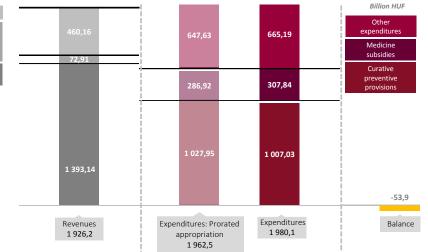




Balance of the Health Insurance Fund, November 2017



Source: Healthware analysis based on NHIFA data

Decision-making index, November 2017 Legislation 48/215 3,12 Activity of Parliament

21/215

Product offering

Burden of disease analysis

NIHIFM decisions

The indirect costs of therapies can currently be validated in only a limited way in health economic analysis made from local financing viewpoint. However, in other levels of decision making the cost analyses, which are made in social approach, can include objective and well communicable messages. These details can aid in forming of preferences between different healthcare technologies. By way of data-request from OEP we provide the summing up of the following information:

- Demographic and epidemiologic characteris -tics (by age, sex and comorbodity)
- Dispersion of patients by disease severity based on pharm. treatment pattern
- Cost analyses (on data of prescr., inpatient and outpatient care, labs and diagnostic services, hospice, sickness benefit)

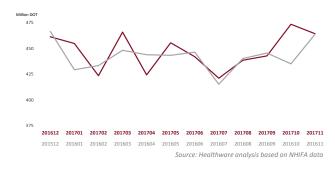
We suggest the patient survey method to define the patients indirect costs and the other state

- · Sickness absence costs
- · Home remodeling costs
- Informal care
- Other indirect burdens

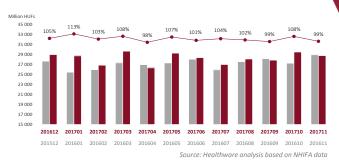
More information about our services: link

Pharmacy DOT turnover

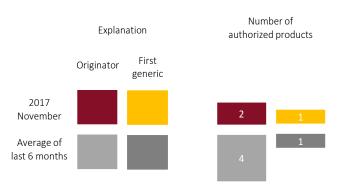
Dynamics of the sales/circulation of prescription-only-medicine

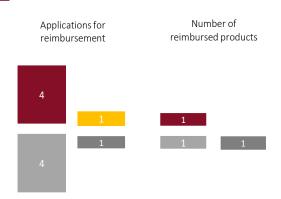


Pharmacy reimbursement turnover



Changes to subsidized medicinal product categories, November 2017





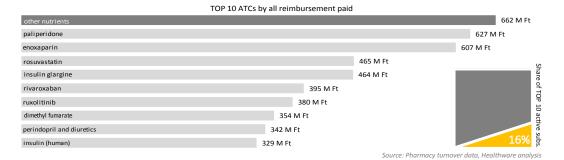
Source: Healthware analysis based on NHIFA data

Actualities of Hungarian pharmaceutical financing market

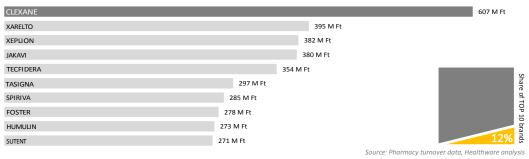
No. 1, Issue VI. 2018 Published: 23/01/2018

Market data

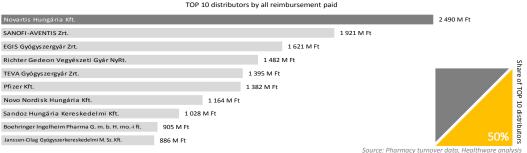
Toplists of reimbursement and number of patients, November 2017



TOP 10 brands by all reimbursement paid



TOP 10 distributors by all reimbursement paid

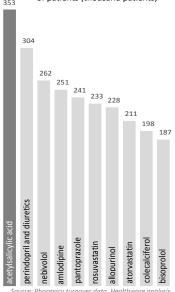


Average number of medical sales reps



Source: NHIFA data, Healthware analysis

TOP 10 active substances by number of patients (thousand patients)



