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# D1.3 List of EU member registries and their progress on the implementation of GRID

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REGISTRATION IDENTIFIER FOR

DONORS

GLOBAL

GRID-

UNIQUE DONOR IDENTIFICATION







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## 1. Preface

This report, as part of the 2019 work programme of the World Marrow Donor Association (WMDA) for the EU Third Health Programme (2014-2020), details the status of each European Union (EU) member registry in relation to the implementation and use of the Global Registration Identifier for Donors (GRID). This will allow progress to be monitored, and for support to be targeted to those members who are making slower than anticipated progress. It will also enable us to monitor the percentage of donors who have a GRID ID.

Chapter 2 describes background information about the GRID project in addition to the project plan describes in Deliverable D1.2 Progress report GRID (2018). Following, Chapter 3 displays the whole list of WMDA member organisations within the EU member states that have implemented GRID. It is clear that EU member states are doing exceptionally well on the basis of GRID implementation. Unfortunately, one organisation is lagging behind. Finally, in Chapter 4 the 4 Third Countries that have not implemented GRID yet, including the reasons and solutions are shown.

On the website **GRID Status: XML Update Dash** on WMDA Share, the complete overview of the GRID implementations statuses of all WMDA member organisations is manifested (*Figure 1*).

Figure 1. GRID Status: XML Update Dash on WMDA Share – last update 13 December 2019

## **GRID Status: XML Update Dash**

Created by last modified on Oct 02, 2019

#### GRID in WSMS

Check detail track of GRID status and survey.

Data is updated every hour.

Overview of GRID update

Orgs with GRID	Orgs no GRID	Orgs Partly GRID	Total Donor records	Total GRID records	Percentage	Last Updated Time
73	5	1	35,872,777	33,982,745	94.73	2019-12-13 09:40:00+01

This page allows progress to be monitored, and for support to be targeted to those members who are making slower than anticipated progress. It also enables WMDA to monitor the percentages of donors who have a GRID ID.

This page is currently only accessible for WMDA members. *Appendix 2* displays the complete list of GRID updates.



## 2. Background on GRID

Unrelated hematopoietic progenitor cell (HPC) donor registries and issuing organisations (IO) facilitate exchange of HPC products throughout the world. To improve communication across national and international borders, and to prevent errors in identification of donors, a system to uniquely and consistently identify potential donors on a global scale is needed.

To this end, the World Marrow Donor Association (WMDA) worked in collaboration with International Council for Commonality in Blood Banking Automation (ICCBBA) to develop and implement a Global Registration Identifier for Donors (GRID). The GRID Project is a multi-phase, multi-year effort to achieve implementation on a global basis.

Given the international nature of the work done by the organisations providing blood stem cell products, a system to uniquely identify potential donors on a global scale is needed to facilitate communication and prevent errors in identification of donors.

A GRID implementation timeline - Figure 2 - was developed in 2018, to let organisations proceed more smoothly into complete implementation. To ease the implementation across organisations, WMDA have extended the implementation plan for step C to allow for changes around the Operational processes within their organisations.

1st Jan 2019 29th Apr 2019 1st Jul 2019 17<sup>th</sup> Dec 2019 15th Dec 2020 Continue to submit old donor-IDs Optional 'dual running': Mandatory 'dual organisations decide when running' of new GRID to discontinue submission of donor IDs s and old Submit new GRID donor-IDs old donor-IDs at any point donor IDs. between Step D and E. Step B: Step C1: Step D: COMPLETE **PROCESS PLAN** 31.12.18 01.01.19 29.04.19 01.07.19 17.12.19 15.12.20 • Get your ION- Creation of a GRID · All IT systems (for · GRID must be fully · Ensure all your • You must be able to registration number example your own use GRID as the sole implemented for all field in your XML data operational from ICCBBA. submission to the registry software; procedures contain donor identifier for listing organisations Define your plan Search & Match EMDIS; Search & GRIDs (for example all your donors and and will be the only Match Service) must how you will Service (BMDW) is labels, paperwork, any incoming donors donor identifier to be implement GRID in mandatory have a GRID working instructions) You may continue to shown in the Search populated for all and that all your use your old donor your organisation. Where you have & Match Service.

transplant centres,

collection centres

stakeholders are fully

aware of your GRIDs.

donor centres,

and other

donors. GRID is

If you need more

operational

until 1st July.

time to roll out your

processes, you have

visible in all IT

systems.

assigned a GRID to

your donors please,

file and you will see

the GRID shown in

If your GRID field is

blank it will show as blank alongside the old donor IDs.

Search & Match

(BMDW).

submit it in your XML

Figure 2. GRID implementation timeline 2018 - 2020

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· Old donor IDs will no

longer be accepted

by the Search &

Match Service.

IDs alongside their

GRID as a secondary

identifier should you

wish to.



- C\*1: IT track: The expectation for mandatory GRID implementation is defined as any technical process that involves interaction with other organisations (for example completing the EMDIS IPs), but does not include any technical changes that are entirely internal (e.g. screen changes or internal database changes). GRID as mandatory in IT will remain from the beginning of step C on 29 April.
- C\*2: Operational track: The expectation of GRID implementation during this step includes search reports, email communications, documents and forms, blood sample and product labelling, invoicing etc. Operational changes will be mandatory from 1 July 2019.

For more information on the previous and coming steps, please visit <u>GRID: WMDA Implementation</u> <u>Deadlines</u> on WMDA Share.

Despite all the efforts from both the WMDA office and the GRID Task Force, there are 5 registries that have not implemented GRID yet: one within the EU member states and 4 outside. WMDA office and the GRID Task Force (expert volunteers from across the WMDA community) are doing everything in their power to reach out to those organisations, find out their struggles and offer support to ease the GRID implementation.

To get a better picture of the GRID implementations in the WMDA member organisations, WMDA office sent out a survey (*Appendix 1*) in the annual GRID newsletter to assort the status of GRID implementations of the WMDA member organisations. This was sent out to all WMDA member organisations to check for the GRID implementation status of their organisation.

