



ISPOR BIOSIMILARS SPECIAL INTEREST GROUP AND ISPOR CENTRAL AND EASTERN EUROPE CONSORTIUM:

BIOSIMILARS: AN OPPORTUNITY FOR COUNTRIES WITH RESTRICTED RESOURCES TO IMPROVE PATIENT ACCESS?

Tuesday, 5 November 2019; 12:30 – 1:45 PM CET

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- **Purpose:**
 - To present an overview of the goals, barriers and facilitators of biosimilar adoption in countries with limited resources, from HTA and policy perspective
- **We are interested in your view:**
 - Interactive session after presentation through poll questions - be prepared with your mobile
- **Moderator:**
 - Vera Pataki, MD, MBA,
 - Head of International Market Access, Egis, Budapest, Hungary
 - Chair of CEE Network, Medicines for Europe, Brussels, Belgium

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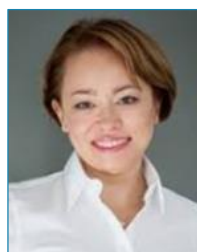
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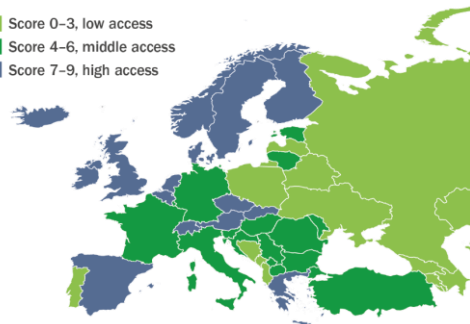
- Compared with Western Europe, Central and Eastern Europe have experienced reduced access to biological medicines^{1,2}

Percentage of patients with rheumatoid arthritis (RA) treated with a biological medicine:

Western Europe*	Central & Eastern Europe**
11–12%	1–5%

Level of access to biological treatments for RA across Europe³

Score 0–3, low access
Score 4–6, middle access
Score 7–9, high access



This difference in access to biological medicines is largely due to general economic conditions²

⁵ Footnotes: *Based on values from 2009; **Based on values from 2011.

References: 1. Kobelt G, Kasteng F. Access to innovative treatments in rheumatoid arthritis in Europe. Available at: <http://bit.ly/Shamf8>. Accessed July 2017; 2. Orlewska L, et al. *Med Sci Monit.* 2011;17:SR1-13; 3. Putrik P, et al. *Ann Rheum Dis.* 2014;73:198–206.

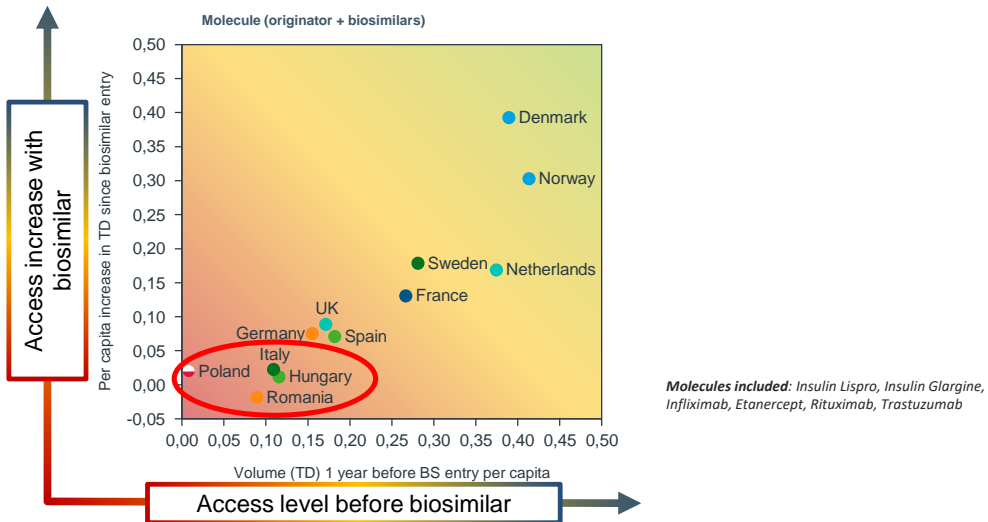
- According to WHO, biosimilar medicines provide a good opportunity to **expand access** and to become a **game-changer** for access to medicines for certain complex conditions¹

Product/Country	Treatment days per capita ² (Year before biosimilar entrance)	Volume change of treatment days following introduction of biosimilar ²
HGH		
Romania	0.02	152%
Czech Rep	0.08	68%
Poland	0.04	82%
G-CSF		
Romania	0.02	2542%
Bulgaria	0.02	581%
Slovakia	0.05	509%
Anti-TNF		
Bulgaria	0.10	190%
Czech Rep	0.24	59%
Slovakia	0.49	93%

Biosimilar medicines allow access to highly innovative treatments

⁶ Abbreviations: G-CSF, granulocyte-colony stimulating factor; HGH, human growth hormone; TNF, tissue necrosis factor; WHO, World Health Organisation.

Reference: 1. WHO. WHO to begin pilot prequalification of biosimilars for cancer treatment. Available at: <http://bit.ly/2q1W0tp>. Accessed July 2017; 2. QuintilesIMS. The impact of biosimilar competition on price, volume and market share - update 2017. Available at: <http://bit.ly/2rpB1rW> Accessed July 2017.



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Source: IQVIA MIDAS Restricted MTH October 2018

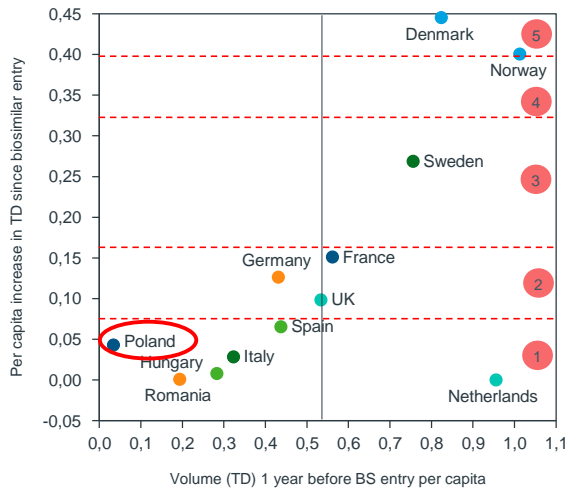
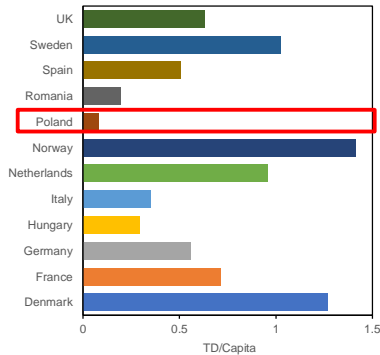
Biosimilar penetration - differences among molecules and countries

	infliximab	insulin glargine	etanercept	rituximab	trastuzumab	adalimumab	
UK	92.2	9.0	82.0	91.5	60.7		High uptake
Germany	51.3	13.3	56.8	60.9	28.3	1.4	
France	59.1	14.6	17.9	63.6	27.5	0.08	
Italy	78.5	19.2	45.6	74.5	9.2	0.01	
Spain	55.8	12.0	30.2	27.8	10.6	0.02	
Denmark	98.5	9.3	90.6	67.2	99.3		Low uptake
Finland	17.8	6.0	6.1	6.2	-		
Netherlands	76.1	10.8	24.1	93.4	95.0	3.2	
Norway	97.6	5.8	90.1	0.0	81.2		
Poland	95.2	35.6	36.6		34.4		

