HEALTHWARE	
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Actualities of the Hungarian pharmaceutical financing market

News, current issue	25		D	ecision-making in	dex, June 2018		
News In 4 years gratuity from the healthcar	payments might disappear e system	»>			6/184	Legislation	Metho
There have been fi	nancial issues in the health	care »		2,45	112/184	Activity of Parl	iament Vethoodology
News institutes					18/184	NIHIFM decisio	ons
News Accrual based heal	thcare financing	»>					efering
Macro approach to	financing healthcare	and medicinal products				Produ	act offering
Balance of the Hea	lth Insurance Fund, J	une 2018				Public turnover Medalyse service	
Other revenues Contribution of	315,18			Billion HUF Other expenditures		With our service Medalyse f public turnover data publishe	
Pharmaceutical Manufacturers and Wholesalers		388,65	377,04	Medicine subsidies		easily available and it is pos them with time series analysis.	sible to follow
Socil Security Contributions	45,23	168,70	173,93	Curative preventive provisions		The turnover data is available of 16-18th day after the given mo	
		602,20				Healthware takes under data in the informat Medalyse, if it is po workday.	tion system of
	814,21	602,20	595,97				clients are free alyze the turno-
_			Expenditures	27,7		ver data of NH day after the giv	IIF on the 20th ven month.
	Revenues 1 174,6	Expenditures: Prorated appropriation 1 159,6	1 146,9	Balance Balance			escription about e data published
Dynamics of the sa	les/circulation of pre	escription-only-medicine					by NHIFA: <u>link</u> Details about
	Pharmacy DOT turr	nover		Pharmacy re	imbursement tur	nover	Medalyse: <u>link</u>
Million DOT 475	\sim		Million HUFs 35 000 104%	108%	09% 104% 101%	101% 108% 107% 105%	
450			33 000 31 000 29 000	102% 99% 99%	98% 107% 101%	101% 107% 105%	
425	\sim	\vee \vee	27 000 25 000 23 000 21 000 19 000			ш	
375 201707 201708 201 201607 201608 201		D1 201802 201803 201804 201805 201806 D1 201702 201703 201704 201705 201706		201708 201709 201710 2017 201608 201609 201610 20161		201803 201804 201805 201806 201703 201704 201705 201706	
	Source:	Healthware analysis based on NHIFA data				e analysis based on NHIFA data	
Changes to subsidi	zed medicinal produ	ct categories, June 2018					
E	xplanation	Number of authorized products		cations for pursement	Number of reimbursed pro		
Origina	itor First generic						
2018 June		1	3	1	1	1	
Average of last 6 months		2	2	2	1	1	-
		4					ALL RANGE

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Source: Healthware analysis based on NHIFA data



Average number of medical sales reps

Market data

Novartis Hungária Kft.

EGIS Gyógyszergyár Zrt. Richter Gedeon Vegyészeti Gyár NyRt.

TEVA Gyógyszergyár Zrt.

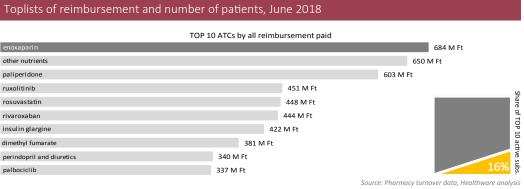
Novo Nordisk Hungária Kft.

Sandoz Hungária Kereskedelmi Kft.

Boehringer Ingelheim Pharma GmbH mo-i ft. 933 M Ft Janssen-Cilag Gyógyszerkereskedelmi M. Sz. Kft. 870 M Ft

SANOFI-AVENTIS Zrt.

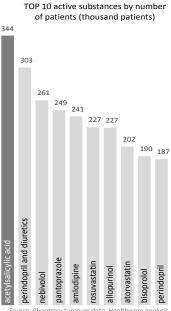
Pfizer Kft.



2 614 M Ft

Source: Pharmacy turnover data, Healthware analys

Source: NHIFA data, Healthware analysis



TOP 10 brands by all reimbursement paid

CLEXANE		684 M Ft	
JAKAVI		451 M Ft	
XARELTO		444 M Ft	
TECFIDERA	381 M Ft	Ft	
XEPLION	357 M Ft		
IBRANCE	337 M Ft	Share	
GILENYA	305 M Ft	of	
TASIGNA	302 M Ft	TOP 10	
SUTENT	296 M Ft		
XULTOPHY	289 M Ft	13% and	
		Source: Pharmacy turnover data, Healthware analysis	

TOP 10 distributors by all reimbursement paid

1 399 M Ft

1 365 M Ft

1 318 M Ft

1 625 M Ft

1 490 M Ft

1 982 M Ft

Biosimilars in Europe and in Hungary - Case study

in our <u>case study</u> published in November 2016, we reviewed the European market of biosimilars, examining the biosimilars which were authorized by EMA (Europen Medicines Agency) and got reimbursed by NEAK (National Health Insurance Fund) till 2016 from different perspectives.

989 M Ft

Reviewing the authorizations for the last two years, two things should be noted regarding the biosimilar market. Firstly, the activity in producing and accepting new biosimilars is significantly growing in Europe. Secondly, more and more original or generic firms with original parent company are participating in the production of biological medicines. The table below shows the biosimilar products available in Europe and eimbursed in Hungary (red type color shows the changes since 2016).

