

ASBM European Prescribers Survey

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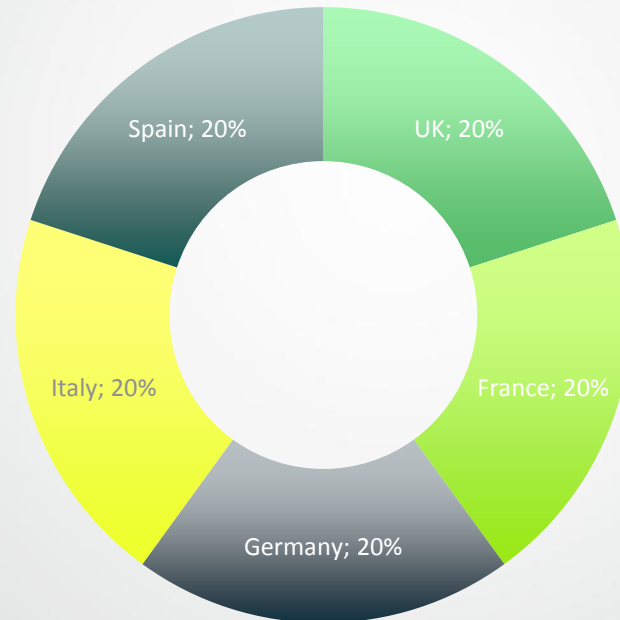
November, 2013

- 470 Prescribers were recruited from 5 countries in Western Europe
 - UK
 - France
 - Germany
 - Italy
 - Spain
- 15 minute web-based survey