Notes: trastuzumab and rituximab subcutaneous form excluded from calculations

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Source: IQVIA MIDAS Restricted MTH October 2018



Line shows average volume (TD) 1 year before BS entry per capita, across all countries in scope
Sustainability for Biosimilars in Europe - Policies evaluation report ; Sustainability Score 1 = low; Score 5 = high

Anti-TNFs: Adalimumab, Certolizumab pegol, Etanercept, Golimumab, Infliximab

Source: IQVIA MIDAS Restricted MTH October 2018

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SECTION

1

Biosimilars' uptake from a CEE perspective – theory vs. Practice



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1 Associate Professor, Semmelweis University, Budapest, Hungary;

2 Co-chair, ISPOR SIG on Biosimilars Key Project;

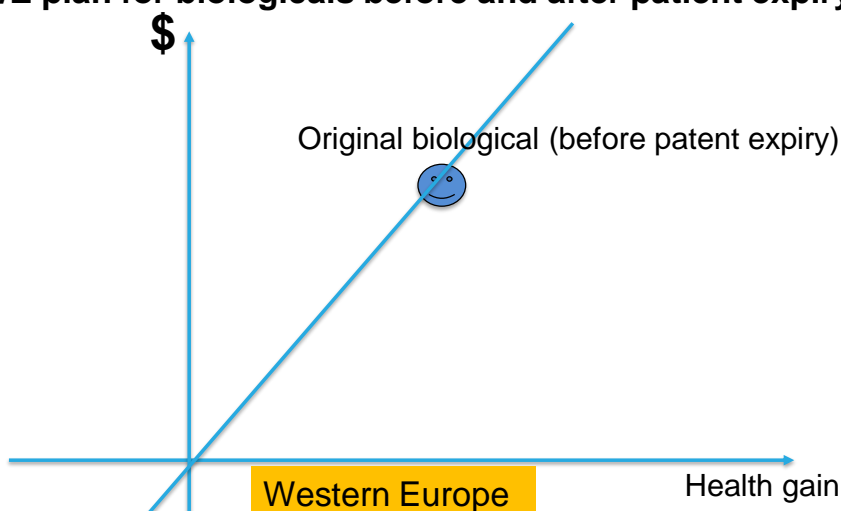
3 Principal Researcher, Syreon Research Institute, Budapest, Hungary

- Biologicals at Western European price level are usually not cost effective in CEE
- Off-patent biologicals with price erosion after patent expiry provides more affordable treatment alternatives
- The policy objective of off-patent pharmaceuticals can be approached in two different ways:
 - Disinvestment aspect: Reduce health care expenditure without compromising health outcomes
 - Investment aspect: Increase population health gain by improved patient access without increasing health expenditure

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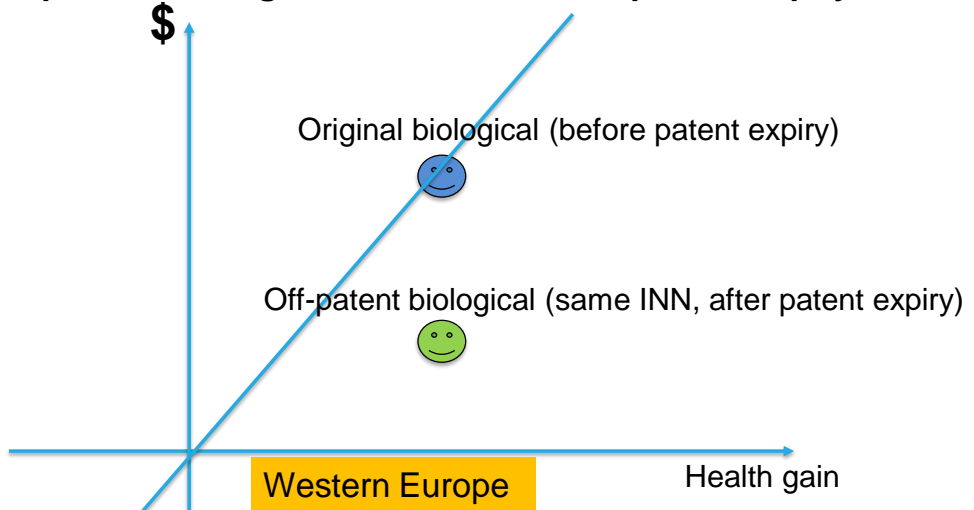
Ref: Inotai A et al. *BioMed Research International*. 2018. 9597362. 9.

C/E plan for biologicals before and after patent expiry



Ref: Inotai A, Csanádi M, Vitezic D, Francetic I, Tesar T, Bochenek T, Lorenzovici L, Dylst P, Kaló Z. Policy Practices to Maximise Social Benefit from Biosimilars. *Journal of Bioequivalence & Bioavailability*. 2017. 9. 467-472.

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Before patent expiry

After patent expiry



Ref: Inotai A, Csanádi M, Vitezic D, Francetic I, Tesar T, Bochenek T, Lorenzovici L, Dylst P, Kaló Z. Policy Practices to Maximise Social Benefit from Biosimilars. *Journal of Bioequivalence & Bioavailability*. 2017. 9. 467-472.

Before patent expiry

After patent expiry

Western Europe:

All eligible patients have access to the original biological prior patent expiry



Ref: Inotai A, Csanádi M, Vitezic D, Francetic I, Tesar T, Bochenek T, Lorenzovici L, Dylst P, Kaló Z. Policy Practices to Maximise Social Benefit from Biosimilars. *Journal of Bioequivalence & Bioavailability*. 2017. 9. 467-472.

Before patent expiry

After patent expiry

\$



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Western Europe:

All eligible patients have access to the original biological prior patent expiry



N/C

✓ (CMA)

Ref: Inotai A, Csanádi M, Vitezic D, Francetic I, Tesar T, Bochenek T, Lorenzovici L, Dylst P, Kaló Z. Policy Practices to Maximise Social Benefit from Biosimilars. *Journal of Bioequivalence & Bioavailability*. 2017. 9. 467-472.

Methods

- Volume restrictions are implemented by payers to ensure financial sustainability of reimbursing high-cost pharmaceuticals
- Aim: to reveal these transparent and hidden access barriers in CEE
- Methods:
 - Disease: RA
 - Scope: TNFa inhibitor bDMARDs
 - 3-3 interviews with 4 stakeholder groups (payers, patients, rheumatologists, industry) in each country
 - Participating countries: CZ, HU, PL, RO, SK
 - 3x4x5=60 interviews
 - Results aggregated at country level

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Results

- TNFa bDMARDs are on the reimbursed list in CEE, but...
- ...the following barriers were reported the most frequently:

Barrier	Number of reporting countries (out of 5)
limited number of RA centers with prescribing rights	5
uneven budget allocation among RA centers	3
maximised patient number on reimbursed biologics / RA center	3
insufficient human resource capacities to administer IV bDMARDs	4
more restrictive financial protocols compared to EULAR guidelines in prescribing bDMARDs	4
significant administrative burden of prescribing biologics	3
significant travelling time and cost for patients to RA centers	5

- Altogether 33 different types of access barriers were reported

Consequence: Not all eligible patient may have access to bDMARDs in RA in CEE

Before patent expiry

After patent expiry

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Western Europe:

All eligible patients have access to the original biological prior patent expiry

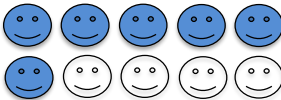


N/C

✓ (CMA)

Central Eastern Europe:

Volume restrictions to the original biological prior patent expiry



Ref: Inotai A, Csanádi M, Vitezic D, Francetic I, Tesar T, Bochenek T, Lorenzovici L, Dylst P, Kaló Z. Policy Practices to Maximise Social Benefit from Biosimilars. Journal of Bioequivalence & Bioavailability. 2017. 9. 467-472.