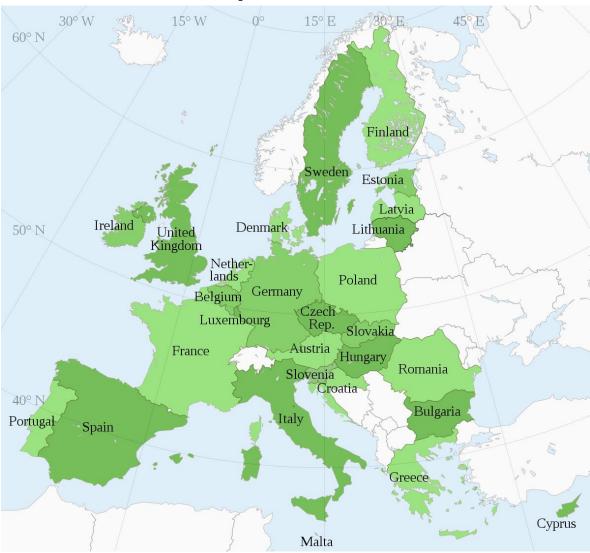


## 3. EU Member States - GRID implementation status

In 2019, the European Union (EU) consists of 28 member states. Each member state is party to the founding treaties of the union and thereby subject to the privileges and obligations of membership. Unlike members of most international organisations, the member states of the EU are subjected to binding laws in exchange for representation within the common legislative and judicial institutions. Member states must agree unanimously for the EU to adopt policies concerning defence and foreign policy. Subsidiarity is a founding principle of the EU.<sup>1</sup>

Figure 1 displays all countries in Europe that are EU member states. Estonia, Malta and Latvia do not have hematopoietic stem cell organisations.

Figure 1. EU Member states



¹ https://en.wikipedia.org/wiki/Member state of the European Union



The last couple of years, WMDA office and the GRID Task Force provided support and guidance to all issuing organisations on all operational matters related to the GRID. In addition, they accommodated recommendations and guidance to support the implementation of GRID in the international stem cell community. These recommendations are approved by the WMDA board members before it being communicated to the wider community.

In 2019, WMDA succeed in almost 100% GRID implementation. Especially the EU member states were successful in the implementation of GRID. On 13 December 2019, **99,83%** of the WMDA member organisations within the EU member states had GRID fully implemented (*Table 1*). That is more than the worldwide percentage.

 EU member states

 Total Donor records
 Total GRID records
 Percentage

 15,598,534
 15,571,651
 99,83

 Worldwide

 Total Donor records
 Total GRID records
 Percentage

 35,872,777
 33,982,745
 94.73%

Table 1. EU member states vs. Global data

Only the Against Leukemia Foundation MDR (ALF), Warsaw Registry has not implemented GRID yet despite several attempts from WMDA office to offer support. The overview in *Table 2* includes the name of the listing organisation, the country, ION, number of total donor records, last update, shipments (both national and international), the reason for delay and if they are a paying WMDA member.

Name Country ION Record Last Shipments Shipments Reason Membership **National** International updated paid Against Poland 3918 26,883 2019-16 (2018) 4 (2018) **Political** Leukemia 01-03 Foundation MDR (ALF), Warsaw

Table 2. EU member state organisation - record and reason

The official list of total donor records and GRID records of WMDA organisations within the EU member states is specified in *Table 3*.

Table 3. EU member states - WMDA member organisations\*



Organisation	<b>Total Donor records</b>	<b>GRID</b> records	Percentage
	Austria		
Austrian Bone Marrow Donor Registry	80,947	80,947	100
Verein Geben für Leben	58,306	58,306	100
	Belgium		
Marrow Donor Program Registry Belgium	83,305	83,305	100
	Bulgaria		
Bulgarian Bone Marrow Donor Registry	1,592	1,592	100
	Croatia		
Croatian Bone Marrow Donor Registry	56,770	56,770	100
Rep	ublic of Cyprus		
Cyprus Bone Marrow Donor Registry	172,311	172,311	100
Cyprus Paraskevaidio Bone Marrow Donor Registry	5,003	5,003	100
Cz	ech Republic		
Czech Stem Cells Registry Prague	32,562	32,562	100
Czech National Marrow Donor Registry Plzeň	86,934	86,934	100
	Denmark		
Danish Stem Cell Donors - West	42,265	42,265	100
Danish Stem Cell Donors - East	19,897	19,897	100
	Finland		
Finnish Stem Cell Registry	50,889	50,889	100
	France		
France Greffe de Moelle Registry	307,860	307,860	100
	Germany		
Zentrales Knochenmarkspender-Register Deutschland	8,923,596	8,923,596	100
	Greece		
EOM Hellenic Transplant Organization	155,332	155,332	100
	Hungary		
Hungarian Stem Cell Donor Registry	7,075	7,075	100
	Ireland		
Irish Unrelated Bone Marrow Registry	21,603	21,603	100
	Italy		
Italian Bone Marrow Donor Registry	442,115	442,115	100
Organisation	<b>Total Donor records</b>	GRID records	Percentage



	Lithuania								
Lithuanian National Bone Marrow Donor Registry	12,101	12,101	100						
I	Luxembourg								
Luxembourg Marrow Donor Program	12,457	12,457	100						
	Netherlands								
Matchis Foundation	305,094	305,094	100						
Poland									
Against Leukemia Foundation MDR	26,883	0	0						
Poltransplant	258,123	258,123	100						
Fundacja DKMS	1,505,823	1,505,823	100						
	Portugal								
CEDACE/Portuguese BMD Registry	398,694	398,694	100						
	Romania								
National Registry of Hematopoietic Stem Cells Voluntary Donors	39,517	39,517	100						
	Slovakia								
Slovak National BMD Registry	15,036	15,036	100						
	Slovenia								
Slovenia Donor	19,142	19,142	100						
	Spain								
Registro de Donantes de Médula Ósea (REDMO)	398,189	398,189	100						
	Sweden								
Tobias Registry	230,371	230,371	100						
United Kingdom (UK)									
Anthony Nolan London	777,358	777,358	100						
NHS Blood and Transplant - BBMR	375,397	375,397	100						
DKMS United Kingdom	608,997	608,997	100						
Welsh Bone Marrow Donor Registry	66,990	66,990	100						

<sup>\*</sup>There are no stem cell donor registries in Estonia, Malta and Latvia



## 4. Third Countries - GRID implementation status

In addition to the WMDA organisations that are part of the EU Member states, 4 other registries outside the EU have not yet implemented GRID. With 3 of those 4, WMDA office is in close contact. Due to different reasons (*Table 4*), they are not up to date with GRID implementation. However, we do expect them to keep up by the end of 2020. Therefore, we extended their deadline to December 2020.

