

Attualità nella gestione della raccolta di plasma e del suo utilizzo clinico

**Trend di fabbisogno di emocomponenti ed emoderivati in Italia
e in Europa**

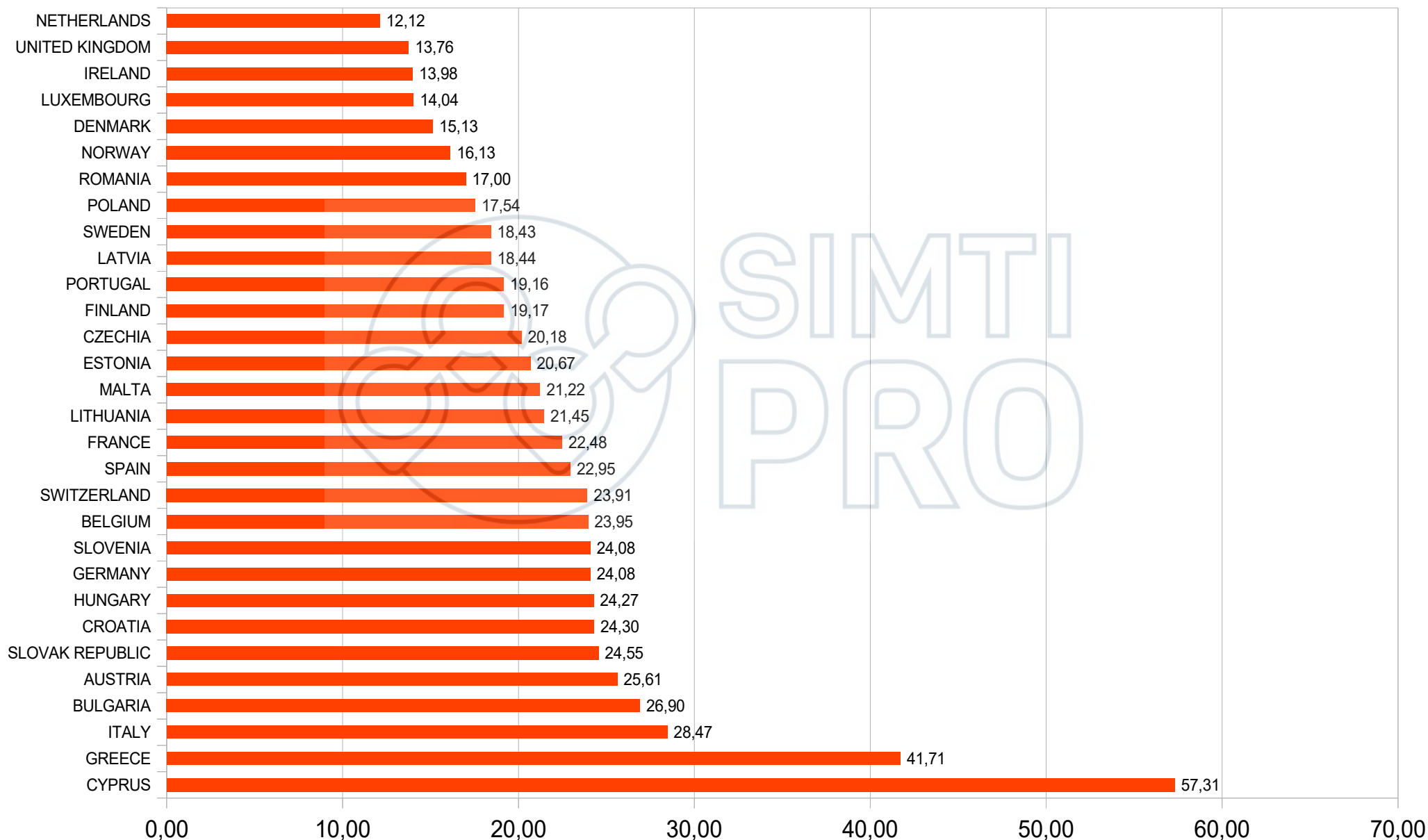
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Il sottoscritto, in qualità di Relatore, dichiara che

nell'esercizio della Sua funzione e per l'evento in oggetto, NON È in alcun modo portatore di interessi commerciali propri o di terzi; e che gli eventuali rapporti avuti negli ultimi due anni con soggetti portatori di interessi commerciali non sono tali da permettere a tali soggetti di influenzare le mie funzioni al fine di trarne vantaggio.

EU Member States – Donors (/1.000 pop) 2023

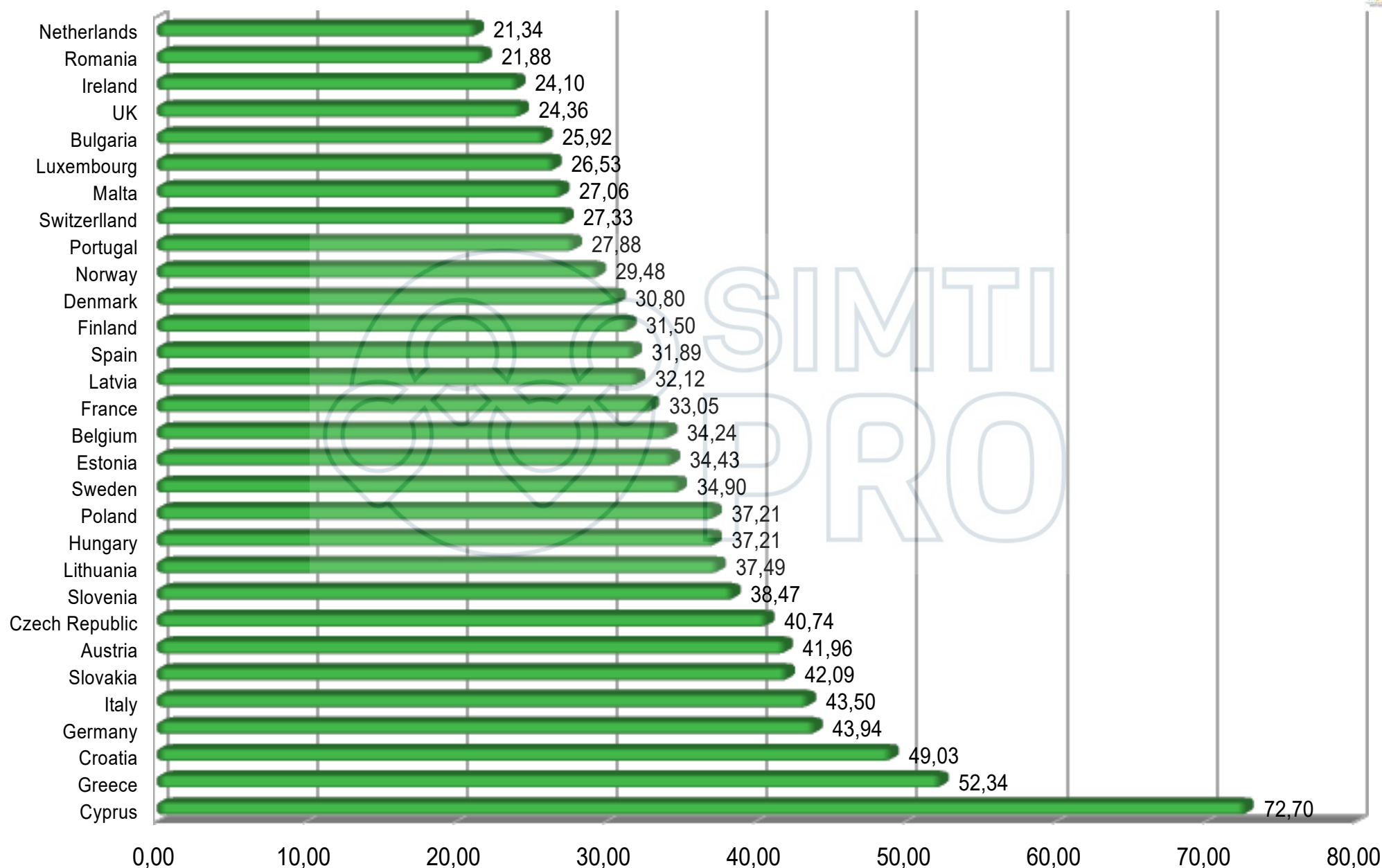


Quali sono i trend di evoluzione in Europa?