Before patent expiry

After patent expiry

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Western Europe:

All eligible patients have access to the original biological prior patent expiry



N/C

✓ (CMA)

Central Eastern Europe:

Volume restrictions to the original biological prior patent expiry



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Before patent expiry

After patent expiry

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Western Europe:

All eligible patients have access to the original biological prior patent expiry

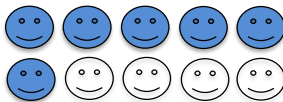


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Central Eastern Europe:

Volume restrictions to the original biological prior patent expiry



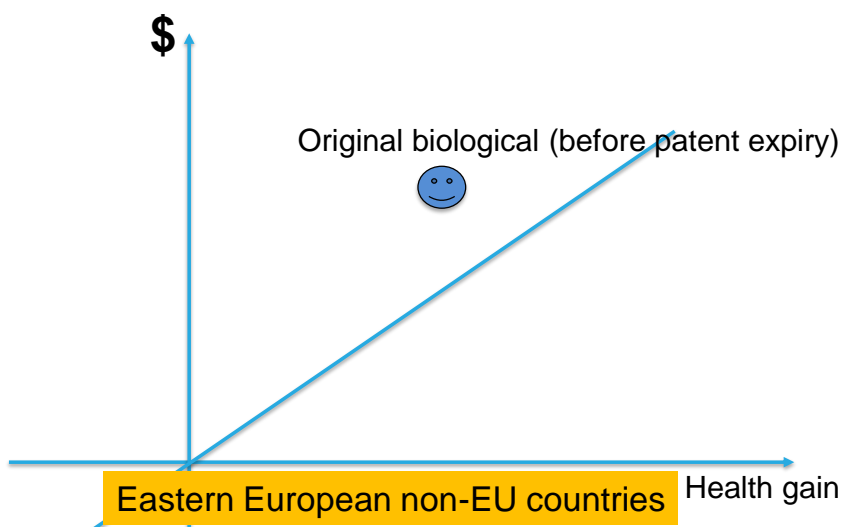
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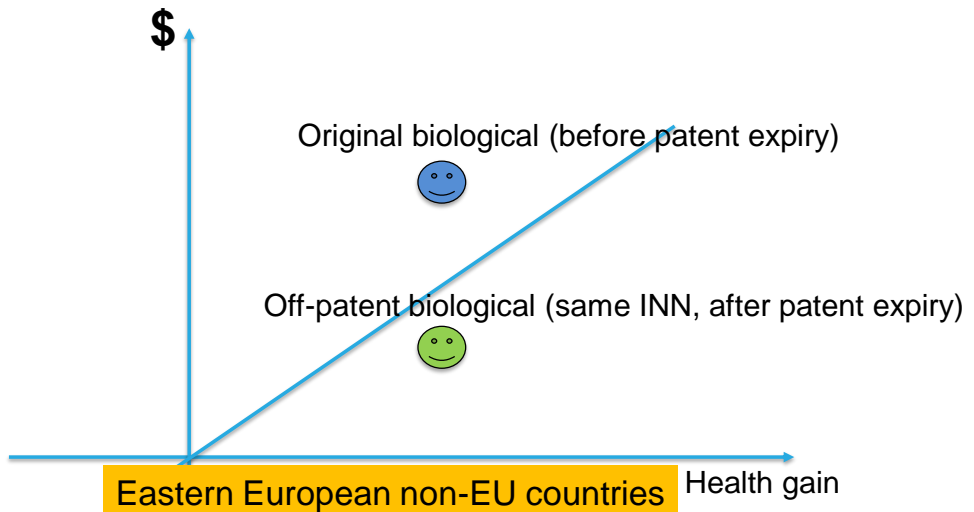
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C/E plan for biologicals for low income countries



Ref: Inotai A, Csanádi M, Vitezic D, Francetic I, Tesar T, Bochenek T, Lorenzovici L, Dylst P, Kaló Z. Policy Practices to Maximise Social Benefit from Biosimilars. *Journal of Bioequivalence & Bioavailability*. 2017. 9. 467-472.



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Before patent expiry

After patent expiry

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Western Europe:

All eligible patients have access to the original biological prior patent expiry



N/C

✓ (CMA)

Central Eastern Europe:

Volume restrictions to the original biological prior patent expiry



Eastern European non-EU countries:

Original biological is not cost effective prior patent expiry



Ref: Inotai A et al. Journal of Bioequivalence & Bioavailability. 2017. 9. 467-472.

Before patent expiry

After patent expiry

\$



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Western Europe:

All eligible patients have access to the original biological prior patent expiry



N/C

✓ (CMA)

Central Eastern Europe:

Volume restrictions to the original biological prior patent expiry



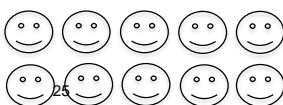
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✓

Eastern European non-EU countries:

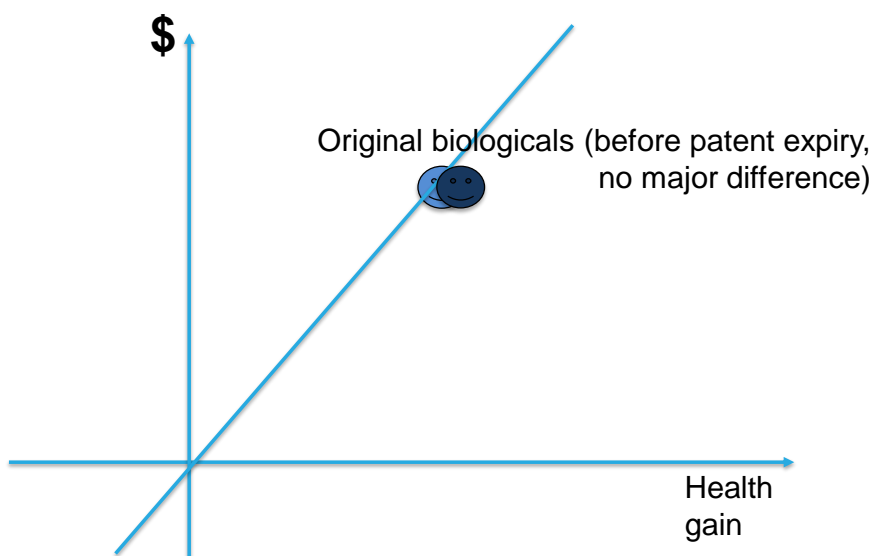
Original biological is not cost effective prior patent expiry

