Mapping of Innovative Treatments and Devices in EFCCA Member Countries

FINAL REPORT

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1. INTRODUCTION

European Federation of Crohn's and Ulcerative Colitis Associations (EFCCA) is an umbrella organization representing 34 national IBD patient associations. EFCCA aims to improve the quality of life for people with IBD and give them a louder voice and higher visibility across Europe and beyond.

National health systems and access to various treatments tend to be unequal in different European and non-European countries with representation in EFCCA, in particular when dealing with new/innovative treatments and devices. In some of these countries, there are no national registries of IBD patients available that would assist in obtaining information about IBD patients. This project aimed to reduce health inequalities in Europe by carrying out a thorough mapping of all innovative treatments and devices (biologics, biosimilars, apheresis) available in EFCCA member countries. Seven national IBD associations (Finland, France, New Zealand, Poland, Serbia, Slovenia and Spain) participated in the pilot phase from October to December in 2016 to test an online survey developed by EFCCA.

The pilot phase was followed by a second phase in 2017 in which data was collected from other member associations of EFCCA. This final report is a general overview of the situation in EFCCA member countries, including the level of involvement of different payers and the role of national health authorities. The outcomes of the project will support the exchange of knowledge and experience among countries with representation in EFCCA and promote a better understanding of European healthcare systems, improve the mobility of people with IBD in European countries and facilitate the access to treatment in other countries. Finally, the outcomes can be used to display discrepancies to European policy makers and to stress the importance of equal access to treatment.

2. METHODS

2.1. Pilot phase

National associations from Finland, France, New Zealand, Poland, Serbia, Slovenia and Spain volunteered to participate in the pilot phase, which was carried out in October-December 2016. The aim of the pilot phase was to test an online survey that was created by the EFCCA working group and uploaded on the Limesurvey platform, selected by EFCCA IT personnel, and to fine tune the project and shape the following phases. The volunteers were asked to fill out the online survey and give feedback about it to EFCCA. In most pilot countries, the survey was filled by the patient association in cooperation with gastroenterologists. There were some technical and content issues that were taken care of before moving on to the next phase.

2.2. Second phase

After optimizing the survey, other EFCCA member countries were invited to participate. The survey was open from March 2017 until all national associations had completed it in December 2017. A pdf file of the survey questions was sent to the participants in advance so they could look for the information needed and prepare their answers. Respondents were also encouraged to cross-check the information with the national authorities in their country. The project proceeded as follows:

Time	Action	Participants	
Summer	Identifying pilot countries	EFCCA working group	
2016	Developing the work sheet		
September	Launching the pilot phase	EFCCA working group	
2016		Pilot countries	
February	Interim report	EFCCA working group	
2017			
February	Optimizing the survey based on the	EFCCA working group	
2017	feedback collected during the pilot phase		
March	Launching the second phase with more	EFCCA working group	
2017	countries	EFCCA member countries	
Summer	Closing the second phase	EFCCA working group	
2017		EFCCA member countries	
Late 2017	Analyzing the outcomes, generating the	EFCCA working group	
	final product		
Early 2018	Final report and development of	EFCCA working group	
	recommendations		
2018	Event at European Parliament?	EFCCA	

Figure 1. Schedule of the project

A fact sheet consisting of answers to all survey questions was generated for each participating country. Furthermore, a comparison table that included all participating associations was generated for each question of the survey.

3. RESULTS

3.1. Participants

All in all, thirty-two national associations participated in the pilot phase and the second phase of the survey. The participating national associations were Argentina, Austria, Belgium Flemish / French, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Malta, New Zealand, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

The results have been listed with all participants together as well as associations from European countries (n=29) and non-European countries (n=3) separated. Argentina, Israel and New Zealand were separated into the non-European category.

3.1.1. Number of IBD patients in participating countries

The availability and source of a precise number of IBD patients or prevalence of IBD varied greatly in the participating countries. In very few of the countries there was a patient registry available. In Finland, for example, the Social Insurance Institute is able to provide a number of persons (45 000) who receive medication coverage based on IBD diagnosis, whereas Serbia, for example, while a registry of IBD patients exists, the data is incomplete and the number of patients (7000-8000) is estimated by the gastroenterologists dealing with IBD. In Ireland, an estimate has been extrapolated from the most recent census.