Questions on donors	Positive trend	No trend	Negative trend	Likelihood of an overall trend*	Relative change per year
B01: What was the total number of donors who donated at least once during the year?	46%	27%	27%	99%	1.1% (0.5%, 2.0%)
B02: What was the total number of first-time donors?	57%	27%	16%	100%	3.4% (1.6%, 4.7 %)
B02a: The proportion of first-time donors	46%	22%	32%	93%	1.5% (0.1%, 3.1%)

Source : The collection, supply and use of BLOOD AND BLOOD COMPONENTS in Europe 2020-2023 report EDQM Council of Europe – Strasbourg France, 2025

EU Whole blood donations (/1.000 pop) 2023



Questions on donations	Positive trend	No trend	Negative trend	Likelihood of an overall trend*	Relative change per year
C01: What was the total number of whole blood units collected?	59%	14%	27%	100%	2.1% (0.8%, 2.9%)
C02: What was the total number of red cell apheresis units collected?	14%	63%	23%	77% (-)	-2.4% (-14.5%, 1.4%)
C03: What was the total number of plasma apheresis units (or volume in litres) collected?	23%	46%	31%	23% (-)	-0.3% (-4.0%, 2.4%)
C04: What was the total number of platelet apheresis units collected?	53%	14%	33%	100%	2.1% (0.4%, 4.1%)
C05: What was the total number of granulocyte apheresis units collected?	9%	69%	23%	95% (-)	-11.4% (-32.3%, 0.0%)

Questions	Positive trend	No trend	Negative trend	Likelihood of an overall trend*	Relative change per year
D01: What was the total number of red cell units prepared and available for transfusion?	54%	16%	30%	98%	1.9% (0.5%, 2.8%)
D02: What was the total number of platelet units prepared and available for transfusion?	68%	16%	16%	100%	2.6% (2.0%, 3.4%)
D03: What was the total number of plasma (FFP) units prepared and available for transfusion?	32%	19%	49%	24% (-)	-0.3% (-2.1%, 0.9%)

Questions	Positive trend	No trend	Negative trend	Likelihood of an overall trend*	Relative change per year
E01: What was the total number of red cell units transfused?	43%	32%	24%	97%	1.4% (0.4%, 2.4%)
E02: What was the total number of platelet units transfused?	59%	19%	22%	100%	2.6% (1.3%, 3.4%)
E03: What was the total number of plasma (FFP) units transfused?	27%	22%	51%	96% (-)	-2.3% (-3.8%, -1.1%)
E07: How many litres of plasma were collected in your country and supplied for fractionation into plasma-derived medicinal products (PDMP)?	40%	37%	23%	96%	1.3% (0.0%, 2.7 %)

Where information on the number of units transfused was not available, the number of units issued or distributed was provided by the MS instead.

C01: What was the total number of whole blood units collected?

Country	2020	2021	2022	2023	Graphs	Trend probability
ALBANIA	29 848	34 738	23 029	24 198		-25%
AUSTRIA	348 778	364 509	389 497	385 934		67%
BELGIUM	425 982	427 300	414 276	407 598		-67%
BOSNIA AND HERZEGOVINA	1 597		100 788	108 229		67%
BULGARIA	148 483	156 893	166 883	171 673		92%
CROATIA	171 734	186 035	187 021	189 979		92%
CYPRUS			69 374	71 243		0%
CZECHIA	411 200	426 800	443 000	444 429		92%
DENMARK	200 724	193 967	204 017	184 584		-25%
ESTONIA	49 048	48 348	47 443	47 170		-92%
FINLAND	188 294	185 326	181 406	177 550		-92%
FRANCE	2 421 930	2 410 279	2 255 525	2 268 672		-67%
GERMANY	3 671 838	3 703 384	3 575 895	3 672 317		0%

C01: What was the total number of whole blood units collected?

Country	2020	2021	2022	2023	Graphs	Trend probability
GREECE	504 316	523 725	343 369	544 827		25%
HUNGARY	326 310	330 820		354 984		67%
ICELAND	9 862	10 454	11 281	10 830		67%
IRELAND	123 304	128 895	131 128			67%
ITALY	2 438 349	2 566 235	2 555 886	2 563 717		25%
LATVIA	51 100	56 200	57 450	59 649		92%
LITHUANIA	89 825	95 635	101 609	108 375		92%
LUXEMBOURG	18 617	18 947	18 094			0%
MALTA	15 306	15 832	16 112	15 538		25%
REPUBLIC OF MOLDOVA	48 229	51 066	54 690	59 821		92%
MONTENEGRO	16 747	20 299	20 723	20 344		67%
NORTH MACEDONIA	44 337	50 906	53 955	56 431		92%
NORWAY	165 765	167 112	155 401	164 901		-25%

C01: What was the total number of whole blood units collected?

Country	2020	2021	2022	2023	Graphs	Trend probability
POLAND	1 115 944	1 260 908	1 302 920	1 357 952		92%
PORTUGAL	282 406	304 611	306 796	299 713		25%
ROMANIA	313 843	377 102	405 682	416 549		92%
SERBIA	58 327	65 535	206 107	219 628		92%
SLOVAK REPUBLIC	199 961	198 650	216 165	228 081		67%
SLOVENIA	75 638	81 860	82 075	81 976		67%
SPAIN	1 549 867	1 622 610	1 616 913	1 564 886		0%
SWEDEN	370 971	381 399	369 979	369 535		-67%
SWITZERLAND	249 385	251 479	248 316	246 034		-67%
THE NETHERLANDS	411 518	407 203	393 987	384 998		-92%
TURKIYE				2 599 612		
UNITED KINGDOM	1 649 057	1 719 630	1 716 516	1 696 308		0%

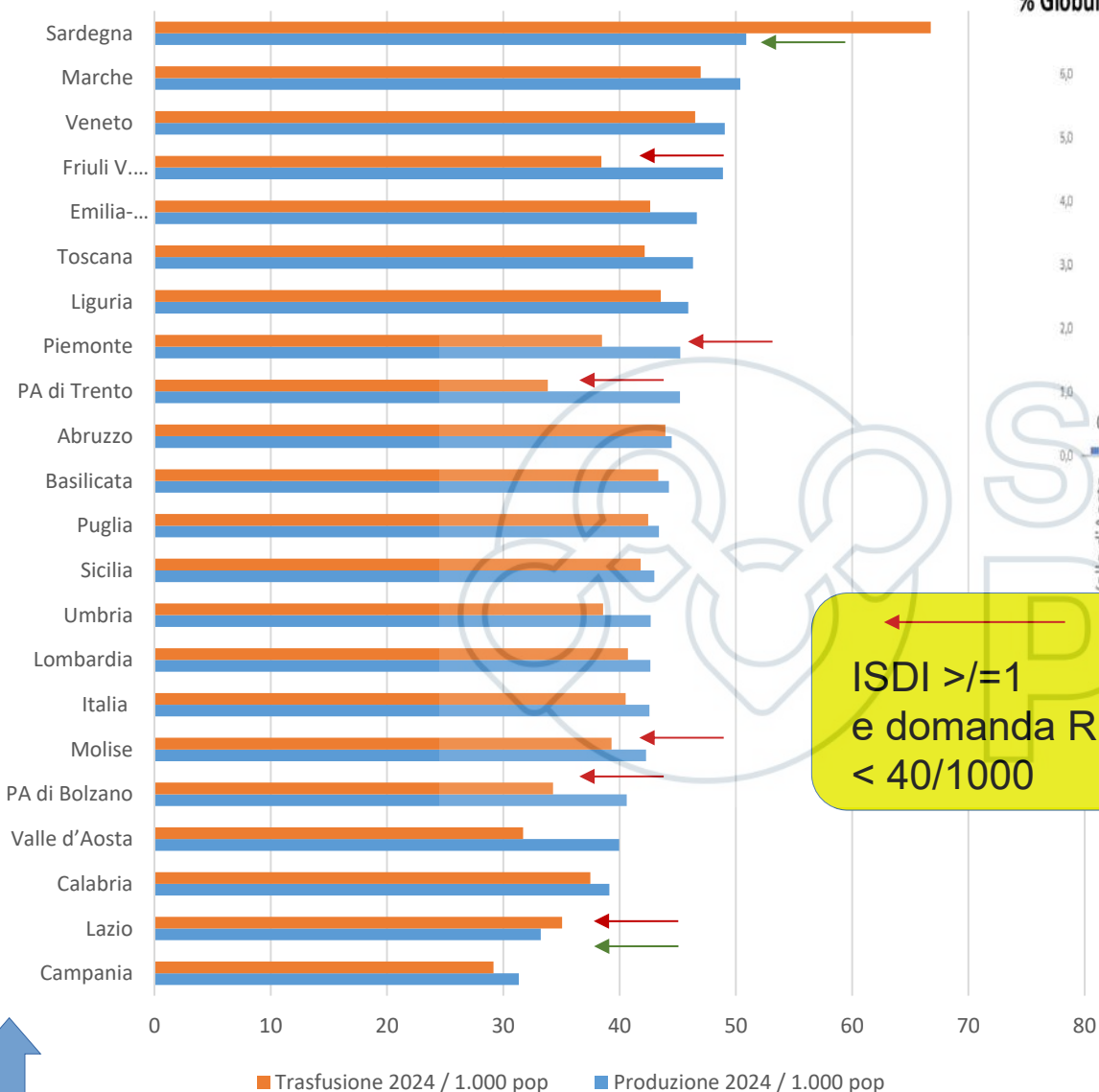
Country	2023 RBC Transfused		Trend probability	Rate of RBC Transfusion (/1000 population)
ROMANIA	395.910	Distributed	25%	20,8
THE NETHERLANDS	379.149	Distributed	-92%	21,0
IRELAND*	125.135	Distributed	67%	23,0
UNITED KINGDOM	1.606.018	Distributed	25%	23,1
SWITZERLAND*	211.546	Distributed	-25%	23,5
MALTA	13.577	Transfused	0%	23,6
NORWAY	147.944		0%	26,4
PORTUGAL	284.965	Transfused	0%	26,5
BULGARIA	171.384	Distributed	92%	26,6
LUXEMBOURG*	18.710	Transfused	0%	27,4
DENMARK	175.021	Transfused	-67%	29,2
FINLAND	165.861	Distributed	-67%	29,4
SPAIN	1.460.973	Transfused	0%	29,8
AUSTRIA	274.407	Transfused	67%	29,8
FRANCE	2.125.252	Issued	-67%	31,0
ESTONIA	42.549	Transfused	-92%	31,1
LATVIA	57.724	Distributed	92%	31,1
SLOVAK REPUBLIC	169.237	Issued	0%	31,2
BELGIUM	378.896	Transfused	-67%	31,8
SWEDEN	350.677	Transfused	-25%	33,1
POLAND	1.297.010	Issued	92%	35,5
HUNGARY	346.929	Transfused	0%	36,4
SLOVENIA	79.809	Issued	67%	37,5
CZECHIA	410.640	Issued	25%	37,6
LITHUANIA	112.062	Issued	92%	38,8
GERMANY	3.343.673	Issued	67%	40,0
ITALY	2.392.289	Transfused	0%	40,6
GREECE	432.184		-25%	41,5
CROATIA	165.313		0%	42,7
CYPRUS	71.798	Transfused	0%	73,3