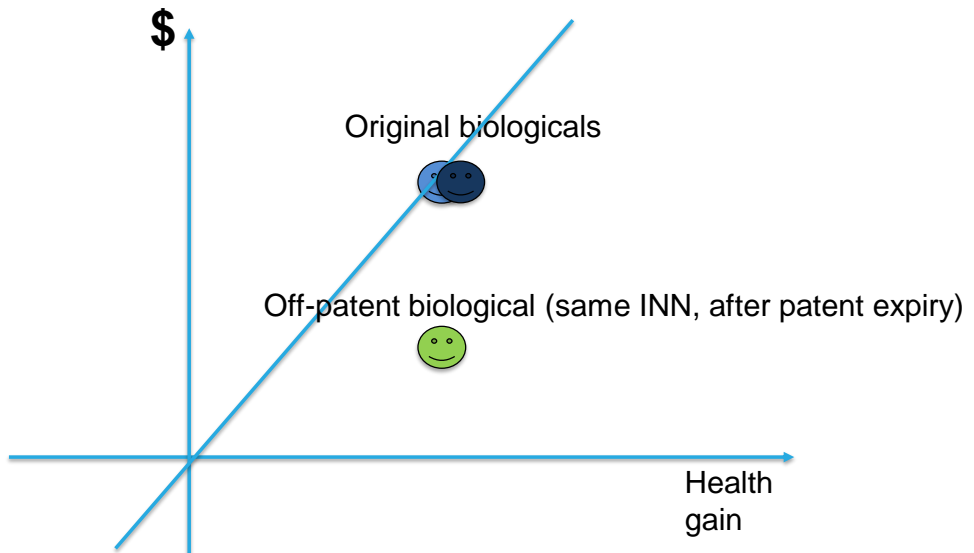


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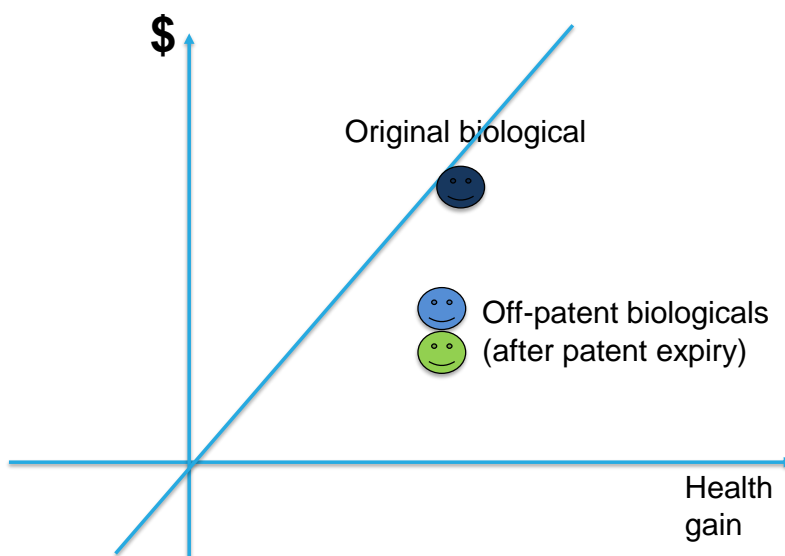
Ref: Inotai A et al. Journal of Bioequivalence & Bioavailability. 2017. 9. 467-472.

How to select first line treatment of compounds with no or limited differential value?





27



28

Before patent expiry

After patent expiry

\$



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Western Europe:

All eligible patients have access to the original biological medicine prior patent expiry



N/C

✓ (CMA)

29

Before patent expiry

After patent expiry

\$



\$/

Western Europe:

All eligible patients have access to the original biological medicine prior patent expiry



N/C

✓ (CMA)

30

Before patent expiry

After patent expiry

\$



\$/

Western Europe:

All eligible patients have access to the original biological medicine prior patent expiry



N/C

✓ (CMA)

Central Eastern Europe:

Volume restrictions to the original biological medicine prior patent expiry



N/C



✓

31

Before patent expiry

After patent expiry

\$



\$/

Western Europe:

All eligible patients have access to the original biological medicine prior patent expiry



N/C

✓ (CMA)

Central Eastern Europe:

Volume restrictions to the original biological medicine prior patent expiry



N/C



✓

32

Before patent expiry

After patent expiry

\$



\$/☹️

Western Europe:

All eligible patients have access to the original biological medicine prior patent expiry



N/C

✓ (CMA)

Central Eastern Europe: • Opportunity cost: reduced opportunity for savings

Volume restrictions to the original biological medicine prior patent expiry



N/C



✓

• Opportunity cost: reduced opportunity to treat additional patients

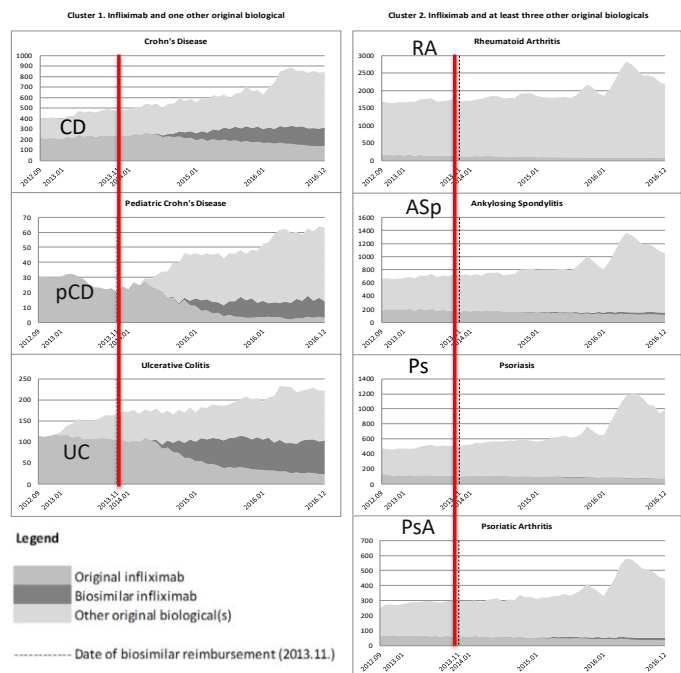
New patients should start on more affordable off patent biologicals

Using other patented biologicals w/o added benefit if off patent biologicals are available has opportunity cost

The case of infliximab in Hungary

- Increasing utilisation of biologicals implicitly confirms hidden barriers

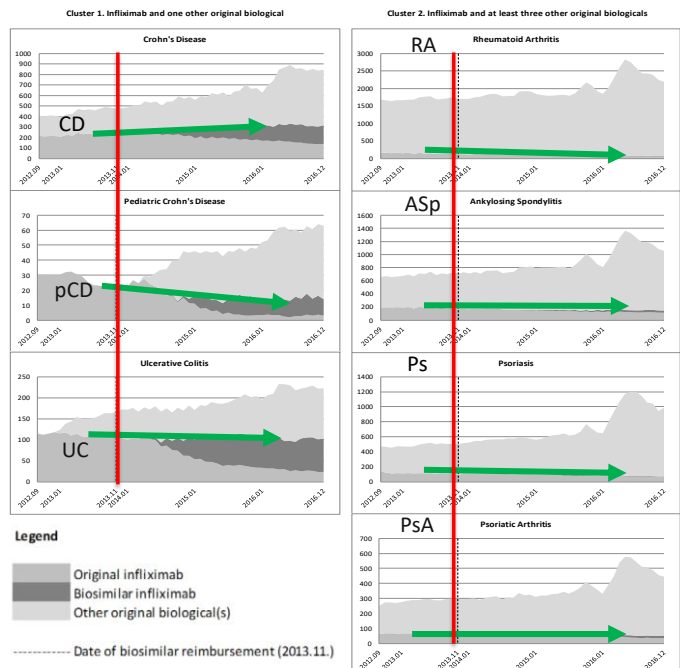
Ref: Harsányi A, Csanádi M, Márky K, Vincziczki AZ, Kaló Z, Inotai A (2019) Influence Of Biosimilar Infliximab Launch On The Utilization Pattern Of Biological Medicines. Expert Rev PharmacoeconOutcomes Res. <https://doi.org/10.1080/14737167.2019.1667232>