Some estimates were very wide; for example, in Austria the estimate is 40 to 80 000 IBD patients, and in Bulgaria some physicians estimate the number of IBD patients to be about 18 000, whereas

according to the National Health Insurance Fund, about 3000 receive IBD medications co-financed by the Fund. Only Sweden could provide an exact number (41361 patients as of June 30, 2017) based on SWIBREG, the Swedish Inflammatory Bowel Disease Registry, and France could provide a number from an IBD observatory www.observatoire-crohn-rch.fr (145 220 patients).

3.2. Health care systems

3.2.1. Question 5: Describe the health care system in your country.

Most of the participating associations (17 associations, 53%) reported that patients in their country are covered by a state insurance, same for all citizens, funded through taxation and a possible voluntary additional private insurance. Six associations, respectively, reported that patients in their country are covered by a state insurance, same for all citizens, funded through taxation (19%), or a combination of state and private insurance (19%). One association reported only private insurance in their country (3%) and one association reported a system of several sickness funds, of which a citizen chooses one (3%). One association reported a statutory contribution system, not fitting to any of the alternatives offered (3%).

When European and non-European countries were separated, 52% of the European associations reported that patients in their country are covered by a state insurance, same for all citizens, funded through taxation and a possible voluntary additional private insurance. Six associations (21%) reported that patients in their country are covered by a state insurance, same for all and funded through taxation, and five associations (17%) reported a combination of state and private insurance. Three associations (10%) reported another policy (see above). In the non-European countries, Argentina and New Zealand reported a combination of state and private insurance and Israel a state insurance, same for all citizens and funded through taxation.

3.2.2. Question 6. Is a health insurance mandatory in your country?

Eleven of the participating associations (34%) reported that everyone is required to have a health insurance in their country, either fully by the state, fully private, or partially by the state / partially

private. Fourteen associations (43%) reported that everyone in their country is by default 100% insured by the state. Seven associations (22%) reported that health insurance is not mandatory in their country (but two of these countries specified that it is not mandatory because everyone is insured by the state).

When European and non-European countries were separated, in Europe ten associations (34%) reported that everyone is required to have a health insurance in their country, either fully by the state, fully private, or partially by the state / partially private, thirteen associations (45%) that everyone in their country is by default 100% insured by the state, and six associations (21%) that health insurance is not mandatory in their country (see above). In the countries outside Europe, Argentina reported that everyone is by default 100% insured by the state, Israel that everyone is required to have a health insurance in their country, either fully by the state, or partially by the state / partially private, or partially by the state / partially private and New Zealand that health insurance is not mandatory.

3.2.3. Question 7. Who pays a person's health insurance in your country (the person himself/herself; the state; the employer)?

Twenty-two participating associations (69%) reported that in their country, health care is financed by employers, employees and/or the state together. In many of the countries that reported a combination system, the payer largely depends on whether the person is employed, in which case the employer covers a part, otherwise it is covered by the state. Two associations (6%) reported that the employer pays the health insurance in their country, one association (3%) that the state pays, and one association (3%) reported another policy.

Six associations (19%) reported that in their country, the person him/herself pays the insurance. The Bulgarian association, however, also specified that although by default the person him/herself pays the contribution, the state also insures a number of citizen groups, such as students, children and retired people. Furthermore, the Bulgarian and Italian associations also reported in Question 5 that all citizens have a state insurance funded through taxation; it may be that in these cases, the tax contributions have been seen as direct health insurance contributions.

When European and non-European countries were separated, in Europe twenty associations (69%) reported that in their country, health care is financed by employers, employees and/or the state together. Five associations (17%) reported that in their country, the person him/herself pays the insurance. Two associations (7%) reported that the employer pays the health insurance in their country, one association (3%) that the state pays, and one association (3%) reported another policy. In countries outside of Europe, Argentina and Israel reported a combination system and New Zealand that the person him/herself pays.

3.2.4. Question 8. How does a patient get covered / reimbursed in your country?

Nine of the participating associations (28%) reported that in their country, the patient pays nothing as insurance covers everything. Denmark specified that patients pay only a part of medicines themselves, and Norway specified that the patient pays a fee of approximately 210 euros per year, anything after that is directly covered by the state to doctors, hospitals and pharmacies.

Eleven of the participating associations (34%) reported that in their country, the patient pays a part at the point of care and the insurance covers the rest. Argentina specified that this is usually the case, apart from certain medicines (biologics) which are included in a "specific fund created for certain high-cost drugs", and if a person has a certified disability, medicines are 100% covered by the state. Slovenia specified that almost all are also insured for the part that should be paid at the point of care.

