frequency.

ATC	Description	Expert
A04A	ANTIEMETIKA UND MITTEL GEGEN ÜBELKEIT	TRUE
A07A	INTESTINALE ANTIINFEKTIVA	FALSE
A09A	DIGESTIVA, INKL. ENZYME	FALSE
A12A	CALCIUM	TRUE
D06B	CHEMOTHERAPEUTIKA ZUR TOPISCHEN ANWENDUNG	FALSE
G03D	GESTAGENE	FALSE
J01E	SULFONAMIDE UND TRIMETHOPRIM	FALSE
J01M	CHINOLONE	FALSE
L03A	IMMUNSTIMULANZIEN	TRUE
R02A	HALS- UND RACHENTHERAPEUTIKA	FALSE
S01B	ANTIPHLOGISTIKA	FALSE

Table 138: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose C40-C41. There are 17 ATC-Codes that related to the Diagnosis C40-C41. In order to give a clear overview of the distribution of the ATC codes behind an ICD10 group only the ATCs are shown, which represent the 95% of the cumulative frequency.

E.110. Diagnose F90-F98: Verhaltens- und emotionale Störungen mit Beginn in der Kindheit und Jugend

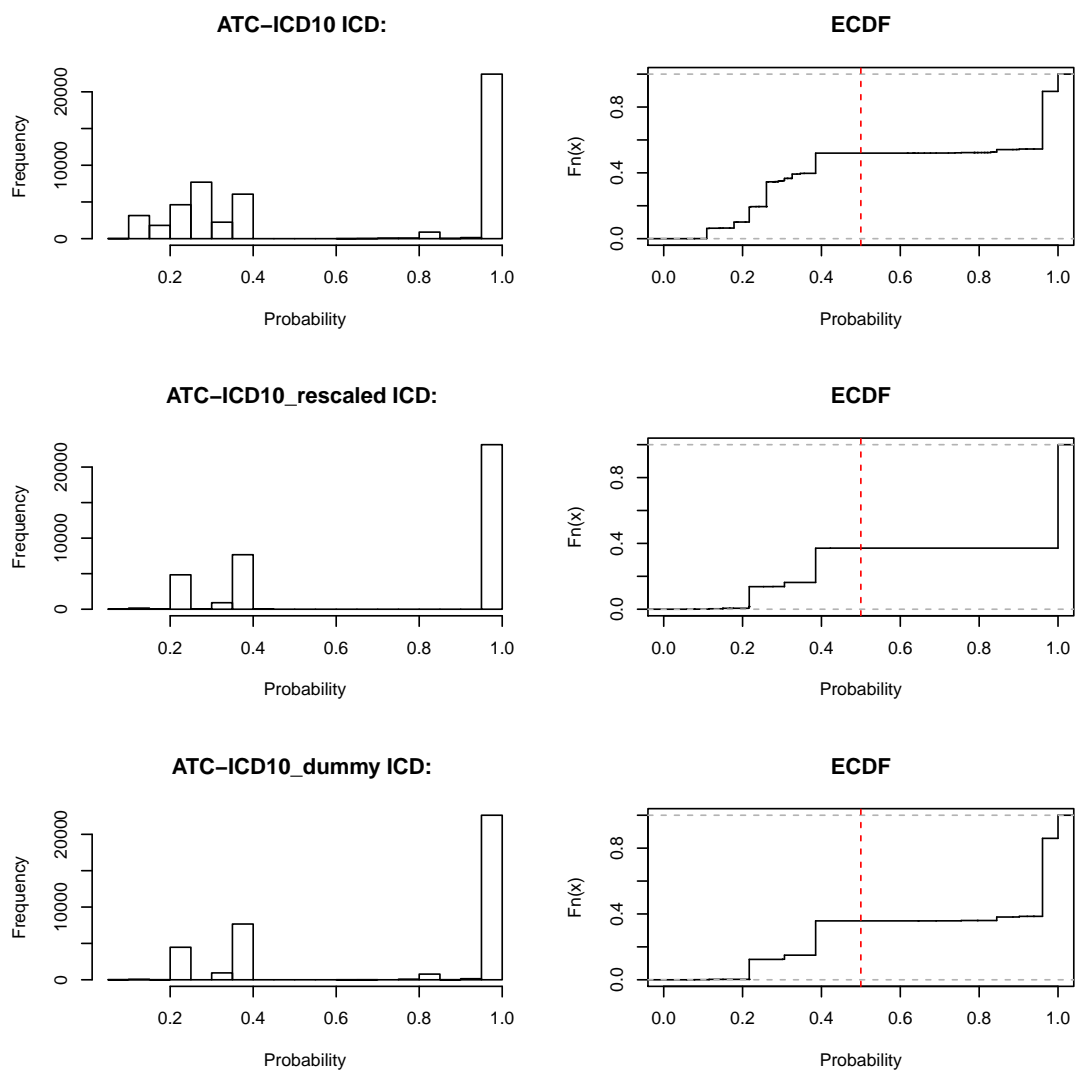


Figure 270: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group F90-F98.

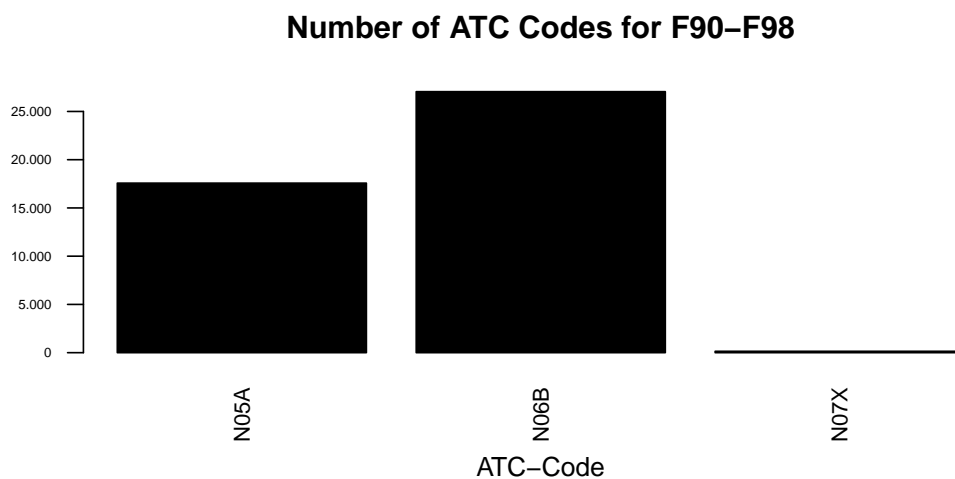
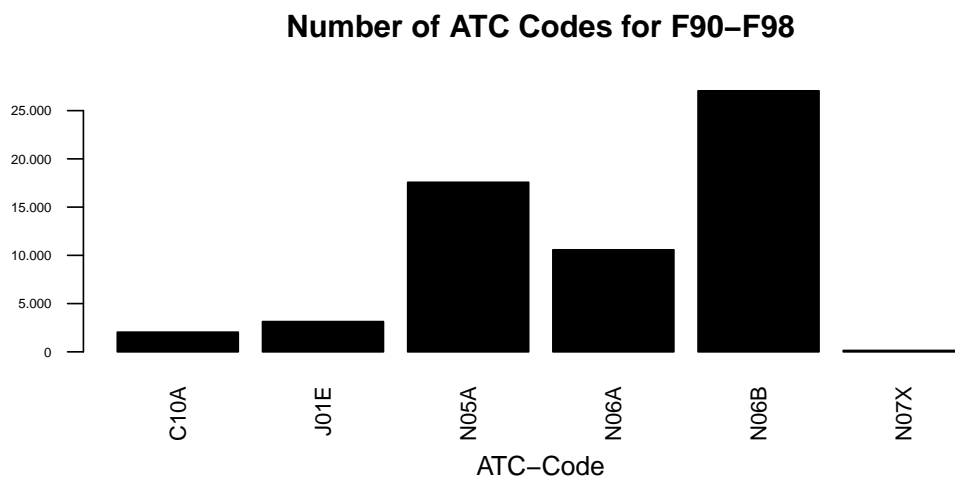


Figure 271: This figure shows the frequency of the underlying ATC codes for the given diagnose group F90-F98. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
C10A	MITTEL, DIE DEN LIPIDSTOFFWECHSEL BEEINFLUSSEN, REIN	FALSE
J01E	SULFONAMIDE UND TRIMETHOPRIM	FALSE
N05A	ANTIPSYCHOTIKA	TRUE
N06A	ANTIDEPRESSIVA	FALSE
N06B	PSYCHOSTIMULANZIEN, MITTEL FÜR DIE ADHD UND NOOTROPIKA	TRUE
N07X	ANDERE MITTEL FÜR DAS NERVENSYSTEM	TRUE

Table 139: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose F90-F98.

E.111. Diagnose A65-A69: Sonstige Spirochätenkrankheiten

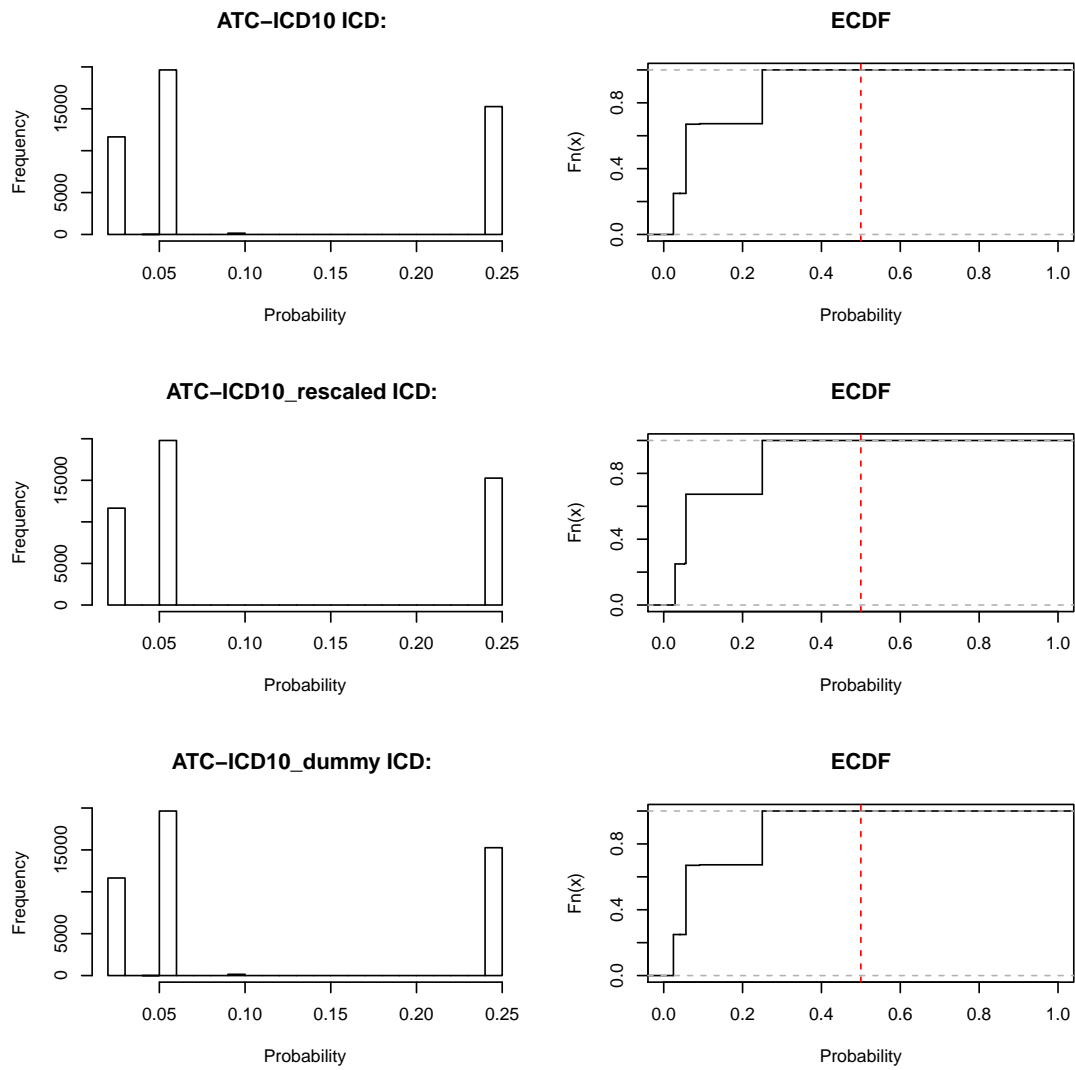
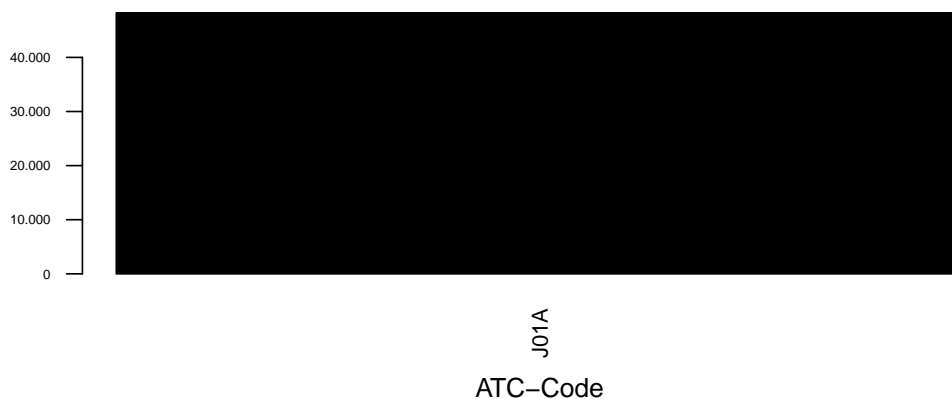


Figure 272: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group A65-A69.

Number of ATC Codes for A65–A69



Number of ATC Codes for A65–A69

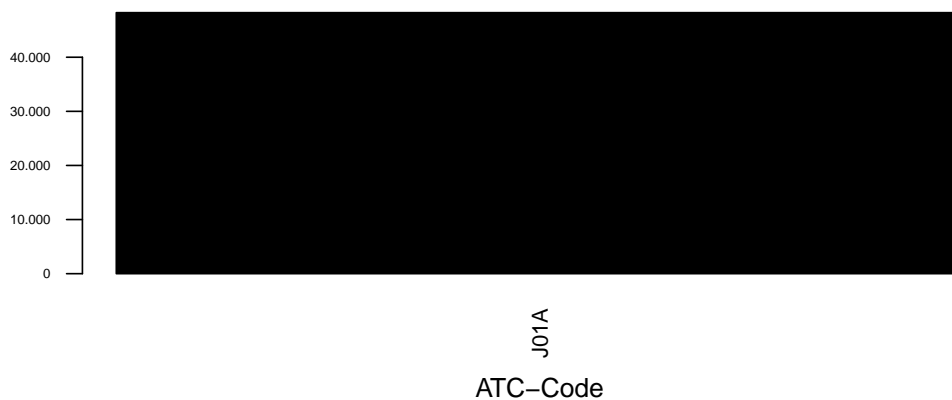


Figure 273: This figure shows the frequency of the underlying ATC codes for the given diagnose group A65-A69. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
J01A	TETRACYCLINE	TRUE

Table 140: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose A65-A69.

E.112. Diagnose I95-I99: Sonstige und nicht näher bezeichnete Krankheiten des Kreislaufsystems

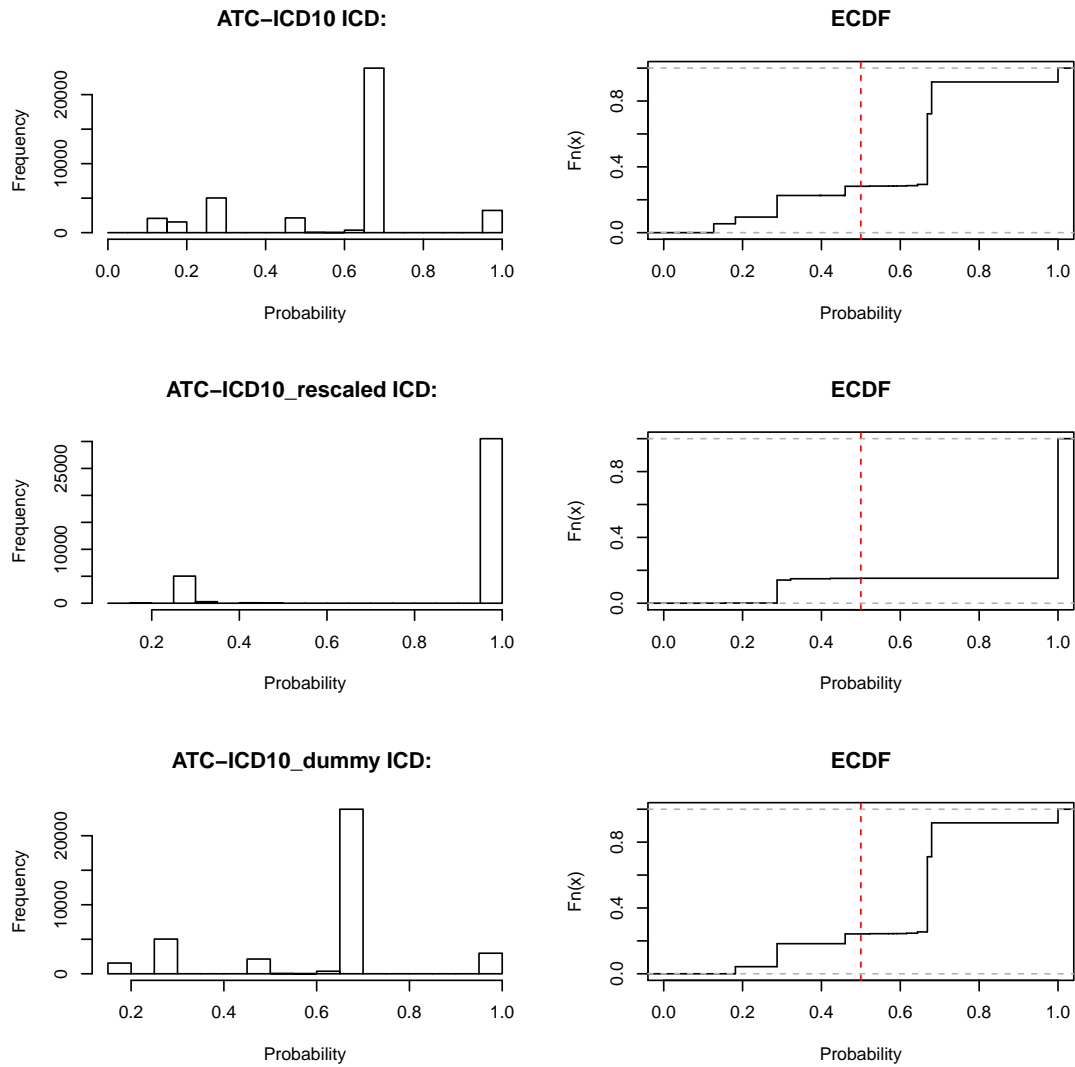


Figure 274: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group I95-I99.