Nr of countries with a positive trend: 22 (59%); No trend: 7 (19%); Negative trend: 8 (22%) - *2022 data

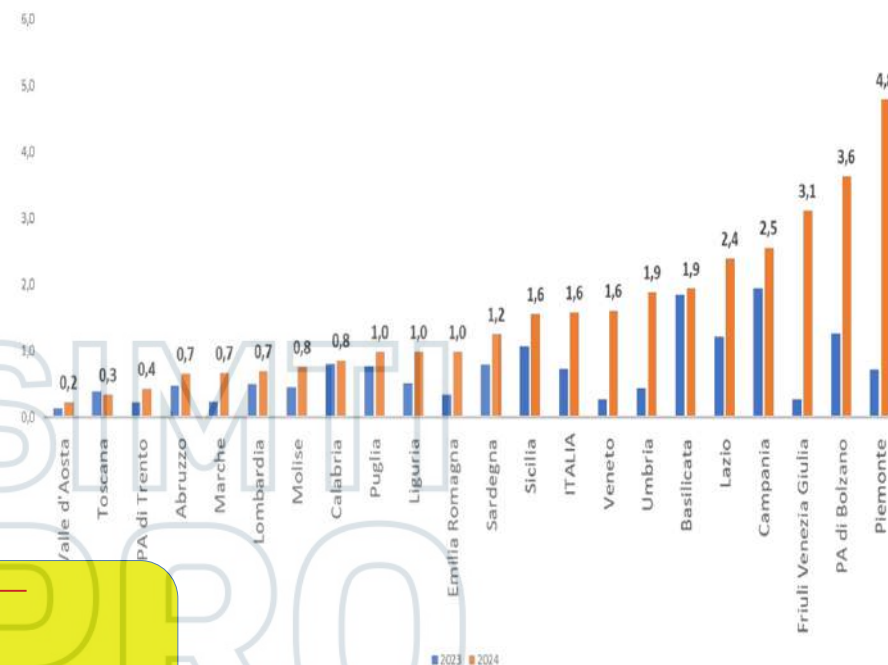
Red cell transfusion in 2023 and trend probability on the basis of 2020 – 2023 evolution: overall significant positive trend (97 % probability) in the number of red cell units transfused during the reporting period of 1.4 %

Produzione e domanda di trasfusione eritrocitaria (x 1.000 pop) 2024 (rolling year)

Data Source: elaborazione su dati consultazione plenaria 2025
<https://www.centronazionale sangue.it/consultazione-plenaria-maggio-2025/>



% Globuli Rossi (GR) non utilizzati per scadenza rispetto ai globuli rossi disponibili anni 2023-2024



ISDI >=1
e domanda RBC
< 40/1000

Nel 2024 in molte regioni una raccolta troppo eccedentaria rispetto ai fabbisogni si è associata a eliminazione di globuli rossi per scadenza.

Domanda di trasfusione eritrocitaria in Italia:
40,5 U/1.000 pop (con Sardegna)
39,8 U/1.000 pop (senza Sardegna)



**40 unità di sangue intero/1.000 ab/anno:
ancora valido ???**

**Unità di GR utilizzate per Regione
gennaio-giugno 2024-2025**

	2024	2025	DELTA %	DELTA VALORI ASSOLUTI
Valle d'Aosta	2.310	2.117	-8,4	-193
Piemonte	94.044	91.819	-2,4	-2.225
Liguria	38.799	38.827	0,1	28
Lombardia	239.931	235.870	-1,7	-4.061
PA di Trento	10.284	10.776	4,8	492
PA di Bolzano	10.488	10.233	-2,4	-255
Friuli-V.G.	26.732	26.677	-0,2	-55
Veneto	132.149	125.526	-5,0	-6.623
Emilia-Romagna	113.921	110.727	-2,8	-3.194
Toscana	91.190	83.171	-8,8	-8.019
Umbria	19.702	22.052	11,9	2.350
Marche	40.915	40.383	-1,3	-532
Lazio	117.520	120.122	2,2	2.602
Sardegna	61.995	62.653	1,1	658
Abruzzo	32.583	32.553	-0,1	-30
Campania	98.427	96.412	-2,0	-2.015
Molise	6.887	7.074	2,7	187
Puglia	97.039	97.919	0,9	880
Basilicata	13.751	12.785	-7,0	-966
Calabria	40.579	41.342	1,9	763
Sicilia	119.006	119.068	0,1	62
ST Forze Armate	291	230	-21,0	-61
TOTALE ITALIA	1.408.543	1.388.336	-1,4	-20.207

**Unità di GR prodotte e unità di GR utilizzate per Regione,
gennaio-giugno 2025**

	<u>Prodotte</u>	<u>Utilizzate</u>	DELTA %	DELTA VALORI ASSOLUTI
Valle d'Aosta	2.778	2.117	-23,8	-661
Piemonte	109.090	91.819	-15,8	-17.271
Liguria	39.882	38.827	-2,6	-1.055
Lombardia	246.357	235.870	-4,3	-10.487
PA di Trento	14.082	10.776	-23,5	-3.306
PA di Bolzano	11.508	10.233	-11,1	-1.275
Friuli-V.G.	32.651	26.677	-18,3	-5.974
Veneto	135.315	125.526	-7,2	-9.789
Emilia-Romagna	117.389	110.727	-5,7	-6.662
Toscana	95.892	83.171	-13,3	-12.721
Umbria	21.219	22.052	3,9	833
Marche	43.075	40.383	-6,2	-2.692
Lazio	113.189	120.122	6,1	6.933
Sardegna	44.346	62.653	41,3	18.307
Abruzzo	32.052	32.553	1,6	501
Campania	100.680	96.412	-4,2	-4.268
Molise	7.123	7.074	-0,7	-49
Puglia	95.851	97.919	2,2	2.068
Basilicata	12.922	12.785	-1,1	-137
Calabria	40.848	41.342	1,2	494
Sicilia	119.360	119.068	-0,2	-292
ST Forze Armate	551	230	-58,3	-321
TOTALE ITALIA	1.436.160	1.388.336	-3,3	-47.824

Plasma units transfused

- There was a statistically significant negative trend (96 % trend probability) in the number of plasma units transfused during the reporting period of 2.3% (-3.8%, -1.1%).
- A consistent increase was observed in Norway and Serbia, and a consistent decrease in five MS: Belgium, Czechia, Malta (3×), Slovenia and Spain.
- The highest number of plasma units was transfused in Türkiye (1 306 468) and no units were transfused in Ireland or Finland (in 2020 only, and an average of 102 units only in the other reporting years).

Summary - Blood components

A positive trend in Europe was found in (the median relative change per year is given in brackets):

- the number of donors who donated at least once during the year (+1.1% per year)
- the number of first-time donors (+3.4% per year)
- the number of whole blood units collected (+2.1% per year)
- the number of red cell units prepared and available for transfusion (+1.9% per year)
- the number of red cell units transfused (+1.4% per year)

A statistically significant negative trend was found for the number of plasma (FFP) units transfused (-2.3% per year).