Two associations (6%) reported that in their country, the patient pays everything at the point of care and gets partially reimbursed later. France specified that if the patient has a disease that is registered in the list of chronic diseases set by the government, the patient will receive full reimbursement for the expenses related to the disease. In some hospitals and state institutions the patient pays nothing; in private clinics or medical and paramedical institutions, the patient pays a part and private insurance covers the rest, in which case the patient may have to pay ahead and be reimbursed. Much of the time, the institution is paid directly by the State and the private insurance plan. Portugal specified that biologic medicines are always fully covered and therefore free for the patient.

Ten of the participating associations (31%) reported "something else". Austria specified that at some private doctors the patient will be reimbursed later and that for registered medicines you pay a

certain amount, otherwise the full price. Finland specified that health services have an upper limit per calendar year, beyond which the patient does not have to continue paying fees. Germany specified that the insurance covers the costs in the statutory health insurance but patients have to pay up to 10 euros in co-payments for prescription medicines and 10 euros per day for hospital stays. Greece specified that for seeing a doctor registered in the health care system the patient pays 10 euros, for seeing a non-registered doctor the patient pays whatever the doctor asks. For medication the patient pays a certain percentage of the price (25% in case of IBD). Ireland specified that it depends on the type of insurance: if the treatment is covered, the patient pays nothing, if not, the patient has to pay up front and may not be reimbursed later. New Zealand specified that their public health system is universal and no money changes hands. Sweden specified that you pay a maximum of 180 euros per year for medicines and nothing above that.

When European and non-European countries were separated, in Europe nine associations (31%) reported that in their country, the patient pays nothing as insurance covers everything. Nine associations (31%) also reported that the patient pays a part at the point of care and the insurance covers the rest. Two associations (7%) reported that in their country, the patient pays everything at the point of care and gets partially reimbursed later, one nine associations (31%) reported another policy (see above). In countries outside Europe, Argentina and Israel reported that the patient pays a part at the point of care and the insurance covers the rest and New Zealand reported another policy (see above).

3.2.5. Question 9. Are there regional differences in your country in terms or health insurance or health care system (in case of a federation etc.)?

Most participating associations (26 associations, 81%) reported no regional differences in their country. Six associations (19%) reported regional differences in their country. Argentina specified that each of the 24 jurisdictions in the country have their own laws regarding health, and Austria specified that each of the country's federations has its own insurance. New Zealand reported that although the country's public health care is universal and same everywhere, access to health care system will vary due to geography and distribution of specialists. Furthermore, private health insurance coverage varies between city and region according to socio-economic factors. Spain reported that the country has 17 regional health services, and not all of them work in the same way to support the needs of

patients and their families. The United Kingdom specified that health is a devolved function in Scotland, Wales and Northern Ireland, with different structures, policies and priorities; for example, prescriptions are not charged for in Wales, Scotland or Northern Ireland, but charges apply, subject to certain exemption criteria, in England.

When European and non-European countries were separated, 25 associations (86%) reported no regional differences in their country. Four associations (14%) reported regional differences (see above). In countries outside of Europe, Argentina and New Zealand reported regional differences (see above) and Israel reported none.

3.2.6. Question 10. Can a patient choose GP / specialist / point of care freely?

Twenty-two of the associations (69%) reported that in their country, a patient can freely choose his/her GP, specialist, or point of care. Five associations (16%) reported that in their country, a GP, specialist or point of care is defined by the system based on e.g. where the patient lives. Argentina specified that the patient should usually go to the appropriate family doctor and as for the gastroenterologist, the patient should often select from a small number of professionals within their health coverage and jurisdiction, and therefore it is not always possible to reach an IBD specialist. Denmark reported that patients cannot choose the specialist, but they can choose the hospital. New Zealand specified that each person has a GP and access to the GP; this can be changed if required. When moving from primary to secondary or tertiary care a referral is required.

Five (16%) associations defined another system from their countries: in Finland, the patient can choose any health centre for non-emergency care, and also the special medical care unit together with their doctor. In Iceland the patient can choose their GP, who then refers them to a specialist. In Ireland, the GP, specialist and point of care are usually based on where the patient lives, but as some rural hospitals do not, for example, have IBD nurses, patients travel to other counties for more varied services. In Switzerland the choice of doctor depends on the type of insurance you choose, and in the UK, patients have a legal right to choose a GP practice that best suits their needs and are entitled to ask for a referral for specialist treatment. Whether they get it, however, depends on what their GP feels is clinically necessary.