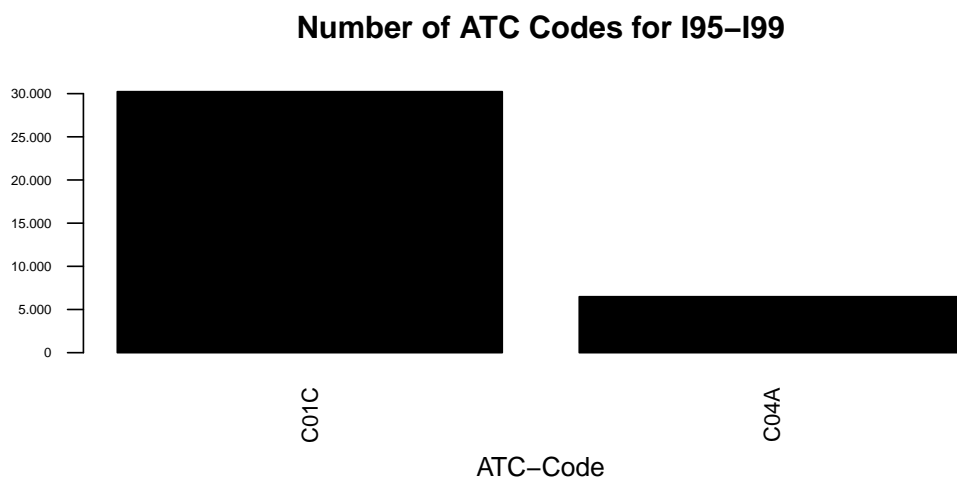
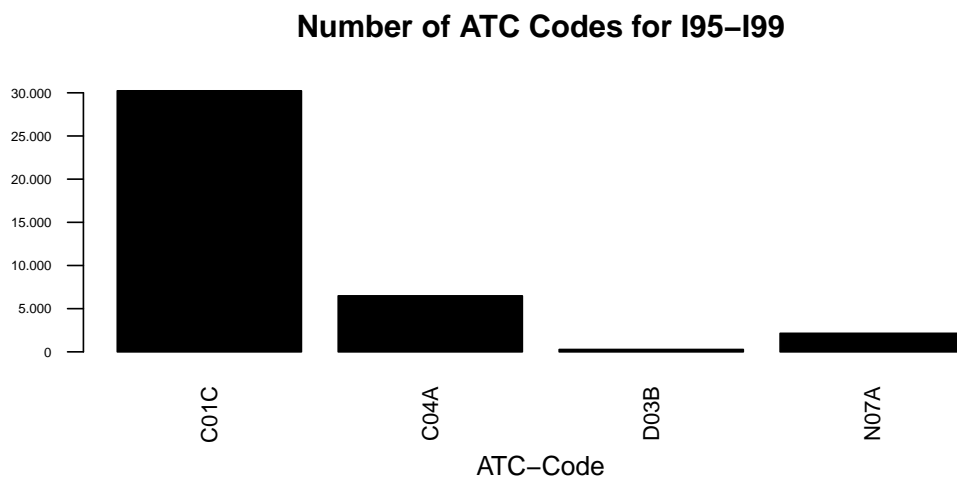


Figure 275: This figure shows the frequency of the underlying ATC codes for the given diagnose group I95-I99. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
C01C	KARDIOSTIMULANZIEN, EXKL. HERZGLYKOSIDE	TRUE
C04A	PERIPHERE VASODILATATOREN	TRUE
D03B	ENZYME	FALSE
N07A	PARASYMPATHOMIMETIKA	FALSE

Table 141: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose I95-I99.

E.113. Diagnose D65-D69: Koagulopathien, Purpura und sonstige hämorrhagische Diathesen

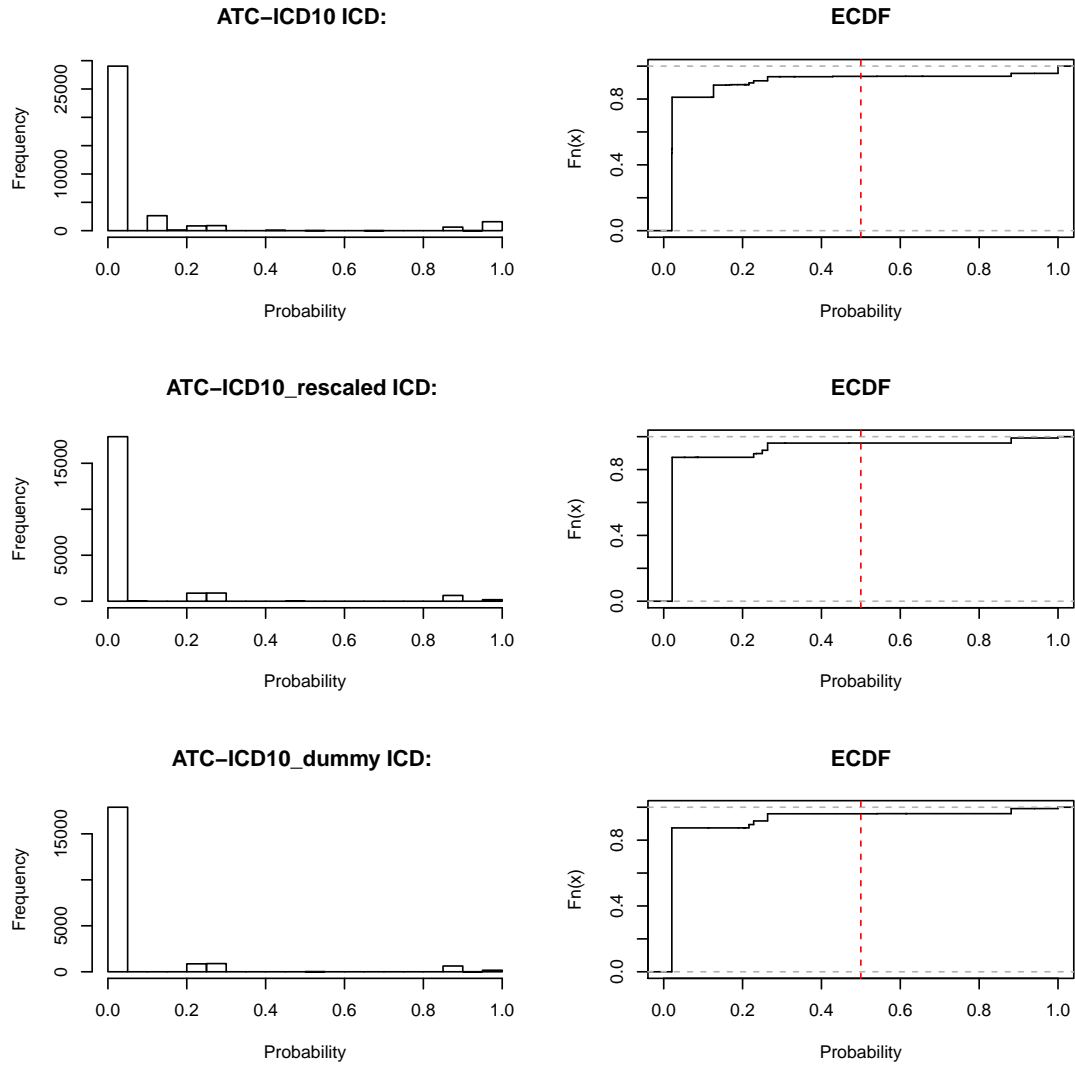


Figure 276: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group D65-D69.

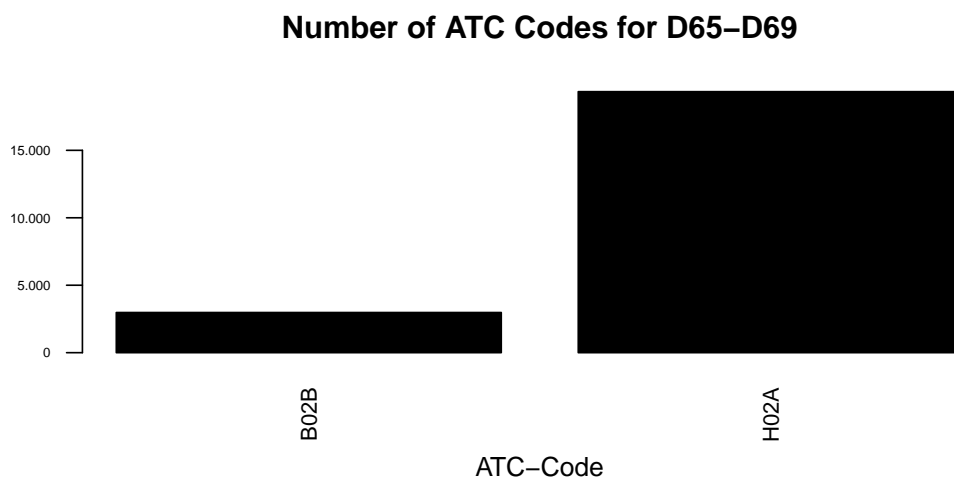
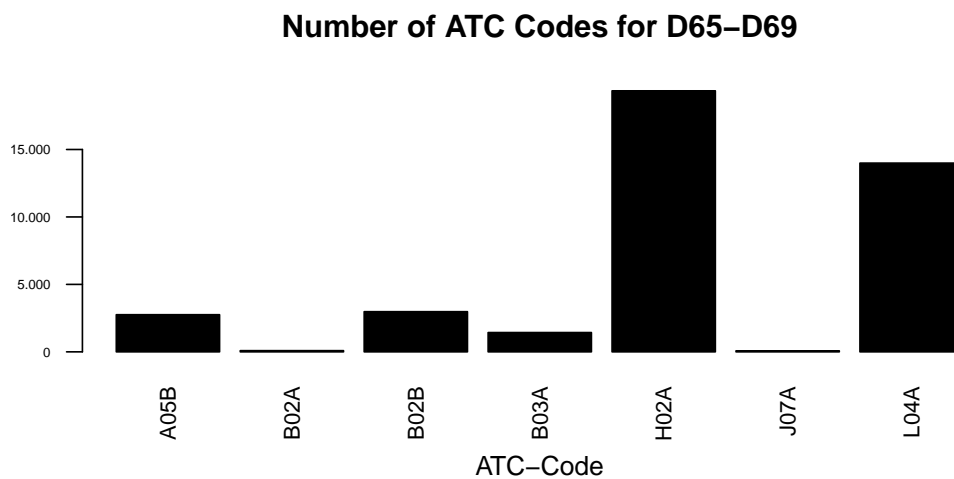


Figure 277: This figure shows the frequency of the underlying ATC codes for the given diagnose group D65-D69. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
A05B	LEBERTHERAPIE, LIPOTROPE SUBSTANZEN	FALSE
B02A	ANTIFIBRINOLYTIKA	FALSE
B02B	VITAMIN K UND ANDERE HÄMOSTATIKA	TRUE
B03A	EISEN-HALTIGE ZUBEREITUNGEN	FALSE
H02A	CORTICOSTEROIDE ZUR SYSTEMISCHEN ANWENDUNG, REIN	TRUE
J07A	BAKTERIELLE IMPFSTOFFE	FALSE
L04A	IMMUNSUPPRESSIVA	FALSE

Table 142: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose D65-D69.

E.114. Diagnose H00-H06: Affektionen des Augenlides, des Tränenapparates und der Orbita

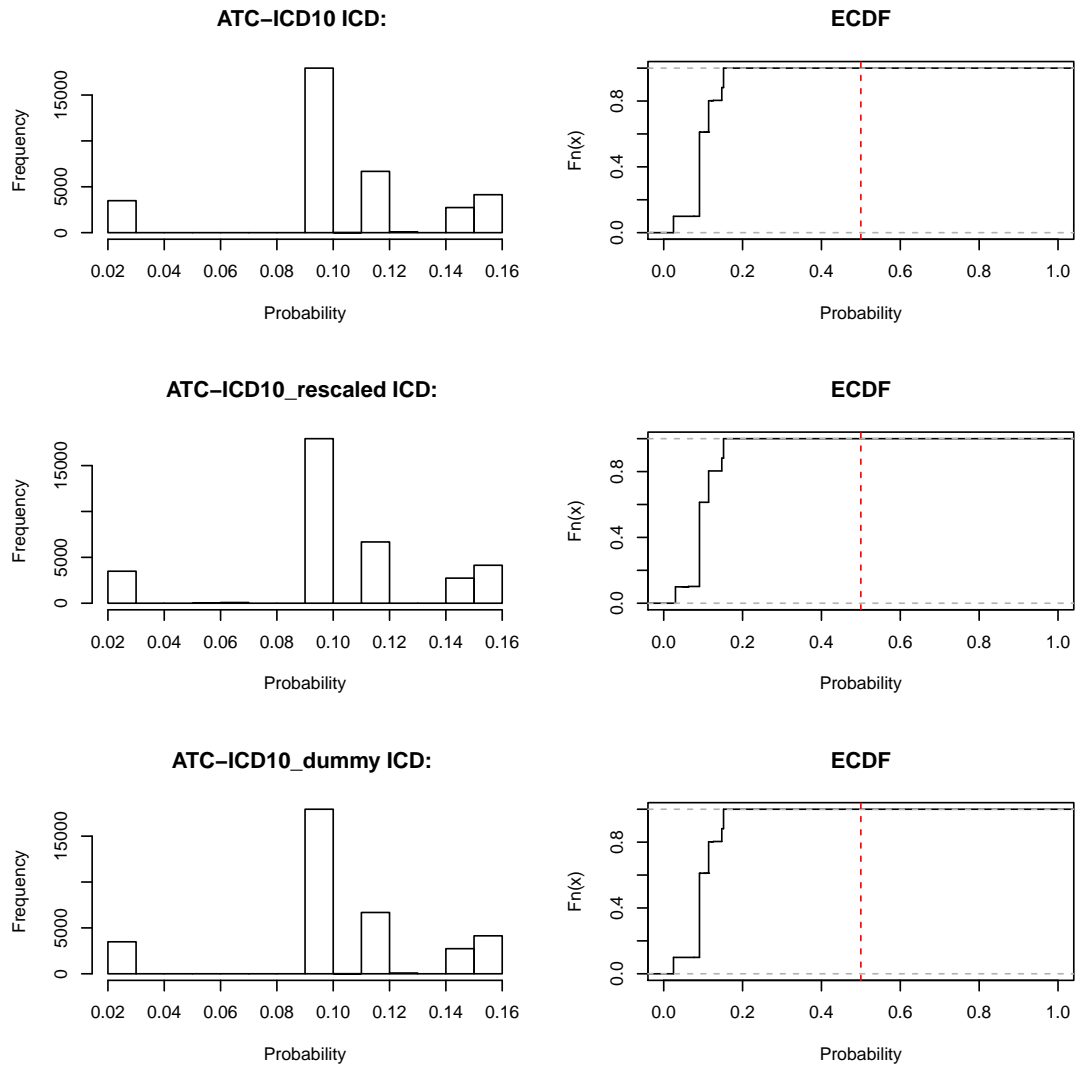


Figure 278: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group H00-H06.