Plasma per produzione MPD - 2024

Più di 90 ML di litri di plasma per frazionamento raccolti nel 2024 (nel 2023 85 ML, già +19% rispetto al 2022)

67 % Nord America, 12% Europa, 19% Asia & Pacific, resto del mondo 2%

Aumento del plasma da aferesi: 12%

Aumento del Plasma da separazione da Sangue Intero (SI) 4,4% (si tratta di Paesi che in precedenza non lo producevano, non è aumento di raccolta di SI)

EU 2024 10 ML di litri

Commerciale, aferesi 47%, Non commerciale aferesi 15%

Commerciale da SI 3%, Non commerciale da SI 35%

La Grecia e la Slovacchia hanno annunciato di voler entrare nel mercato della raccolta a pagamento

Country	2020	2021	2022	2023	Trend probability
AUSTRIA	452.565	424.367	486.488	588.643	67%
BELGIUM	226.290	230.200	223.190	228.584	0%
BULGARIA	13.560	14.728	13.908	15.650	67%
CROATIA	26.566	26.711	28.625	28.306	67%
CYPRUS			0	0	0%
CZECH REPUBLIC	754.500	882.500	1.015.200	1.112.049	92%
DENMARK	101.660	102.386	118.304	124.126	92%
ESTONIA	12.741	12.772	12.353	12.358	-25%
FINLAND	52.344	49.882	49.500	48.555	-92%
FRANCE	861.423	840.923	782.041	827.631	-67%
GERMANY	2.855.850	2.971.148	3.083.583	3.349.417	92%
GREECE					
HUNGARY	78.813	76.991		85.201	0%
IRELAND	0	0	0		0%
ITALY	823.179	839.870	822.734	857.888	25%
LATVIA	10.103	7.274	5.331	8.350	-25%
LITHUANIA			25.000	26.000	0%
LUXEMBOURG	6.488	6.125	5.830		-67%
MALTA	0	0	0	0	0%
NORWAY	51.688	44.778	0	0	-83%
POLAND	272.551	271.148	291.842	268.281	-25%
PORTUGAL	15.000	15.000	15.000	60.000	50%
ROMANIA	0	0	0		0%
SLOVAK REPUBLIC	43.785	24.783	43.432	52.622	25%
SLOVENIA	15.613	18.836	21.879	19.147	67%
SPAIN	384.847	407.857	412.980	418.196	92%
SWEDEN	148.791	165.368	97.238	91.051	-67%
SWITZERLAND	58.226	56.629	68.932	58.758	25%
THE NETHERLANDS	338.966	366.847	355.420	364.107	25%
UNITED KINGDOM	0	0	69.400	134.941	83%

A positive trend in Europe was found in the litres of plasma that were collected and supplied for fractionation into PDMPs (+ 1.3% per year)

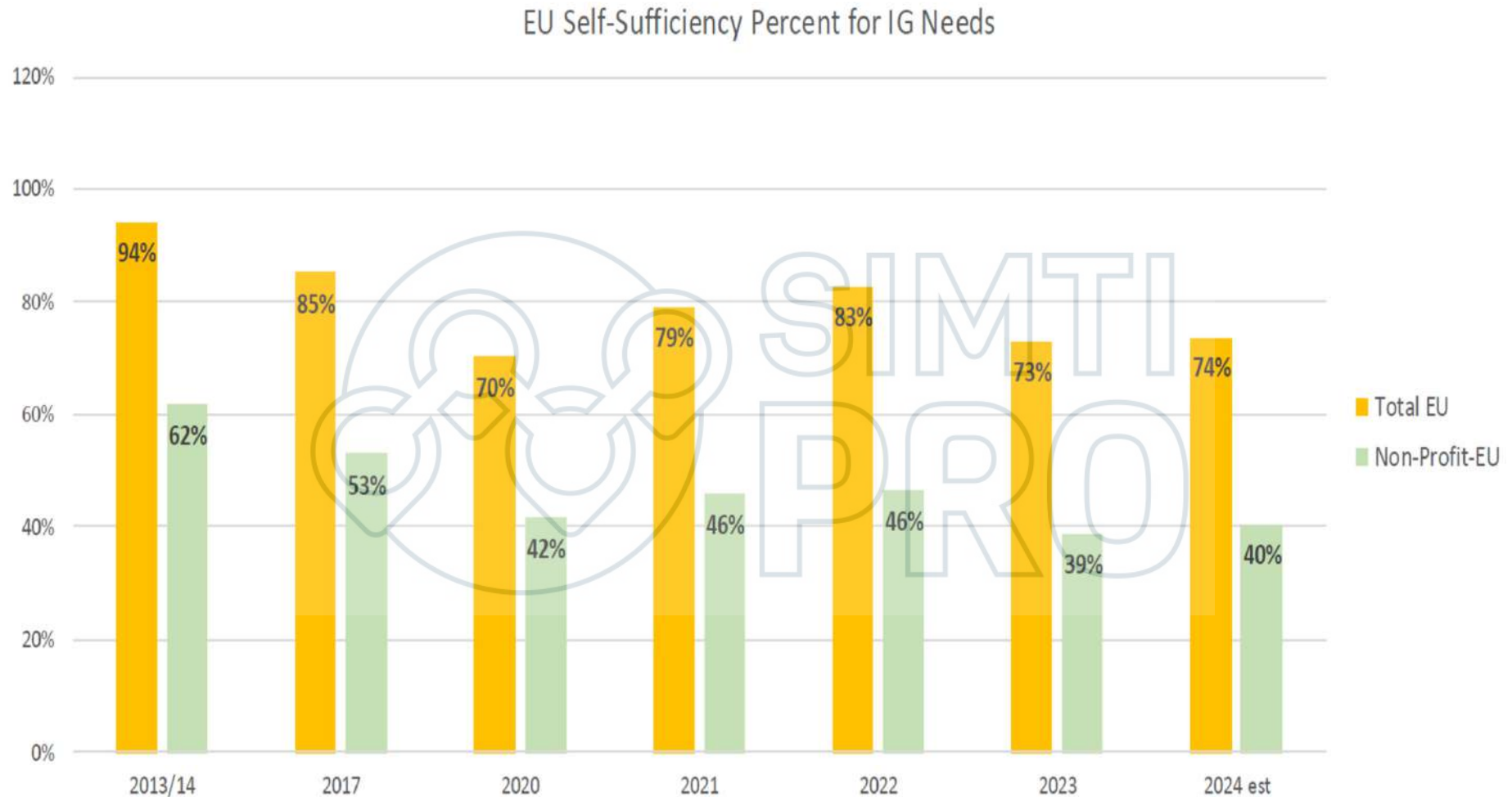
C03: What was the total number of plasma apheresis units (or volume in litres) collected?

Country	2020		2021		2022		2023		Graphs	Trend probability
	Amount	Units	Amount	Units	Amount	Units	Amount	Units		
ALBANIA							0			
AUSTRIA*	236 493	units	28	units	396 266	litres	503 826	litres		0%
BELGIUM	187 204	units	182 587	units	175 321	units	185 083	units		-25%
BOSNIA AND HERZEGOVINA	0				0		0			0%
BULGARIA	2 441	units	4 086	units	1 281	units	708	units		-67%
CROATIA	4 697	units	4 609	units	5 042	units	5 042	units		50%
CYPRUS					53	units	44	units		0%
CZECHIA	671 500	litres	810 300	litres	963 000	litres	1 116 700	litres		92%
DENMARK*	89 581	units	95 816	units	78 036	litres	85 535	litres		0%
ESTONIA	8 425	units	7 778	units	6 806	units	8 382	units		-25%
FINLAND	137	units	309	units	8	units	2	units		-67%
FRANCE*	302 097	units	259 762	litres	243 346	units	329 296	units		0%
GERMANY	2 085 015	litres	2 177 419	litres	2 245 556	litres	2 482 918	litres		92%
GREECE					130 540		0			0%
HUNGARY	0		0				0			0%
ICELAND	54	units	91	units	58	units	128	units		67%
IRELAND	0		0		0					0%
ITALY	382 927	units	396 826	units	362 694	units	393 907	units		0%
LATVIA	3 609	units	300	units	12	units	1 401	units		-25%
LITHUANIA	380	units	555	units	184	units	150	units		-67%
LUXEMBOURG	2 194	units	2 449	units	2 195	units				0%
MALTA	1	units	13	units	13	units	0			0%
REPUBLIC OF MOLDOVA	32 974	units	31 835	units	34 690	units	33 396	units		25%
MONTENEGRO	0		0				0			0%
NORTH MACEDONIA	49	units	14	units	0	units	0	units		-83%
NORWAY	14 890	units	14 292	units	12 756	units	13 339	units		-67%
POLAND	208 895	units	301 285	units	291 207	units	96 379	units		-25%
PORTUGAL	789	units	1 233	units	217	units	1 068	units		0%
ROMANIA	2 712	units	1 826	units	327	units	160	units		-92%
SERBIA	1 864	units	2 184	units	145		0			-67%
SLOVAK REPUBLIC	40	units	280	units	7 000	units	18 415	units		92%
SLOVENIA	1 861	units	2 365	units	1 877	units	2 341	units		25%
SPAIN*	50 510	units	65 030	units	40 389	litres	109 311	units		67%
SWEDEN					13 519	litres				
SWITZERLAND*	886	litres	788	litres	16 899		1 213	units		0%
THE NETHERLANDS*	325 075	units	336 681	units	334 241	units	260 558	litres		0%
TURKIYE							0			
UNITED KINGDOM					9 458	litres	15 165	litres		0%

Plasma apheresis units/litres collected

- The number of plasma apheresis units collected appears to have remained rather stable over the reporting period, with a slight decline of 0.3% per year (95% CI: -4.0%, 2.4%).
- In four countries (Czechia, Germany, Slovakia and Spain (3×)) a consistent increase was observed. Germany was also the country that collected the highest number of litres of plasma apheresis (2 482 918 litres in 2023), whereas Italy collected the highest number of units (396 826 in 2021).
- Only North Macedonia and Romania showed a consistent decline in the number of plasma apheresis units collected.