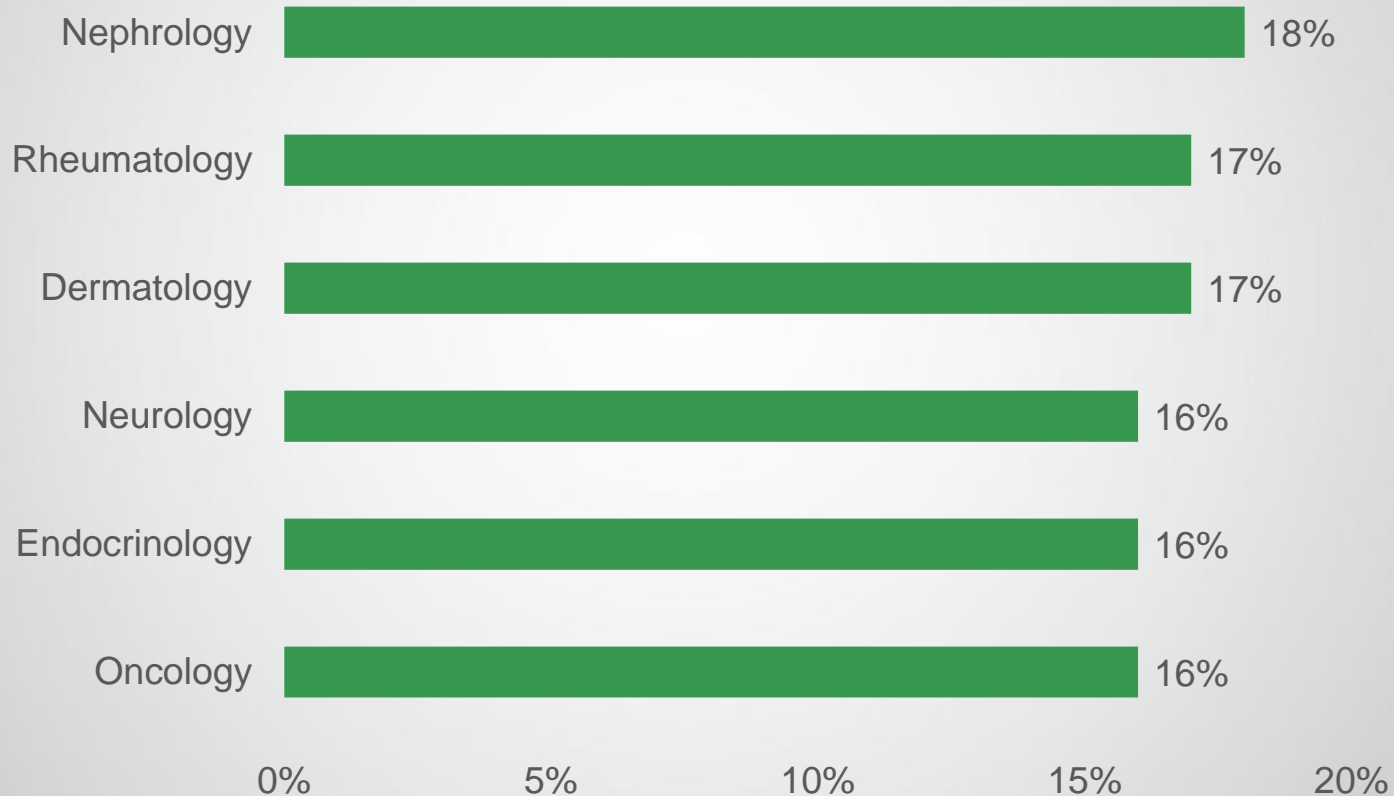
Demographic Data

SAMPLE CHARACTERISTICS

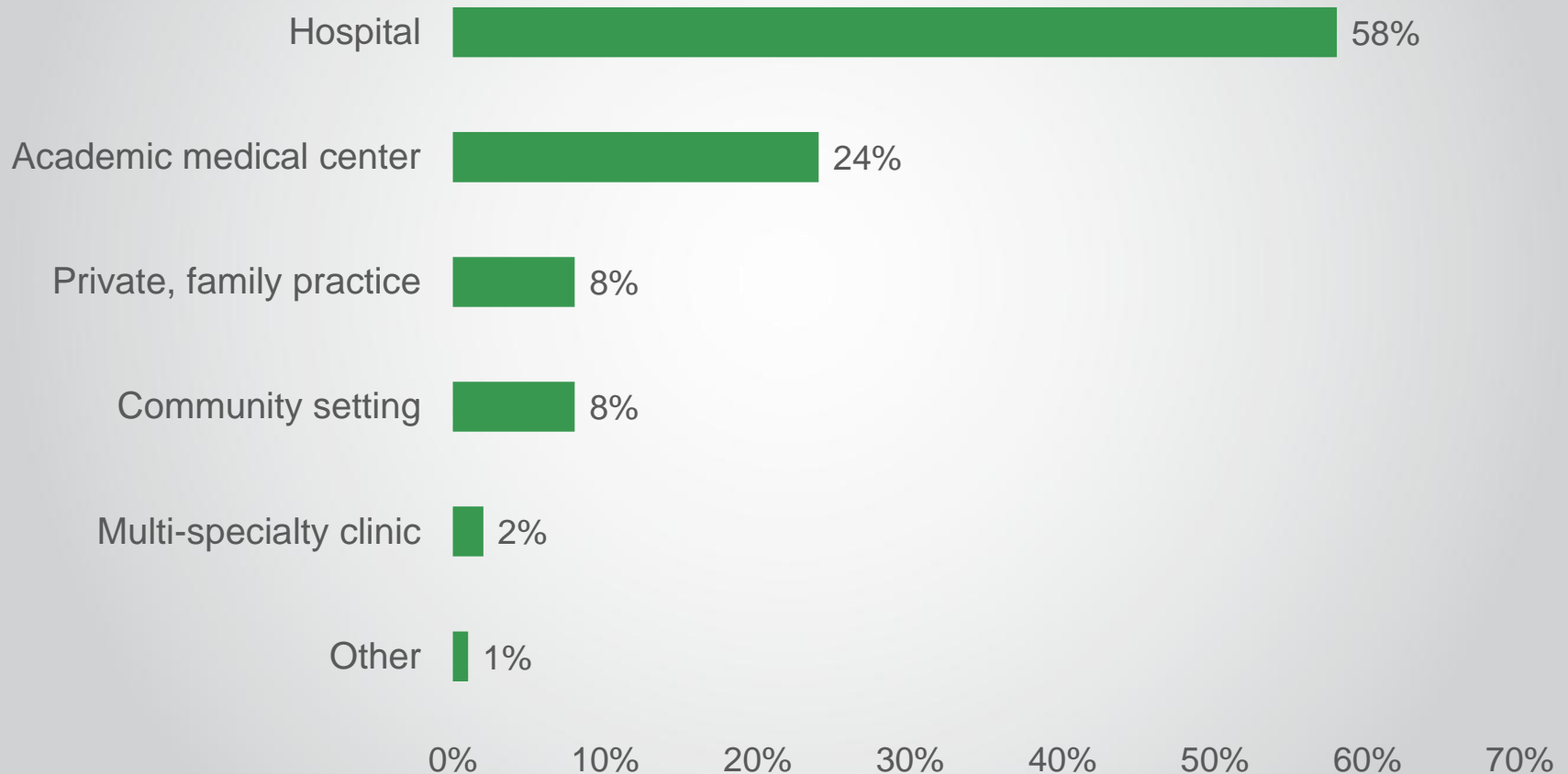
N=470



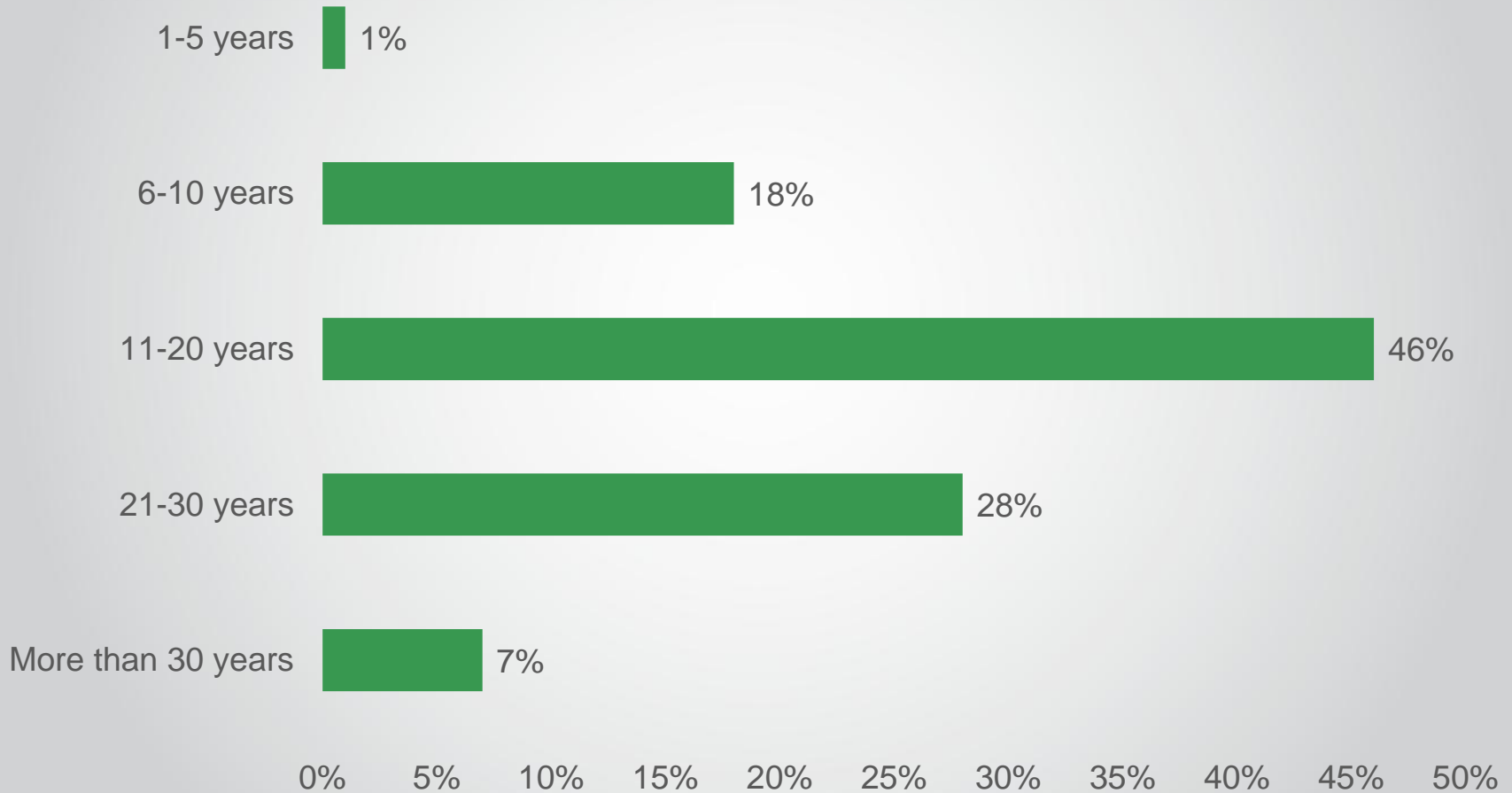
“Please indicate your primary practice area or therapeutic area in which you practice?” (N=470)



“Which of the following best describes the type of practice in which you work?” (N=470)

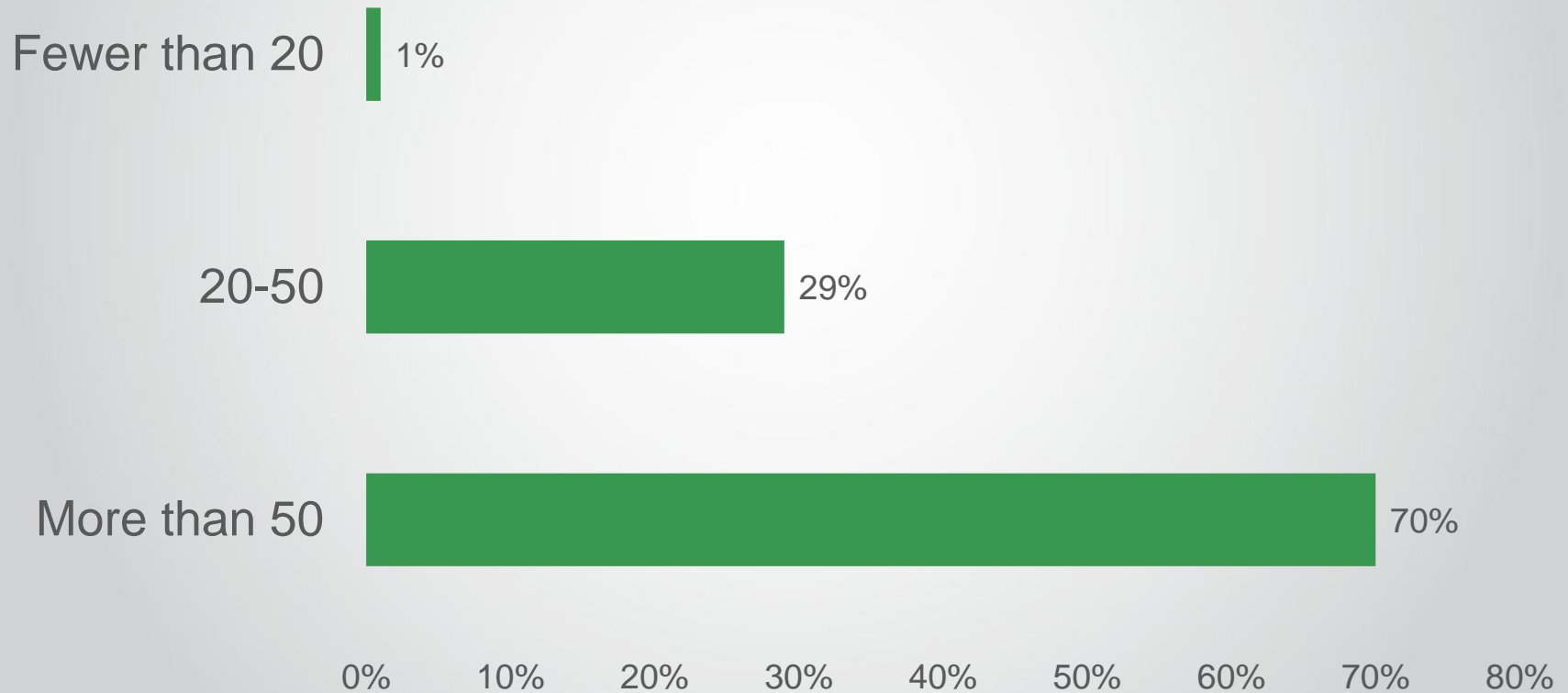


“How long have you been working in the healthcare sector?” (N=470)