Analysis of the results of the competing line procurement of itemized accounted pharmaceuticals - Case study

s of itemized public procurement process ("For the financing year of 2018, under the accelerated dure – in the form of a framework agreement – the procurement process in certain therapeutic new patients, which fall under the itemized framework). Previously, in our case study published in 2017, we presented the difficult circumstances of evaluating the economics of the new tender and some factors that can be examined in the future, which will allow us to evaluate the efficiency pies provided by the new procedure, and also the efficiency of the health provision?

e of our present analysis is to examine whether, in addition to the realistic risk that the offered ecoming open, which type of strategy the bidders have chosen as strategy for public procurement of the results of the public procurement offer.

lation to the publicly available list price.
publication of the results of the public procurement offers opportunity for an assessment according to our ctive, but the unit of measure introduced in the tender – which implies the lack of a precise definition of a alled "Joint Therapy Unit" (KTE) – significantly increases the uncertainty around the analysis. Although ultations were held between applicants for the procurement process and NEAK in order to get a definition clear KTE quantities, this information is not available for the broad public. In addition, in the case of ized pharmaceuticals the tender prices of previous public procurement procedures are not being reached, in most cases, we do not have any official information on the amount of the rebate and on the amounts

	Indication	(quantity)	KTE (definition)	nt*	eq."	estimation*	Brand	dosage unit (mg)	(mg)
1.	Lung cancer	1 209	a given multiple quantity of the dosage of one patients daily therapy	30	day	36 270	Iressa	250	9 067 500
							Giotrif	40	
							Tarceva	150	5 440 500
2.	BRAF negative melanoma	35 607	a given multiple quantity of the weekly dosage according to the summary of product characteristics	6	week	213 642	Keytruda	2,0	142 428
							Opdivo	3,0	320 463
3.	BRAF positive melanoma	720	a given multiple quantity of the dosage for a 28 day period according to the summary of product characteristics	2	28 days	1 440	Tafinlar	300	12 096 000
-							Zelboraf	1 920	77 414 400
	Colorectal cancer	998	a given weekly dosage of a patient with average budy surface or weight according to the summary of product characteristics	12	week	11 976	Erbitux	250	5 239 500
4.							Vectibix	6,0	2 514 960
5.	Prostate cancert	1 512	a fiftyfold quantity of the dosage of one patients daily therapy according to the summary of product characteristics	50	day	75 600	Zytiga	1 000	75 600 000
-							Xtandi	160	12 096 000
	Rheumatoid arthritis	758	quantity of the dosage needed for a new patients therapy according to the summary of product characteristics, including the induction dose if necessary	24	week	18 192	Cimzia	3 200	2 425 600
6.							Enbrel	1 200	
							Humira	480	
							Simponi	300	227 400
7.	AMD	3 641	a given multiple quantity of the dosage for one treatement according to the summary of product characteristics	1,65	treatment	6 008	Lucentis	2,3	13 818
							Eylea	3,6	21 628
8.	Fabry- disease	910	a twelvefold week dosage of a patient with average weight according to the summary of product characteristics	12	week	10 920	Replagal	1,2	1 092
-							Fabrazyme	6,0	5 460

active substance that is relevant for the procurement. In the case of the 1st row we considered monthly data (Iressa, Giotrif, Tarceva), and 24 weeks for the 6th row (Cimzia, Enbrel, Humira,

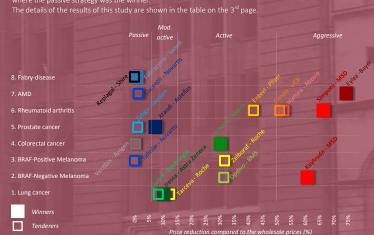
KTE and the public wholesaler prices at the time of the tender publication (October 2017) are compared to each other as a list price. As for the strategy of the companies, 4 groups were defined based on the degree of deviation. Those companies are listed for the *Aggressive* groups that have 50% lower bid price compared to the

deviation. Those companies are listed for the *Aggressive* groups that have 50% lower bid price compared to the list price. *Active* group is where this value is between 15% and 50%, *Moderately actives* are the one's with 3-15%, and the *Passive* group is where the companies gave maximum 3% discount, so their offer was equal or almost equal to their list prices. We classified the 2 preparations with invalid offers, Tafinlar (Novartis) and Replagal (Shire) into the group of Passive.