The overview in *Table 4* includes the name of the listing organisation, the country, ION, number of total donor records, last update, shipments (both national and international), the reason for delay and if they are a paying WMDA member.

Name Country ION Records Last Shipments **Shipments** Reason Membership **National** International paid updated Japan Marrow 4364 1209 Japan 523,465 2019-5 (2018) Political (2018)07-09 Donor **Program** 8405 Korean Korea 344,603 2019-550 (2017) 3 (2017) Unclear Network for 02-25 Organ Sharing Chinese China 2197 993,145 2017-766 (2017) 35 (2017) ΙT Marrow 11-09 Donor **Program** Chaim Sheba Israel 4068 1,796 2015-Unclear 05-06 Medical Centre

Table 4. Third Country organisations - records and reasons

Please find below the different organisation chapters, including more detailed information concerning the reasons for no GRID implementation yet and additional email conversations between WMDA office and the various organisations.

#### Japan Marrow Donor Program

In September 2018, the CEO of WMDA office had a meeting with the CEO of Japan Marrow Donor Program (JMDP) during the Worldwide Network for Blood & Marrow Transplantation (WBMT) in Beijing (China). The organisation was – again – notified about the importance of worldwide GRID implementation. In addition, they were informed that WMDA is prepared to assist the JMDP in any way they see necessary to further our common aims and goals. JMDP informed WMDA that they have to discussed this with their Ministry of Health, Labor and Welfare as well as the Japanese Red Cross Society.

It turns out that in Japan the law has to be changed in order for the organisation to make it possible to implement GRID.

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### Korean Network for Organ Sharing

In October 2019, the CEO of the WMDA office went to Korea for a conference and had the option to speak to representatives of the organisation. Also, this organisation was notified about the importance of worldwide GRID implementation. Up until now, they did not implement GRID yet, but they indicate that they are going to have some difficulties but they will cooperate with the WMDA.

## Chinese Marrow Donor Program

The organisation first needs time to update their IT systems and upload their XML file data. After this is finished, they will start implemented GRID. At the moment, there is no specific time schedule available for this. WMDA's data specialist, originally from China, is in close contact with China to help them wherever is needed.

#### Chaim Sheba Medical Centre

This registry has very limited resources. In addition, this organisation did not pay their recent WMDA membership and did not report their shipment numbers. listing their donors in the WMDA Search & Match service.

## Partially GRID implementation

In addition, there is one organisation that has implemented GRID for almost 100%. This is the Serbian Bone Marrow Donor Registry, with 95.90% GRID records of their total donor records (*Table 5*).

Table 5. Organisations who partly implemented GRID

Name		ION Records GRID recor		GRID records	Percentage	Last update	
Serbian	Bone	Marrow	4650	3,417	3,277	95.90	2019-07-18
Donor Registry							

Currently, WMDA's IT experts are in close contact with this registry and offering support. WMDA office is expecting this issue will be solved soon.

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D1.3



# Appendix 1. Survey GRID - Status

GRID - what is the status?
GRID - what is the status  The GRID Task Force would like to set up a page where all WMDA Member Organisations can monitor how far their international colleagues are with the implementation of GRID in their organisation.  Please fill in the questionnaire below and let us know.  1. Are you on track with the implementation timeline?
( the next deadline is on December 17th, when organisations can discontinue submission of old donor-IDs at any point)  Yes  No
2. Did you update your local software to accommodate GRID? If not, when is that scheduled?  O Yes  No, please provide a date
3. Did you update your local standards, forms, labels?
<ul><li>○ Yes</li><li>○ No</li></ul>
4. Did you share the goals and timelines with your national network (transplant centres, collection centres)?
○ Yes
○ No
5. Did you organise your registry staff?
○ Yes
○ No
Submit