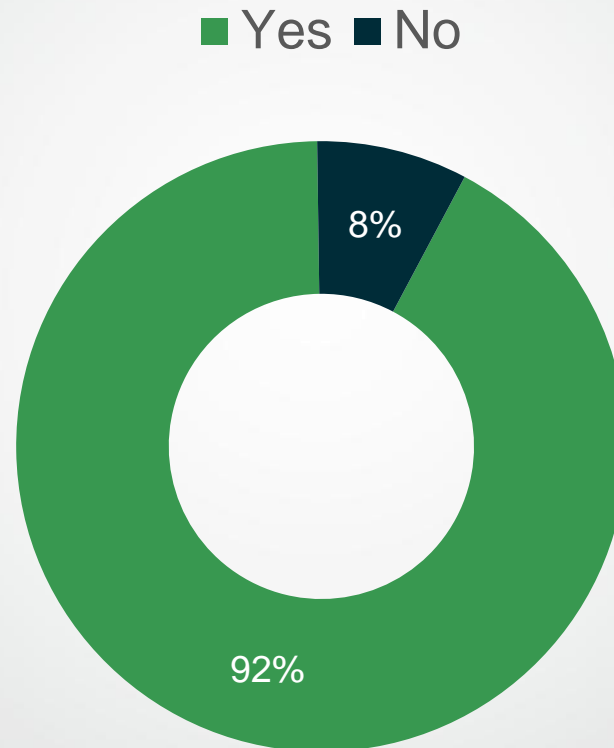


Average number of appointments

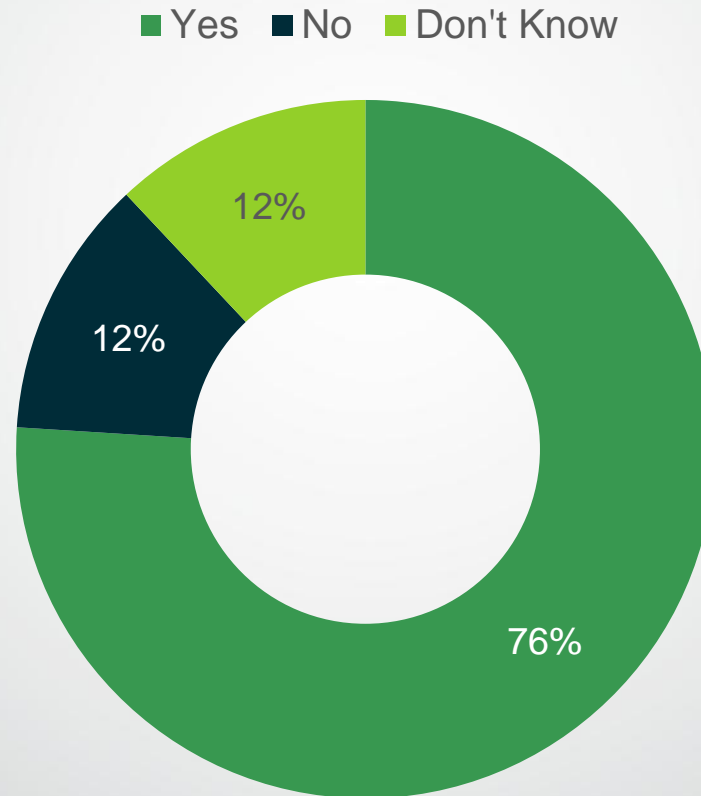
“On average, about how many patient appointments do you conduct per week?” (N=470)



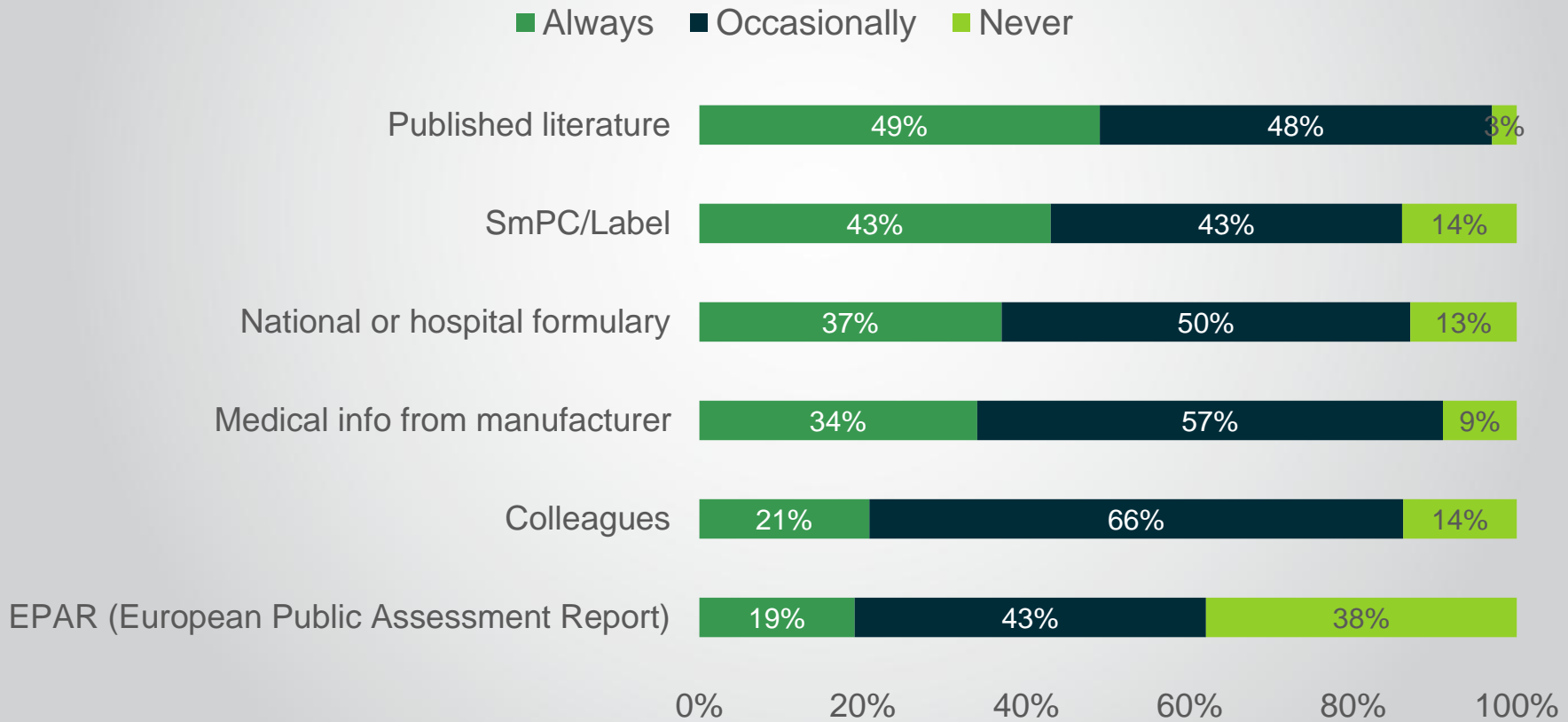
“Do you prescribe biologic medicines in your practice?” (N=470)



“Do you commonly treat patients who you are aware are being prescribed biologic medicines by another health care provider?” (N=470)



“How often do you use each of the following sources to learn about the details of a medicine for prescribing and monitoring?” (N=470)

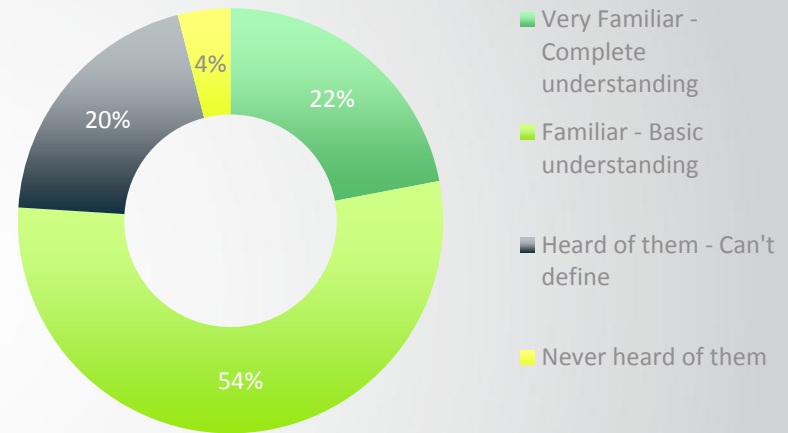


EXECUTIVE SUMMARY

Biosimilars Knowledge

- A need for Biosimilar education still exists - 24% of prescribers do not consider themselves familiar with these medicines.
- 37% of prescribers are unaware that clinical trials for a single indication leads to approval for multiple indications.

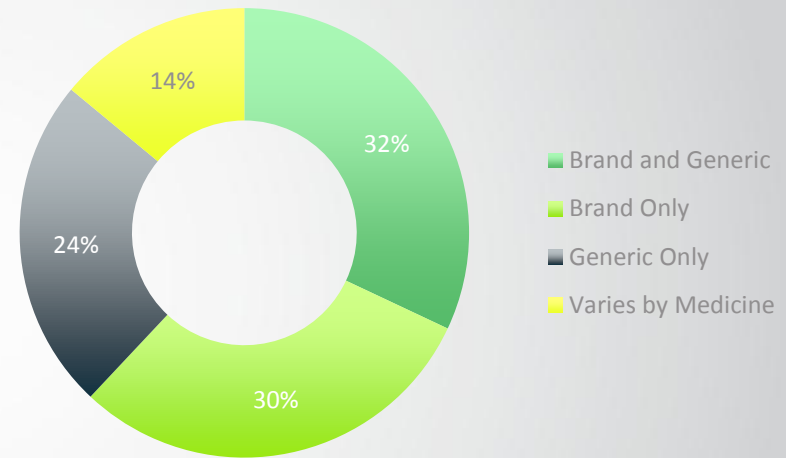
Familiarity with Biosimilars



Identifying the Drug in Patient Records

- Whether by brand, non proprietary / generic or both varies considerably.
 - 32% use both
 - 30% use brand only
 - 24% use non proprietary name only
 - 14% - varies by medicine
- When reporting AEs, 54% use both brand and non proprietary names

Identifying Drugs



Naming Implications

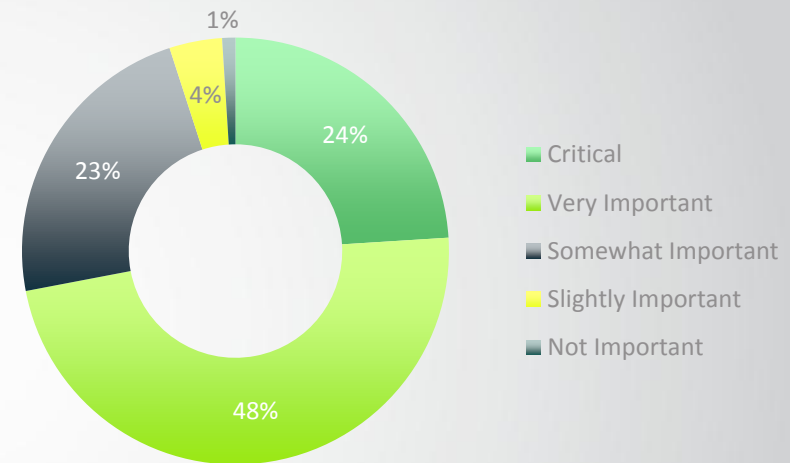
“If two medicines have the same non-proprietary scientific name, does this suggest to you or imply...