The case of infliximab in Hungary

- Increasing utilisation of biologicals implicitly confirms hidden barriers
- After patent expiry the market share of **off-patent infliximab** showed a decrease

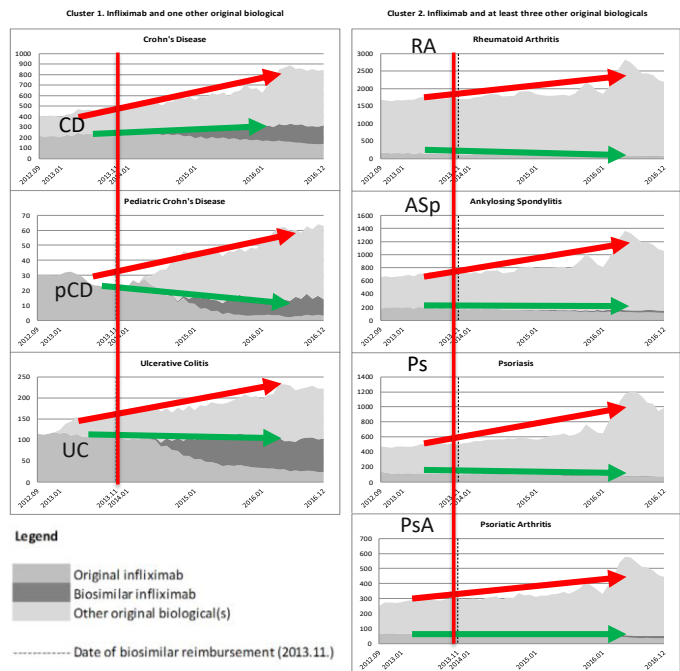
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The case of infliximab in Hungary

- Increasing utilisation of biologicals implicitly confirms hidden barriers
- After patent expiry the market share of **off-patent infliximab** showed a decrease
- Market share of **other patented biologics** shows an increase

Ref: Harsányi A, Csanádi M, Márky K, Vincziczki AZ, Kaló Z, Inotai A (2019) Influence Of Biosimilar Infliximab Launch On The Utilization Pattern Of Biological Medicines. Expert Rev PharmacoeconOutcomes Res. <https://doi.org/10.1080/14737167.2019.1667232>



Indication	Originator infliximab	Biosimilar infliximab	Other patent protected biological(s)
Ulcerative Colitis	13.5%	50.3%	36.3%
Adult Crohn's Disease	14.3%	37.0%	48.7%
Paediatric Crohn's Disease	17.1%	18.4%	64.6%
Rheumatoid Arthritis	0.4%	1.2%	98.4%
Ankylosing Spondylitis	1.1%	4.1%	94.8%
Psoriasis	1.4%	1.6%	97.0%
Psoriatic Arthritis	1.5%	5.4%	93.1%

Despite of the economic rationale, in many indications physicians did not even try the more affordable off patent biologicals for new patients

Ref: Harsányi A, Csanádi M, Márky K, Vincziczki AZ, Kaló Z, Inotai A (2019) Influence Of Biosimilar Infliximab Launch On The Utilization Pattern Of Biological Medicines. Expert Rev PharmacoeconOutcomes Res. <https://doi.org/10.1080/14737167.2019.1667232>

- Using patented biologicals with no added value if off-patent biologicals are also available has opportunity cost:
 - In case of disinvestment: reduced opportunity for savings
 - In case of investment (e.g. volume restriction): reduced opportunity to treat additional patients

In case of limited access, if naive patients start on original bDMARDs when off patent biologicals are available, some patients will be denied treatment

Are lower income countries rich enough not to use off patent biologicals as first line treatments?

SECTION

2

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Policies on biosimilars: What can we learn from the European experience?



Evelien Moorkens

PhD researcher, KU Leuven, Leuven, Belgium

ISPOR

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biosimilar
medicines
better access, better health.

MARKET REVIEW – BIOSIMILAR MEDICINES MARKETS

2017

Payers' price & market access policies supporting a sustainable biosimilar medicines market

SIMON • KUCHER & PARTNERS
Strategy & Marketing Consultants

PLOS ONE

RESEARCH ARTICLE

Policies for biosimilar uptake in Europe: An overview

Evelien Moorkens^{1*}, Arnold G. Vulto², Isabelle Huys³, Pieter Dylst^{4,5}, Brian Godman^{6,7}, Simon Keenleber⁸, Barbara Claus⁹, Maria Dimitrova¹⁰, Guentika Petrova¹¹, Lijljana Sović-Bričić¹², Juraj Slaby¹³, Robin Sebesta¹⁴, Ott Lalus^{15,16}, Allan Kar¹⁷, Morgane Beck¹⁸, Jaana E. Martikainen¹⁹, Gisbert W. Selke²⁰, Susan Spillane^{21,22}, Laura McCullagh^{23,24}, Gianluca Trifiro²⁵, Patricia Veltz Bonanico²⁶, Asbjørn Mack²⁷, Antra Fogele²⁸, Anita Wikman²⁹, Magdalena Władysław³⁰, Helder Mota-Filipe³¹, Dmitry Meshkov³², Marija Kalaba³³, Simona Mencej Bedrac³⁴, Juri Fürst³⁵, Corrine Zara³⁶, Peter Sköld³⁷, Einar Magnusson³⁸, Steven Simoons³⁹



OPEN ACCESS

Citation: Moorkens E, Vulto AG, Huys I, Dylst P, Godman B, Keenleber S, et al. (2017) Policies for biosimilar uptake in Europe: An overview. PLoS ONE 12(12): e0190147. <https://doi.org/10.1371/journal.pone.0190147>

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Supply-side and demand-side policies for biosimilars: an overview in 10 European states

Cécile Rémusat, Anna Kapuśniak, Aleksandra Caban, Dan Io Radière, Cyril Mendoza & Mondher Toumi

To cite this article: Cécile Rémusat, Anna Kapuśniak, Aleksandra Caban, Dan Ionescu, Guerric Radière, Cyril Mendoza & Mondher Toumi (2017) Supply-side and demand-side policies for biosimilars: an overview in 10 European member states, Journal of Market Access & Health Policy, 5:1, 1307315, DOI: [10.1080/20016689.2017.1307315](https://doi.org/10.1080/20016689.2017.1307315)

To link to this article: <http://dx.doi.org/10.1080/20016689.2017.1307315>

List prices

Pricing of biosimilars:

often **different pricing mechanisms**

- % below price of originator
- Maximum price
- ...

Pricing of off-patent biologicals:

- Price cuts for originators

VS

Tenders

Often by INN → no difference between treatment-naïve patients and on treatment

National – regional – hospital level

Multiple winners – single winner

Reimbursement

Approximately half of European countries use internal reference pricing

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Moorkens *et al.* (2017). Policies for biosimilar uptake in Europe: An overview. *PLoS ONE*

➤ Policies tend to target physicians, ...

rather than pharmacists and patients

Quotas
Recommendations
Economic prescribing
Switching
Education



Substitution



Information?