Livelli di autosufficienza in plasma per Ig con (giallo) e senza (grigio) plasma commerciale



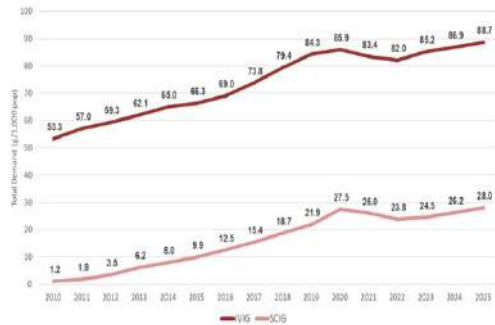
Note: IG Yield from 1 L of plasma:

Total EU: 4.5 grams for both non-profit and commercial

Non-Profit EU: 4.8 grams



National demand for polyvalent immunoglobulins, 2010-2025

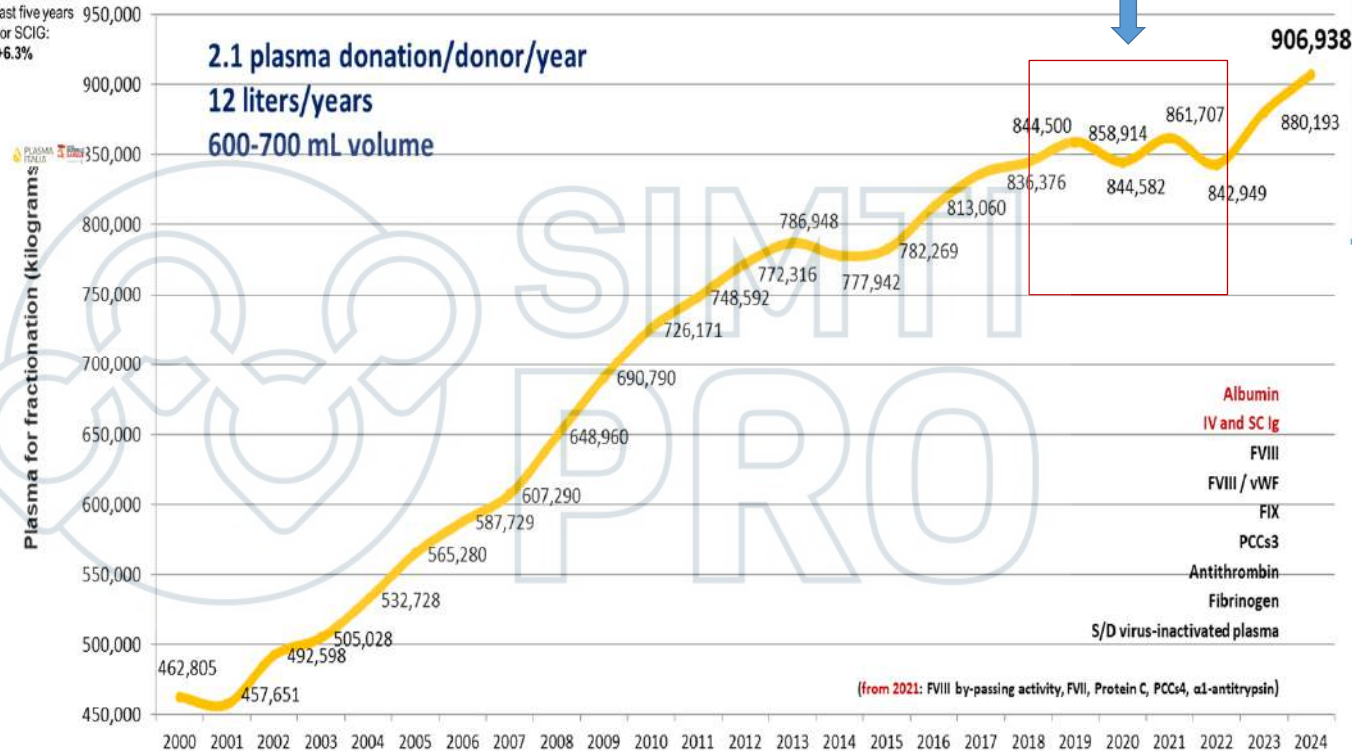


Mean Δ in the last five years for IVIg: **+1.5%**

Mean Δ in the last five years for SCIG: **+6.3%**

Data sources: Adapted by the Italian National Blood Centre on data from Fractionation industries, January 2025

COVID 19



$\Delta\%$ 2024 vs 2023= **+3%**

$\Delta\%$ 2024 vs 2015= **+16%**



18 Kg plasma/1000 abitanti/anno



mancano c.a 230.000 Kg

90 % domanda albumina



mancano c.a 419.000 Kg

90 % domanda Ig



mancano c.a 423.000 Kg



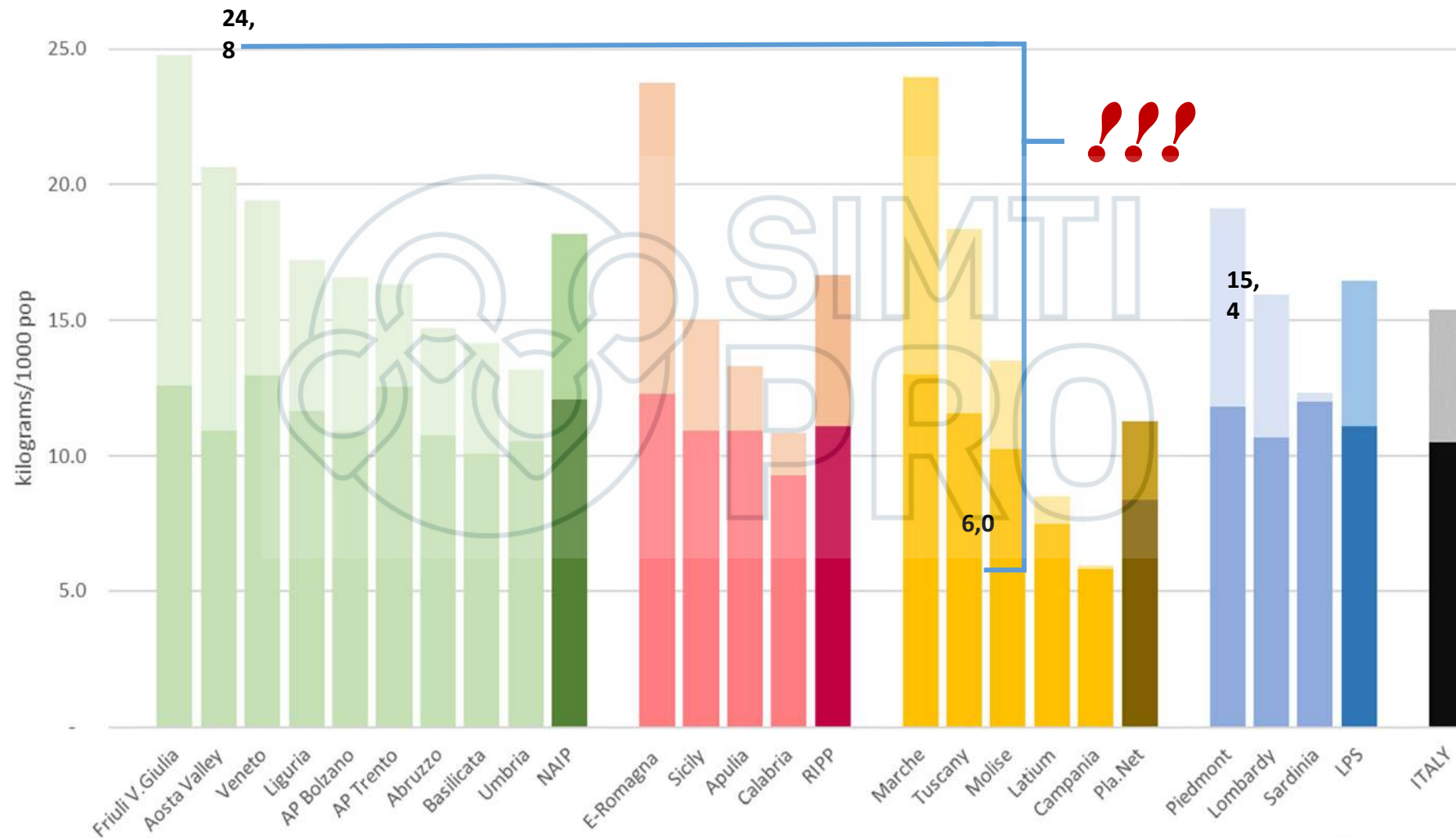
Napoli, 14 ottobre 2025



**Plasma prodotto per Regione
gennaio-giugno 2024-2025 (quantità espressa in kg)**

	2024	2025	DELTA %	DELTA VALORI ASSOLUTI
Valle d'Aosta	1.557	1.575	1,2	18
Piemonte	48.234	47.950	-0,6	-284
Liguria	14.828	16.350	10,3	1.522
Lombardia	94.327	96.888	2,7	2.561
PA di Trento	5.197	5.392	3,8	195
PA di Bolzano	5.344	5.043	-5,6	-301
Friuli-V.G.	17.716	17.257	-2,6	-459
Veneto	55.204	53.996	-2,2	-1.208
Emilia-Romagna	62.410	61.849	-0,9	-561
Toscana	40.234	38.224	-5,0	-2.010
Umbria	6.500	6.431	-1,1	-69
Marche	21.519	21.282	-1,1	-237
Lazio	28.711	30.799	7,3	2.088
Sardegna	11.734	10.823	-7,8	-911
Abruzzo	11.027	11.037	0,1	10
Campania	19.900	20.716	4,1	816
Molise	2.196	2.675	21,8	479
Puglia	30.205	31.032	2,7	827
Basilicata	4.218	4.724	12,0	506
Calabria	12.088	12.311	1,8	223
Sicilia	42.952	43.287	0,8	335
Min. Difesa	111	146	31,5	35
TOTALE ITALIA	536.212	539.787	0,7	3.575
Totale 2025 (proiezione)		925.349		
Plasma raccolto nel 2024		906.936		
Delta % rispetto al dato del 2024		2.0		