- Structurally identical – Yes = 53%
- Safely receive either with the same results – Yes = 47%
- Safely switch during treatment, with the same results – Yes = 39%
- Approved for the same indications – Yes = 61%

Pharmacy Substitution

- 72% of prescribers consider it “Critical” or “Very Important” to decide which biologic is most suitable.
- 74% regard DAW authority as “Critical” or “Very Important”

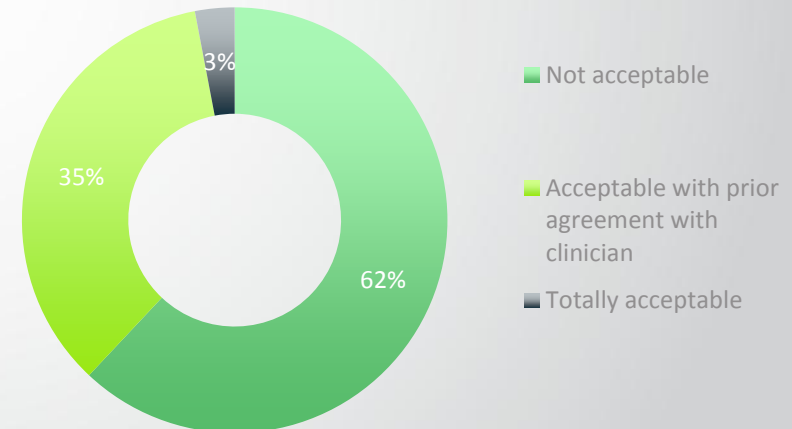
Importance of Sole Authority



Notification

- 77% consider it “Critical” or “Very Important” to receive notification of a switch
- 3% consider pharmacy level substitution completely acceptable
- 35% consider switching to a biosimilar acceptable, pending agreement of the prescriber

Pharmacist Decision Making



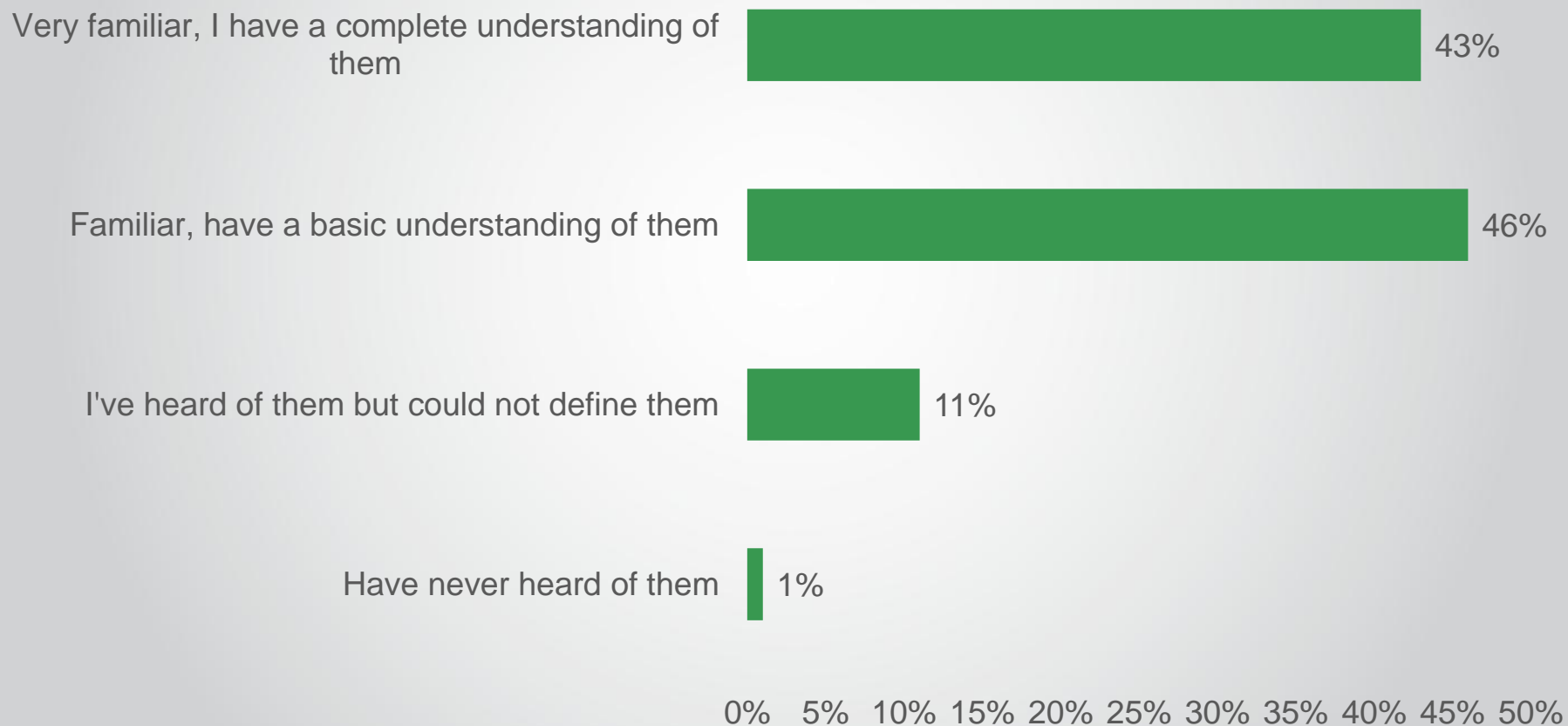
Study Data

FAMILIARITY

- ISR has provided regional statistical significance tests for each question
- When highlighting the existence of segment differences, ISR uses the following format: Each column (country) has been assigned a letter (A thru E) and when a statistically significant difference occurs between segments, it is noted by one of these letters
- Below are the regional statistical significance results of the question asking whether or not physicians prescribe biologics
 - How to read table: Physicians in Italy (C: 14%) are more likely to *not* prescribe biologics than physicians in France (A: 4%) and Germany (B: 3%)

	Total N=470	France N=93 A	Germany N=94 B	Italy N=96 C	Spain N=92 D	UK N=95 E
No	8%	4%	3%	14% A,B	14% A,B,E	5%
Yes	92%	96% C,D	97% C,D	86%	86%	95% D

“How familiar are you with biologic medicines?” (N=470)

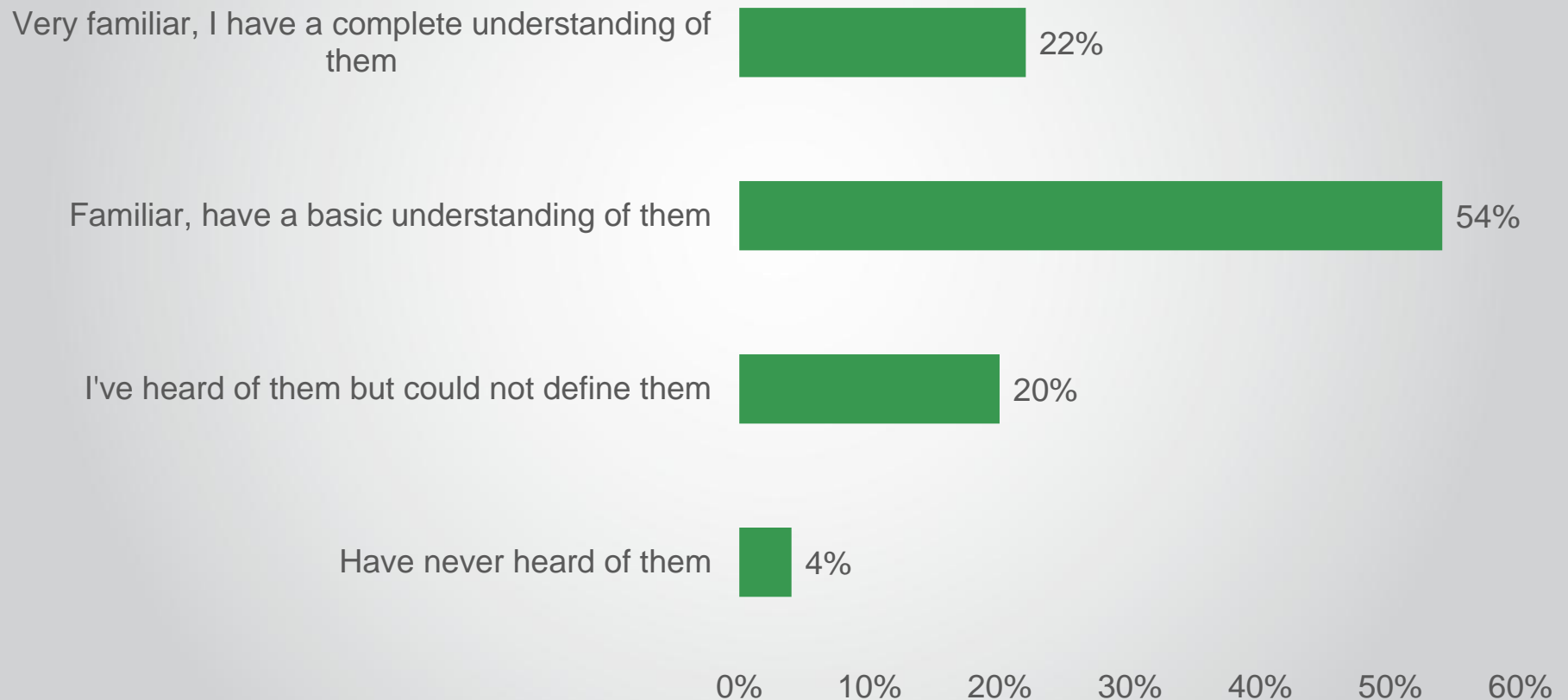


Significance: Familiarity with biologic medicines

- A higher proportion of physicians from Spain (62%) are “very familiar” with biologic medicines than all other geographies.
- French prescribers indicate a lower level of awareness than most.