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Moorkens *et al.* (2017). Policies for biosimilar uptake in Europe: An overview. *PLoS ONE*

Case study in Sweden

- Study local/regional level: 21 counties in Sweden
- Focus on infliximab and etanercept

Infliximab (Hospital setting)

Biosimilar market shares: 18-96% (2017)

Regression analysis: 59% of variability explained by relative difference in discounted price between originator and biosimilar

→ Uptake influenced by regional tender contracts

Etanercept (Outpatient setting)

Biosimilar market shares: 40-82% (2017)

Small differences in actual costs between products for regions after MEA on national level and gainsharing arrangements

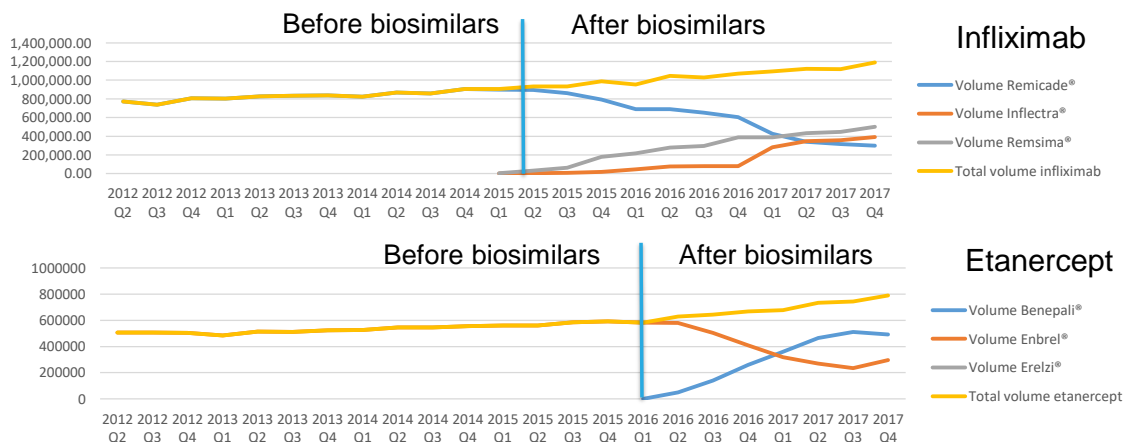
Prescription provided for a year: Active pull-back or wait?

→ Uptake influenced by KOLs, guidelines, gainsharing

43

Moorkens *et al.* (2019). Different policy measures and practices between Swedish counties influence market dynamics. *BioDrugs*

Case study in Sweden: Rate of volume growth accelerates (AND cost savings)



44

Moorkens *et al.* (2019). Different policy measures and practices between Swedish counties influence market dynamics. *BioDrugs*

Case study in UK

- Study local/regional level: England (10 historical regions), Scotland (14 health boards), Wales (7 health boards)
- Focus on infliximab and etanercept: **Early and late adopters** of biosimilars can be seen

UK biosimilar uptake is positively influenced by:

- A price difference** between biosimilar and originator product making it worth to switch patients
- A good relationship** between commissioner and provider in England resulting in gainsharing agreements
- Leadership** on biosimilars in regional NHS offices in England or Scottish and Welsh health boards
- Key opinion leaders** or leading hospitals that start using biosimilars early and gain experience



High biosimilar market shares can be reached even without gainsharing!
(Scotland, Wales)

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Case study in UK: Example of biosimilar adalimumab in Scotland

Before patent expiry:

- Groups on efficient use of high cost medicines were tasked to come up with a **strategy** for biosimilar use
- Health Boards were encouraged to put in place a **switching plan**
- A **case study** on the biosimilar switch for etanercept was made available
- Some Health Boards invested in **additional staffing** ('invest to save principle')

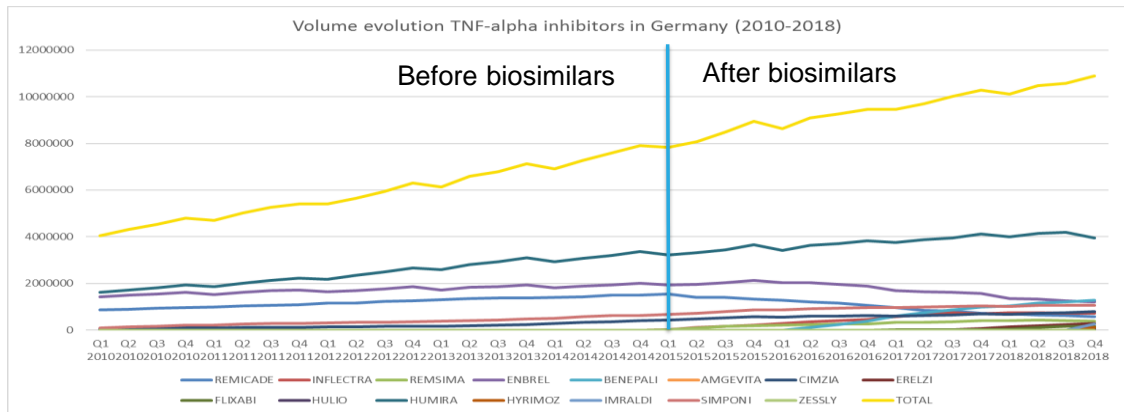
After patent expiry:

- **Statistics** on biosimilar market shares were shared monthly for benchmarking purposes
- Also, for anti-TNFs a national biological medicines **treatment cost comparator** was developed

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Case study in Germany: Constant rate of volume growth (but cost savings)

- **Access to TNF-alpha inhibitors seems to increase at the same rate after introduction of biosimilars**



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Conclusions

Policies targeting price may not be sustainable in the long term

Focus on demand-side policies

Guidelines and recommendations

Target agreements

Gainsharing arrangements

Create an open environment with multi-stakeholder involvement

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Biosimilars CEE public payer perspective



Iga Lipska, MD PhD
National Health Fund HQ
Warsaw, Poland

- **Biologicals** are usually not cost effective in CEE
 - Price levels at Western European countries at launch
 - International Reference Pricing
- Creates a **financial barrier** for patients to have access to effective treatments
- **Biosimilars create new cost saving opportunities**
 - The same clinical effectiveness (patient outcomes)
 - Less costly – better cost – effectiveness
- The policy objective of off-patent pharmaceuticals can be approached in two different ways*:
 - Disinvestment aspect: **Reduce health care expenditure** without compromising health outcomes
 - Investment aspect: **Increase population health gain** by improved patient access without increasing health expenditure

- **Public payer priority:**
 - To provide appropriate health care to the population covered
 - Poland – population of 38 mln
 - Within limited budget / financial resources
- **Whats's specific about CEE countries?**
 - Worse health status of the population
 - Less money invested in health care (5% GDP in Poland, EU average 9%)
 - eg. OECD/European Commission report „Health at glance”
 - Patients are less satisfied with health care services
 - European Health Consumer Index EHCI 2018 (32/35 with 585/1000 points)
- **The ongoing discussion about:**
 - Value-based health care (VBHC)
 - Michael Porter *Redefinig health care* 2006 & *What is value in healthcare?* NEJM 2010

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- **Governmental document approved in Sept 2018**
- **Currently in the implementation phase**
- **Authors:**
 - M. Czech – Vice Minister responsible for Drug Policy 2017-2019 (chair)
 - J.Adamski, A. Fałek, A. Lech, I. Lipska, I. Skrzekowska-Baran, R. Zyśk
- **The document addresses also:**
- *„Special categories of medicinal products: biological medicines and biosimilars”*

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POLITYKA LEKOWA PAŃSTWA 2018-2022

ISPOR Biological medicines in Medicines Policy for 2018-2022 www.ispor.org

- The market for biological medicines in Poland **reached the value of PLN 3.5bn***
- **Three groups of medicines** accounted for more than **50%** of the market: monoclonal antibodies, human insulin and its analogues and heparins
- **Monoclonal antibodies and human insulin and its analogues** are also the main areas of development of biosimilars
- In view of **the expiry of patent protection of key biological drugs**, the biosimilars segment has experienced rapid growth in recent years
- The main biosimilars in Poland were immunomodulating agents (non-interferon) and the highest sales were generated by the biosimilar filgrastim (2016)