When European and non-European countries were separated, in Europe 21 associations (72%) reported that in their country, a patient can freely choose his/her GP, specialist, or point of care. Three associations (10%) reported that the GP, specialist or point of care is defined by the system, and five associations (17%) reported another policy (see above). In countries outside of Europe, Israel reported a free choice of GP, specialist or point of care, while Argentina and New Zealand reported that GP, specialist and point of care are defined by the system (see above).

3.2.7. Question 11. Does access to or reimbursement of IBD or other chronic illness medication in your country require an official recognition of diagnosis (e.g. a marking on health insurance card)?

Sixteen of the participating associations (50%) reported that access to reimbursement of IBD medication requires an official recognition of diagnosis in their country; one association (3%) reported "something else". Austria specified that the diagnosis, including the extent and location of inflammation, needs to be noted on the prescription if required by the registry. Estonia specified that with diagnosis, the patient can buy medication with a 90% cheaper price. Finland and Italy specified that there needs to be a marking on the health insurance card. Fifteen associations (47%) reported that no official recognition of diagnosis is needed for access to or reimbursement of IBD or other chronic illness medications.

When European and non-European countries were separated, in Europe fourteen associations (48%) reported that access to reimbursement of IBD medication requires an official recognition of diagnosis in their country; also fourteen associations (48%) reported that no official recognition of diagnosis is needed for access to or reimbursement of IBD or other chronic illness medications. One association (3%) reported another policy. Outside of Europe, Argentina and Israel reported that an official recognition is needed, while New Zealand reported it is not needed.

3.2.8. Question 12. How would you define the unmet needs and priorities for IBD patients in terms of access to new innovative therapies in your country?

Participating associations were also asked to define, in their opinion, the unmet needs and priorities of IBD patients in terms of access to new innovative therapies. Not all countries listed such issues,

and although some of the responses given may have been personal opinions, some of the issues listed were rather striking:

- Argentina: Those with public health coverage provided by the state see their access to new therapies more restricted, as compared to those with private coverage.
- Austria: Number of specialized hospitals and gastroenterologists is much too low. Diagnoses are delayed as GP's do not send patients to gastroenterologists, and waiting times in outpatient care are long.
- Belgium: Sometimes patients have to wait very long for treatment with biologics; they must start with a 3-month period of conventional therapy.
- Bulgaria: There is a need for improved knowledge on such medications for both patients and doctors.
- Croatia: Biologic therapy is only available in biggest cities.
- Czech Republic: Faster access is needed.
- Estonia: Not many patients are willing to participate trials on medicines.
- Greece: Due to the economic crisis in Greece, most innovative therapies come to the country later than in other countries as the law states that in order to define their price they have to be priced in 7 different countries of the EU and in 3 out of the 7, a risk benefit analysis needs to be done during the pricing.
- Hungary: It is difficult to come in touch with the new therapies. You need to be a patient in an IBD center, fill lots of requirements and complete a lot of other therapies. If your condition does not improve on these therapies, you can get treated with new therapies, if the insurance company allows it.
- Ireland: 45% of hospitals in Ireland have no IBD nurse. Compared to other EU countries, Ireland also faces a lack of gastroenterologists.
- New Zealand: There is geographical variation in access to specialist care, due to distance and population distribution. Therapies are managed by a central government agency which limits access and range of therapies available.
- Norway: Norway is late in using new medications.
- Poland: Access is difficult for patients with Crohn's disease and illusory for those with ulcerative colitis.
- Serbia: There is delay in the application of latest therapeutic options due to the long process of their approval by the health insurance authorities.

- Slovenia: Although patients have access to new therapies, it may be delayed compared to other countries.
- Spain: Innovative therapies are nowadays the last option as regional governments have the priority of saving money.
- United Kingdom: New innovative therapies are appraised by the National Institute for Health and Care Excellence (NICE) and the Scottish Medicines Consortium (SCM). The appraisal process can take some considerable time. Access to defined psychological support / mental health services and specialist dieticians is very limited and variable across the UK.

3.3. Medicines: Biologics

The availability of all medicines in all participating countries can be seen in Figure 2. Information for all the medicines separately is listed on the following pages.