# Appendix 2. Overview of GRID update WMDA member organisations

Name	Name	Listing Occ					
KONOS - Korean Network for Organ Sharing         845         344,033         805         0         0         2019-02-25 063-450           Against Eaulemins Foundation MOR (ALF), Warsaw         310         2,608         318         0         0         2019-04-07 220-047           Chairn Sheba Medical Ceritie         4008         1,79         983,45         4009         0         0         2018-04-00 070-070-07           Chinese Marrison Ornor Program         1979         983,45         450         2,177         95-00238714-259         0         0         2019-04-10 177-171-171-171-171-171-171-171-171-171	Tunic	Listing Org	Kecords	ION	GRID records	Percentage	Created_at
Against Leukemia Foundation NDR (ALF). Warsawa 3918 2688 3918 0.0 0. 2019-01-03 122020 T. Chainer Shebia Medical Centre 4068 1.796 4068 0.0 0. 2019-01-06 070994 T. Chinase Marrow Donor Program 2197 93.415 2197 0.0 0. 2019-01-06 070994 T. Chinase Marrow Donor Program 4650 31.417 450 2197 0.0 0. 2019-01-06 070994 T. Chinase Marrow Donor Registry 4650 31.417 450 2197 1.00 0. 2019-01-10 107111 1.00 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	JMDP - Japan Marrow Donor Program	4364	523,465	4364	0	0	2019-11-20 04:46:05
Chains Steba Medical Centric         4088         1.798         4688         0         0         2018-04-46 07/09/07           Chinese Marrow Donor Program         3197         93,145         2197         0         0         0         2018-04-00-03505           Serbian Bone Marrow Donor Registry         4596         31,687         157         55,003837474893         2018-07-01-171121           DIMOS BMST Foundation Inclia         4596         31,687         9738         57,46         100         2019-12-13 052-124           Familiah Stem Cell Registry         9738         50,483         9738         50,483         100         2019-12-12 1907-38           Familiah Stem Cell Registry         5285         211,635         5355         511,635         100         2019-12-12 1907-38           South Affician Boen Marrow Registry         8118         7,3571         8118         7,3571         8118         7,3571         8118         7,3571         100         2019-12-12 1907-39           Stownia Donor         Both Marrow Registry         8118         7,3571         8118         7,3571         8118         7,3572         8118         7,3572         8118         7,3572         8118         1,3542         100         2019-12-12 1907-39           Stownia Don	KONOS - Korean Network for Organ Sharing	8405	344,603	8405	0	0	2019-02-25 06:34:50
Chanses Marrow Donor Program   2197   993,145   2197   0	Against Leukemia Foundation MDR (ALF), Warsaw	3918	26,883	3918	0	0	2019-01-03 12:20:47
Particular Bone Marrow Donor Registry	Chaim Sheba Medical Centre	4068	1,796	4068	0	0	2018-04-06 07:09:47
Pundación de Beneficencia Pública DúNS hy intermediary of DúNS Registry	Chinese Marrow Donor Program	2197	993,145	2197	0	0	2018-04-06 02:35:05
DKMS BMST Faundation India         4596         37,246         993         37,246         100         2019-12-13 059-21:06           Finniah Stem Cell Registry         9738         50,843         978         50,843         100         2019-12-12 1907/38           Tobias Registry         5285         231,635         5285         231,635         100         2019-12-12 1907/38           Danish Stem Cell Donors - West         2015         42,176         2015         42,176         100         2019-12-12 1905/38           South African Bone Marrow Registry         7214         85,540         7214         85,540         7214         85,540         100         2019-12-12 1905/39           Stownia Donor         4987         1,004,104         4987         1,004,104         4987         1,004,104         100         2019-12-12 1905/39           Stownia Donor         4565         19,466         4565         19,466         456         100         2019-12-12 1905/39           Stownia Donor Registry         2673         12,099         2073         12,099         100         2019-12-12 1905/39           Hungarian Stem Cell Donor Registry         1698         7,091         1695         7,091         1695         7,091         100         2019-12-12 1905/39	Serbian Bone Marrow Donor Registry	4650	3,417	4650	3,277	95.9028387474393	2019-07-18 17:11:21
Finnish Stem Cell Registry	Fundación de Beneficencia Pública DKMS by intermediary of DKMS Registry	4596	37,687	1574	37,687	100	2019-12-13 05:21:24
Danish Stem Cell Donors - West   2015   231.635   238   231.635   100   2019-12-12 1907-08	DKMS BMST Foundation India	4596	37,246	9935	37,246	100	2019-12-13 05:21:06
Danish Stem Cell Donors - West         2015         42,176         2015         42,176         100         2019-12-12 1905-293           South African Bone Marrow Registry         8118         73,571         8118         73,571         100         2019-12-12 1905-633           Norwegian Bone Marrow Donor Registry         7214         35,540         7214         35,540         100         2019-12-12 1905-163           Slowein Bone Marrow Donor Registry         4987         1,004,104         4987         1,004,104         4987         1,004,104         100         2019-12-12 1905-165           Slowein Donor         4565         19,486         4565         19,486         100         2019-12-12 1805-185           Lithuanian National Bone Marrow Donor Registry         2073         12,099         2073         12,099         100         2019-12-12 1805-182           Hungarian Stem Cell Donor Registry Charitable Trust         5019         30,433         5019         30,433         100         2019-12-12 1805-124           Saudi Stem Cells Registry Prague (CSCR)         4753         33,018         4753         33,018         100         2019-12-12 1805-124           Saudi Stem Cells Registry Prague (CSCR)         2107         70,437         2107         70,437         2107         70,437	Finnish Stem Cell Registry	9738	50,843	9738	50,843	100	2019-12-12 19:07:38
South African Bone Marrow Registry         8118         73.571         8118         73.571         100         2019-12-12 1903-03           Norwegian Bone Marrow Donor Registry         7214         35.540         7214         35.540         100         2019-12-12 1903-15           Ezer Mizion Bone Marrow Donor Registry         4987         1,004,104         400         2019-12-12 1903-56           Slovenia Donor         4565         19.496         4565         19.496         100         2019-12-12 1903-56           Lithuanian National Bone Marrow Donor Registry         2073         12.099         2073         12.099         100         2019-12-12 1805-05           Hungarian Stem Cell Donor Registry         1695         7,091         1695         7,091         100         2019-12-12 1805-024           Armenian Bone Marrow Donor Registry Charitable Trust         5019         30.433         5019         30.433         5019         30.433         100         2019-12-12 1805-12           Zuech Stem Cells Donor Registry Charitable Trust         5019         30.433         5019         30.433         5019         30.433         100         2019-12-12 1805-024           Armenian Bone Marrow Donor Registry         2019         2019         2019         2019         2019         2019 <th< td=""><td>Tobias Registry</td><td>5285</td><td>231,635</td><td>5285</td><td>231,635</td><td>100</td><td>2019-12-12 19:07:08</td></th<>	Tobias Registry	5285	231,635	5285	231,635	100	2019-12-12 19:07:08