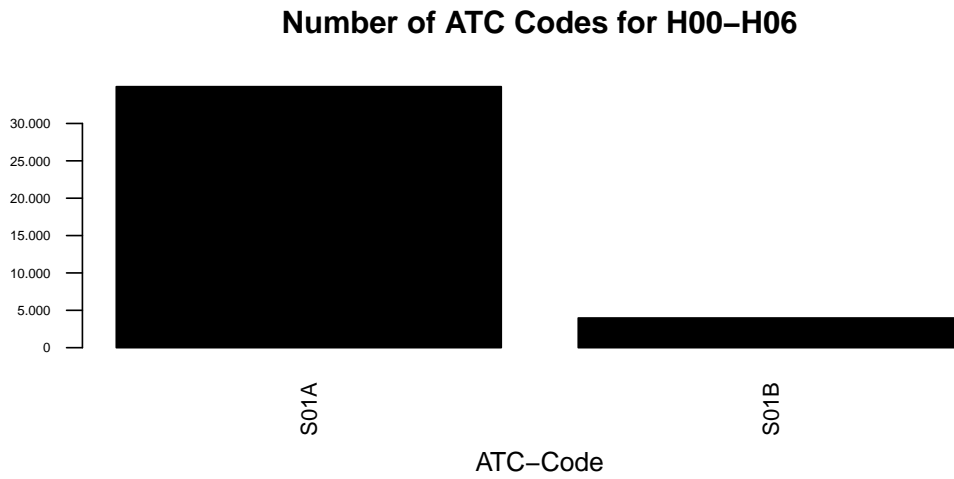
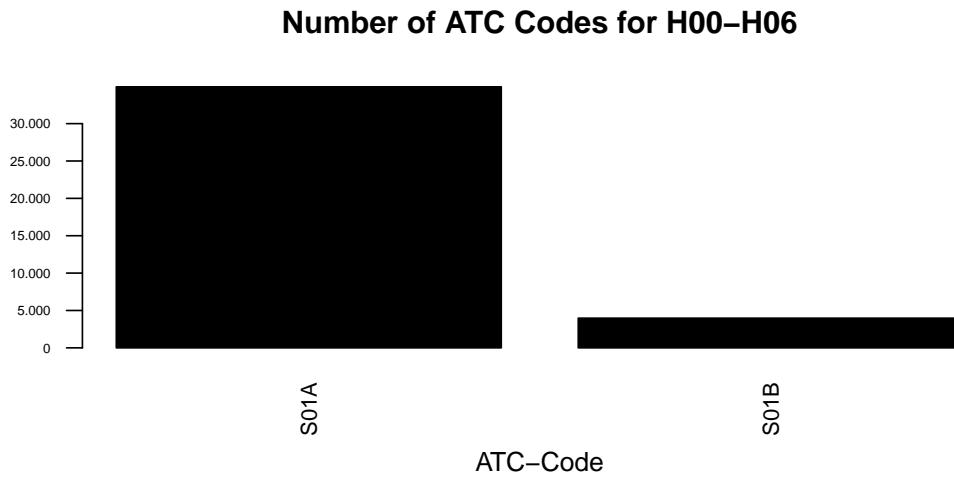


Figure 279: This figure shows the frequency of the underlying ATC codes for the given diagnose group H00-H06. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
S01A	ANTIINFEKTIVA	TRUE
S01B	ANTIPHLOGISTIKA	TRUE

Table 143: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose H00-H06.

E.115. Diagnose A15-A19: Tuberkulose

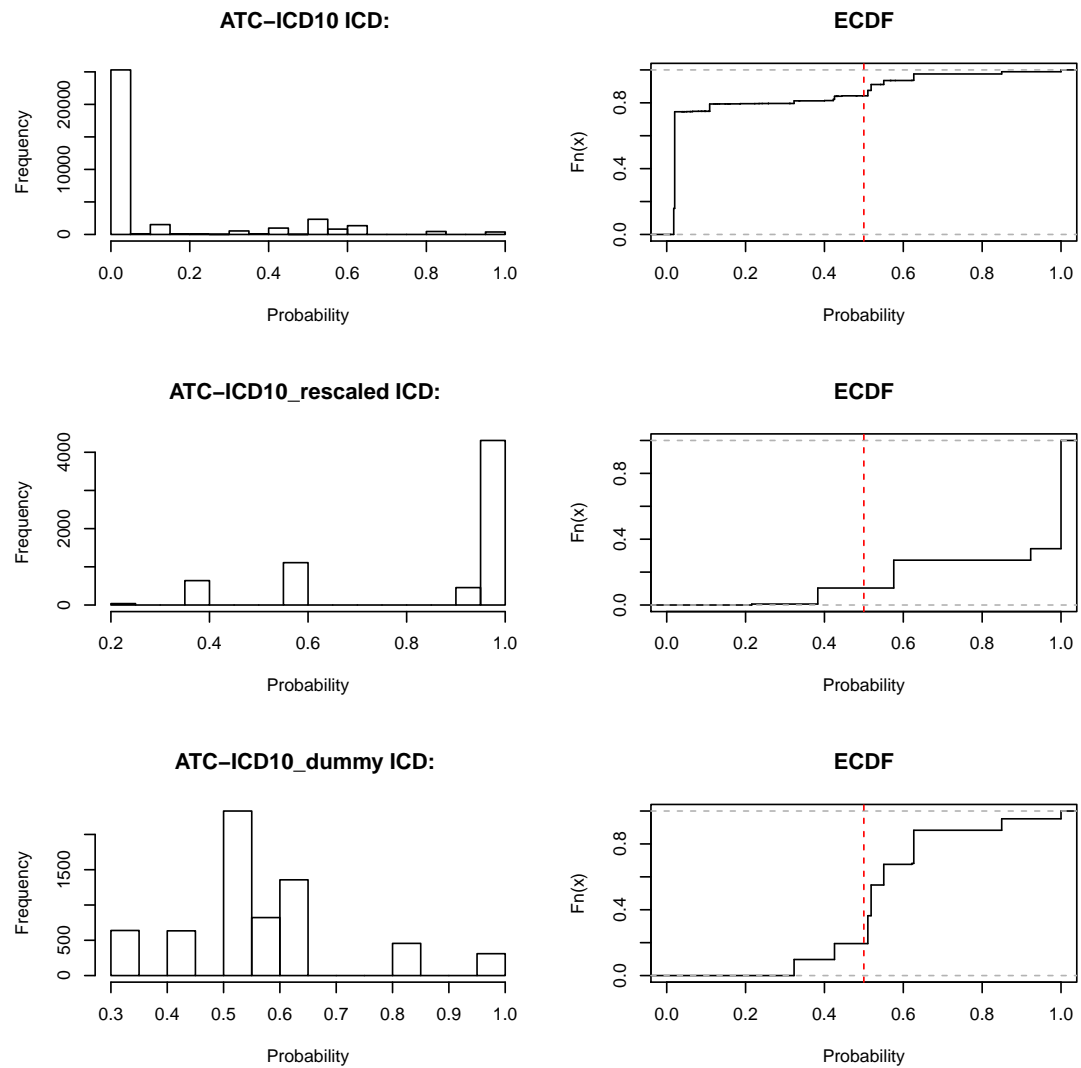


Figure 280: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group A15-A19.

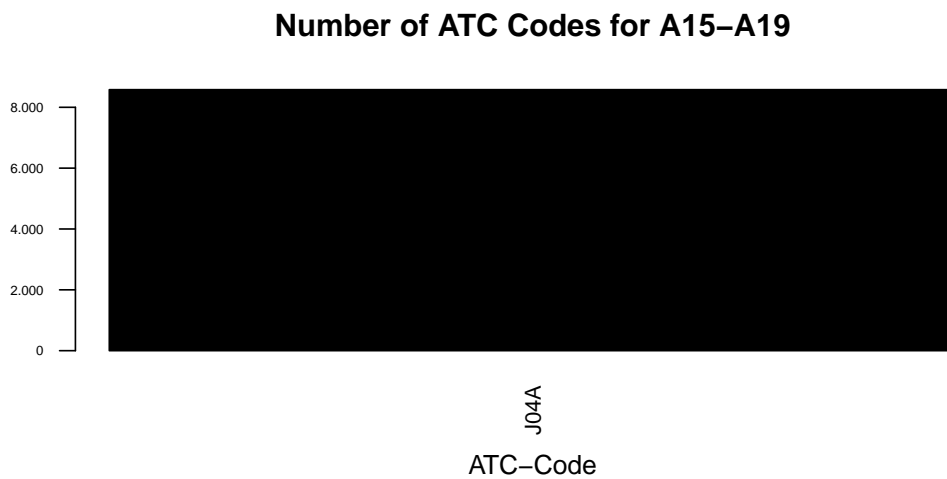
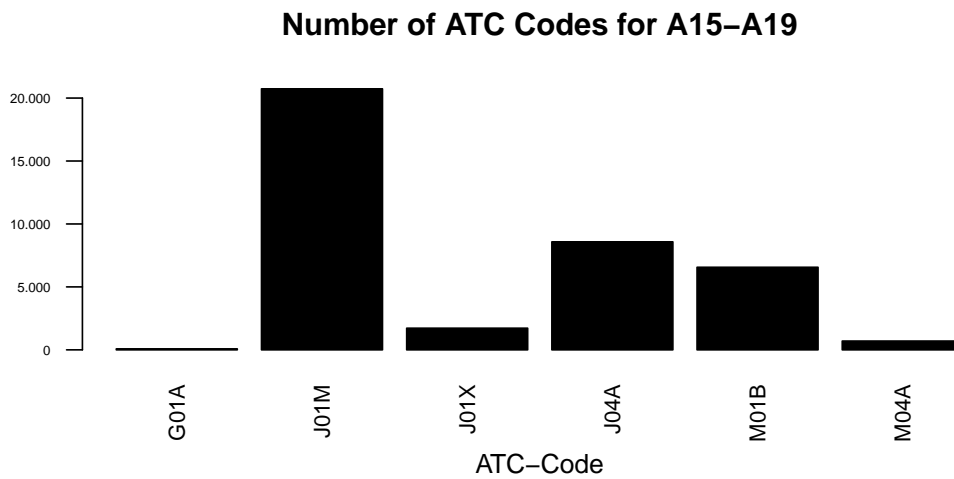


Figure 281: This figure shows the frequency of the underlying ATC codes for the given diagnose group A15-A19. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
G01A	ANTIINFEKTIVA UND ANTISEPTIKA, EXKL. KOMBINATIONEN M. CORTICOSTEROIDEN	FALSE
J01M	CHINOLONE	FALSE
J01X	ANDERE ANTIBIOTIKA	FALSE
J04A	MITTEL ZUR BEHANDLUNG DER TUBERKULOSE	TRUE
M01B	ANTIPHLOGISTIKA/ANTIRHEUMATIKA IN KOMBINATION	FALSE
M04A	GICHTMITTEL	FALSE

Table 144: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose A15-A19.

E.116. Diagnose O10-O16: Ödeme, Proteinurie und Hypertonie während der Schwangerschaft, der Geburt und des Wochenbettes

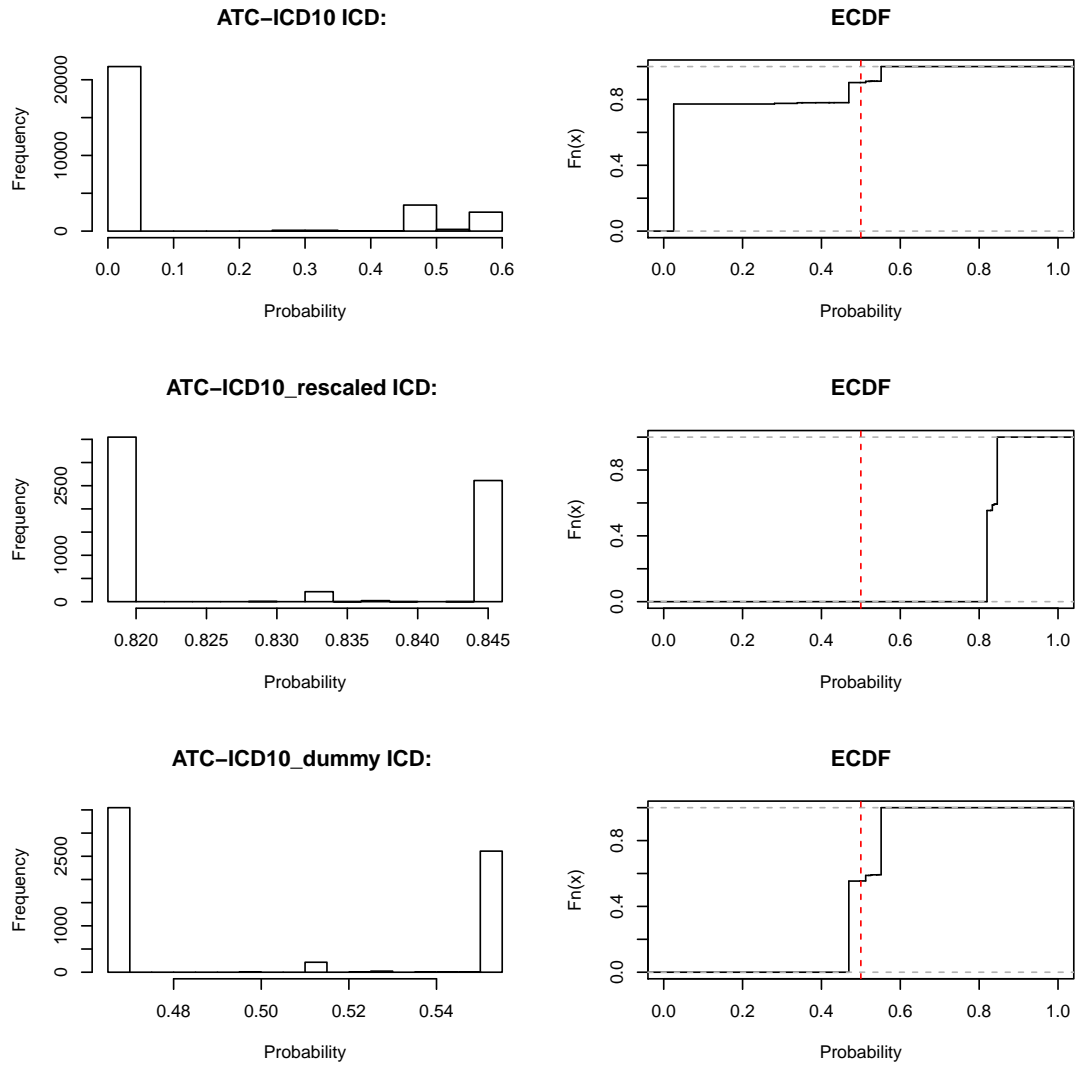
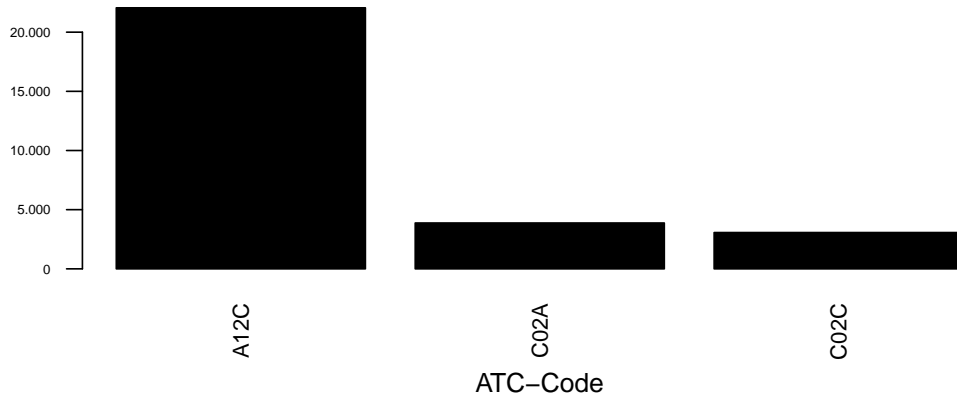


Figure 282: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group O10-O16.

Number of ATC Codes for O10–O16



Number of ATC Codes for O10–O16

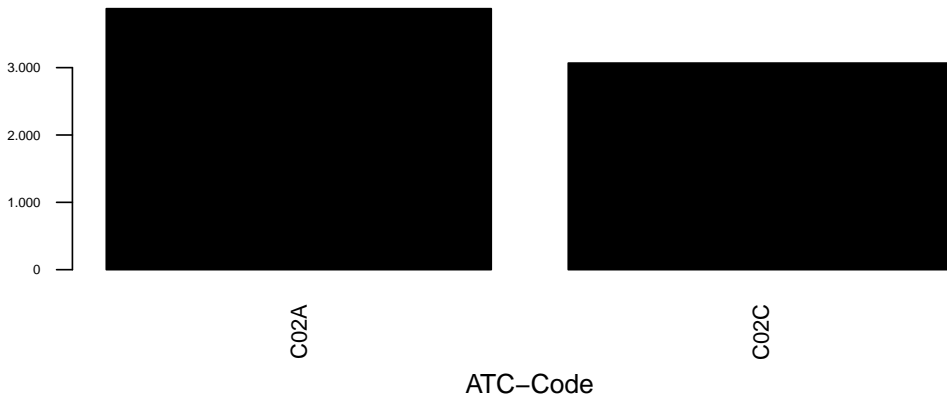


Figure 283: This figure shows the frequency of the underlying ATC codes for the given diagnose group O10-O16. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
A12C	ANDERE MINERALSTOFFE	FALSE
C02A	ANTIADRENERGE MITTEL, ZENTRAL WIRKEND	TRUE
C02C	ANTIADRENERGE MITTEL, PERIPHER WIRKEND	TRUE

Table 145: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose O10-O16.