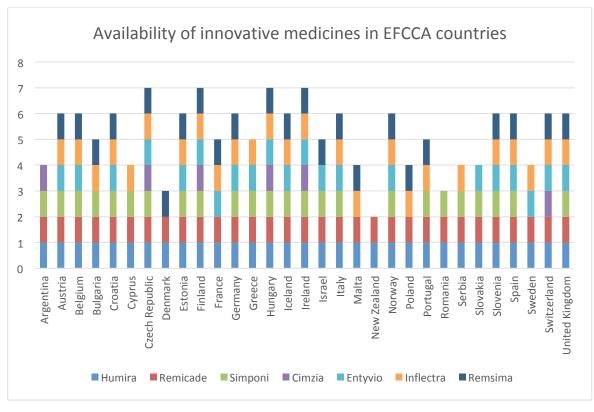


Figure 2. Availability of innovative medicines in the participating countries.

3.3.1. Humira (adalimumab, anti-TNF)

Humira (adalimumab) is approved to IBD patients in all participating countries. Of the participating associations, 17 (53%) reported that the medicine is fully covered, 4 (13%) that it is partially covered, and 11 (34%) that coverage requires IBD diagnosis in their country. Three associations (9%) reported regional differences in their country in terms of availability or reimbursement.

Twelve of the participating associations (38%) reported that in their country, the medicine is available to all IBD patients; 18 associations (56%) reported that it is available if certain preconditions are met. The preconditions criteria varied greatly. In Poland and Romania, for example, the Crohn's Disease Activity Index (CDAI) is used, but in Poland the CDAI limit is >300, whereas in Romania it is >220. Two associations (6%) reported that in their country, the medicine is available for Crohn's disease but not for ulcerative colitis patients.

Most associations (66%) reported that in their country, the medicine is administered at home. Many of the associations added that the medicine is usually started at the hospital, after which the patient can administer it at home. 25% of the participating associations reported that it is administered in the hospital, and three associations (9%) reported that in their country, the medicine is administered in both home and hospital, which may also have meant that it is given first at the hospital and later at home.

Only Bulgaria, Estonia, Poland and Serbia were able to provide an estimate of how many patients are receiving the treatment in their country (approximately 300 patients in Bulgaria, max. 150 in Estonia, 475 in Poland [2015], and around 150 in Serbia). The Bulgarian estimate is provided by the national health statistics, the Polish estimate by the National Health Fund, and the Serbian estimate by the Republican Fund for Health Insurance. Other countries could provide no data.

When countries in Europe and outside were separated, in Europe the medicine was reported as fully covered by 17 associations (59%), partially covered by 14 associations (14%) and requiring an IBD diagnosis by eight associations (28%). In all countries outside of Europe (n=3), coverage required IBD diagnosis.

3.3.2. Remicade (infliximab, anti-TNF)

Remicade (infliximab) is approved to IBD patients in all participating countries. Of the participating associations, 19 (59%) reported that the medicine is fully covered, 4 (13%) that it is partially covered, and 9 (28%) that coverage requires IBD diagnosis in their country.

Two associations out of the 32 (6%) reported regional differences in their country in terms of availability or reimbursement. Spain specified that in many regional governments, you cannot access this product anymore and can only have the biosimilar instead. Germany specified that in some regions, there is a lack of doctor's offices with infusion equipment. While Italy reported no regional differences, it was specified that in some regions, it is requested to use the biosimilar, and in many regions naïve patients must be treated with the biosimilar.

Fourteen associations out of the 32 (44%) reported that in their country, the medicine is available to all IBD patients; 16 associations (50%) reported that it is available if certain preconditions are met. Most associations specified that the patient usually has to try other medications first and that a gastroenterologist's opinion and prescription is required. Finland specified that the medicine is not used for adult patients anymore.

Most associations (97%) reported that in their country, the medicine is administered at hospital, outpatient clinic or doctor's office. Only Israel reported that it is administered at home.

Only Bulgaria, Estonia, Poland and Serbia were able to provide an estimate of how many patients are receiving the treatment in their country (<100 patients in Bulgaria, max. 150 in Estonia, around 700 in Poland [Remicade and biosimilars combined], and around 200 in Serbia). The Bulgarian estimate is based on the national health statistics, the Polish estimate on the National Health Fund, and the Serbian estimate on the Republican Fund for Health Insurance. Other countries could provide no data.

When European and non-European countries were separated, in Europe the medicine was reported as fully covered by 19 associations (66%), as partially covered by four associations (14%) and as

requiring an IBD diagnosis by seven (25%) associations. In countries outside of Europe, in Argentina and New Zealand the coverage requires IBD diagnosis, while Israel reported that the medicine is fully covered.