Nonwegian Bone Marrow Donor Registry         7214         35.540         7214         35.540         100         2019-12-12 190-36           Ezer Mizion Bone Marrow Donor Registry         4987         1.004.104         4967         1.004.104         100         2019-12-12 190-36           Slowenia Donor         4565         19.496         4565         19.496         100         2019-12-12 180-503           Lithuanian National Bone Marrow Donor Registry         2073         12.099         2073         12.099         100         2019-12-12 180-503           Hungarian Stem Cell Donor Registry Prague (CSCR)         1695         7.091         1695         7.091         100         2019-12-12 180-502           Armenian Bone Marrow Donor Registry Prague (CSCR)         4753         33.018         4753         33.018         100         2019-12-12 180-155           Saudi Stem Cells Donor Registry         2107         70.437         2107         70.437         100         2019-12-12 180-115           Austrian Bone Marrow Donor Registry         2614         80.699         2614         80.699         101         2019-12-12 180-116           Gift of Life Marrow Registry         2614         80.699         2614         80.699         100         2019-12-12 180-117           Gift of Life Marrow Re	Danish Stem Cell Donors - West	2015	42,176	2015	42,176	100	2019-12-12 19:05:29
Ezer Mizion Bone Marrow Donor Registry         4987         1,004,104         4987         1,004,104         100         2019-12-12 19:03:65           Slövenia Donor         4565         19,496         4565         19,496         100         2019-12-12 19:05:08           Lithuanian National Bone Marrow Donor Registry         2073         12,099         2073         12,099         100         2019-12-12 18:05:03           Hungarian Stem Cell Donor Registry Charitable Trust         5019         30,433         5019         30,433         100         2019-12-12 18:05:22           Armenian Bone Marrow Donor Registry Prague (CSCR)         4753         33,018         4753         33,018         100         2019-12-12 18:31:42           Saudi Stem Cells Donor Registry         2107         70,437         2107         70,437         100         2019-12-12 18:31:42           Saudi Stem Cells Donor Registry         2107         70,437         2107         70,437         100         2019-12-12 18:31:42           Austrian Bone Marrow Robor Registry         2614         80,699         2614         80,699         100         2019-12-12 18:21:17           Giff of Life Marrow Registry         1033         363,048         1033         360,448         100         2019-12-12 18:21:17           Giff of L	South African Bone Marrow Registry	8118	73,571	8118	73,571	100	2019-12-12 19:05:03
Slovenia Donor	Norwegian Bone Marrow Donor Registry	7214	35,540	7214	35,540	100	2019-12-12 19:04:17
Lithuanian National Bone Marrow Donor Registry         2073         12.099         2073         12.099         100         2019-12-12 18:09:024           Hungarian Stem Cell Donor Registry         1695         7.091         1695         7.091         100         2019-12-12 18:05:024           Armenian Bone Marrow Donor Registry Charitable Trust         5019         30.433         5019         30.433         100         2019-12-12 18:31:55           Czech Stem Cells Registry Prague (CSCR)         4753         33.018         4753         33.018         100         2019-12-12 18:31:14           Saudi Stem Cells Donor Registry         2107         70.437         2107         70.437         100         2019-12-12 18:31:18           Austrian Bone Marrow Donor Registry         2614         80.699         2614         80.699         100         2019-12-12 18:21:17           Gift of Life Marrow Registry         1033         363.048         103         363.048         100         2019-12-12 18:21:17           Gift of Life Marrow Registry         1033         363.048         103         30.11         100         2019-12-12 18:24:11           Matchis Foundation         8139         310.317         8139         310.317         100         2019-12-12 18:24:50:04           Mary Life Marrow Donor R	Ezer Mizion Bone Marrow Donor Registry	4987	1,004,104	4987	1,004,104	100	2019-12-12 19:03:56
Hungarian Stem Cell Donor Registry         1695         7.091         1695         7.091         100         2019-12-12 18:05-24           Armenian Bone Marrow Donor Registry Charitable Trust         5019         30,433         5019         30,433         100         2019-12-12 18:31:55           Czech Stem Cells Registry Prague (CSCR)         4753         33,018         4753         33,018         100         2019-12-12 18:31:42           Saudi Stem Cells Donor Registry         2107         70,437         2107         70,437         100         2019-12-12 18:31:81           Austrian Bone Marrow Donor Registry         2614         80,699         2614         80,699         100         2019-12-12 18:21:17           Gift of Life Marrow Registry         1033         363,048         103         363,048         100         2019-12-12 18:21:17           Gift of Life Marrow Registry         1033         363,048         103         363,048         100         2019-12-12 18:21:17           Matchis Foundation         8139         310,317         8139         310,317         100         2019-12-12 12:12:12:52:50           Ankara University Faculty of Medicine/TRAN Ankara         3893         15,465         3893         15,465         100         2019-12-12 02:02:03           DATRI Blood Stem C	Slovenia Donor	4565	19,496	4565	19,496	100	2019-12-12 18:50:58
Armenian Bone Marrow Donor Registry Charitable Trust         5019         30.433         5019         30.433         100         2019-12-12 18:31:55           Czech Stem Cells Registry Prague (CSCR)         4753         33.018         4753         33.018         100         2019-12-12 18:31:42           Saudi Stem Cells Donor Registry         2107         70.437         2107         70.437         100         2019-12-12 18:31:18           Austrian Bone Marrow Donor Registry         2614         80.699         2614         80.699         100         2019-12-12 18:31:18           Gift of Life Marrow Registry         1033         363.048         103         363.048         100         2019-12-12 16:54:49           Matchis Foundation         8139         310.317         8139         310.317         8139         103.317         100         2019-12-12 16:54:49           Markar University Faculty of Medicine/TRAN Ankara         3893         15.465         3893         15.465         100         2019-12-12 09:10:35           DATRI Blood Stem Cell Donors Registry         8486         415.747         846         415.747         100         2019-12-12 14:20:90:03           Welsh Bone Marrow Donor Registry         1726         67.494         1726         67.494         172         67.494         <	Lithuanian National Bone Marrow Donor Registry	2073	12,099	2073	12,099	100	2019-12-12 18:50:37
Czech Stem Cells Registry Prague (CSCR)         4753         33.018         4753         33.018         100         2019-12-12 18:31:42           Saudi Stem Cells Donor Registry         2107         70.437         2107         70.437         100         2019-12-12 18:31:18           Austrian Bone Marrow Donor Registry         2614         80.699         2614         80.699         100         2019-12-12 18:21:17           Gift of Life Marrow Registry         1033         363,048         1033         363,048         100         2019-12-12 18:25:04           Matchis Foundation         8139         310,317         8139         310,317         100         2019-12-12 15:25:04           Ankara University Faculty of Medicine/TRAN Ankara         3893         15,465         3893         15,465         100         2019-12-12 09:10:35           DATRI Blood Stem Cell Donors Registry         8486         415,747         8486         415,747         100         2019-12-12 09:10:35           Welsh Bone Marrow Donor Registry         1726         67,494         1726         67,494         1726         67,494         100         2019-12-10 20:08:17           Canadian Blood Services Stem Cell Registry         5103         456,872         5103         456,872         100         2019-12-10 11:20:00 </td <td>Hungarian Stem Cell Donor Registry</td> <td>1695</td> <td>7,091</td> <td>1695</td> <td>7,091</td> <td>100</td> <td>2019-12-12 18:50:24</td>	Hungarian Stem Cell Donor Registry	1695	7,091	1695	7,091	100	2019-12-12 18:50:24