* Between March 2015 and March 2016, QuintilesIMS Institute Report, The potential of biosimilar medicines for healthcare systems. November 2016, <http://www.producencilekow.pl/wp-content/uploads/2017/11/potencjal-lekow-biopodobnych-dla-systemowochrony-zdrowia.pdf>

- **Challenges in pricing negotiations on biosimilars**
- **Pricing negotiations** by the Economic Commission MoH
 - 5 representatives of National Health Fund
- Price reduction
 - by definition 25% when generic or biosimilar enters a market
 - The Act of Law on Drug Reimbursement
- In practice much bigger price reduction has been expected in pricing negotiations
- Sometimes we were successful with substantial price reduction
- **BUT**
- Risk sharing mechanisms were implemented
- Clear financial mechanisms:
 - discounts, payback, price volume agreements
 - to ensure financial sustainability of health care budget (public payer)

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- **Education around biosimilars highly needed**
- For different stakeholders
 - **Clinicians, patients, decision-makers**
 - **Perhaps also media? Journalists?**
- **Clinicians** need to be informed on the entry and use of biosimilars
 - In order to create trust
- There is a framework in place in Poland
 - **Top-down approach**
 - Including incentives for health care providers by a public payer
- Still the uptake of biosimilars is very low
- Bottom-up approach would be helpful
 - Including **education**

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- Extensive use of biosimilars creates cost-saving opportunity for health care systems
 - Everywhere but in particular in CEE countries
- But **more importantly provides more value (health gain) for patients**
 - Creates potential to cover patients in need
 - More patients can be treated as compared to very expensive biologics
- By investing in biosimilars **public payers are able to provide clinically-effective and cost-effective treatments for patients in need**
 - Incentives for health care providers
- **Education** around biosimilars is needed

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SECTION

4

HOW THE OUTPUTS OF THE
SPECIAL INTEREST GROUP CAN
PROVIDE GUIDANCE FOR
BIOSIMILARS' HTA AND POLICY
DECISION-MAKING



Dalia Dawoud, PhD^{1,2}

¹Scientific Adviser, National Institute for Health and Care Excellence (NICE), UK

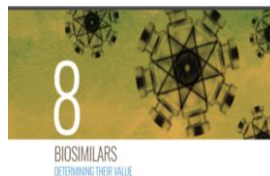
²Chair, ISPOR Biosimilars SIG

Disclaimer

- The views expressed in this presentation are those of the author not the Institute

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Why Biosimilars?



According to the *Generic and Biosimilars Initiative Journal*, the use of biosimilars is expected to result in overall savings from €11.8 billion and €33.4 billion between 2007 and 2020, with the largest savings expected for France, Germany, and the United Kingdom.²¹

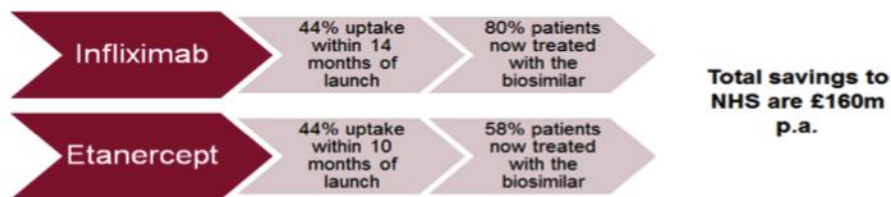
The challenge is how to provide optimal health outcomes for patients without bankrupting individual patients or the healthcare system.

New cost-saving opportunities **without** adversely affecting patient outcomes

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Opportunities

“As the biosimilar market develops, increased competition between biological medicines has the potential to deliver significant savings of at least £200m to £300m per year by 2020/21 through increased uptake of the best value biologic medicine, including biosimilars.” [NHS England, Commissioning framework for biological medicines (including biosimilar medicines), 2017]



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Source: Rx-InfoDefine (Infliximab issued to treat rheumatology conditions and inflammatory bowel disease; etanercept is used for rheumatology conditions. These biosimilars came onto the UK market in March 2015 and April 2016 respectively)

Opportunities



- Improved patient access
- Increased choice for patients and clinicians,
- Enhanced value propositions for individual medicines
- Releasing valuable resources to be invested elsewhere in the healthcare system

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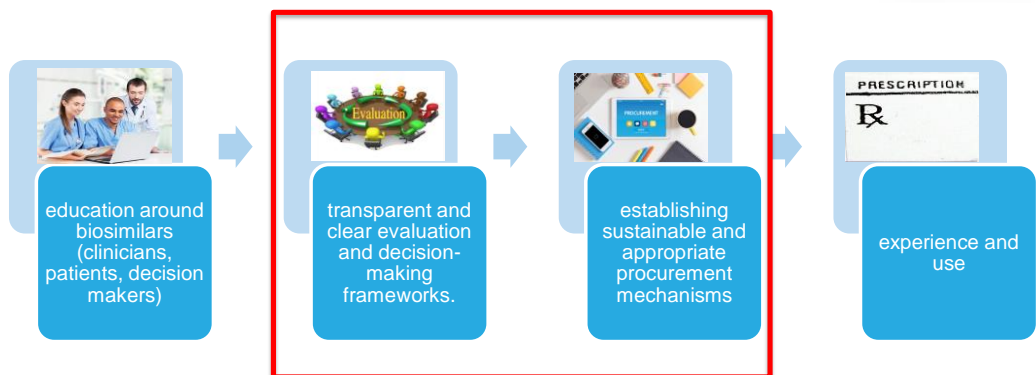
Challenges



- Lack of clear guidance around how to assess their actual value
- Uncertainty around data extrapolation from one indication to another
- Uncertainty around immunogenicity and long-term safety
- Slow uptake
- Switching back

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How to address these challenges?



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NICE's position statement

NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

NICE's biosimilars position statement

a. Published Appraisals

2. NICE has decided that normally all relevant published guidance that includes the originator molecule will apply to the biosimilar medicinal product at the time it is made available for use in the NHS. A funding direction will apply to a new biosimilar if the active drug substance has already been recommended by NICE.

5. NICE will consider appraising the evidence for any new relevant biosimilar product(s) when a published Technology Appraisal is considered for review; the introduction of a biosimilar would not automatically trigger an earlier consideration for review or an automatic decision to update the guidance.

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a. Published appraisals

TA323

Epoetins in treatment of **chemotherapy induced anaemia** - new clinical data supporting enhanced efficacy when combining epoetin with IV iron (2014)

<https://www.nice.org.uk/guidance/ta323/chapter/1-Guidance>

TA383

Infliximab for treatment of **severe ankylosing spondylitis and severe non-radiographic axial spondyloarthritis**. Previously the originator was not supported due to high price (whereas other originator TNFs were supported). (2016)

<https://www.nice.org.uk/guidance/ta383>



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NICE's position statement

NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

NICE's biosimilars position statement

b. Future appraisal topics (before invitation to participate or scoping)

- Intervention
- Comparator

10. Biosimilar medicines will be considered to differ from the originator product only in terms of price.

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TA569

Pertuzumab combined with biosimilar trastuzumab for the treatment of HER-2 positive, node positive, early breast cancer patients (2019) <https://www.nice.org.uk/guidance/TA569/chapter/1-Recommendations>



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NHS England and NHS Improvement Commissioning framework

- Best Value Biologic Medicine (BVBM)
 - Ambition **90% of new patients** prescribed a BVBM within **3 months of product launch**
 - **80% of existing patients** switched to BVBM within **12 months, or sooner if possible**



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Latest success story

- **Adalimumab** (Humira; AbbVie) came off patent in October 2018 and was projected to achieve savings of £300m by 2021
- The rate of uptake of best-value adalimumab has varied across different regions across England, ranging from around **20%** to approximately **90%**
- The switch program will achieve the projected savings by the **beginning of 2020**



National Health Service Reports Substantial Savings From Biosimilar Adalimumab

England's National Health Service (NHS) says that it has saved £110 million (US \$134 million) by implementing its policy to use the best-value adalimumab after the brand-name Humira lost European patent protection in October 2018.