Plasma per frazionamento: Regioni, Accordi, Categoria 2024 (kg/1.000 pop)



Domanda Medicinali Plasmaderivati (MPD)

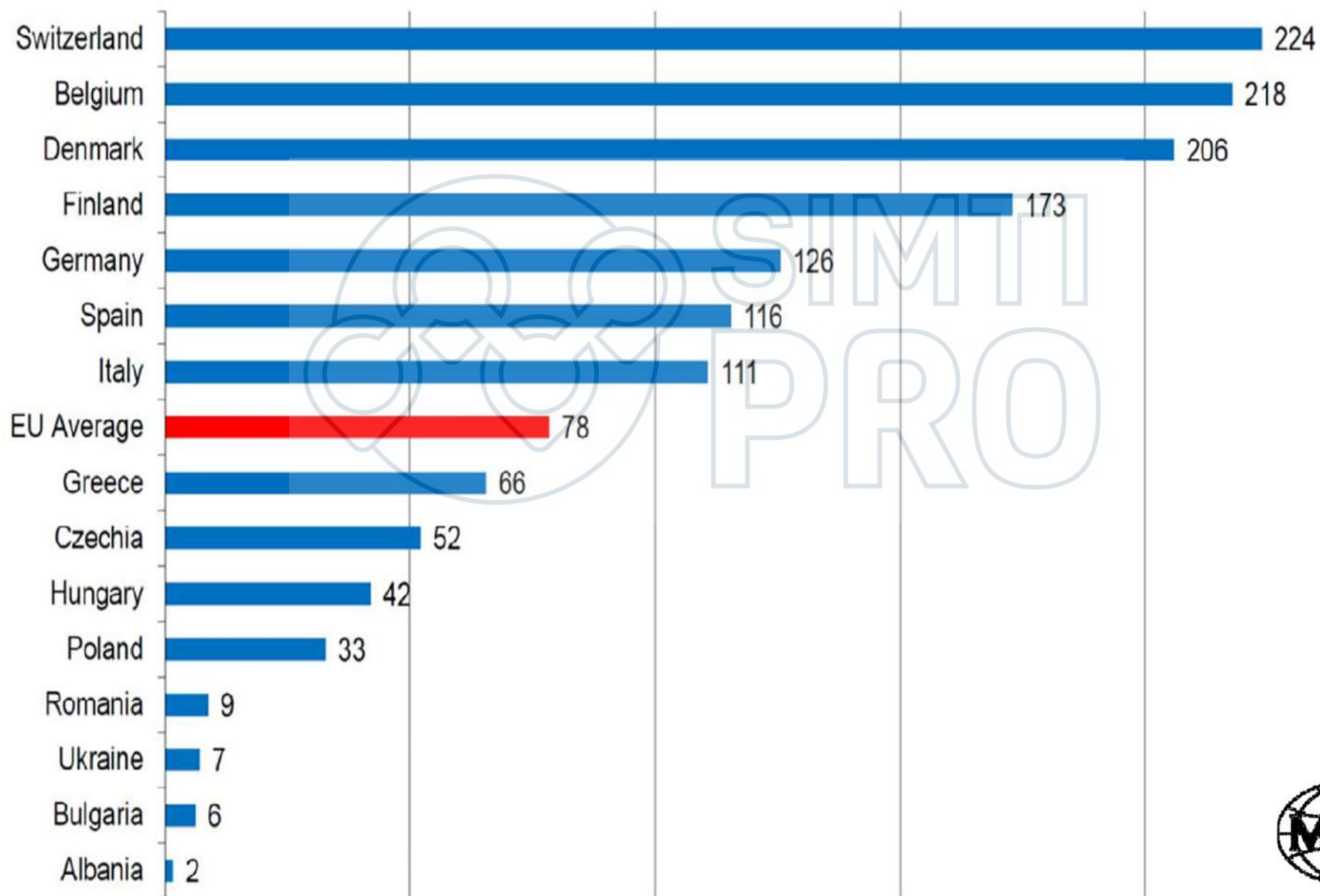
Nel 2023 **domanda di Immunoglobulina** circa 300 tonnellate, di cui quasi la metà in Nord America, un quarto in Europa  in Europa manca circa la metà del plasma necessario.

Si prevede fino al 2030 un **incremento di domanda medio del 6% annuo** (da 4,5 a 8%, dipende da regione); guidano la domanda le malattie neurologiche, le immunodeficienze primitive e le emergenti secondarie (per nuove terapie oncologiche e virosi emergenti (long COVID e Zika). Infine stanno sempre più crescendo i mercati emergenti.

Poichè l'incremento di domanda di Ig supporta il costo della raccolta, anche il costo del prodotto è destinato ad aumentare.

Anche la **domanda di albumina** è destinata a crescere: Albumina: Nord America, Europa e America Latina CAGR 3-4%, Asia & Pacific 6-7% per lo più Cina, Medio Oriente e Africa 6-7%

European average immunoglobulin consumption by country (2020) g/10³population



Key Insights on immunoglobulins

- The IgG segment dominated the revenue share in 2024 due to its essential role in providing immune protection for a wide range of immunodeficiency disorders, both primary and secondary.
- The secondary immunodeficiency segment is projected for substantial growth during the forecast period, driven by an aging population, increased chronic diseases, and rising use of immunosuppressive treatments.
- The hospitals segment led the market in 2024 owing to their advanced facilities, specialist expertise, and ability to handle complex treatment initiation and management; however, hospitals play a critical role in ensuring safe administration and guiding patients transitioning to home-based SCIG therapy.
- The Europe subcutaneous immunoglobulin (SCIG) market size is expected to grow at a CAGR of 9.0% from 2025 to 2034. Key factors driving demand include growing prevalence of primary immunodeficiency disorders (PID), favorable reimbursement policies and healthcare infrastructure, aging population and the rising chronic disease burden, and innovation in SCIG formulations and drug delivery technologies.

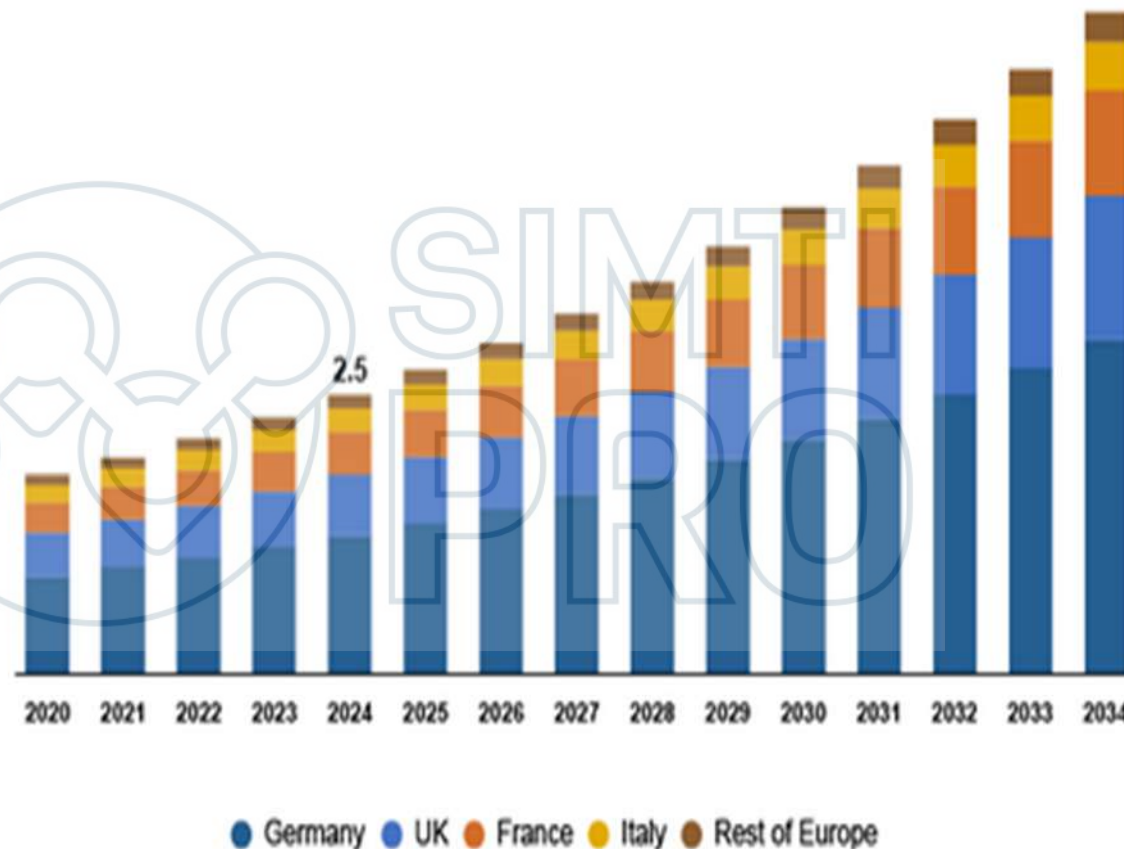
Europe Subcutaneous Immunoglobulin Market