E.117. Diagnose T20-T25: Verbrennungen oder Verätzungen der äußeren Körperoberfläche, Lokalisation bezeichnet

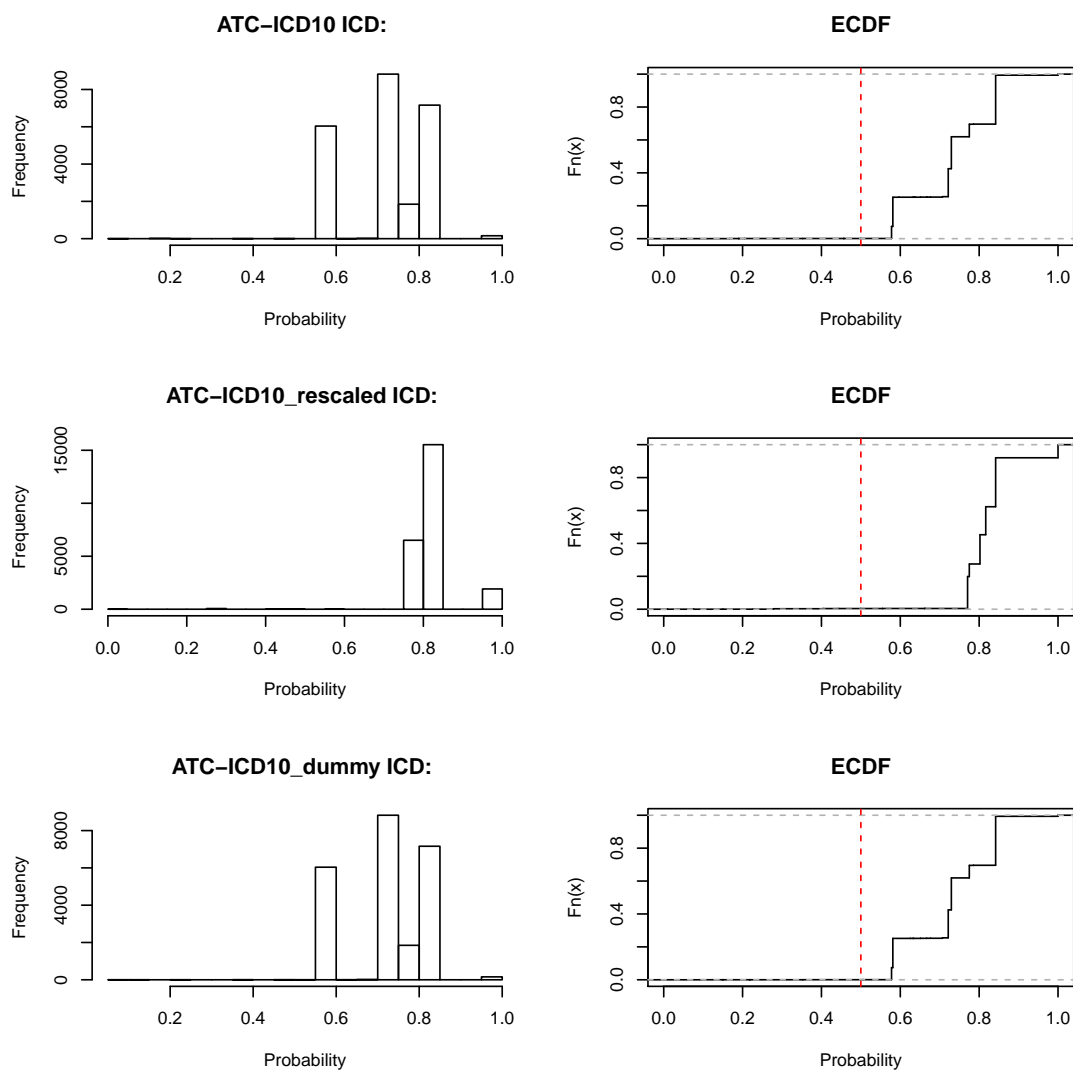


Figure 284: This figure shows the distribution of the probabilities of the diagnosis for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group T20-T25.

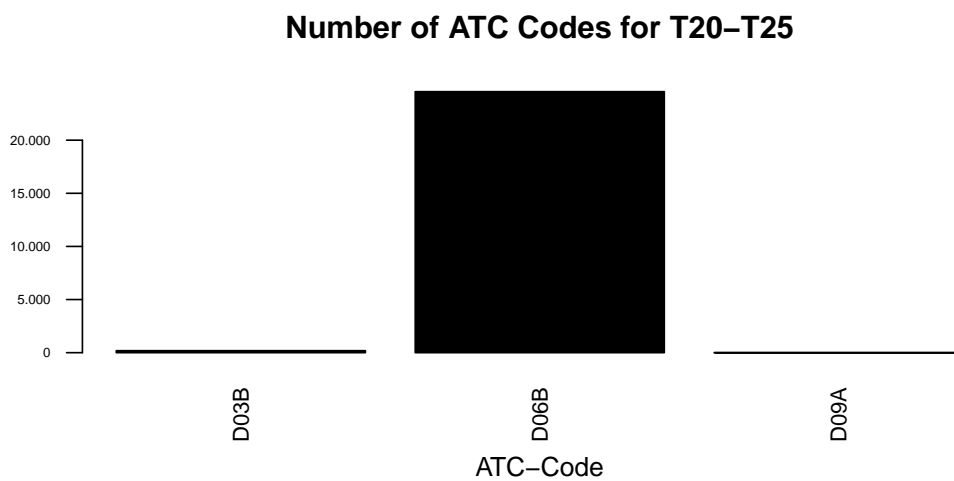
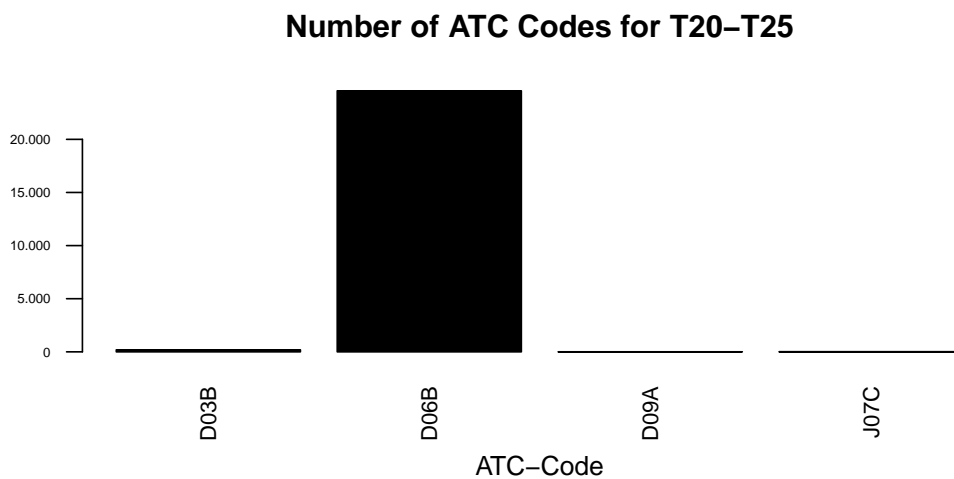


Figure 285: This figure shows the frequency of the underlying ATC codes for the given diagnose group T20-T25. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
D03B	ENZYME	TRUE
D06B	CHEMOTHERAPEUTIKA ZUR TOPISCHEN ANWENDUNG	TRUE
D09A	MEDIZINISCHE VERBÄNDE	TRUE
J07C	BAKTERIELLE UND VIRALE IMPFSTOFFE, KOMBINIERT	FALSE

Table 146: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose T20-T25.

E.118. Diagnose T29-T32: Verbrennungen oder Verätzungen mehrerer und nicht näher bezeichneter Körperregionen

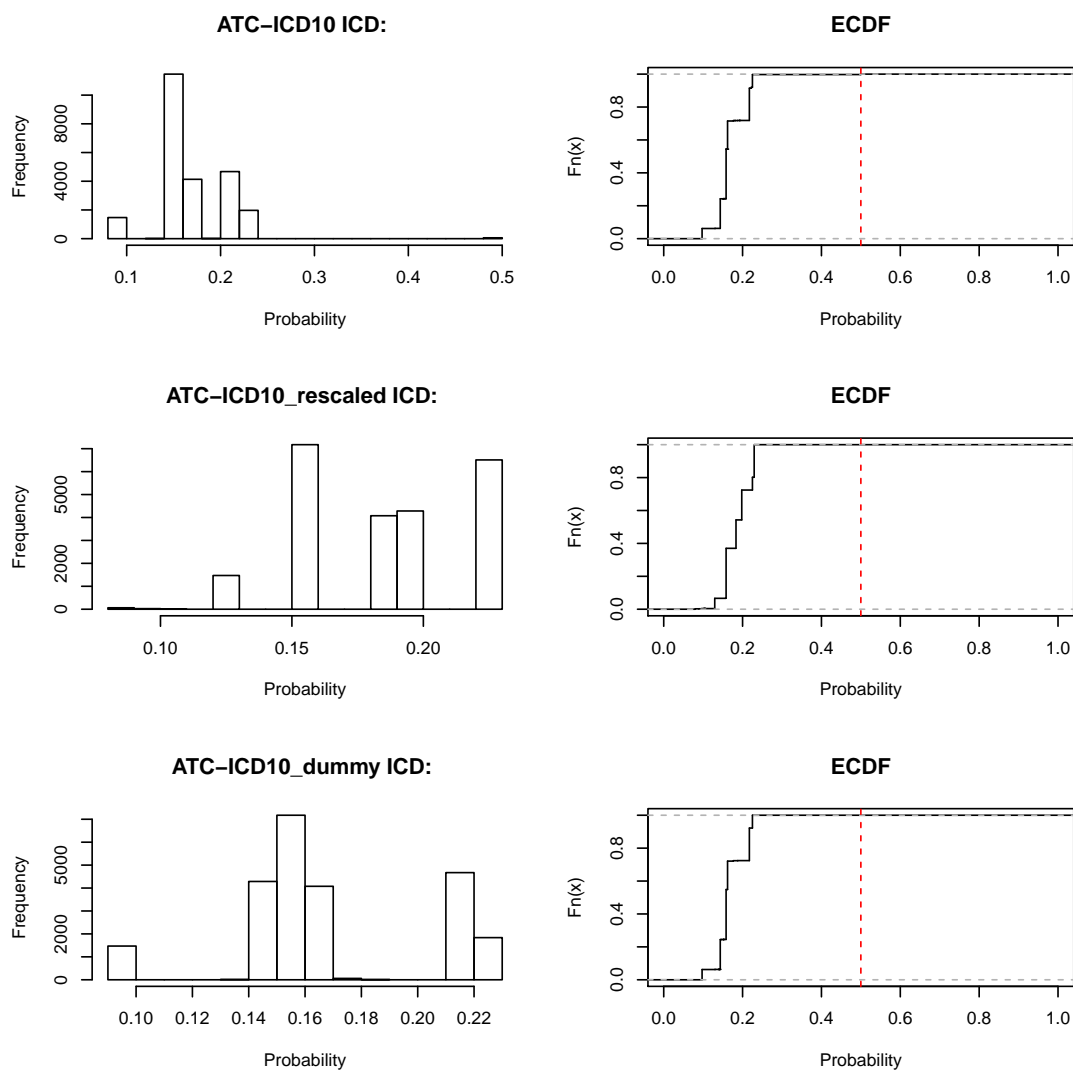
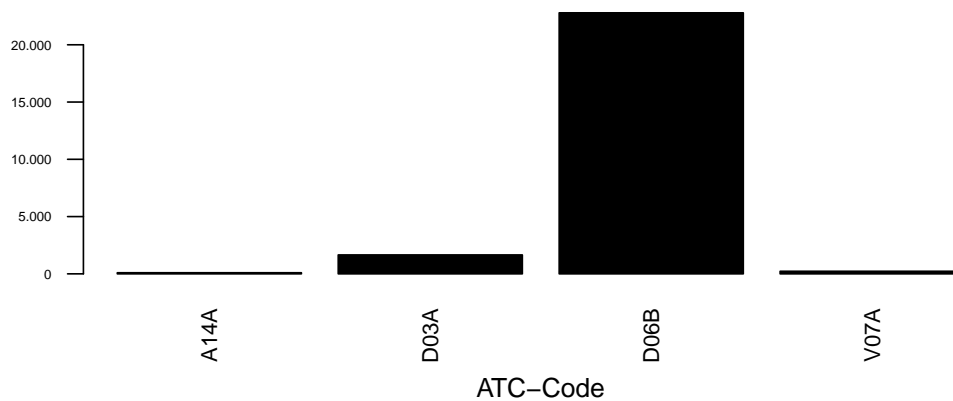


Figure 286: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group T29-T32.

Number of ATC Codes for T29-T32



Number of ATC Codes for T29-T32

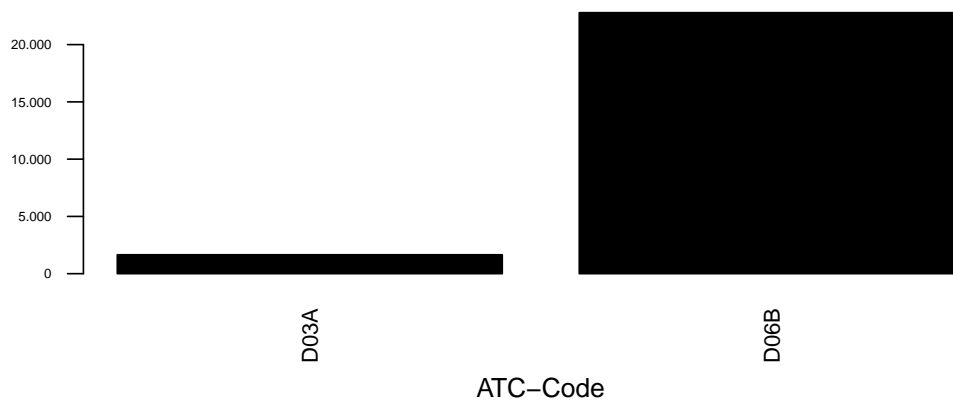


Figure 287: This figure shows the frequency of the underlying ATC codes for the given diagnose group T29-T32. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
A14A	ANABOLE STEROIDE	FALSE
D03A	Wundbehandlungsmittel	TRUE
D06B	CHEMOTHERAPEUTIKA ZUR TOPISCHEN ANWENDUNG	TRUE
V07A	ALLE UEBRIGEN NICHTTHERAPEUTISCHEN MITTEL	FALSE

Table 147: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose T29-T32.

E.119. Diagnose P20-P29: Krankheiten des Atmungs- und Herz-Kreislaufsystems, die für die Perinatalperiode spezifisch sind

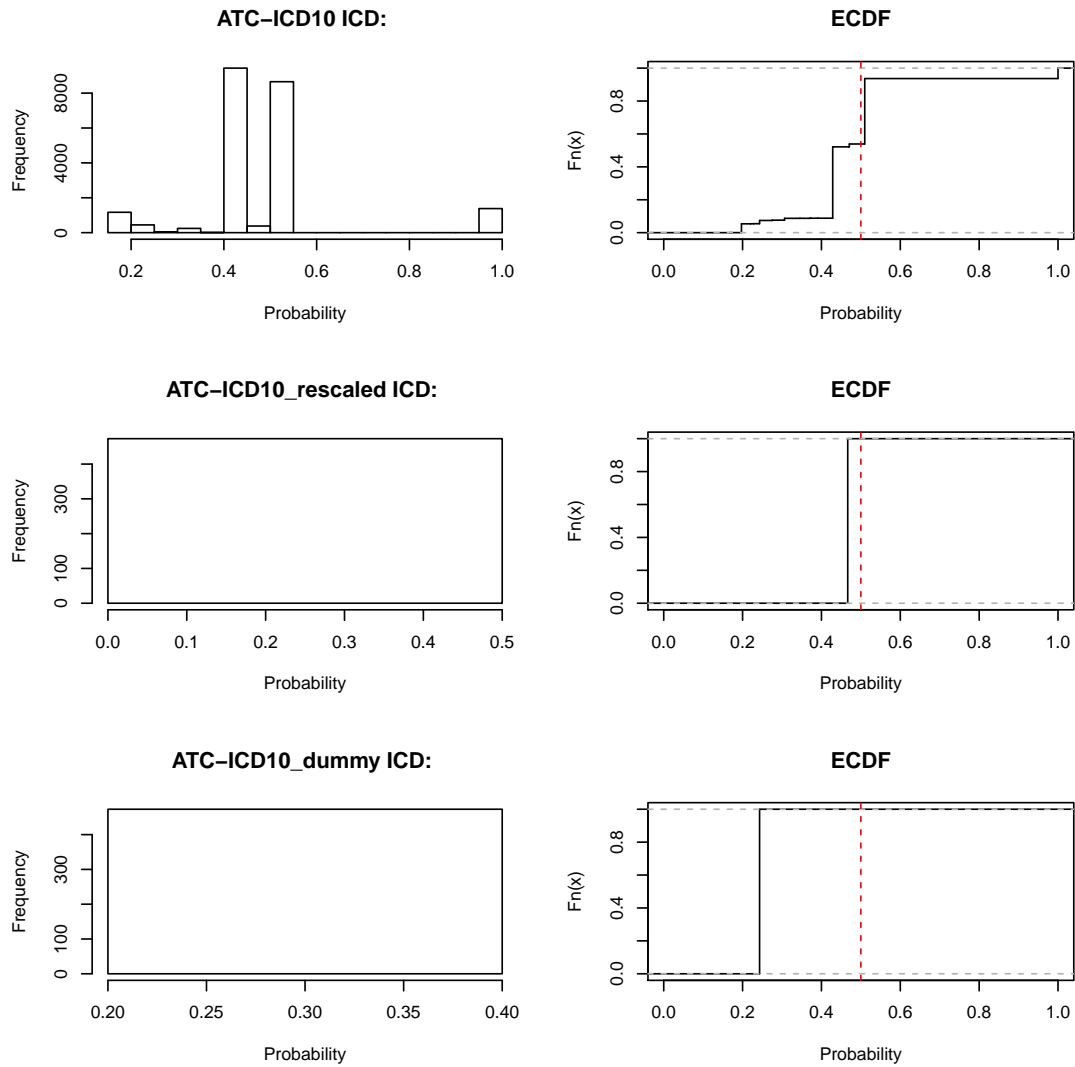


Figure 288: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group P20-P29.