Saudi Stem Cells Donor Registry         2107         70,437         2107         70,437         100         2019-12-12 18:31:18           Austrian Bone Marrow Donor Registry         2614         80,699         2614         80,699         100         2019-12-12 18:21:17           Gift of Life Marrow Registry         1033         363,048         1033         363,048         100         2019-12-12 16:54:49           Matchia Foundation         8139         310,317         8139         310,317         100         2019-12-12 15:25:04           Ankara University Faculty of Medicine/TRAN Ankara         3893         15,465         3893         15,465         100         2019-12-12 09:10:35           DATRI Blood Stem Cell Donors Registry         8486         415,747         8486         415,747         100         2019-12-12 04:45:26           Welsh Bone Marrow Donor Registry         1726         67,494         1726         67,494         100         2019-12-11 14:15:22           NHS Blood and Transplant - BBMR         2731         376,020         2731         376,020         100         2019-12-10 11:20:30           Italian Bone Marrow Donor Registry         7450         445,241         7450         445,241         100         2019-12-01 11:20:30           Italian Bone Marrow Donor Registry<	Armenian Bone Marrow Donor Registry Charitable Trust	5019	30,433	5019	30,433	100	2019-12-12 18:31:55
Austrian Bone Marrow Donor Registry       2614       80.699       2614       80.699       100       2019-12-12 18:21:17         Gift of Life Marrow Registry       1033       363.048       1033       363.048       100       2019-12-12 16:54:49         Matchis Foundation       8139       310.317       8139       310.317       100       2019-12-12 15:25:04         Ankara University Faculty of Medicine/TRAN Ankara       3893       15.465       3893       15.465       100       2019-12-12 09:10:35         DATRI Blood Stem Cell Donors Registry       8486       415,747       8486       415,747       100       2019-12-12 04:45:26         Welsh Bone Marrow Donor Registry       1726       67.494       1726       67.494       100       2019-12-11 04:15:22         NHS Blood and Transplant - BBMR       2731       376.020       2731       376.020       100       2019-12-10 11:20:12         Be The Cure Registry by Jeevan Stem Cell Foundation       4460       8,256       4460       8,256       100       2019-12-10 11:20:30         Italian Bone Marrow Donor Registry       7450       445,241       7450       445,241       100       2019-12-09 09:15:46         France Greffe de Moelle Registry - FGM       1804       309,836       1804       309,836	Czech Stem Cells Registry Prague (CSCR)	4753	33,018	4753	33,018	100	2019-12-12 18:31:42
Gift of Life Marrow Registry       1033       363,048       103       363,048       100       2019-12-12 16:54:49         Matchis Foundation       8139       310,317       8139       310,317       100       2019-12-12 15:25:04         Ankara University Faculty of Medicine/TRAN Ankara       3893       15.465       3893       15.465       100       2019-12-12 09:10:35         DATRI Blood Stem Cell Donors Registry       8486       415,747       8486       415,747       100       2019-12-12 04:45:26         Welsh Bone Marrow Donor Registry       1726       67.494       1726       67.494       100       2019-12-12 02:08:17         Canadian Blood Services Stem Cell Registry       5103       456.872       5103       456.872       100       2019-12-11 14:15:22         NHS Blood and Transplant - BBMR       2731       376,020       2731       376,020       100       2019-12-10 12:12:01         Be The Cure Registry by Jeevan Stem Cell Foundation       4460       8,256       4460       8,256       100       2019-12-10 11:20:30         Italian Bone Marrow Donor Registry       7450       445,241       7450       445,241       100       2019-12-09 09:15:46         France Greffe de Moelle Registry - FGM       1804       309,836       1804       309,836 <td>Saudi Stem Cells Donor Registry</td> <td>2107</td> <td>70,437</td> <td>2107</td> <td>70,437</td> <td>100</td> <td>2019-12-12 18:31:18</td>	Saudi Stem Cells Donor Registry	2107	70,437	2107	70,437	100	2019-12-12 18:31:18
Matchis Foundation         8139         310,317         8139         310,317         100         2019-12-12 15:25:04           Ankara University Faculty of Medicine/TRAN Ankara         3893         15,465         3893         15,465         100         2019-12-12 09:10:35           DATRI Blood Stem Cell Donors Registry         8486         415,747         8486         415,747         100         2019-12-12 04:45:26           Welsh Bone Marrow Donor Registry         1726         67,494         1726         67,494         100         2019-12-12 02:08:17           Canadian Blood Services Stem Cell Registry         5103         456,872         5103         456,872         100         2019-12-11 14:15:22           NHS Blood and Transplant - BBMR         2731         376,020         2731         376,020         100         2019-12-10 12:12:01           Be The Cure Registry by Jeevan Stem Cell Foundation         4460         8,256         4460         8,256         100         2019-12-09 09:15:46           France Greffe de Moelle Registry - FGM         1804         309,836         1804         309,836         100         2019-12-09 09:11:25           ZKRD - Zentrales Knochenmarkspender-Register Deutschland         6939         8,970,440         6939         8,970,440         100         2019-12-08 17:47:50	Austrian Bone Marrow Donor Registry	2614	80,699	2614	80,699	100	2019-12-12 18:21:17
Ankara University Faculty of Medicine/TRAN Ankara       3893       15,465       3893       15,465       100       2019-12-12 09:10:35         DATRI Blood Stem Cell Donors Registry       8486       415.747       8486       415.747       100       2019-12-12 04:45:26         Welsh Bone Marrow Donor Registry       1726       67.494       1726       67.494       100       2019-12-12 02:08:17         Canadian Blood Services Stem Cell Registry       5103       456.872       5103       456.872       100       2019-12-11 14:15:22         NHS Blood and Transplant - BBMR       2731       376.020       2731       376.020       100       2019-12-10 12:10:01         Be The Cure Registry by Jeevan Stem Cell Foundation       4460       8.256       4460       8.256       100       2019-12-10 11:20:30         Italian Bone Marrow Donor Registry       7450       445.241       7450       445.241       100       2019-12-09 09:15:46         France Greffe de Moelle Registry - FGM       1804       309.836       1804       309.836       100       2019-12-09 02:11:25         ZKRD - Zentrales Knochenmarkspender-Register Deutschland       6939       8.970.440       6939       8.970.440       100       2019-12-08 17:47:50         DKMS United Kingdom       6939       619.284	Gift of Life Marrow Registry	1033	363,048	1033	363,048	100	2019-12-12 16:54:49