3.3.3. Simponi (golimumab, anti-TNF)

Simponi (golimumab) was reported as approved to IBD patients in their country by 25 of the participating associations (78%). Out of the 25 associations that reported the medicine is approved, 14 (56%) reported that it is fully covered in their country, 3 associations (12%) that it is partially covered and 8 associations (32%) that coverage requires an IBD diagnosis in their country. No regional differences were reported.

Out of the 25 associations that reported the medicine is approved in their country, 11 (44%) reported that it is available to colitis ulcerative but not Crohn's disease patients in their country. Nine of the 25 associations (36%) reported that the medicine is available if certain preconditions are met, and three of them specified that it is used only or mostly for ulcerative colitis. Four out of the 25 associations (16%) reported that the medicine is available to all IBD patients in their country. Apart from Greece mentioning that sometimes, especially in rural areas the medicine does not get to the patient on time, no regional differences were reported.

Out of the 25 associations, 14 associations (56%) reported that the medicine is administered at home, 7 associations (28%) that it is administered in hospital or outpatient clinic, and one association (4%) that it is administered in both. Three associations could not answer.

Only Bulgaria and Estonia could provide an estimate of the number of patients receiving the medicine (<100 patients in Bulgaria, max. 150 in Estonia). The Bulgarian estimate was based on national health statistics. Other countries could provide no data.

When European and non-European countries were separated, the medicine was reported as approved by 23 associations in Europe (79%). Out of those 23 associations, 13 associations (57%) reported the medicine as fully covered and 3 associations (13%) as partially covered. Seven

associations (30%) reported that coverage requires an IBD diagnosis. Outside of Europe, the medicine is approved in Argentina (fully covered) and Israel (coverage requires an IBD diagnosis).

3.3.4. Cimzia (certolizumab pegol, anti-TNF)

Six associations (19%) reported Cimzia (certolizumab) as approved to IBD patients in their country. Three associations out of the six (50%) reported that the medicine is fully covered in their country, one (17%) that it is partially covered and two (33%) that coverage requires an IBD diagnosis. No regional differences were reported.

Out of the 6 associations that reported the medicine is approved in their country, 3 (50%) reported that it is available to all IBD patients, one (17%) that it is available if certain preconditions are met and one (17%) that it has no trading license and has been used off label for some patients.

Three of the six associations (50%) reported that in their country, the medicine is administered at home, two associations (33%) that it is administered at hospitals and outpatient clinics, and one association (17%) that it is administered in both.

None of the six associations were able to provide a number of patients receiving the medicine.

When European and non-European countries were separated, the medicine was reported as approved by five associations in Europe (17%). Out of those five associations, two associations (40%) reported the medicine as fully covered and 1 association (20%) as partially covered. Two associations (40%) reported that coverage requires an IBD diagnosis. Outside of Europe, the medicine is approved only in Argentina, where it is fully covered.

3.3.5. Entyvio (vedolizumab, anti-integrin agent)

Entyvio (vedolizumab) was reported as approved to IBD patients in their country by 22 of the participating associations (69%). Out of the 22 associations, 13 (59%) reported that it is fully covered

in their country, 2 associations (9%) that it is partially covered and 7 associations (32%) that coverage requires an IBD diagnosis in their country.

Out of the 22 associations that reported the medicine is approved in their country, 9 (41%) reported that it is available to all IBD patients in their country. Ten of the 22 associations (45%) reported that the medicine is available if certain preconditions are met, with Greece specifying that it is only used by patients with moderate to severe Crohn's and Austria, Belgium and Hungary specifying that the medicine is used if anti-TNF therapy fails. Two of the 22 associations (9%) reported that the medicine is available for Crohn's disease but not ulcerative colitis patients, and one association (5%) that it is available for ulcerative colitis but not Crohn's disease patients. Three associations (14%) reported regional differences, with Germany specifying that in some regions there is a lack of doctor's offices with infusion equipment, and Ireland specifying that the medicine is not available in some rural hospitals.

All 22 associations reported that the medicine is administered in hospitals or doctor's offices in their country.

Only Estonia could provide an estimate of the number of patients receiving the medicine (max. 150). Other countries could provide no data.

When European and non-European countries were separated, the medicine was reported as approved by 21 associations in Europe (72%). Out of those 21 associations, 13 associations (62%) reported the medicine as fully covered and two associations (10%) as partially covered. Six associations (29%) reported that coverage requires an IBD diagnosis. Outside of Europe, the medicine is approved only in Israel, where coverage requires IBD diagnosis.