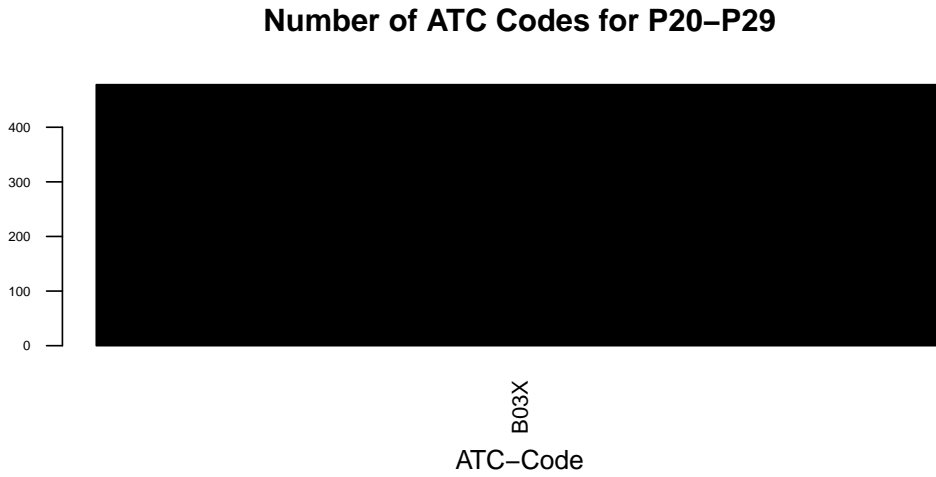
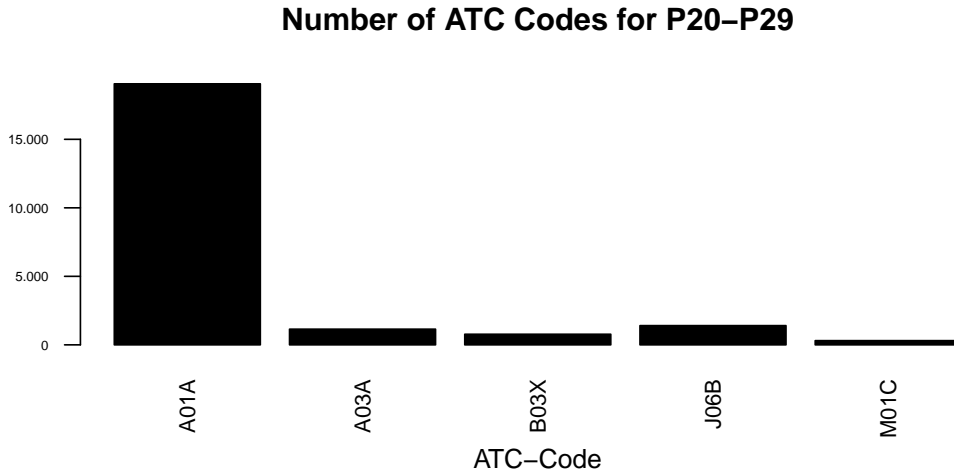


Figure 289: This figure shows the frequency of the underlying ATC codes for the given diagnose group P20-P29. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
A01A	STOMATOLOGIKA	FALSE
A03A	MITTEL BEI FUNKTIONELLEN STÖRUNGEN DES DARMS	FALSE
B03X	ANDERE ANTIANÄMIKA	TRUE
J06B	IMMUNGLOBULINE	FALSE
M01C	SPEZIFISCHE ANTIRHEUMATIKA	FALSE

Table 148: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose P20-P29.

E.120. Diagnose N99-N99: Sonstige Krankheiten des Urogenitalsystems

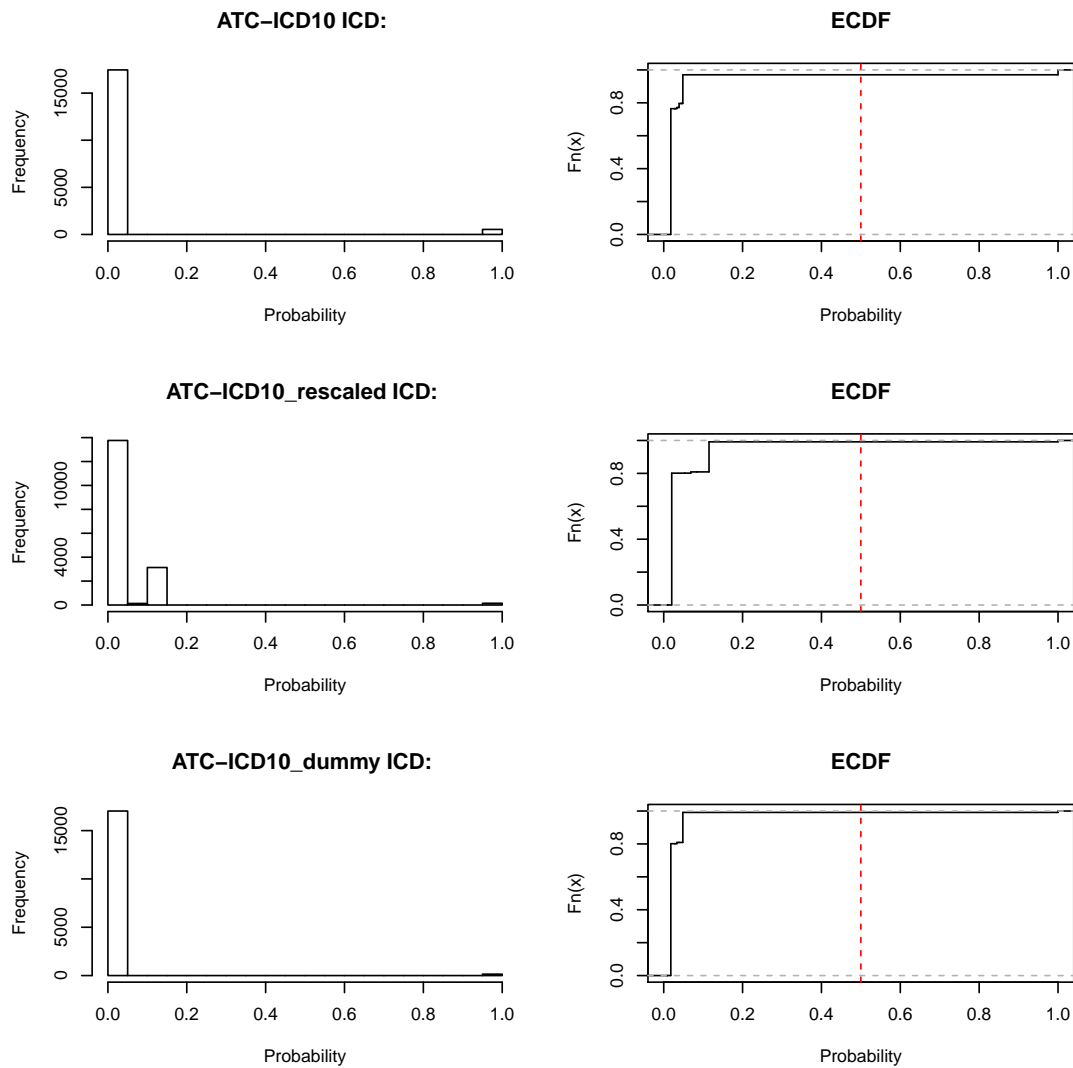


Figure 290: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group N99-N99.

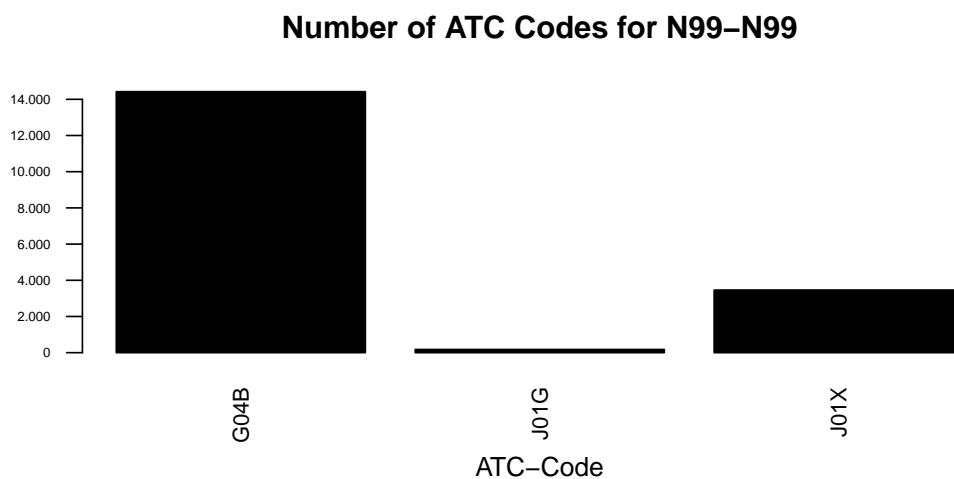
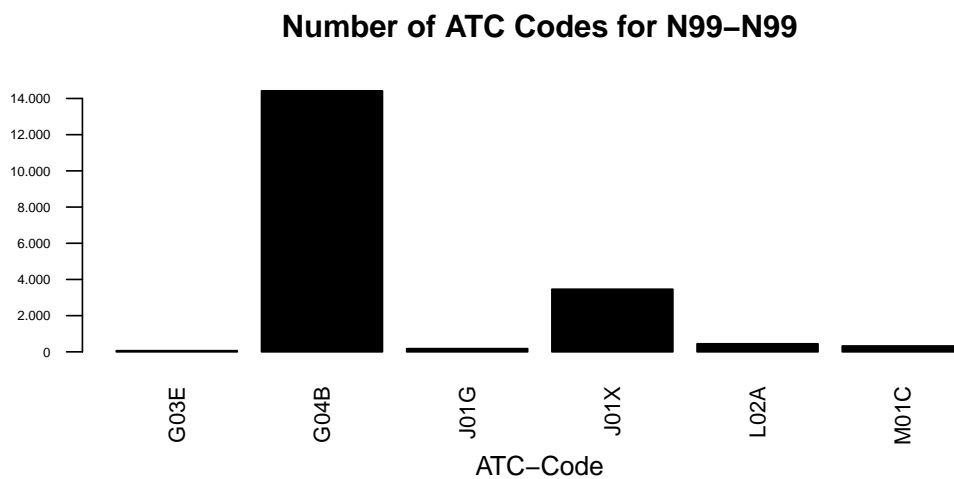


Figure 291: This figure shows the frequency of the underlying ATC codes for the given diagnose group N99-N99. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
G03E	ANDROGENE UND WEIBLICHE SEXUALHORMONE IN KOMBINATION	FALSE
G04B	ANDERE UROLOGIKA, INKL. SPASMOLYTIKA	TRUE
J01G	AMINOGLYKOSID-ANTIBIOTIKA	TRUE
J01X	ANDERE ANTIBIOTIKA	TRUE
L02A	HORMONE UND VERWANDTE MITTEL	FALSE
M01C	SPEZIFISCHE ANTIRHEUMATIKA	FALSE

Table 149: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose N99-N99.

E.121. Diagnose L55-L59: Krankheiten der Haut und der Unterhaut durch Strahleneinwirkung

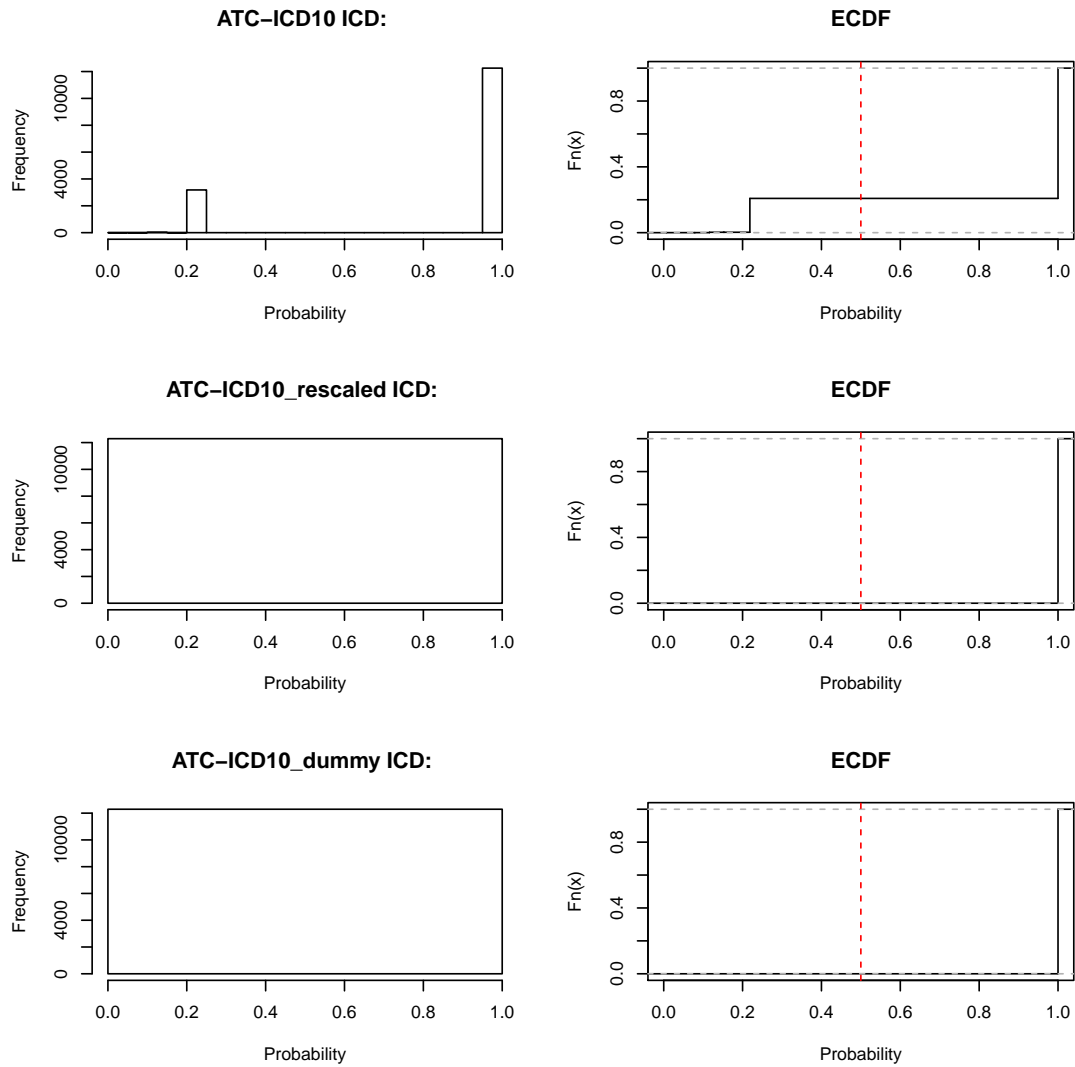
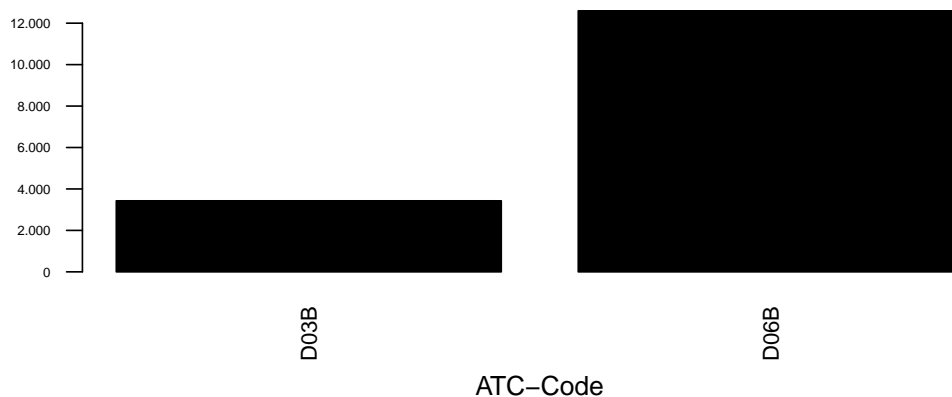


Figure 292: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group L55-L59.

Number of ATC Codes for L55–L59



Number of ATC Codes for L55–L59

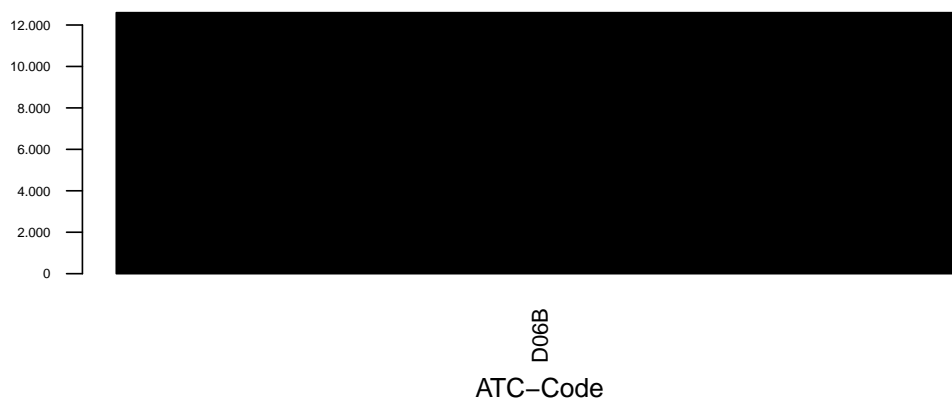


Figure 293: This figure shows the frequency of the underlying ATC codes for the given diagnose group L55-L59. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
D03B	ENZYME	FALSE
D06B	CHEMOTHERAPEUTIKA ZUR TOPISCHEN ANWENDUNG	TRUE

Table 150: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose L55-L59.