DATRI Blood Stem Cell Donors Registry       8486       415.747       8486       415.747       100       2019-12-12 04:45:26         Welsh Bone Marrow Donor Registry       1726       67.494       1726       67.494       100       2019-12-12 02:08:17         Canadian Blood Services Stem Cell Registry       5103       456.872       5103       456.872       100       2019-12-11 14:15:22         NHS Blood and Transplant - BBMR       2731       376.020       2731       376.020       100       2019-12-10 12:12:01         Be The Cure Registry by Jeevan Stem Cell Foundation       4460       8,256       4460       8,256       100       2019-12-10 11:20:30         Italian Bone Marrow Donor Registry       7450       445,241       7450       445,241       100       2019-12-09 09:15:46         France Greffe de Moelle Registry - FGM       1804       309,836       1804       309,836       100       2019-12-09 02:11:25         ZKRD - Zentrales Knochenmarkspender-Register Deutschland       6939       8,970,440       6939       8,970,440       100       2019-12-08 17:47:50         DKMS United Kingdom       6939       58,745       4961       58,745       100       2019-12-08 17:47:50	Matchis Foundation	8139	310,317	8139	310,317	100	2019-12-12 15:25:04
Welsh Bone Marrow Donor Registry       1726       67.494       1726       67.494       100       2019-12-12 02:08:17         Canadian Blood Services Stem Cell Registry       5103       456.872       5103       456.872       100       2019-12-11 14:15:22         NHS Blood and Transplant - BBMR       2731       376.020       2731       376.020       100       2019-12-10 12:12:01         Be The Cure Registry by Jeevan Stem Cell Foundation       4460       8,256       4460       8,256       100       2019-12-10 11:20:30         Italian Bone Marrow Donor Registry       7450       445,241       7450       445,241       100       2019-12-09 09:15:46         France Greffe de Moelle Registry - FGM       1804       309,836       1804       309,836       100       2019-12-09 02:11:25         ZKRD - Zentrales Knochenmarkspender-Register Deutschland       6939       8,970,440       6939       8,970,440       100       2019-12-08 17:47:50         DKMS United Kingdom       6939       619,284       9968       619,284       100       2019-12-08 17:47:19	Ankara University Faculty of Medicine/TRAN Ankara	3893	15,465	3893	15,465	100	2019-12-12 09:10:35
Canadian Blood Services Stem Cell Registry         5103         456,872         5103         456,872         100         2019-12-11 14:15:22           NHS Blood and Transplant - BBMR         2731         376,020         2731         376,020         100         2019-12-10 12:12:01           Be The Cure Registry by Jeevan Stem Cell Foundation         4460         8,256         4460         8,256         100         2019-12-10 11:20:30           Italian Bone Marrow Donor Registry         7450         445,241         7450         445,241         100         2019-12-09 09:15:46           France Greffe de Moelle Registry - FGM         1804         309,836         1804         309,836         100         2019-12-09 02:11:25           ZKRD - Zentrales Knochenmarkspender-Register Deutschland         6939         8,970,440         6939         8,970,440         100         2019-12-08 19:28:04           Verein Geben für Leben         6939         58,745         4961         58,745         100         2019-12-08 17:47:50           DKMS United Kingdom         6939         619,284         9968         619,284         100         2019-12-08 17:47:19	DATRI Blood Stem Cell Donors Registry	8486	415,747	8486	415,747	100	2019-12-12 04:45:26
NHS Blood and Transplant - BBMR       2731       376,020       2731       376,020       100       2019-12-10 12:12:01         Be The Cure Registry by Jeevan Stem Cell Foundation       4460       8,256       4460       8,256       100       2019-12-10 11:20:30         Italian Bone Marrow Donor Registry       7450       445,241       7450       445,241       100       2019-12-09 09:15:46         France Greffe de Moelle Registry - FGM       1804       309,836       1804       309,836       100       2019-12-09 02:11:25         ZKRD - Zentrales Knochenmarkspender-Register Deutschland       6939       8,970,440       6939       8,970,440       100       2019-12-08 17:47:50         DKMS United Kingdom       6939       619,284       9968       619,284       100       2019-12-08 17:47:19	Welsh Bone Marrow Donor Registry	1726	67,494	1726	67,494	100	2019-12-12 02:08:17
Be The Cure Registry by Jeevan Stem Cell Foundation       4460       8,256       4460       8,256       100       2019-12-10 11:20:30         Italian Bone Marrow Donor Registry       7450       445,241       7450       445,241       100       2019-12-09 09:15:46         France Greffe de Moelle Registry - FGM       1804       309,836       1804       309,836       100       2019-12-09 02:11:25         ZKRD - Zentrales Knochenmarkspender-Register Deutschland       6939       8,970,440       6939       8,970,440       100       2019-12-08 17:47:50         DKMS United Kingdom       6939       619,284       9968       619,284       100       2019-12-08 17:47:19	Canadian Blood Services Stem Cell Registry	5103	456,872	5103	456,872	100	2019-12-11 14:15:22
Italian Bone Marrow Donor Registry       7450       445,241       7450       445,241       100       2019-12-09 09:15:46         France Greffe de Moelle Registry - FGM       1804       309,836       1804       309,836       100       2019-12-09 02:11:25         ZKRD - Zentrales Knochenmarkspender-Register Deutschland       6939       8,970,440       6939       8,970,440       100       2019-12-08 19:28:04         Verein Geben für Leben       6939       58,745       4961       58,745       100       2019-12-08 17:47:50         DKMS United Kingdom       6939       619,284       9968       619,284       100       2019-12-08 17:47:19	NHS Blood and Transplant - BBMR	2731	376,020	2731	376,020	100	2019-12-10 12:12:01
France Greffe de Moelle Registry - FGM         1804         309,836         1804         309,836         100         2019-12-09 02:11:25           ZKRD - Zentrales Knochenmarkspender-Register Deutschland         6939         8,970,440         6939         8,970,440         100         2019-12-08 19:28:04           Verein Geben für Leben         6939         58,745         4961         58,745         100         2019-12-08 17:47:50           DKMS United Kingdom         6939         619,284         9968         619,284         100         2019-12-08 17:47:19	Be The Cure Registry by Jeevan Stem Cell Foundation	4460	8,256	4460	8,256	100	2019-12-10 11:20:30
ZKRD - Zentrales Knochenmarkspender-Register Deutschland       6939       8,970,440       6939       8,970,440       100       2019-12-08 19:28:04         Verein Geben für Leben       6939       58,745       4961       58,745       100       2019-12-08 17:47:50         DKMS United Kingdom       6939       619,284       9968       619,284       100       2019-12-08 17:47:19	Italian Bone Marrow Donor Registry	7450	445,241	7450	445,241	100	2019-12-09 09:15:46
Verein Geben für Leben         6939         58,745         4961         58,745         100         2019-12-08 17:47:50           DKMS United Kingdom         6939         619,284         9968         619,284         100         2019-12-08 17:47:19	France Greffe de Moelle Registry - FGM	1804	309,836	1804	309,836	100	2019-12-09 02:11:25
DKMS United Kingdom 6939 619,284 9968 619,284 100 2019-12-08 17:47:19	ZKRD - Zentrales Knochenmarkspender-Register Deutschland	6939	8,970,440	6939	8,970,440	100	2019-12-08 19:28:04
	Verein Geben für Leben	6939	58,745	4961	58,745	100	2019-12-08 17:47:50
Luxembourg Marrow Donor Program (LMDP) 6939 12 681 3099 12 681 100 2019-12-08 17:40:20	DKMS United Kingdom	6939	619,284	9968	619,284	100	2019-12-08 17:47:19
Editaribudig Mariow Bottor Hogiam (Embry)	Luxembourg Marrow Donor Program (LMDP)	6939	12,681	3099	12,681	100	2019-12-08 17:40:20
Fundacja DKMS 6939 1,524,791 7414 1,524,791 100 2019-12-08 17:40:13	Fundacja DKMS	6939	1,524,791	7414	1,524,791	100	2019-12-08 17:40:13