NHS savings from adalimumab biologic switching hit earlier than expected

The Pharmaceutical Journal 11 JUN 2019

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Pharmaceutical Journal. 'NHS savings from adalimumab biologic switching hit earlier than expected.' 11 June 2019. Available at: <https://www.pharmaceutical-journal.com/news-and-analysis/news-in-brief/nhs-savings-from-adalimumab-biologic-switching-hit-earlier-than-expected/20206806.article?firstPage=false>

Biosimilars

Special Interest Group

Special Interest Groups

Biosimilars

Clinical Outcome Assessment

Digital Health

Health Preference Research

Medical Devices and

Diagnostics

Medication Adherence and

Persistence

Mission

To identify and discuss emerging issues of biosimilars, as related to their originator biologics, focusing on health economics and outcomes research (HEOR) and reimbursement policy.

Goal

- Discuss the current state of biosimilars as a unique category of therapeutics

- Highlight the gaps in understanding and evaluating biosimilars from an HEOR lens
- Propose solutions to issues pertaining to biosimilar accessibility, adoption, utilization, value, and impact

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ISPOR Biosimilars SIG

Member engagement

- NOLA 2019 workshop
- Updating ISPOR book of terms
- Copenhagen 2019 joint forum with CEE network
- Webinar on existing Biosimilars access policies

Key project

- Manuscript for Value in Health
- Gaps and challenges in value assessment of biosimilars

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ISPOR Biosimilars SIG

Key Project Co-Chairs

Steven Simoens

Andras Inotai

Evelien Moorkens

Leadership

Dalia Dawoud

Chair

&

Jackie Vanderpuye-Orgle

Chair-elect

Member Engagement Co-Chairs

Catarina Lopes Pereira

&

Liese Barbier

ISPOR Leads

Amy Pavlock

Associate Director, Scientific and Health Policy Initiatives

&

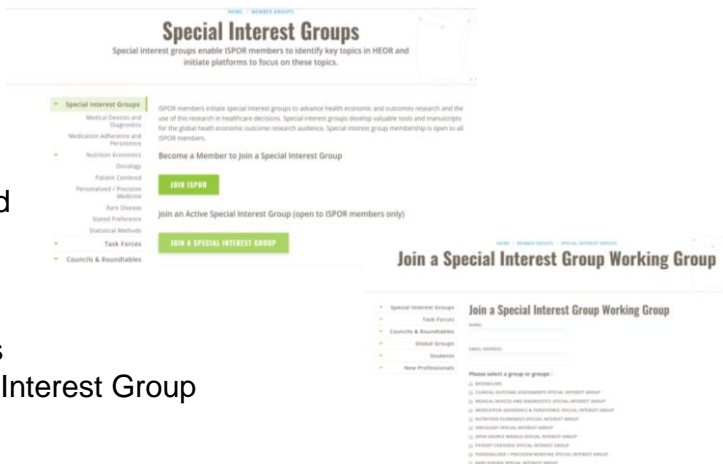
Theresa Tesoro

Associate Director, Scientific and Health Policy Initiatives



How to JOIN our Special Interest Group

- Sign up now
 - Sign up sheet
 - Provide a business card
- Go to the Website
 - Members groups
 - Special Interest Groups
 - Click on Join A Special Interest Group



The screenshot displays the ISPOR Special Interest Groups website. The main heading is "Special Interest Groups" with a subtext: "Special interest groups enable ISPOR members to identify key topics in HEOR and initiate platforms to focus on these topics." Below this, there are two main sections: "Become a Member to join a Special Interest Group" and "Join an Active Special Interest Group (open to ISPOR members only)". The "Join an Active Special Interest Group" section includes a list of groups: Medical Devices and Diagnostics, Medication Adherence and Persistence, Nutrition Economics, Oncology, Patient-Centered Personalized / Precision Medicine, Rare Diseases, Patient Preference, Statistical Methods, Task Forces, and Councils & Roundtables. A "Join a Special Interest Group" button is visible. On the right, there is a "Join a Special Interest Group Working Group" form with fields for Name, Email Address, and a list of groups to select from. The groups listed are: Medical Devices and Diagnostics, Medication Adherence and Persistence, Nutrition Economics, Oncology, Patient-Centered Personalized / Precision Medicine, Rare Diseases, Patient Preference, Statistical Methods, Task Forces, Councils & Roundtables, and New Professionals.

SECTION

5

BIOSIMILARS: AN OPPORTUNITY FOR COUNTRIES WITH RESTRICTED RESOURCES TO IMPROVE PATIENT ACCESS?

DISCUSSION

www.ispor.org



WiFi Network: ISPOR2019 | Password: Avalere

Q&A



ISPOR Conference Platform

Web Platform

<https://myispor.cnf.io/>

Mobile App

Search "ISPOR Europe 2019" in the App Store or on Google Play!

The screenshot shows the ISPOR Conference Platform mobile app interface. The top navigation bar includes icons for Back, Schedule, My Schedule, My Favorites, Notifications, Search, and a Menu icon (highlighted with a red box and labeled Step 1). The left sidebar lists various sections: Exhibitors, Sponsors, Favorites, Schedule, Contacts, Notifications, Technical Support, Attendees, User Gateway, and Live Polling (highlighted with a red box and labeled Step 2). The main content area displays the conference schedule for Saturday, November 2, and Sunday, November 3. A session titled "Tools for Reproducible Real-World Data Analysis" (8:00am - 12:00pm in Hall C1 M4) is highlighted with a red box and labeled Step 3 (Select the appropriate session).

In case of volume restrictions (i.e. not all eligible patients can have access to biologicals), **what do you consider more important:**

Options:

- Promote mandatory switch of patients treated with original biological medicine to lower priced biosimilars with the same active compound to release funds to treat additional patients (i.e. maximise access)
- Allow patients staying on the original biological medicine after patient expiry even if lower priced biosimilars are available (i.e. maximise patient preference)

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Live Content Slide

When playing as a slideshow, this slide will display live content

Poll: In case of volume restrictions (i.e. not all eligible patients can have access to biologicals), what do you consider more important:

How would you incentivise increased uptake of off-patent biologicals?**Options:**

- Via top-down approach, mainly driven by regulation of payers
- Via bottom-up approach, mainly driven by incentivising and educating physicians

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Live Content Slide*When playing as a slideshow, this slide will display live content***Poll: How would you incentivise increased uptake of off-patent biologicals?**

SECTION

5

BIOSIMILARS: AN OPPORTUNITY FOR COUNTRIES WITH RESTRICTED RESOURCES TO IMPROVE PATIENT ACCESS?

DISCUSSION

THANK YOU

- Please come to the front to leave your business card and/or use the sign-up sheet to provide your information if you are interested in joining and/or participating in our SIG!
- **Questions?** Please email biosimilarsig@ispor.org.