E.122. Diagnose T15-T19: Folgen des Eindringens eines Fremdkörpers durch eine natürliche Körperöffnung

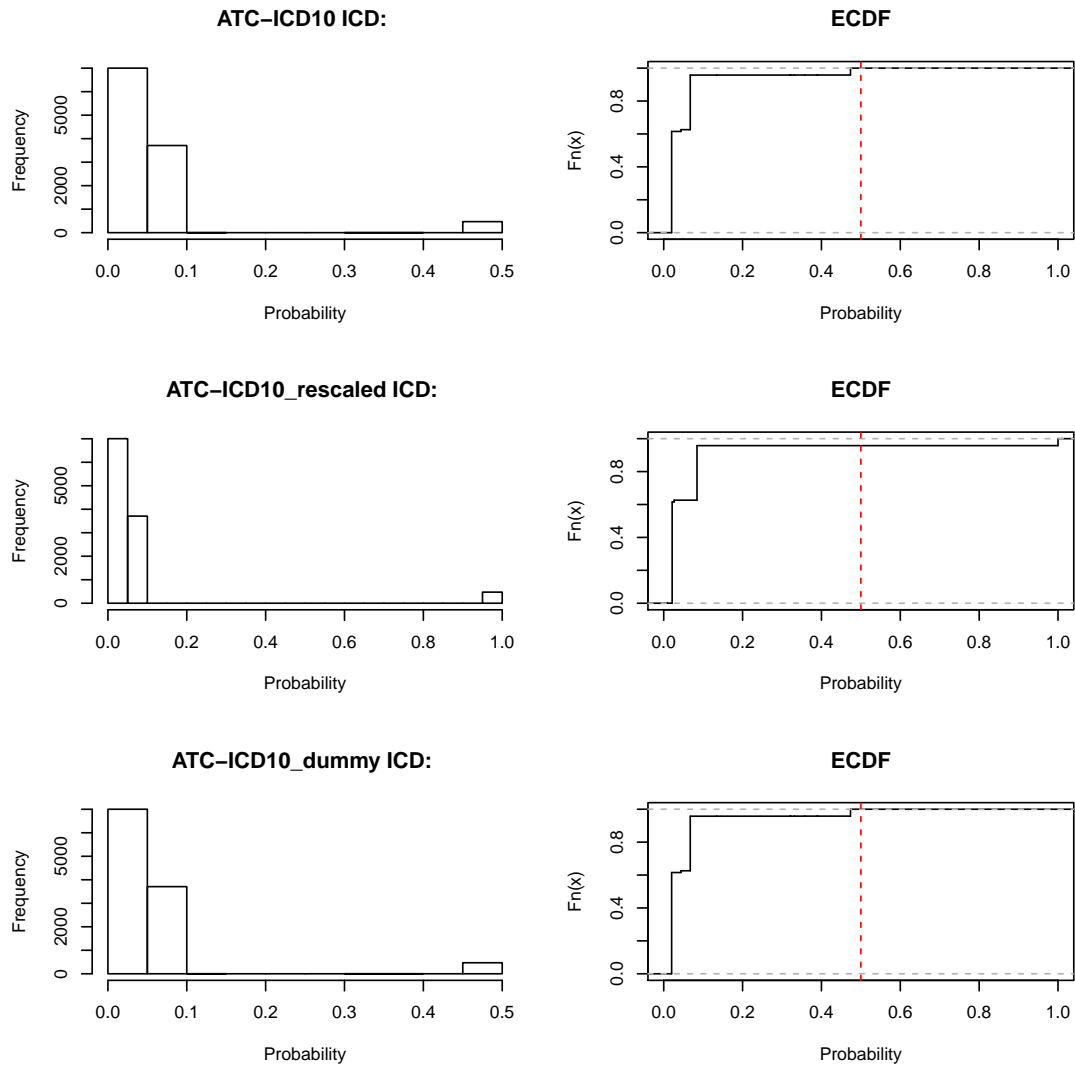
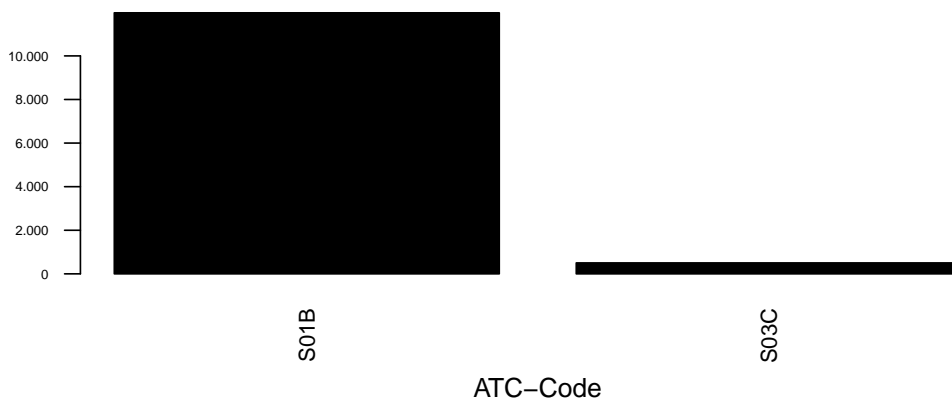


Figure 294: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group T15-T19.

Number of ATC Codes for T15-T19



Number of ATC Codes for T15-T19

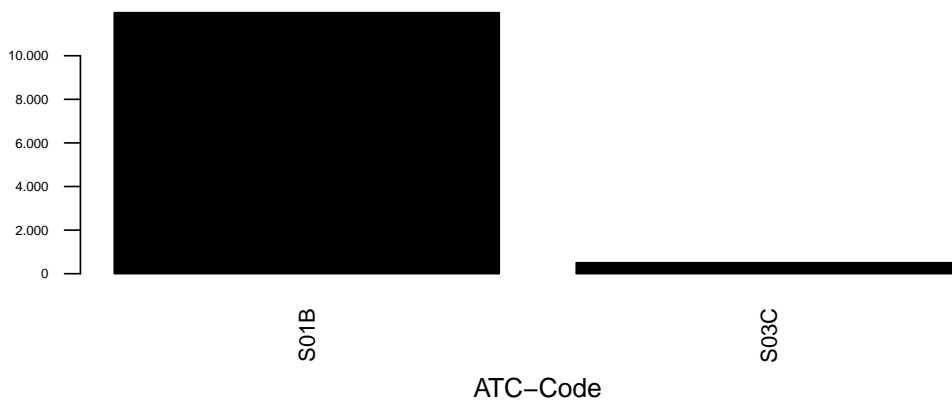


Figure 295: This figure shows the frequency of the underlying ATC codes for the given diagnose group T15-T19. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
S01B	ANTIPHLOGISTIKA	TRUE
S03C	CORTICOSTEROIDE UND ANTIINFEKTIVA IN KOMBINATION	TRUE

Table 151: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose T15-T19.

E.123. Diagnose Q50-Q56: Angeborene Fehlbildungen der Genitalorgane

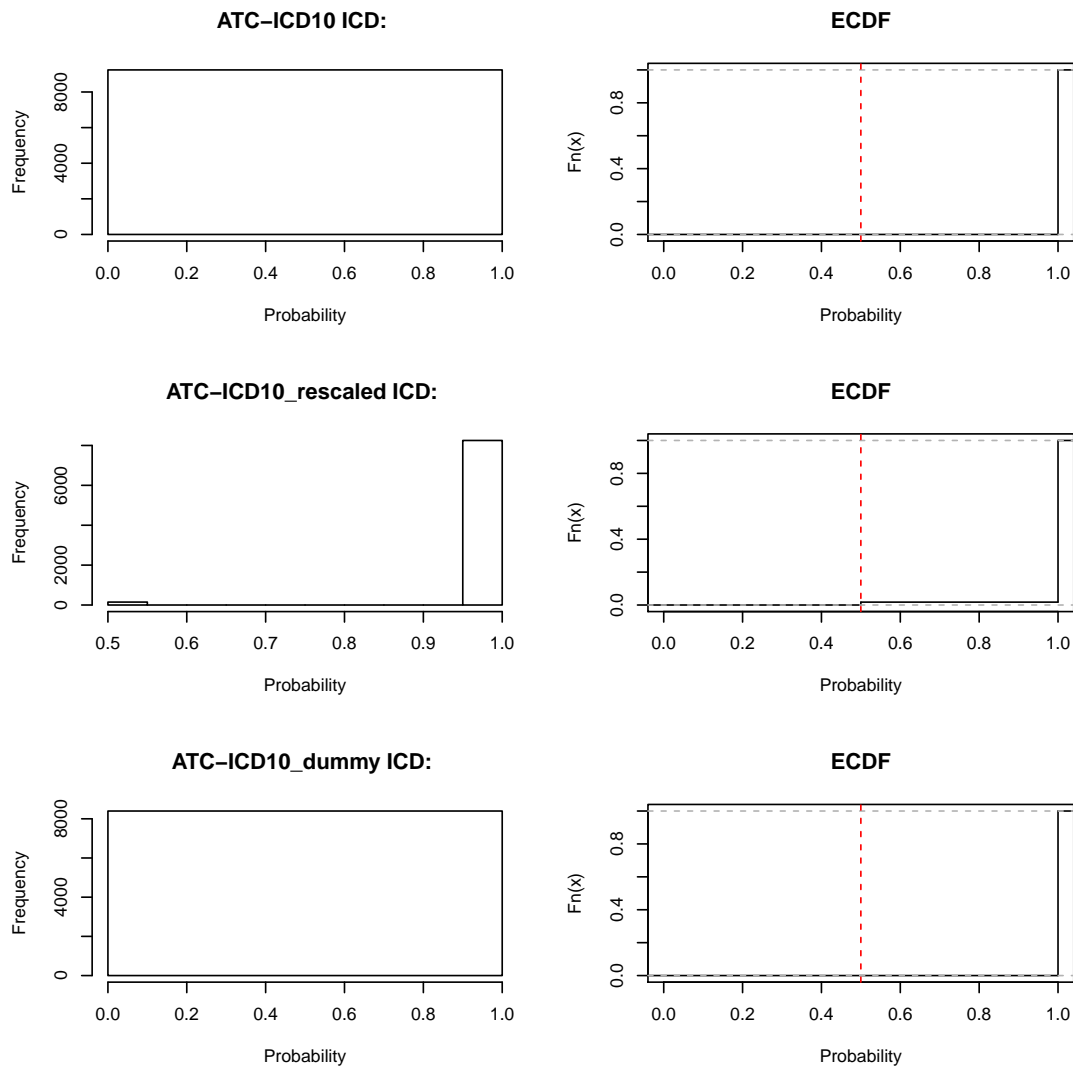
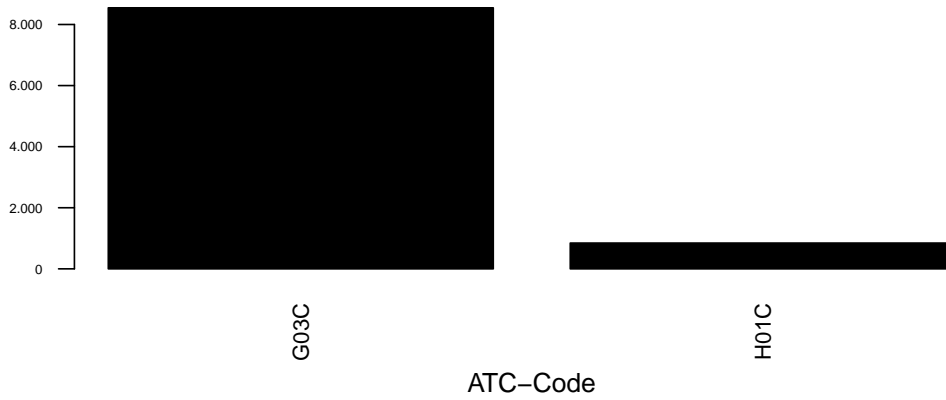


Figure 296: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group Q50-Q56.

Number of ATC Codes for Q50–Q56



Number of ATC Codes for Q50–Q56

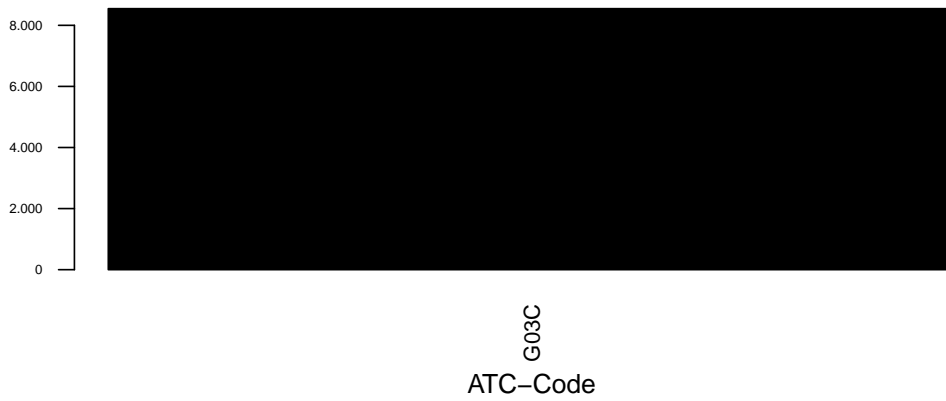


Figure 297: This figure shows the frequency of the underlying ATC codes for the given diagnose group Q50-Q56. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
G03C	ESTROGENE	TRUE
H01C	HYPOTHALAMUSHORMONE	FALSE

Table 152: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose Q50-Q56.

E.124. Diagnose T26-T28: Verbrennungen oder Verätzungen, die auf das Auge und auf innere Organe begrenzt sind

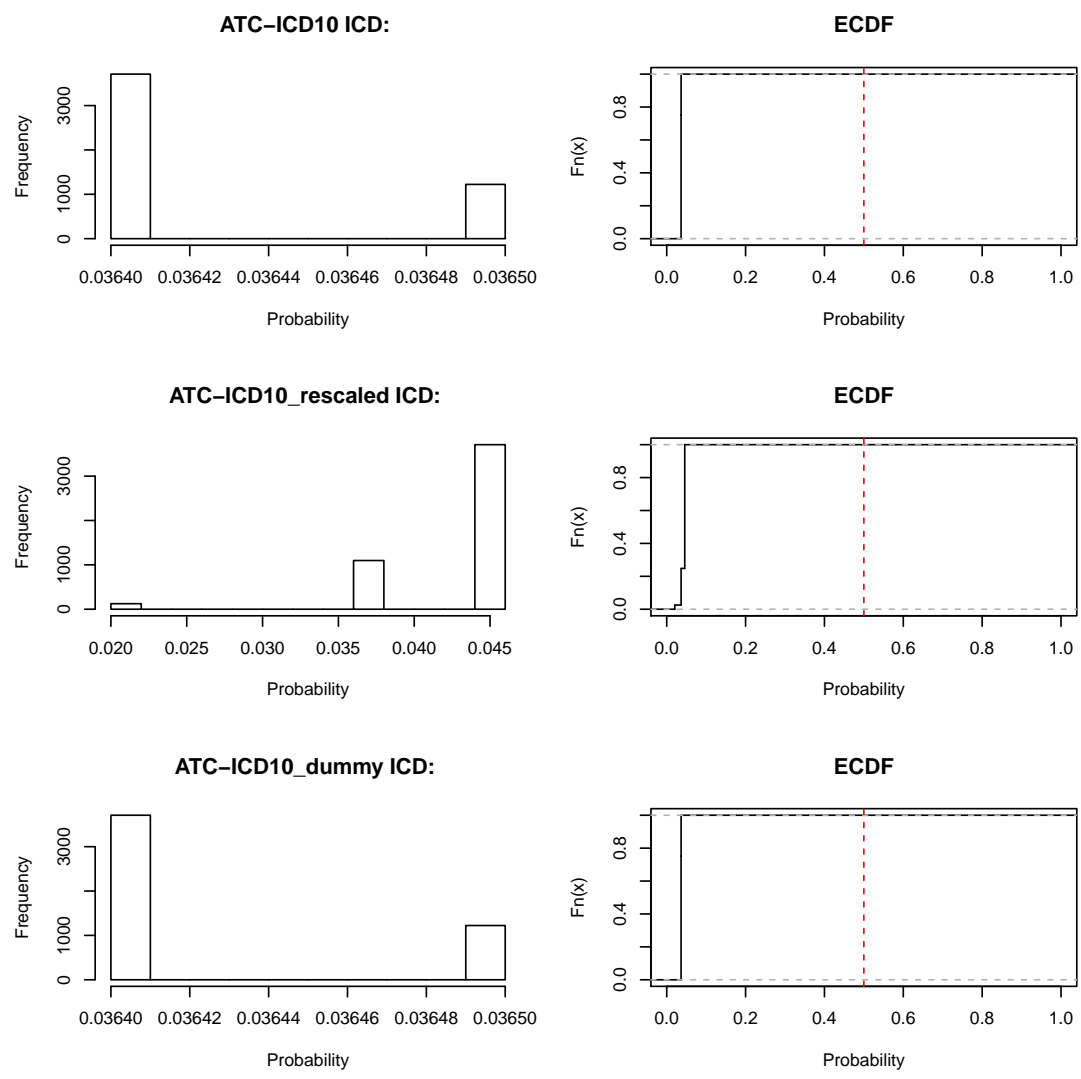
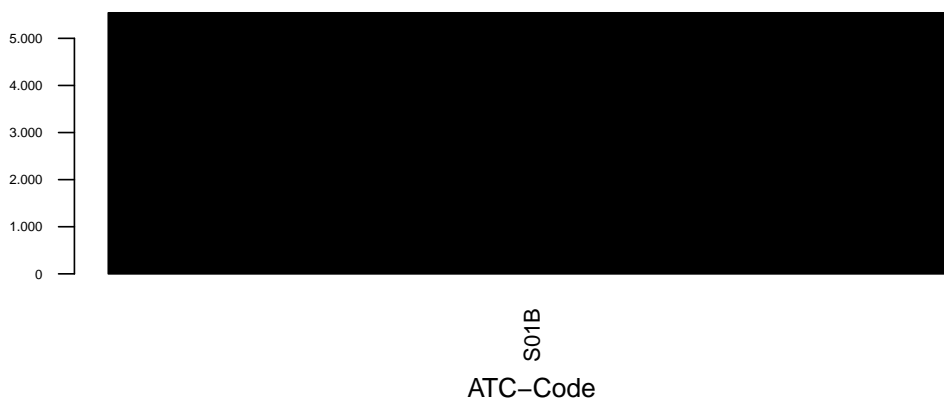


Figure 298: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group T26-T28.