			Reimbursed biosimilars ir Hungary
adalimumab	Rheumatoid Arthritis, Psoriatic Arthritis, Juvenile Rheumatoid Arthritis, Ankylosing Spondylitis, Psoriasis, Crohn Disease, Ulcerative Colitis, Hidradenitis Suppurativa, Uveitis	Amgevita, Cyltezo, Halimatoz, Hefiya, Imraldi, Solymbic	
bevacizumab	Breast Neoplasms Carcinoma, Non-Small-Cell Lung Carcinoma, Renal Cell Colorectal Neoplasms, Fallopian Tube Neoplasms, Ovarian Neoplasms, Peritoneal Neoplasms	Mvasi	
enoxaparin sodium	Venous Thromboembolism	Inhixa, Thorinane	
epoetin alfa	Chronic Kidney Failure, Anemia, Cancer	Abseamed, Binocrit, Epoetin Alfa Hexal	Binocrit
epoetin zeta	Anemia, Autologous Blood Transfusion, Cancer, Chronic Kidney Failure	Retacrit, Silapo	Retacrit
etanercept	Rheumatoid Arthritis, Psoriatic Arthritis, Juvenile Rheumatoid Arthitis, Psoriasis, Ankylosing Spondylitis	Benepali, Erelzi	
filgrastim	Neutropenia, Cancer, Hematopoietic Stem Cell Transplantation, Mobilisation of peripheral blood progenitor cells (PBPC)	Accofil, Filgrastim Hexal, Grastofil, Nives tim, Ratiograstim, Tevagrastim, Zarzio	- Accofil, Nivestim,Ratiogra tim, Tevagrastim, Zarzio
follitropin alfa	Anovulation	Bemfola, Ovaleap	Bemfola
infliximab	Rheumatoid Arthritis, Psoriatic Arthritis, Ankylosing Spondylitis, Psoriasis, Crohn Disease, Ulcerative Colitis	Flixabi, Inflectra, Remsima, Zessly	Inflectra
insulin glargine	Diabetes Mellitus	Abasaglar, Lusduna, Semglee	Abasaglar
rituximab	Non-Hodgkin Leukemia, Chronic, B-Cell, Lymphocytic Leukemia, Wegener Granulomatosis and Microscopic Polyangiitis, Rheumatoid Arthritis	Blitzima, Ritemvia, Rituzena, Rixathon, Riximyo, Truxima	Truxima
somatropin	Turner Syndrome, Pituitary Dwarfism, Prader-Willi Syndrome	Omnitrope	Omnitrope
teriparatide	Osteoporosis	Movymia, Terrosa	
	Breast Neoplasms HER2+, Stomach Neoplasms HER2+	Herzuma, Kaniinti, Ontruzant	Herzuma

ar products (Truxima, Herzuma) got reimbursed Hungary, giving a total of 13 financed biosimilars¹ Examining the producers of the newly authori

			Innovative	subsidiary of innovative	Generic	Other
		Europe	2 (0)	14 (8)	8 (7)	
ed	S	North-				
eric	egion	America	6 (1)		1 (1)	1 (0)
	<i>~</i>	Middle-East			2 (2)	
ter		Asia				11 (4)
me		N		No		

one new biologic medicinal product. Among the producers there is a growing number of firms focusing on biosimilars only, they had eight new product in this period.

Share of TOP 10 distributors

Similar to generics, the entry of biosimilars offers great opportunities on the social level. Their appearance ensures a savings potential for the drug budget and/or it can mean access to these therapies for a broader circle of patients. However, contrary to the generic products, there are many things which impedes the biosimilars' penetration and the realization of the above mentioned positive effects.

Firstly, in March 2018 an OGYÉI (National Institute of Pharmacy and Nutrition) resolution was published, according to which switching between different biosimilars of the same reference product (originator) is not recommended². Although there was an example of good practice in the past for the interchangeability of biosimilars, the referred authority resolution might make the penetration of biosimilar medicinal products more

medical field. This makes the market entry and funding of these products more difficult since a biosimilar might have different patent expiry for the different indications. These patent right issues call the producers and the payer as well for caution.

the extent of the same effect experienced in case of generic market entry. Not only the biosimilars' price sequence is slighter than generics'², but there is no need for producers to adjust to it since the level of competition is lower in the biosimilar market than it is in the generic market. Moreover, the price strategy of original producers — whose growing dominance on the biosimilar market we have already mentioned fundamentally differs from that of generic producers. Therefore the realization of the expected price reductio and the savings effect arising from that is questionable in the case of biosimilars' market entry.

For its social benefits, it is definitely important to encourage the penetration of biosimilars and abol obstacles to it. Collecting real-world data about the application of biosimilar medicines, assembling it into registers, and analyzing them might be a primary tool to the solution. For example, the evaluation of data abou switching therapies with properly controlled and documented circumstances could help to resolve the aversion related to the interchangeability of biosimilars. But the analysis of other information by identifying and separating patient subgroups could allow implementation of differentiated financing techniques.

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¹http://www.oep.hu/feleo_menu/stakmai_oldalak/gvogyster_segedestkoz_gvogyfurdo_tamogatas/egeszegugyi_vallalkozasoknak/ pupha/Vegleges_PUPHA.html http://www.ogyei.gov.hu/dynamic/biohasonlo_allasfoglalas_20180212_Final_jav1_20180301.pdf