	Total N=470	France N=93 A	Germany N=94 B	Italy N=96 C	Spain N=92 D	UK N=95 E
Very Familiar	43%	30%	39%	42%	62% A,B,C,E	40%
Familiar	46%	44%	48% D	50% D	32%	54% D
I've heard of them	11%	20% C,D,E	13%	8%	7%	6%
Have never heard of them	1%	5% B,C,E	0%	0%	0%	0%

“How familiar are you with biosimilar medicines?” (N=470)



- A higher proportion of physicians from Germany and UK are “familiar” with biologic medicines than physicians from France.

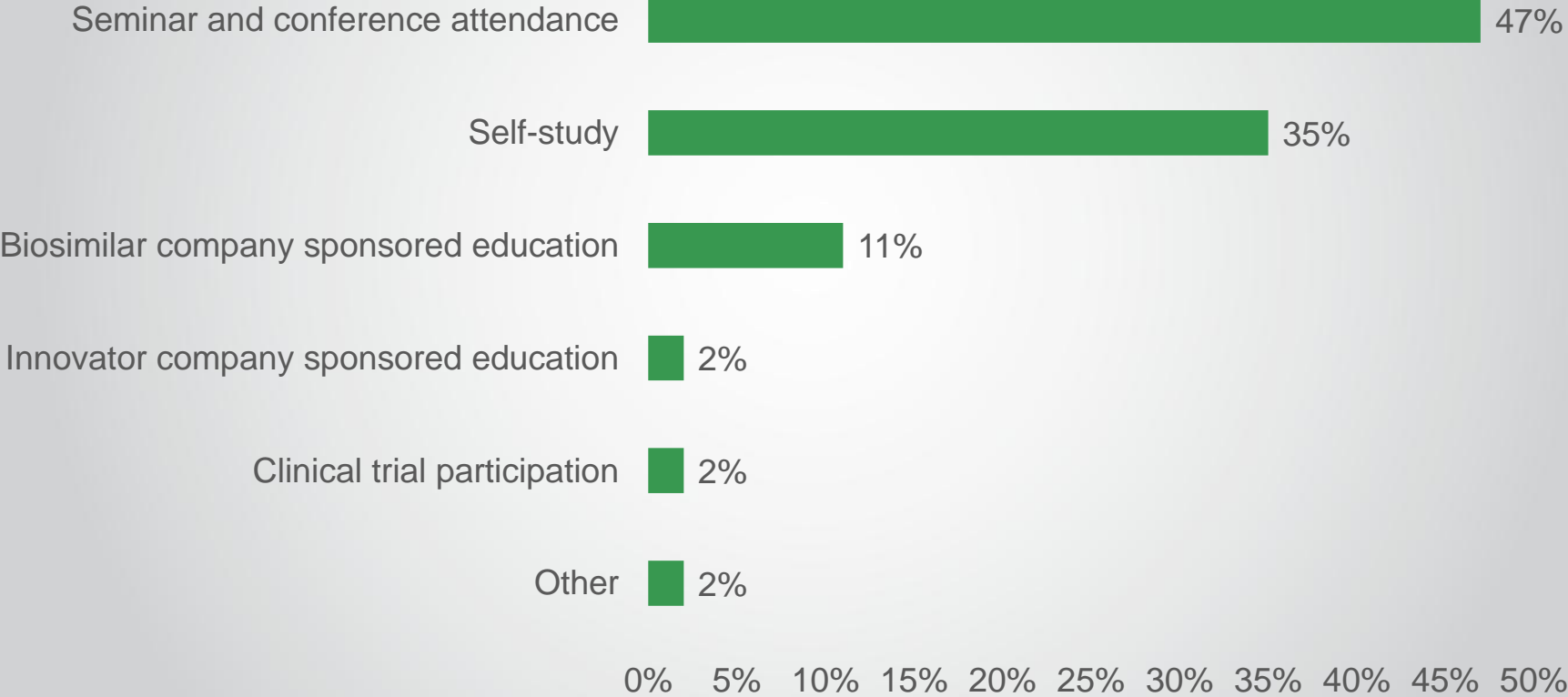
	Total N=470	France N=93 A	Germany N=94 B	Italy N=96 C	Spain N=92 D	UK N=95 E
Very Familiar	22%	17%	21%	26%	28%	19%
Familiar	54%	44%	59% A	57%	49%	59% A
I've heard of them	20%	30% B,C,E	16%	15%	21%	18%
Have never heard of them	4%	9%	4%	2%	2%	4%

Significance: Familiarity with biosimilar medicines



	Total N=470	Derm. N=78 F	Endo. N=76 G	Hemat ology N=21 H	Neph. N=84 I	Neuro. N=77 J	Onc. N=56 K	Rheum. N=78 L
Very Familiar	22%	22%	22%	24%	32% JL	12%	36% JL	13%
Familiar	54%	58% J	45%	76% GIJ	48%	38%	59% J	71% GIJ
I've heard of them	20%	18% HK	30% HKL	0%	20% HK	31% HKL	4%	17% K
Have never heard of them	4%	3%	3%	0%	0%	19% FGHIKL	2%	0%

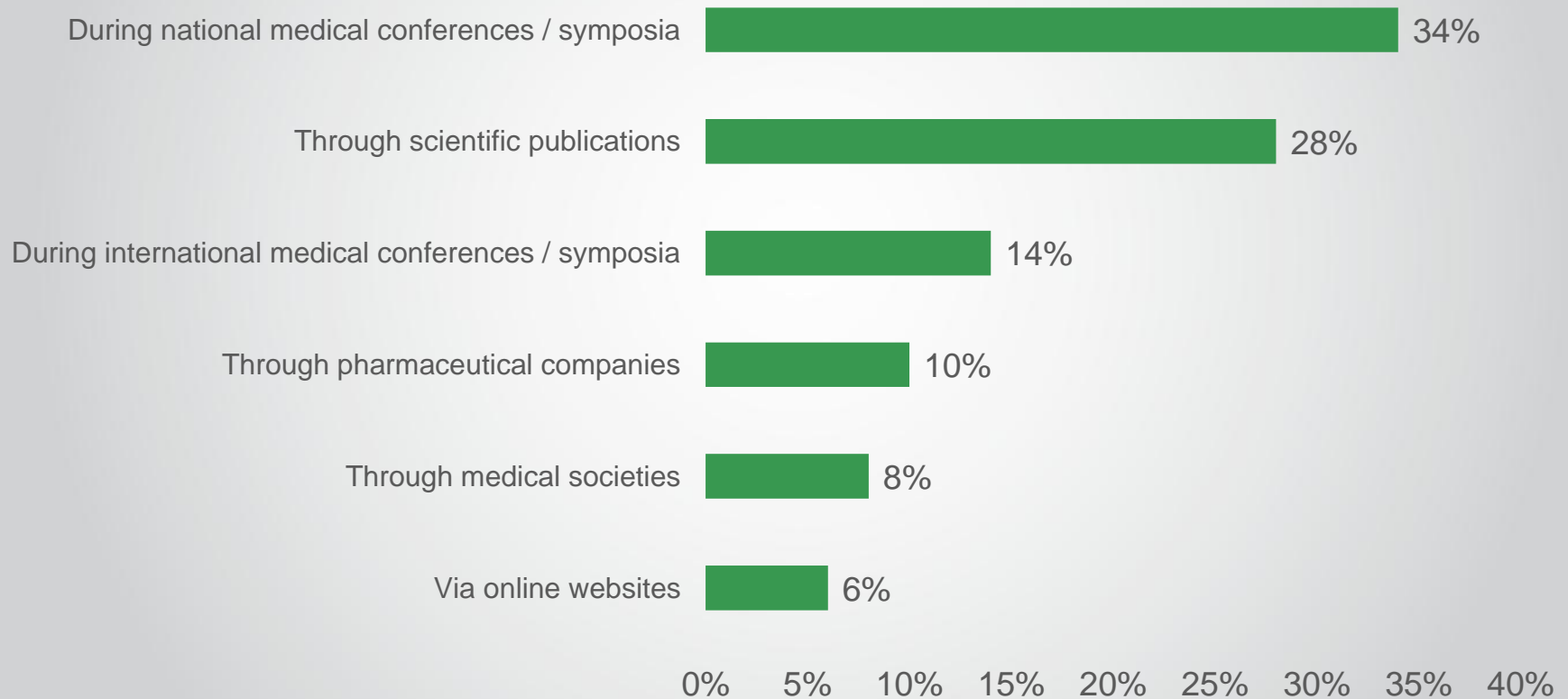
“How did you become familiar with biosimilar medicines?” (N=357)



- Prescribers in Spain are more likely to have become familiar with biosimilars through a company sponsored education program than most.
- Prescribers in Spain are less likely to have become familiar with biosimilars through self study.