3.4. Medicines: Biosimilars

3.4.1. Inflectra (infliximab)

Inflectra (infliximab) was reported as approved to IBD patients in their country by 27 of the participating associations (84%). Out of the 27 associations that reported the medicine is approved, 17 (63%) reported that it is fully covered in their country, 3 associations (11%) that it is partially covered and 7 associations (26%) that coverage requires an IBD diagnosis in their country.

Out of the 27 associations that reported the medicine is approved in their country, 12 (44%) reported that it is available to all IBD patients in their country. Fifteen of the 27 associations (56%) reported that the medicine is available if certain preconditions are met. Austria specified that the medicine is not in the reimbursement registry, and a specialized gastroenterologist has to send a letter to the insurance company, and the company will decide whether they agree or not. Hungary specified that patients who started infliximab therapy after 2014 only get the biosimilar. Several associations out of the 27 (19%) reported regional differences, with Austria specifying that it depends on the insurance and agreement, Belgium specifying that it depends on which hospital administers which biosimilar, and Germany specified that the medicine is not available in every hospital and the United Kingdom that local arrangements are made in terms of which biosimilar is used. Greece also mentioned that sometimes especially in rural areas the medicine does not get to the patient on time.

All associations from countries in which the medicine is approved reported that it is administered at home or outpatient settings. Italy also mentioned that biosimilars are the first choice in naïve patients.

Only Belgium, Bulgaria and Estonia could provide an estimate of the number of patients receiving the medicine (900-1000 patients in Belgium, <100 in Bulgaria, max. 150 in Estonia). The Belgian estimate was given by a pharma company and the Bulgarian estimate was based on national health statistics. Other countries could provide no data.

When European and non-European countries were separated, the medicine was reported as approved by 27 associations in Europe (93%). Out of those 27 associations, 17 associations (63%) reported the medicine as fully covered and three associations (11%) as partially covered. Seven

associations (26%) reported that coverage requires an IBD diagnosis. The medicine was approved in any of the countries outside of Europe.

3.4.2. Remsima (infliximab)

Remsima (infliximab) was reported as approved to IBD patients in their country by 25 of the participating associations (78%). Out of the 25 associations that reported the medicine is approved, 12 (48%) reported that it is fully covered in their country, 4 associations (16%) that it is partially covered and 8 associations (32%) that coverage requires an IBD diagnosis in their country.

Out of the 25 associations that reported the medicine is approved in their country, 11 (44%) reported that it is available to all IBD patients in their country. Eleven of the 25 associations (44%) reported that the medicine is available if certain preconditions are met. Austria specified that the medicine is not in the reimbursement registry, and a specialized gastroenterologist has to send a letter to the insurance company, and the company will decide whether they agree or not, and several associations reported that the preconditions are the same as for the originator Remicade. Two out of the 25 associations (8%) reported that access depends on the region or economic situation in the region. Six associations out of the 25 (24%) reported regional differences. Austria specified that the medicine is not prescribed in some states, Germany specified that the medicine is not available in every hospital and the United Kingdom that local arrangements are made in terms of which biosimilar is used.

Apart from Bulgaria, where the medicine is administered at home, the medicine is administered in hospitals and outpatient settings in all countries where it is approved.

Only Belgium, Bulgaria, Estonia and Poland could provide an estimate of the number of patients receiving the medicine (350-400 patients in Belgium, <100 in Bulgaria, max. 150 in Estonia and around 700 in Poland [Remicade and biosimilars combined]). The Belgian estimate was given by a pharma company, the Bulgarian estimate was based on national health statistics and the Polish estimate on the National Health Fund. Other countries could provide no data.

When European and non-European countries were separated, the medicine was reported as approved by 24 associations in Europe (83%). Out of those 24 associations, 12 associations (50%) reported the medicine as fully covered and four associations (17%) as partially covered. Seven associations (29%) reported that coverage requires an IBD diagnosis. In the countries outside of Europe, the medicine was only approved in Israel, where coverage requires IBD diagnosis.

3.5. Devices / techniques

3.5.1. Otsuka Adacolumn (apheresis)

Seven out of the 32 participating associations (22%) reported that Otsuka Adacolumn (the apheresis technique) is available for IBD patients their country. In all of the seven countries the treatment is given in hospitals. None of the seven countries could provide data on the number of patients receiving the treatment. The technique was not available in any of the countries outside Europe.