Size, By Country, 2020 - 2034 (USD Billion)

The Europe subcutaneous immunoglobulin market is estimated to reach 5.9 billion by 2034

9.0%

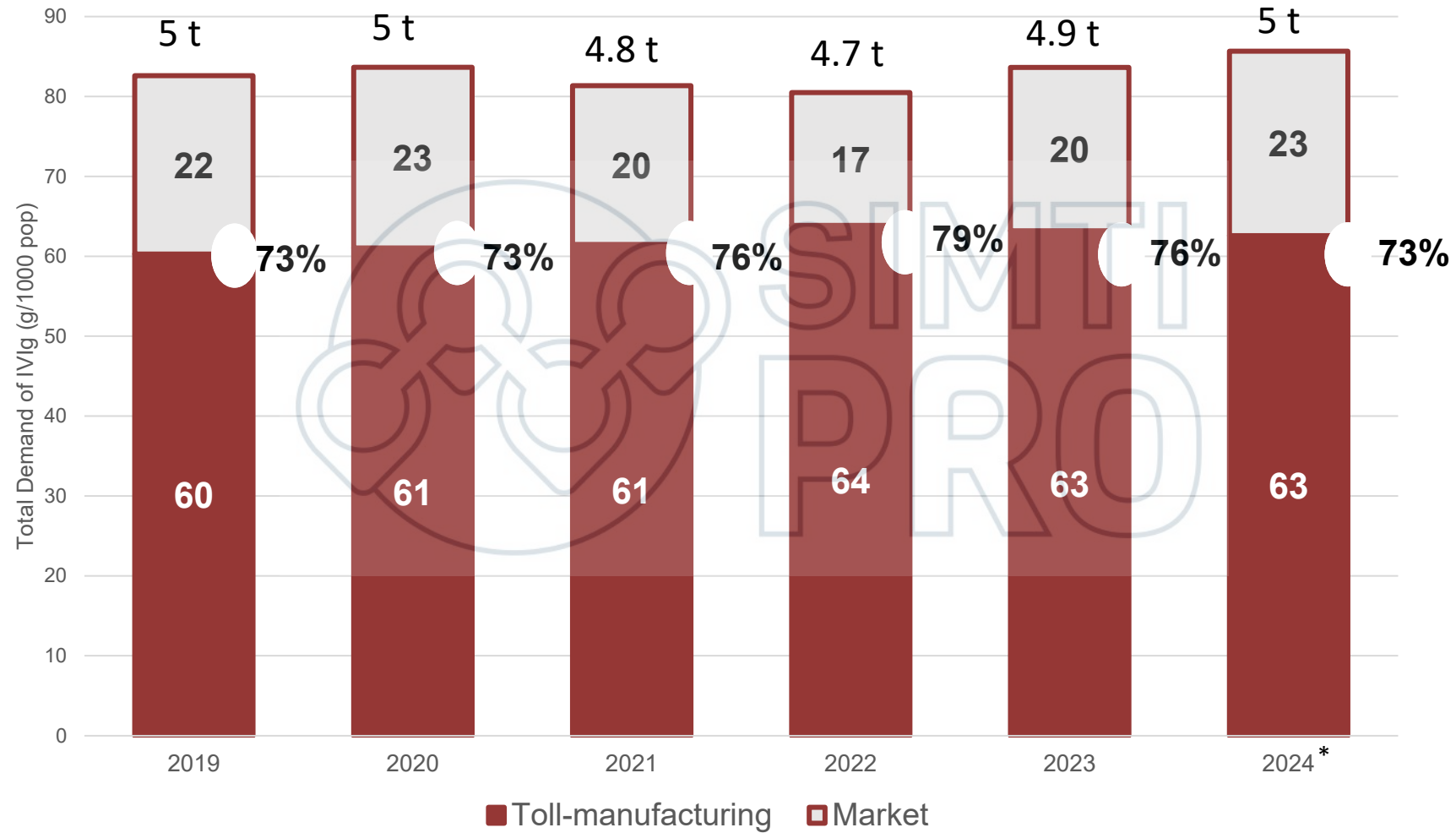
Europe Subcutaneous Immunoglobulin Market
CAGR 2025-2034



Source: www.polarismarketresearch.com

Note: The images shown are for illustration purposes only and may not be an exact representation of the data.

IVIg in Italy: 2019 – 2024



* Preliminary data

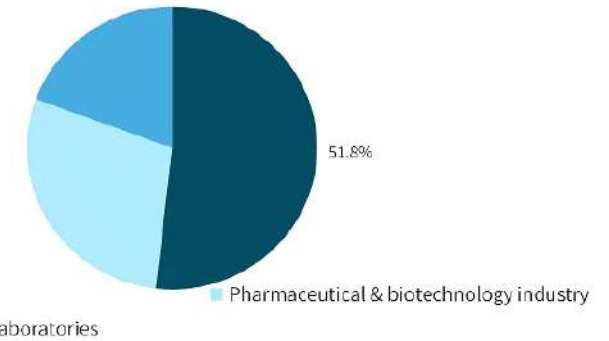
The value does not include High titre IVIg



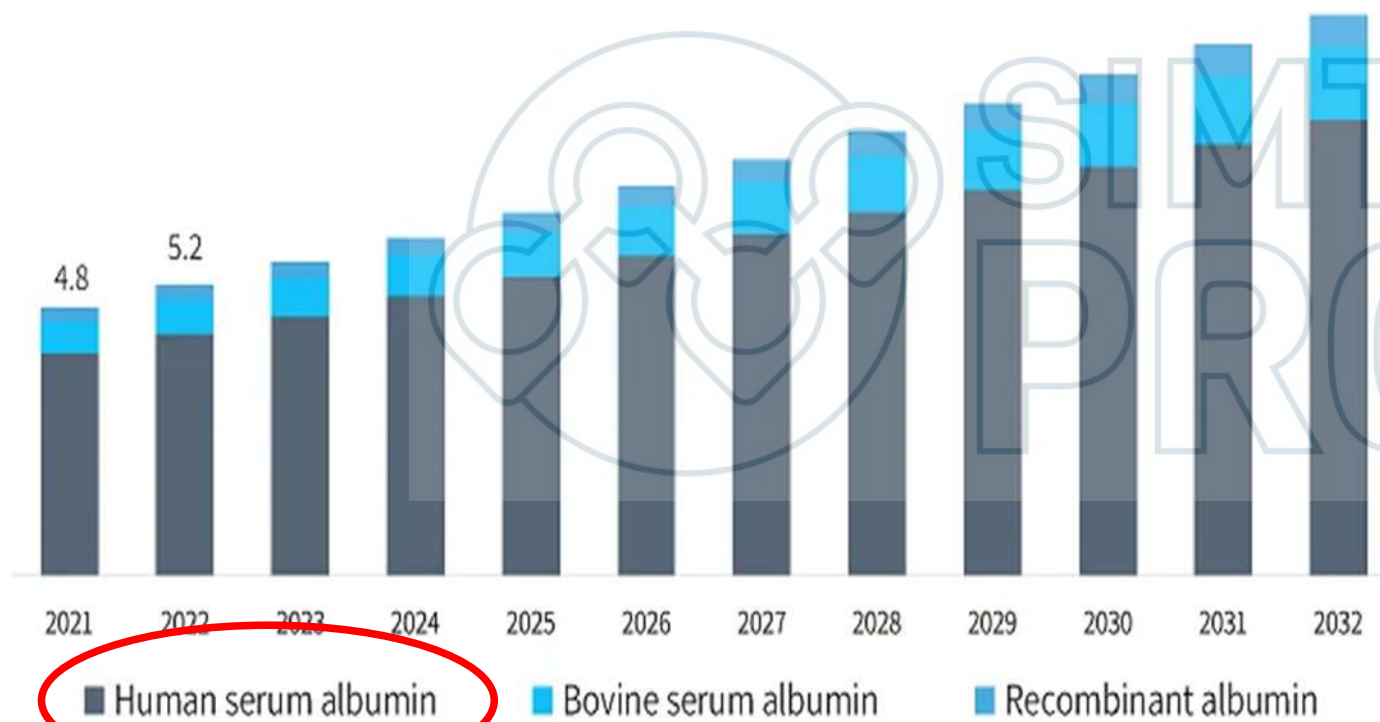
Dati Preliminari

Albumin Market, By Product, 2021 – 2032 (USD Billion)