	Total N=357	France N=57 A	Germany N=75 B	Italy N=80 C	Spain N=71 D	UK N=74 E
Biosimilar company sponsored education	11%	7%	7%	13%	21% A,B,E	7%
Clinical trial participation	2%	5%	0%	3%	4%	0%
Innovator company sponsored education	2%	0%	1%	4%	4%	0%
Self-study	35%	37% D	44% D	31%	20%	45% D
Seminar and conference attendance	47%	47%	47%	50%	48%	45%
Other	2%	4%	1%	0%	3%	4%

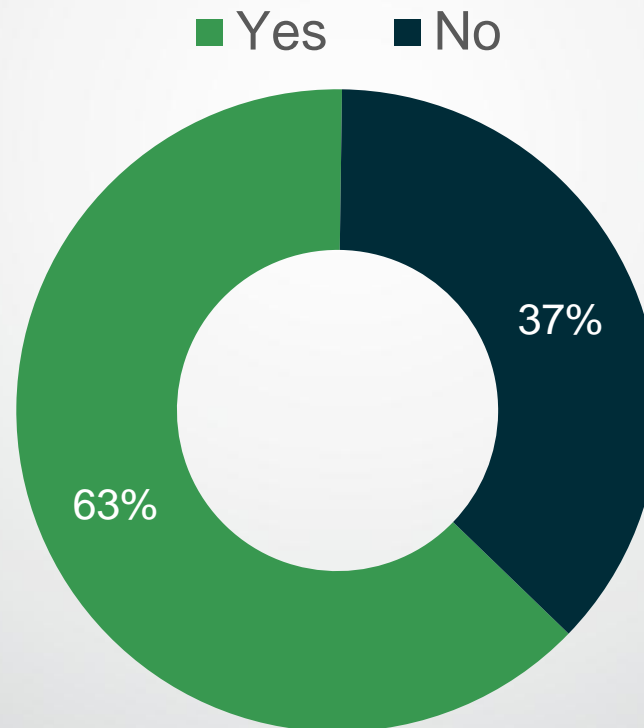
“How would you prefer to learn about biosimilars?” (N=113)



- A higher proportion of physicians from France (44%) would prefer to learn about biosimilars through national medical conferences/symposia than physicians from Italy (13%).

	Total N=113	France N=36 A	Germany N=19 B	Italy N=16 C	Spain N=21 D	UK N=21 E
During international medical conferences / symposia	14%	17%	11%	13%	5%	24%
During national medical conferences / symposia	34%	44% C	26%	13%	38%	33%
Through medical societies	8%	14%	5%	6%	0%	10%
Through pharmaceutical companies	10%	3%	5%	19%	19%	10%
Through scientific publications	28%	19%	37%	44%	38%	14%
Via online websites	6%	3%	16%	6%	0%	10%

“Are you aware that a biosimilar may be approved for several or all indications of the innovator product on the basis of clinical trials in only one of those indications?” (N=470)



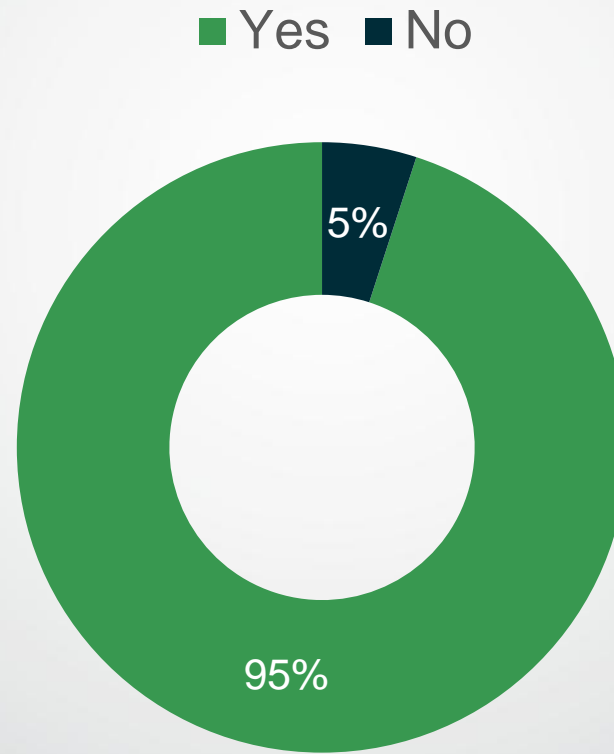
- Italian prescribers report a higher level of awareness than those in other countries measured.

	Total N=470	France N=93 A	Germany N=94 B	Italy N=96 C	Spain N=92 D	UK N=95 E
No	37%	37% C	48% C	22%	35% C	45% C
Yes	63%	63%	52%	78% A,B,D,E	65%	55%

	Total N=470	Derm. N=78 F	Endo. N=76 G	Hematol ogy N=21 H	Neph. N=84 I	Neuro. N=77 J	Onc. N=56 K	Rheum. N=78 L
No	37%	46% IKL	37%	33%	31%	57% GIKL	23%	27%
Yes	63%	54%	63% J	67%	69% FJ	43%	77% FJ	73% FJ

PRESCRIBING, RECORDING, & AE REPORTING

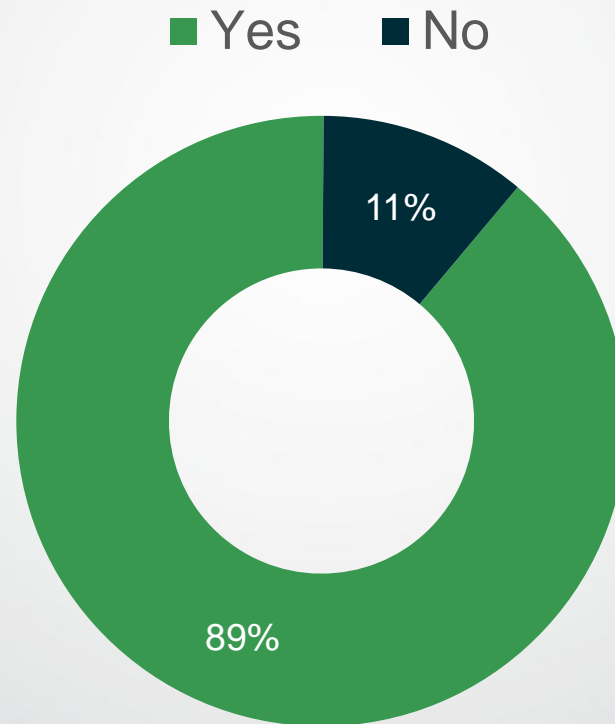
“When you prescribe medicine, including biologics, do you identify the medicine in the patient record?” (N=470)



- The practice is quite common across the board, however, it is less likely in Germany and Spain.

	Total N=470	France N=93 A	Germany N=94 B	Italy N=96 C	Spain N=92 D	UK N=95 E
No	5%	0%	13% A,C,E	4%	8% A,E	0%
Yes	95%	100% B,D	87%	96% B	92%	100% B,D