Blutspende SRK Schweiz AG	9341	142,857	9341	142,857	100	2019-12-08 16:09:09
Registro de Donantes de Médula Ósea (REDMO)	7813	402,211	7813	402,211	100	2019-12-08 10:26:32
Thai National Stem Cell Donor Registry	8362	232,886	8362	232,886	100	2019-12-08 02:16:07
New Zealand Bone Marrow Donor Registry	8261	12,536	8261	12,536	100	2019-12-08 02:13:48
Australian Bone Marrow Donor Registry	7748	170,080	7748	170,080	100	2019-12-08 02:13:45
Poltransplant	5391	258,123	5391	258,123	100	2019-12-08 02:11:29
Singapore BMDP	3785	108,863	3785	108,863	100	2019-12-08 02:08:46
Iranian National Stem Cell Donor Network (INSCDN)	4993	49,350	4993	49,350	100	2019-12-06 17:30:53
Anthony Nolan London	6354	779,723	6354	779,723	100	2019-12-06 10:31:29
Beijing New Sunshine Charity Foundation	6681	2,819	6681	2,819	100	2019-12-06 06:07:55
NMDP-National Marrow Donor Program/Be The Match	3553	8,851,765	3553	8,851,765	100	2019-12-06 04:01:52
Sindome	6517	1,220	6517	1,220	100	2019-12-05 15:50:28
Marrow Donor Program Registry Belgium	4201	83,187	4201	83,187	100	2019-12-04 14:13:55
Buddhist Tzu Chi Stem Cells Center - BTCSCC Hualien	3458	377,594	3458	377,594	100	2019-12-04 02:12:16
REDOME - Registro Nacional de Doadores Voluntarios de Medula Ossea	8766	4,688,210	8766	4,688,210	100	2019-12-03 16:48:13
Karelian Registry of Hematopoietic Stem Cells	8256	5,040	8256	5,040	100	2019-12-03 15:50:31
The Sunflower Fund	6738	1,787	6738	1,787	100	2019-12-03 09:00:32
Hong Kong Bone Marrow Donor Registry	4070	119,515	4070	119,515	100	2019-11-27 07:41:56
Czech National Marrow Donor Registry Plzeň	5440	89,505	5440	89,505	100	2019-11-26 14:08:29
Cyprus Bone Marrow Donor Registry	9751	173,113	9751	173,113	100	2019-11-26 09:42:50
Croatian Bone Marrow Donor Registry	5712	56,770	5712	56,770	100	2019-11-21 13:41:09
Hema-Quebec Stem Cell Donor Registry	6912	49,312	6912	49,312	100	2019-11-20 02:10:16
Argentine HSC Donors Registry	5117	164,371	5117	164,371	100	2019-11-20 02:09:35
MBMDR - Macedonian Bone Marrow Donor Registry	4307	1,878	4307	1,878	100	2019-11-13 14:40:22
Danish Stem Cell Donors - East (DSDE)	7484	19,897	7484	19,897	100	2019-11-01 13:01:11
EOM Hellenic Transplant Organization	4979	155,332	4979	155,332	100	2019-10-29 10:12:29
Mexican BMDR - DONORMO	1671	14,174	1671	14,174	100	2019-10-24 02:12:17
Bone Marrow and Cord Blood Bank Registry Hadassah University Hospital	5239	214,457	5239	214,457	100	2019-10-17 18:09:51
National Registry of Hematopoietic Stem Cells Voluntary Donors	1372	39,517	1372	39,517	100	2019-10-14 09:20:43
GeneBandhu New Delhi	2824	7,802	2824	7,802	100	2019-09-26 07:50:24
CEDACE/Portuguese BMD Registry	7358	398,694	7358	398,694	100	2019-09-17 15:34:54
Cyprus Paraskevaidio Bone Marrow Donor Registry	4278	5,003	4278	5,003	100	2019-09-16 13:00:23
Iranian Stem Cell Donor Program (ISCDP)	6887	27,832	6887	27,832	100	2019-09-01 06:07:48
MDR Marrow Donor Registry India Mumbai	4131	38,598	4131	38,598	100	2019-08-12 08:07:23
The Arjan Vir Foundation	8196	709	8196	709	100	2019-08-08 19:50:26
King Faisal Specialist Hospital & Research Centre Stem Cell Donor Registry (KFSH&RC-UDR)	1810	20,358	1810	20,358	100	2019-07-26 11:50:31
TURKOK - Turkish Stem Cell Coordination Centre	3503	424,999	3503	424,999	100	2019-07-15 18:12:19
Bulgarian Bone Marrow Donor Registry	7197	1,592	7197	1,592	100	2019-07-12 14:06:56
Irish Unrelated Bone Marrow Registry	5590	21,603	5590	21,603	100	2019-06-07 13:20:34
HPC Registry (Samara)	9778	3,190	9778	3,190	100	2019-05-30 08:40:37
Bone Marrow Registry Nigeria	3034	924	3034	924	100	2019-05-20 11:50:17
Slovak National BMD Registry	1005	15,036	1005	15,036	100	2019-03-06 10:07:28
Blood and Bone Marrow Donor Registry of Istanbul Medical Faculty	5509	26,724	5509	26,724	100	2019-02-20 07:41:13