Albumin Market, By End-user (2023)



Source: www.gminsights.com

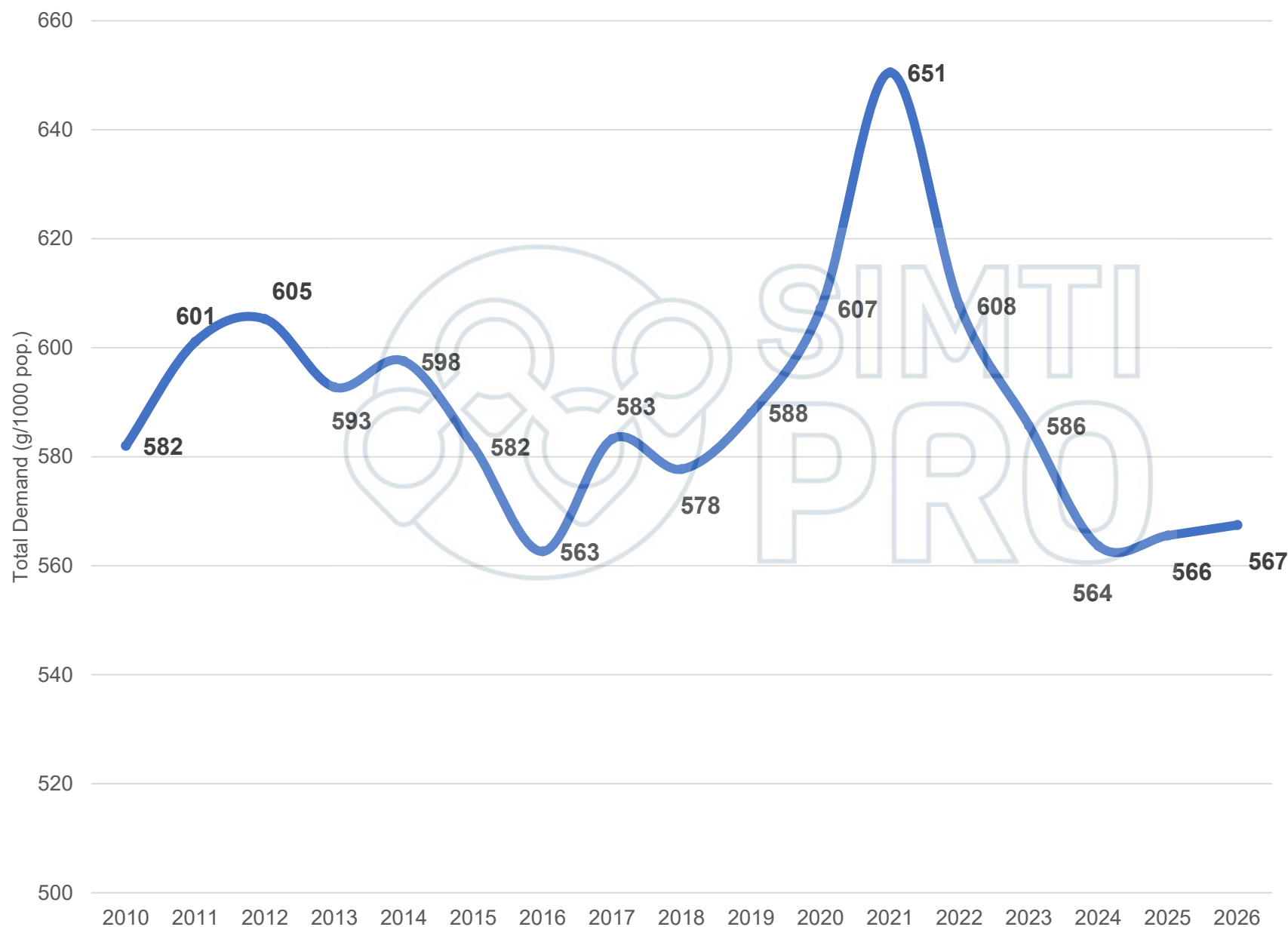


Source: www.gminsights.com

**More of half
market share
is on
Hospital &
Clinics
Setting**

Domanda nazionale di albumina

Trend 2010 – 2026

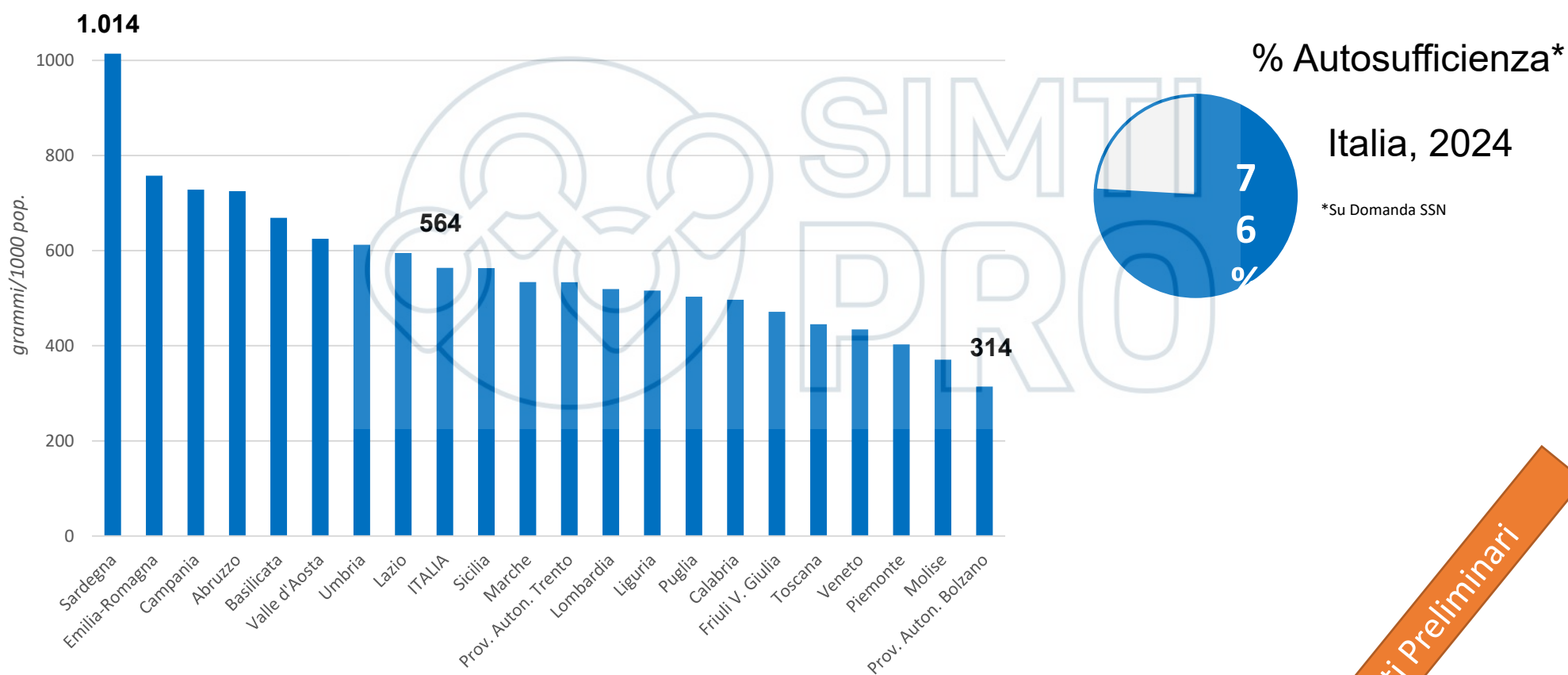


Δ media
2011-
2024=
-0,16%

Dati Preliminari



Albumina - Domanda totale: 2024



Stima della spesa sostenuta dal Servizio Sanitario Nazionale per l'acquisto sul mercato di Albumina **€ 21.388.850**

Dati Preliminari





China's National Medical Products Administration (NMPA) has approved the world's first plant-based human albumin

<https://flcube.com/?p=37663>

On July 18, 2025, the NMPA officially sanctioned Wuhan Healthgen Biotech's recombinant human albumin injection (rice, *Oryza Sativa* Recombinant Human Serum Albumin -OSrHSA-), as announced in an official statement. The product is specifically indicated for the treatment of hypoalbuminemia (≤ 30 g/L) associated with liver cirrhosis.

This approval represents the first global endorsement of a plant-based expression system for a large-molecule protein drug. The technology employs rice seeds as the expression platform, utilizing genetic engineering to prompt the rice to produce a recombinant protein. This protein closely mirrors the structure and function of natural human albumin.

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*Thank you
very
much for
your
attention*