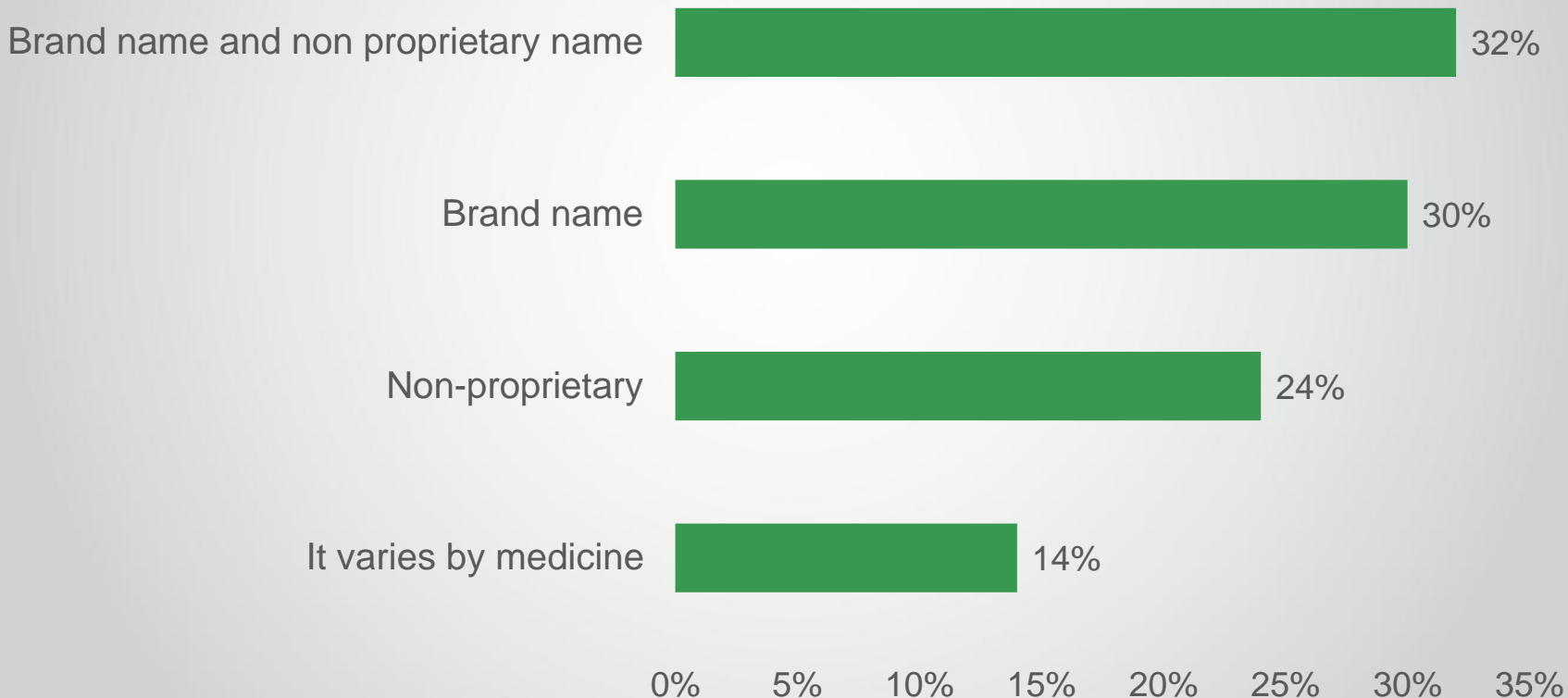
“When you treat a patient receiving a biologic medicine prescribed by another health care provider, do you identify the medicine in the patient record?” (N=470)



- A higher proportion of physicians from the UK and Germany do not record this information than from other countries.

	Total N=470	France N=93 A	Germany N=94 B	Italy N=96 C	Spain N=92 D	UK N=95 E
No	11%	3%	33% A,C,D,E	3%	5%	12% A,C
Yes	89%	97% B,E	67%	97% B,E	95% B	88% B

“How do you identify a biologic medicine for prescription or recording in a patient record? Do you identify the medicine by brand name (eg, Remicade, Herceptin) or non-proprietary name (eg, infliximab, trastuzumab)?” (N=417)



- French and German prescribers are more likely to record the products by brand name.
- Italy and Spain are more likely to use both brand and generic.

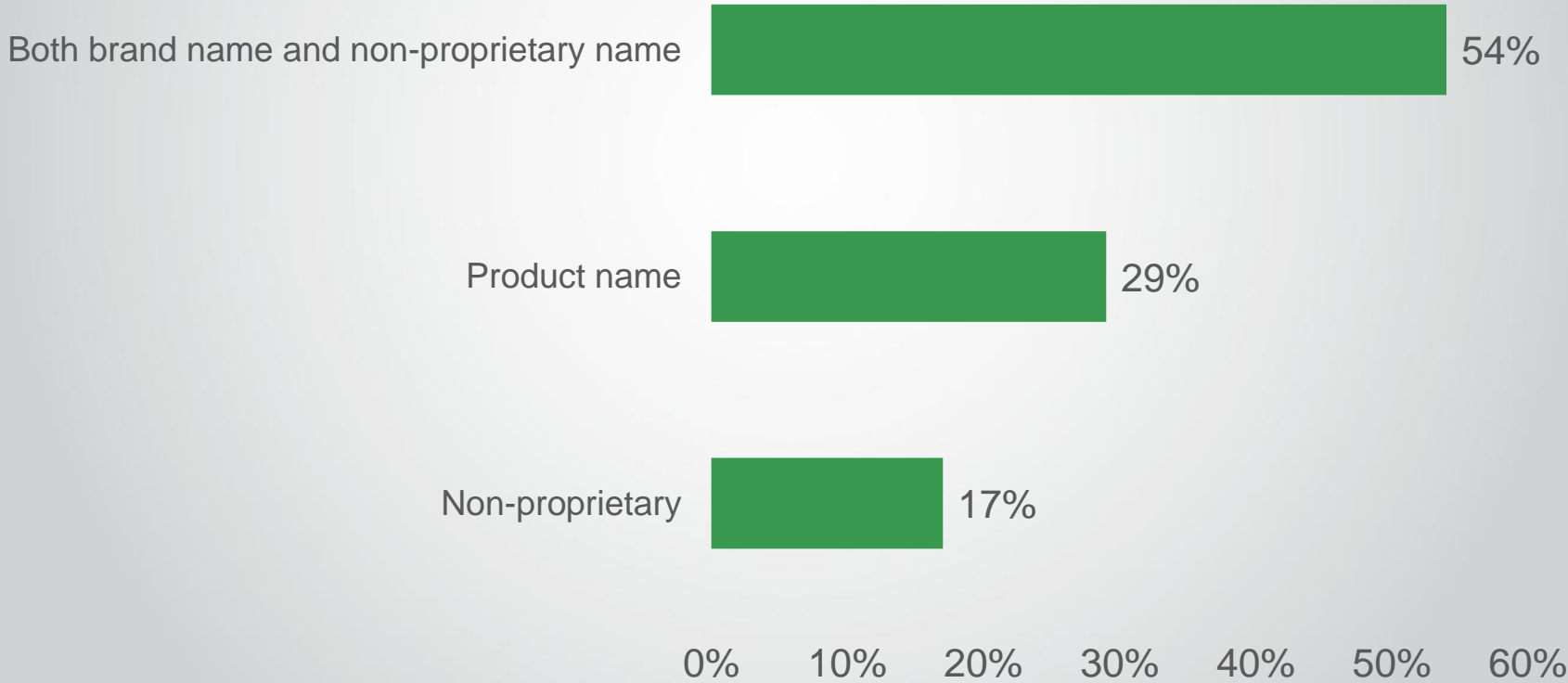
	Total N=417	France N=90 A	Germany N=63 B	Italy N=93 C	Spain N=87 D	UK N=84 E
Brand name	32%	53% C,D,E	40% D,E	27%	20%	20%
Brand name and non-proprietary name	30%	21%	17%	42% A,B	37% A,B	30%
It varies by medicine	14%	17% C	29% C,D,E	6%	8%	13%
Non-proprietary name	24%	9%	14%	25% A	36% A,B	37% A,B

Significance: Biologic recording – Patient record



	Total N=417	Derm. N=68 F	Endo. N=68 G	Hemato logy N=16 H	Neph. N=76 I	Neuro. N=65 J	Onc. N=51 K	Rheum. N=73 L
Brand name	32%	37% K	34%	38%	25%	26%	20%	44%
Brand name and non-proprietary name	30%	31%	32%	19%	28%	42% L	31%	22%
It varies by medicine	14%	12%	10%	25%	21% L	17%	12%	7%
Non-proprietary name	24%	21%	24%	19%	26%	15%	37% FJ	27%

“Physicians play an important role in the identification and reporting of unexpected or serious adverse events to their national regulatory agencies and manufacturers. In the context of identifying a biologic (or, if you don’t prescribe biologics, any other drug) for purposes of reporting an adverse event, how do you identify the medicine?” (N=470)



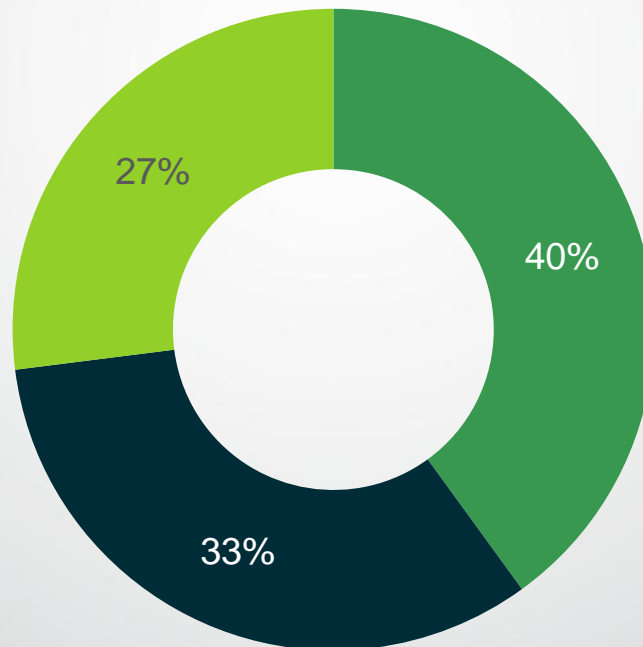
Significance: Biologic recording – Adverse events

	Total N=470	France N=93 A	Germany N=94 B	Italy N=96 C	Spain N=92 D	UK N=95 E
Product name	29%	58% B,C,D,E	36% C,D,E	19%	14%	19%
Both brand name and non-proprietary name	54%	32%	51% A	59% A	70% A	56% A
Non-proprietary	17%	10%	13%	22% A	16%	25% A,B