Number of ATC Codes for T26–T28



Number of ATC Codes for T26–T28

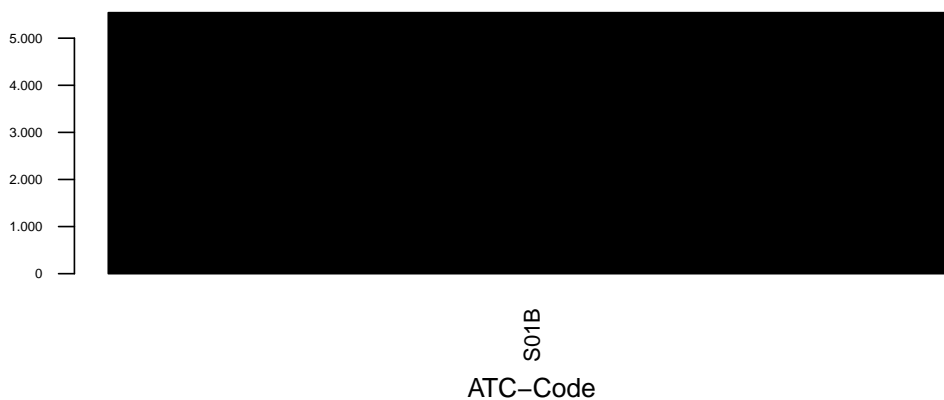


Figure 299: This figure shows the frequency of the underlying ATC codes for the given diagnose group T26-T28. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
S01B	ANTIPHLOGISTIKA	TRUE

Table 153: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose T26-T28.

E.125. Diagnose Q10-Q18: Angeborene Fehlbildungen des Auges, des Ohres, des Gesichtes und des Halses

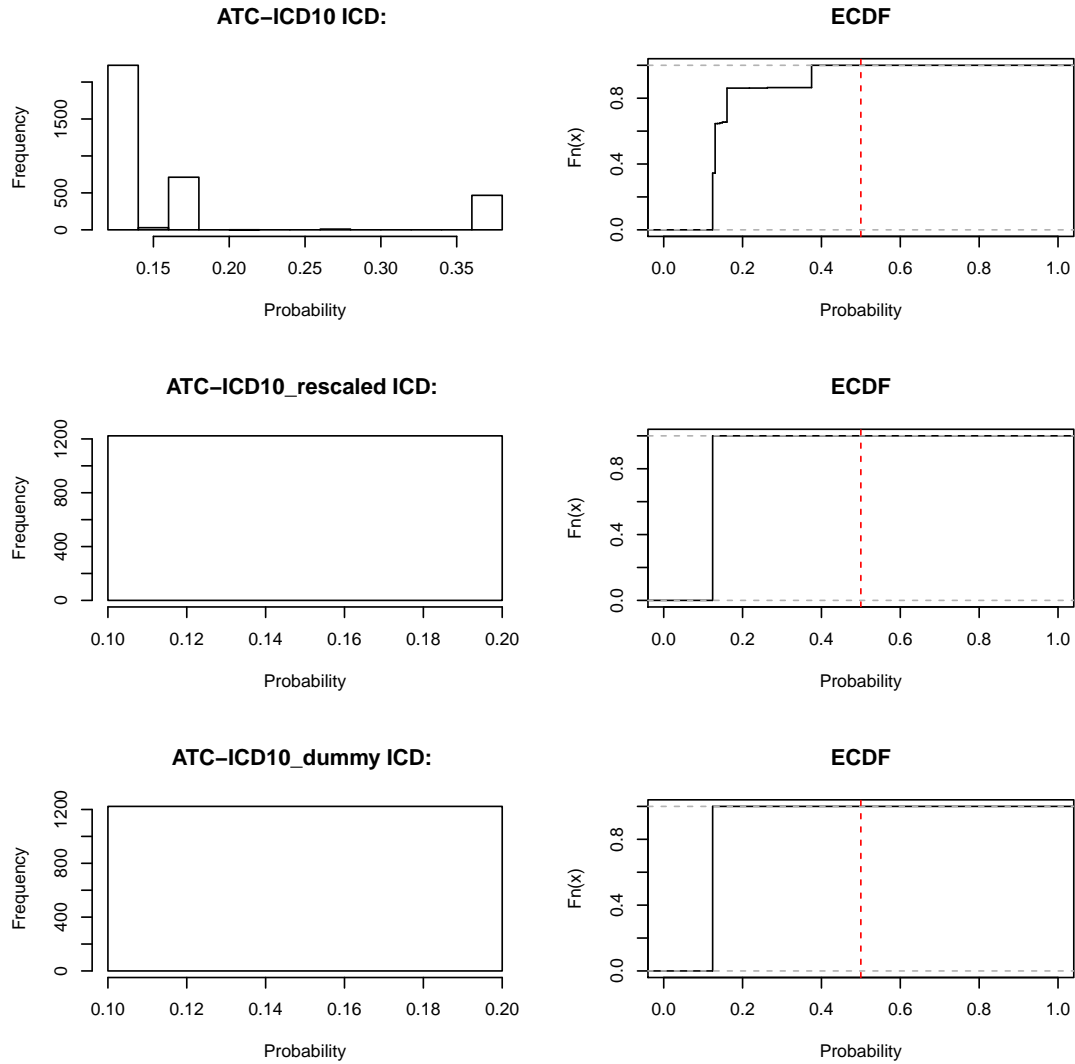
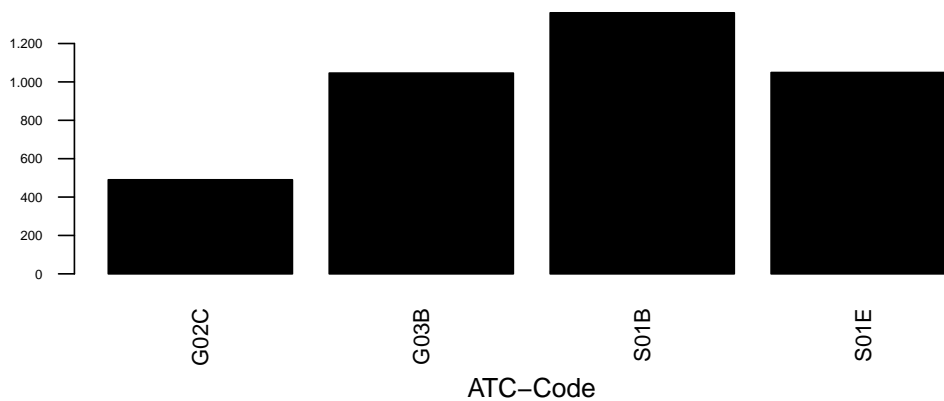


Figure 300: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group Q10-Q18.

Number of ATC Codes for Q10–Q18



Number of ATC Codes for Q10–Q18

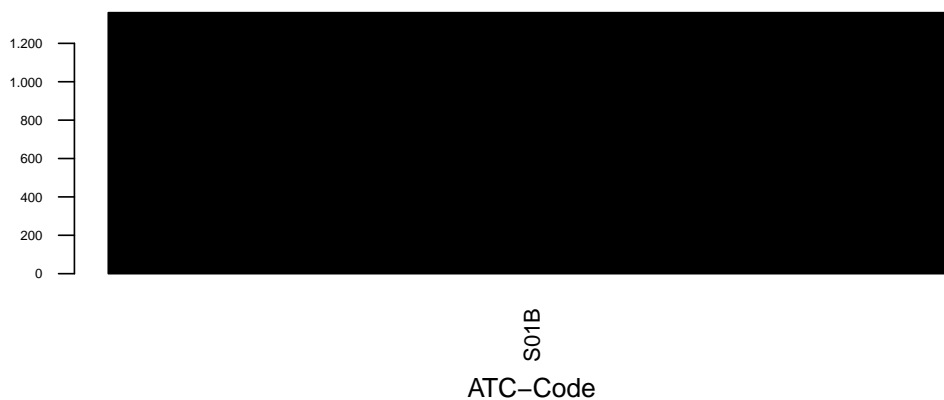


Figure 301: This figure shows the frequency of the underlying ATC codes for the given diagnose group Q10-Q18. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
G02C	ANDERE GYNÄKOLOGIKA	FALSE
G03B	ANDROGENE	FALSE
S01B	ANTIPHLOGISTIKA	TRUE
S01E	GLAUKOMMITTEL UND MIOTIKA	FALSE

Table 154: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose Q10-Q18.

E.126. Diagnose B65-B83: Helminthosen

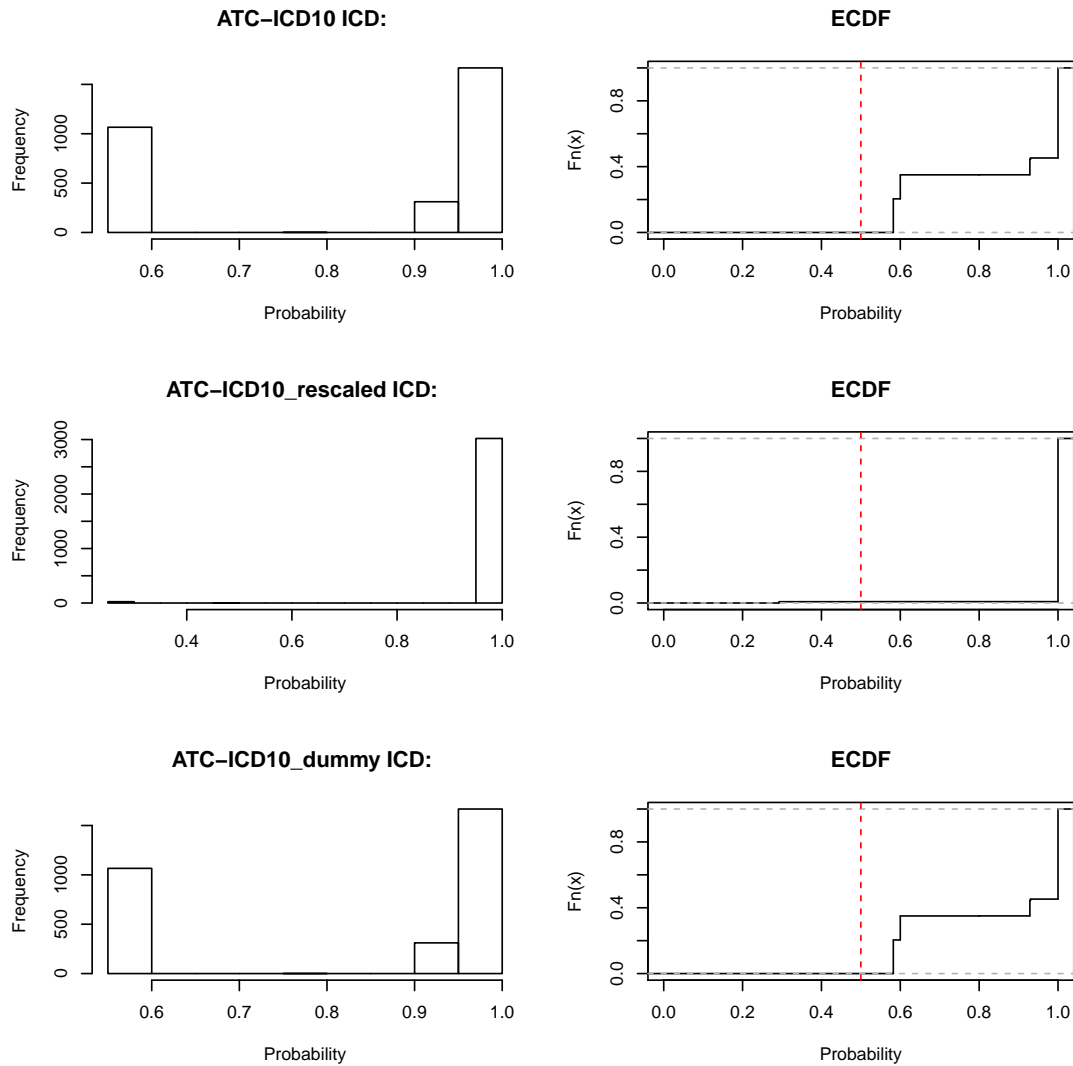
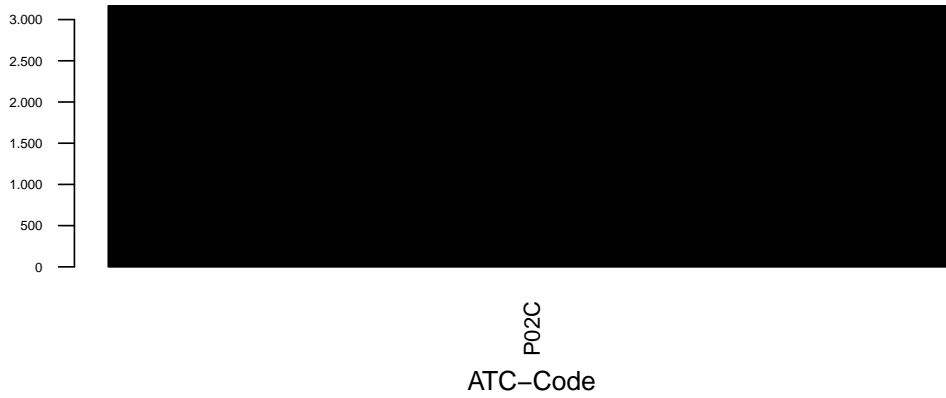


Figure 302: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group B65-B83.

Number of ATC Codes for B65–B83



Number of ATC Codes for B65–B83

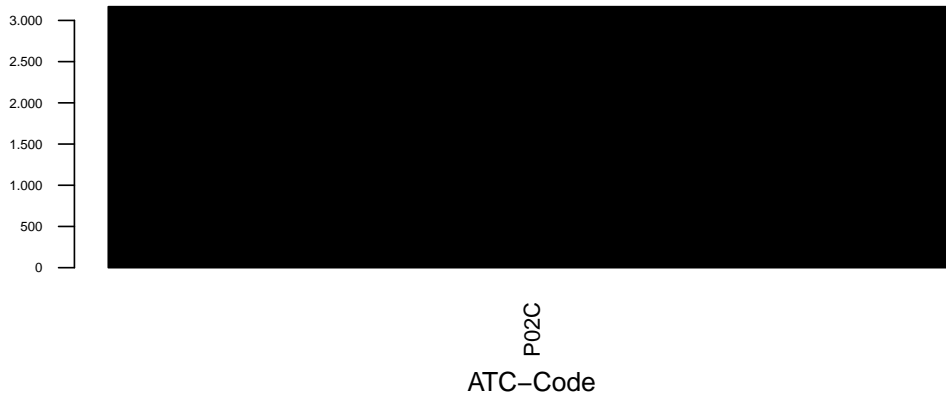


Figure 303: This figure shows the frequency of the underlying ATC codes for the given diagnose group B65-B83. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
P02C	NEMATODENMITTEL	TRUE

Table 155: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose B65-B83.

E.127. Diagnose B95-B97: Bakterien, Viren und sonstige Infektionserreger als Ursache von Krankheiten, die in anderen Kapiteln klassifiziert sind

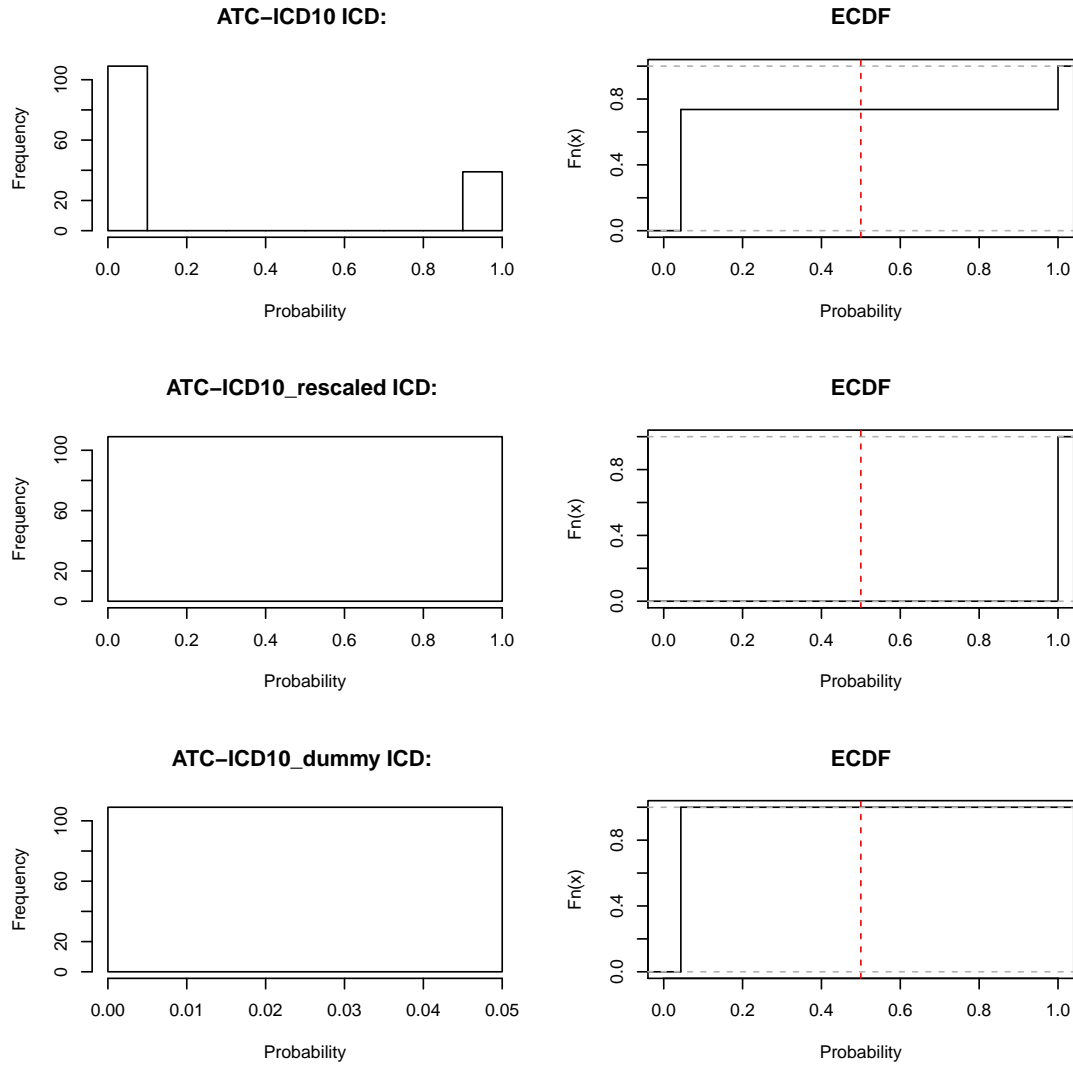
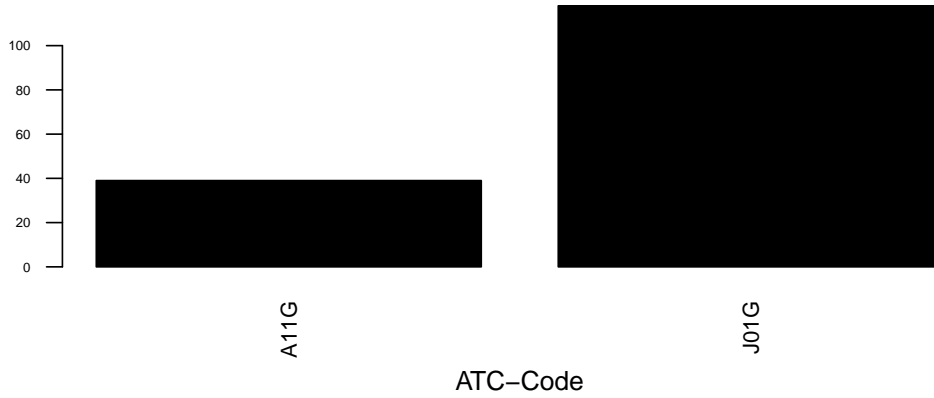


Figure 304: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group B95-B97.