More than the half of the 19 involved preparations (10 pieces; 53%) had passive (6 pieces, 32%) or moderately active (4 pieces, 21%) strategy. In 5 (26%) cases, the tenderers used aggressive and in 4 (21%) cases they used active strategy. 3 company from the winners were aggressive, 1 was active, 2 were moderately active and 1 was passive. Bayer Hungary Ltd. gave the biggest discount (75%) compared to the list price for Eylea used in the indication of age-related wet type macular degeneration (AMD), but significant (60%) discount was given by MSD in case of two preparations (Simponi, Keytruda). According to the indication areas the biggest discount was presented in the next fields: AMD, Rheumatoid Arthritis, BRAF negative melanoma.

In total we can say that significant number of the tenderers were unable/wanted to give zero discount or only a symbolic discount in this new and therefore uncertain procurement process. As we summarized above the winner strategy wasn't clear as not only the Aggressive or Active groups were able to win. There was one case

winner strategy wasn't clear as not only the Aggressive or Active groups were able to win. There was o where the passive strategy was the winner. The details of the results of this study are shown in the table on the 3rd page.



(ii)

Actualities of Hungarian pharmaceutical financing market

Newsletter
No. 1, Issue VI. 2018
Published: 23/01/2018

Analysis of the results of the competing line procurement of itemized accounted pharmaceuticals - Case study annex

Number	Indication	Tenderer, name of the company	Distributor	Substance	Brand	Offer for the total amount (HUF)	Wholesale price (HUF/mg)	Offer price (HUF/mg)*	Price reduction (compared to the wholesale price)*	Strategy
	Lung cancer	Astra Zeneca	Astra Zeneca	gefitinib	Iressa	645 484 223	79	71	10%	Moderately active
1.		Hungaropharma	Boehringer	afatinib	Giotrif	656 789 250	494	453	8%	Moderately active
		Roche	Roche	erlotinib	Tarceva	884 933 595	183	163	11%	Moderately active
2.	Advanced (unresectable or metastatic) BRAF negative melanoma	Euromedic	MSD	pembrolizumab	Keytruda	596 919 630	10 650	4 191	61%	Aggressive
۷.		Euromedic	BMS	nivolumab	Opdivo	964 005 487	4 385	3 008	31%	Active
3.	Advanced (unresectable or metastatic) BRAF positive melanoma		Novartis	dabrafenib	Tafinlar	-	-	-	-	Passive
э.		Roche	Roche	vemurafenib	Zelboraf	1 737 007 920	33	22	32%	Active
4.	Colorectal cancer – KRAS, NRAS wild	Euromedic	Merck	cetuximab	Erbitux	1 898 404 981	519	362	30%	Active
4.		Euromedic	Amgen	panitumumab	Vectibix	2 779 658 534	1 110	1 105	0,4%	Passive
5.	Prostate cancert (metastatic, castrate- resistant)	Euromedic	Janssen	abirateron-acetet	Zytiga	2 275 076 095	30	30	1,1%	Passive
Э.		Hungaropharma	Astellas	enzalutamid	Xtandi	2 260 811 619	202	187	7,3%	Moderately active
	Rheumatoid arthritis	Euromedic	UCB	certolizumab pegol	Cimzia	767 139 136	653	316	52%	Agressive
6.		Hungaropharma	Pfizer	etanercept	Enbrel	688 271 580	1 301	757	42%	Active
0.	Kileumatolu ai tiirtis	AbbVie	AbbVie	adalimumab	Humira	571 770 000	3 263	1 571	52%	Aggressive
		Euromedic	MSD	golimumab	Simponi	461 966 228	6 051	2 032	66%	Aggressive
7.	Age-related wet type macular degeneration (AMD)	Hungaropharma	Novartis	ranibizumab	Lucentis	1 604 828 278	117 688	116 144	1,3%	Passive
/.		Bayer	Bayer	aflibercept	Eylea	723 833 840	131 283	33 468	75%	Aggressive
8.	Fahry disease	Hungaropharma	Shire	agalsidase beta	Replagal	-	130 333	-	-	Passive
ð.	Fabry-disease	Euromedic	Sanofi	agalsidase alfa	Fabrazyme	132 889 976	24 551	24 339	0,9%	Passive

*Healthware estimation; red highlight: winners; KTE estimation = KTE (quantity) st KTE time equivalent