4. DISCUSSION

It comes as no surprise that health systems, insurance coverage and reimbursement policies vary from country to country; this was clear also in this survey. Among the participants of this survey, there were countries with a universal tax-funded coverage for all citizens as well as countries with only private insurance, with several countries in between where different combinations of state and private insurances apply. In some of the participating countries, apart from paying taxes, citizens pay nothing more for their health insurance; on the other hand, in some countries different health insurance fees apply both to citizens as well as their employers.

Reimbursement policies vary as well, ranging from systems where the patient pays nothing and the insurance covers everything to those where the patient pays out of pocket at the point of care and gets reimbursed later. If there is no backup system for persons with low income, e.g. students or

retired persons, paying everything up front, even with a full reimbursement later, can be difficult and can even lead to the person not being able to purchase his/her prescription medicines.

The outcomes of this survey also show clearly that access to new innovative therapies in different countries is far from equal. Only Humira (adalimumab) was approved and available for IBD patients in all participating countries, and only five of the participating countries (Czech Republic, Finland, Hungary, Ireland and Switzerland) could offer all of the five biologics and two biosimilars in this survey to IBD patients. Apart from the differences between countries, there are also regional differences within the same country; these may be due to geographical or economic issues. Although it is understandable that access to health care services in e.g. cities and rural areas can be very different, it puts patients in highly unequal positions.

Not being able to choose one's health care provider, as was the case reported by 16% of the participating associations, may have an impact on the patient's quality of care and life; a good patient-physician relationship has been associated with better compliance to treatment (Kerse et al., 2004), and in a previous EFCCA survey 54% of the respondents felt that they were not able to tell their physician something potentially important about their illness (Lönnfors et al., 2014) – possibly due to trust issues or other difficulties in the patient-physician communication. Being able to choose a health care provider, instead of being appointed to one, could be helpful in developing a patient-physician relationship that promotes the patient's compliance to treatment and quality of life.

A very striking finding was the fact that most countries had no official registries of IBD patients and could thus provide mere estimates on the number or prevalence of IBD patients. France could give a number provided by an IBD observatory, Sweden provided by a national registry, and Finland provided by the Social Insurance Institute. Other participating national associations reported that there are no national registries or if there are, these are incomplete or not up-to-date; these associations were only able to give an approximation. Furthermore, very few of the participating associations had any data on how many patients are receiving each medication.

The European Medicines Agency defines patient registries as "organized systems that use observational methods to collect uniform data on a population defined by a particular disease, condition, or exposure, and that is followed over time. Patient registries can play an important role in

monitoring the safety of medicines" (European Medicines Agency, 2017). According to the Registry of Patient Registries working under the U.S. Department of Health & Human Services, at its most basic level a patient registry is a database containing information about patients' medical condition or treatments (Registry of Patient Registries). Patient registries can, however, be used for a variety of purposes, such as scientific and clinical research, collecting post-marketing data of a drug or device, studying the natural history of disease, and health policy purposes (European Medicines Agency, 2017; Registry or Patient Registries, 2018). Registries could be coordinated and maintained by, for example, patients' or physicians' associations, academic institutions or national agencies (European Medicines Agency, 2017). Unfortunately, developing such registries seems to not have been a priority within the IBD community. This may be improving as in Denmark, for example, a national registry of IBD patients receiving biologic therapy was initiated in 2016 (Larsen et al., 2016).

There may have been ambiguity in the questions and the given reply alternatives that caused some of the participants to have to choose a reply from several fitting options. This may have caused some discrepancies in the outcomes. Due to the cross-sectional nature of this survey, it may be that the situation in many of the countries has changed since the time of the survey. Still, the results do give an outlook into the differences in the EFCCA member countries at one point of time, and it is unlikely that all differences would have cleared since then. A follow-up survey, however, should definitely be carried out after a few years to see how the situation has developed. Furthermore, EFCCA is looking into the possibility of creating an online observatory where member countries could update changes in their country and see changes happening in other countries in real time.

5. EFCCA'S RECOMMENDATIONS

Based on the outcomes of this survey, EFCCA has created a set of recommendations that can be developed further and realized in future projects within EFCCA or in cooperation with other stakeholders:

- Access to new innovative therapies needs to be accelerated; national associations are encouraged to take advantage of the outcomes of this project in their work.
- In rural areas and regions where distances are long, the possibilities of telemedicine and online services should be developed.
- Developing IBD patient registries on national or European level needs to be encouraged.

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