Number of ATC Codes for B95–B97



Number of ATC Codes for B95–B97

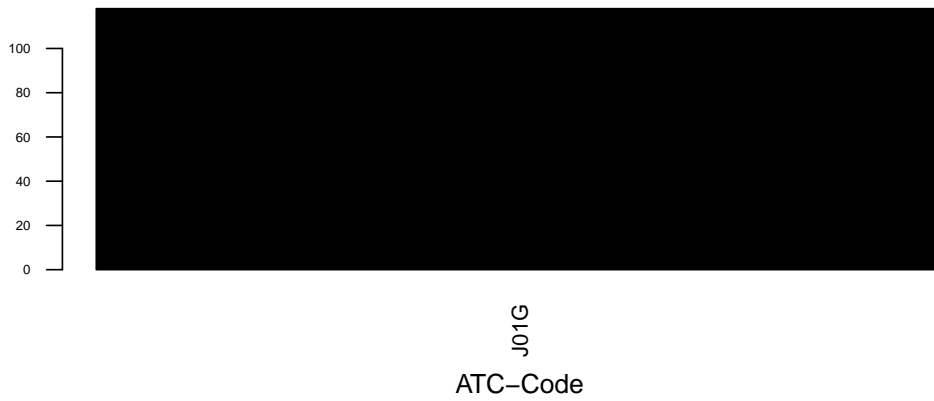


Figure 305: This figure shows the frequency of the underlying ATC codes for the given diagnose group B95-B97. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
A11G	ASCORBINSÄURE (VITAMIN C), INKL. KOMBINATIONEN	FALSE
J01G	AMINOGLYKOSID-ANTIBIOTIKA	TRUE

Table 156: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose B95-B97.

E.128. Diagnose J85-J86: Purulente und nekrotisierende Krankheitszustände der unteren Atemwege

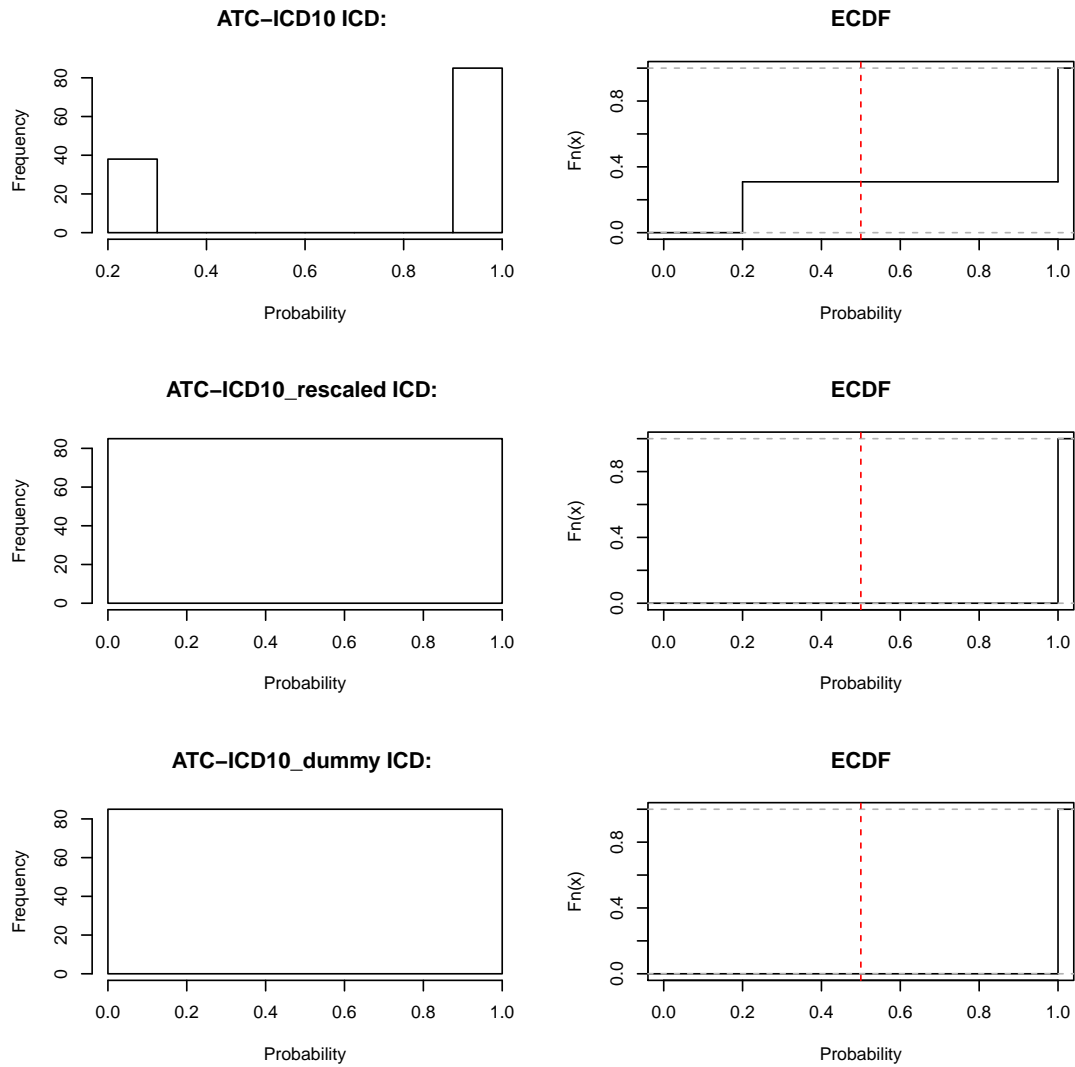
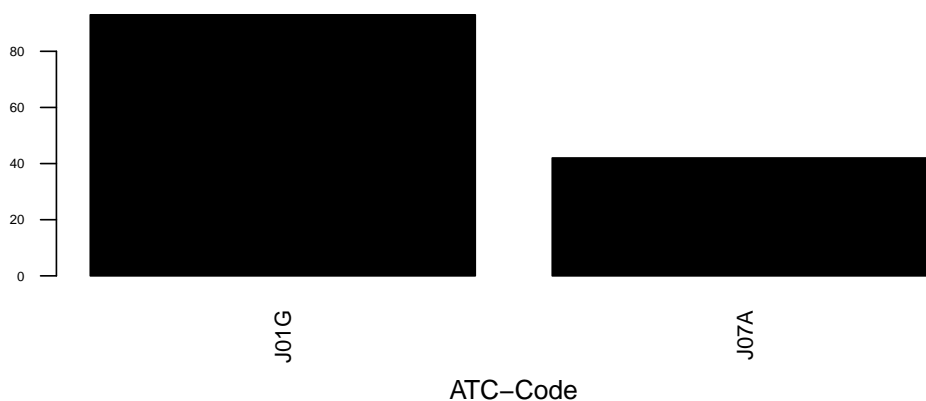


Figure 306: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group J85-J86.

Number of ATC Codes for J85–J86



Number of ATC Codes for J85–J86

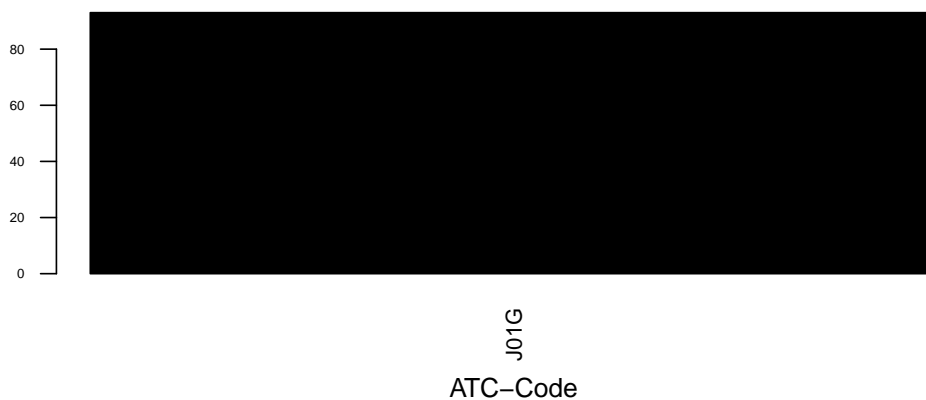


Figure 307: This figure shows the frequency of the underlying ATC codes for the given diagnose group J85-J86. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
J01G	AMINOGLYKOSID-ANTIBIOTIKA	TRUE
J07A	BAKTERIELLE IMPFSTOFFE	FALSE

Table 157: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose J85-J86.

E.129. Diagnose B50-B64: Protozoenkrankheiten

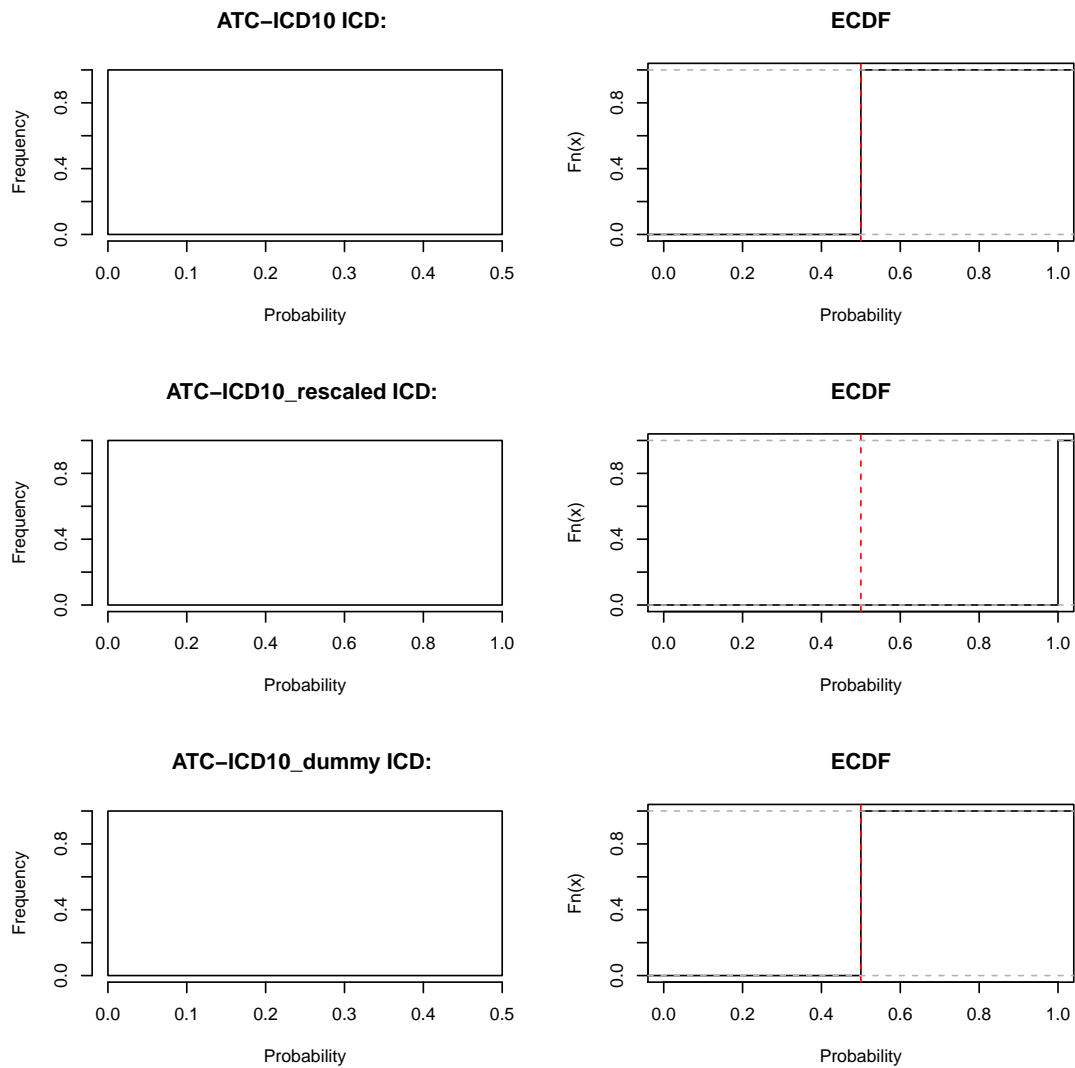
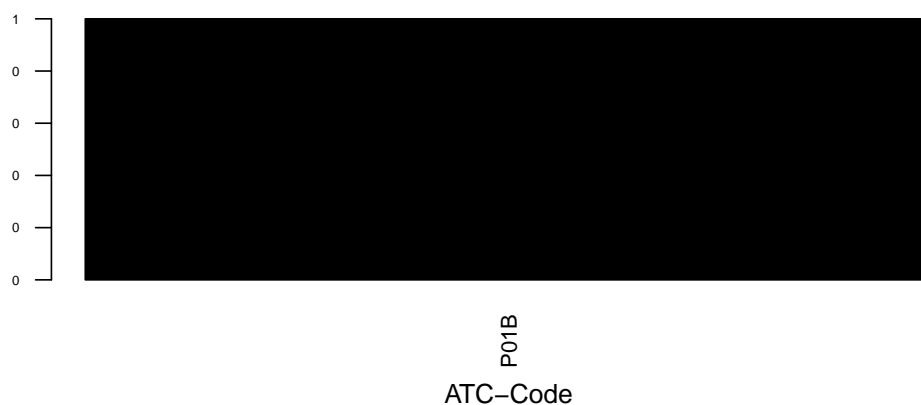


Figure 308: This figure shows the distribution of the probabilities of the diagnose for the three ATC-ICD implementations. The top figure shows the results before taking expert opinions into account. The rescaled version takes expert opinions into account and rescales the probabilities. The bottom figure shows the results with taking expert opinions into account but without rescaling the probabilities. This figure shows the results for ICD10 group B50-B64.

Number of ATC Codes for B50–B64



Number of ATC Codes for B50–B64

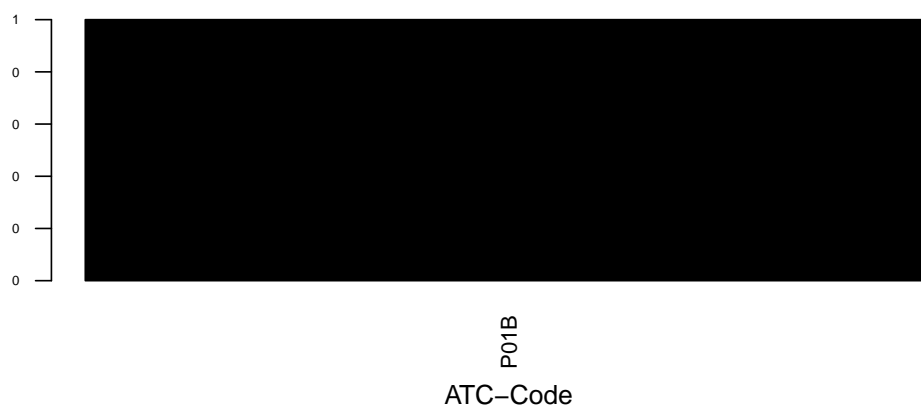


Figure 309: This figure shows the frequency of the underlying ATC codes for the given diagnose group B50-B64. The top figure shows the results for the ATC-ICD implementation without taking the experts' opinions into account. The lower figure shows the results after elimination of incorrect assignments according to the experts' opinions.

ATC	Description	Expert
P01B	MALARIAMITTEL	TRUE

Table 158: This table shows the description of ATC codes and the expert opinions to those, which are associated with Diagnose B50-B64.