	Total N=417	Derm. N=68 F	Endo. N=68 G	Hematology N=16 H	Neph. N=76 I	Neuro. N=65 J	Onc. N=51 K	Rheum. N=73 L
Product name	29%	27%	28%	52% FGIJK	23%	26%	27%	38% I
Both brand name and non-proprietary name	54%	60% HL	50%	33%	57% L	66% GHJ	54%	40%
Non-proprietary	17%	13%	22% J	14%	20% J	8%	20% J	22% J

“How often do you include the batch number when reporting adverse events?” (N=470)

■ Always ■ Sometimes ■ Never

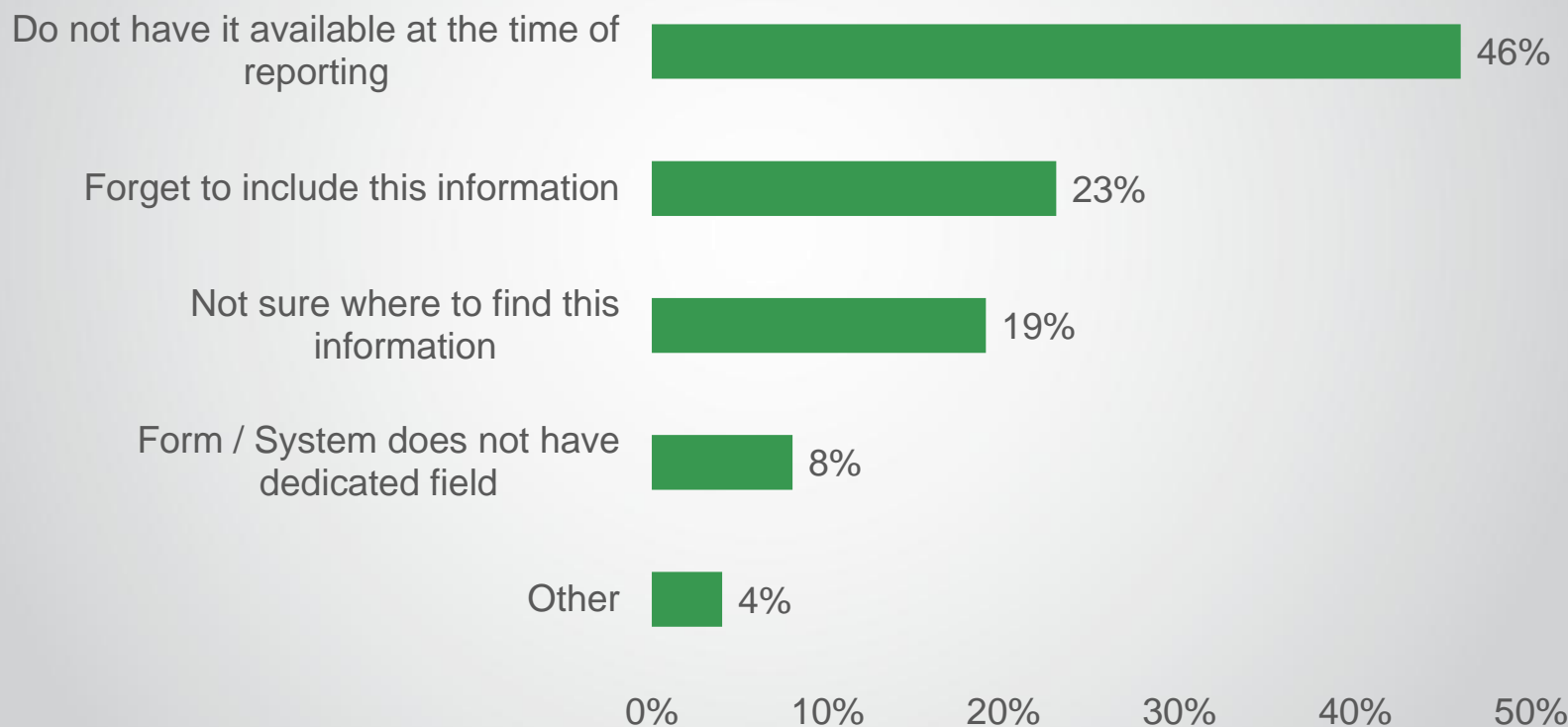


Significance: Batch number inclusion

- Italy and Germany are more likely to “always” include batch number.
- France and Spain are more likely to “never” include it.

	Total N=470	France N=93 A	Germany N=94 B	Italy N=96 C	Spain N=92 D	UK N=95 E
Always	40%	30%	45% A	57% A,D,E	34%	35%
Sometimes	33%	32%	35%	31%	23%	43% D
Never	27%	38% B,C,E	20%	11%	43% B,C,E	22% C

“If your answer to question 18 was ‘Sometimes’ or ‘Never’, what are the main reasons for not reporting the batch number?”
(N=281)



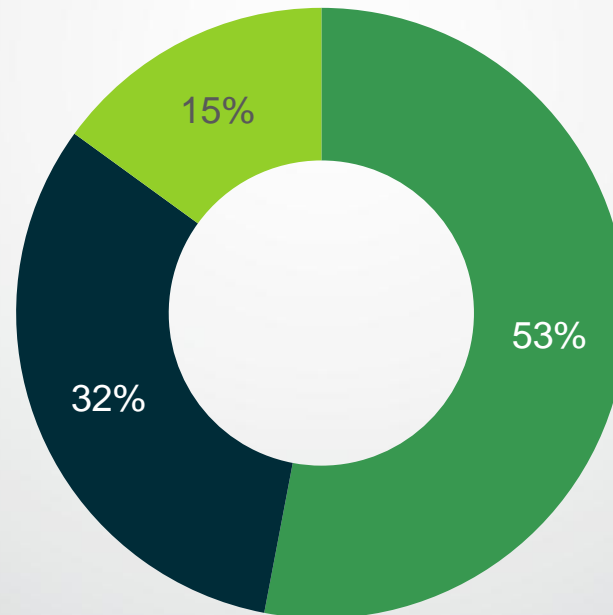
Significance: Reason for not including batch number

- A higher proportion of physicians from Germany (62%) say the reason they do not include the batch number is they “do not have it available at the time of reporting.”

	Total N=281	France N=65 A	Germany N=52 B	Italy N=41 C	Spain N=61 D	UK N=62 E
Do not have it available at the time of reporting	46%	37%	62% A,D	41%	43%	48%
Forget to include this information	23%	28%	25%	17%	23%	19%
Form / System does not have dedicated field	8%	5%	4%	22% A,B,E	10%	5%
Not sure where to find this information	19%	29% B,C	8%	12%	16%	24% B
Other	4%	2%	2%	7%	8%	3%

“If two medicines have the same non-proprietary scientific name, does this suggest to you or imply that the medicines are structurally identical?”
(N=470)

■ Yes ■ No ■ No Opinion



Significance: Non-proprietary name implications – Structurally Identical?



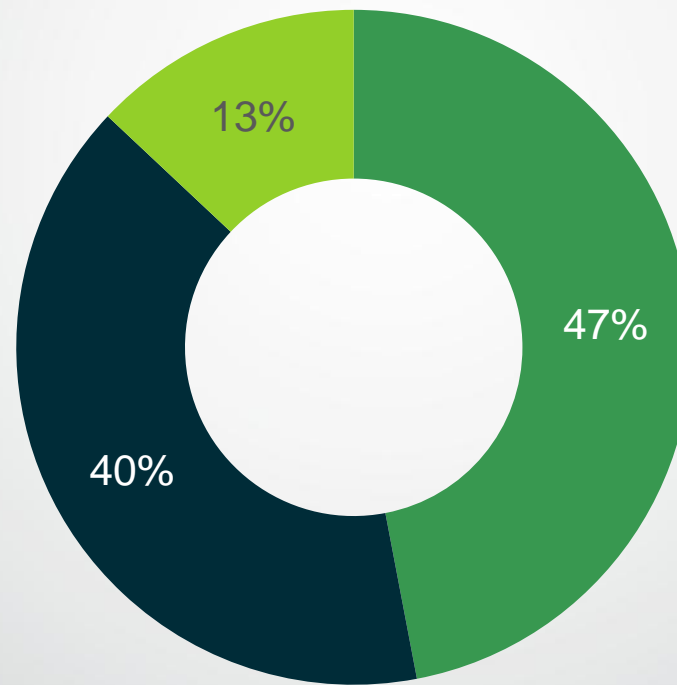
- Prescribers in France, Germany and UK are more likely to believe these products are structurally identical.

	Total N=470	France N=93 A	Germany N=94 B	Italy N=96 C	Spain N=92 D	UK N=95 E
No	32%	28%	24%	43% A,B,E	40% B,E	24%
Yes	53%	59% C,D	68% C,D	44%	37%	59% C,D
No opinion	15%	13%	7%	14%	23% B	17% B

	Total N=470	Derm. N=78 F	Endo. N=76 G	Hematolo gy N=21 H	Neph. N=84 I	Neuro. N=77 J	Onc. N=56 K	Rheum. N=78 L
No	32%	14%	20%	29%	42% FG	36% FG	27%	51% FGK
Yes	53%	68% IJL	74% IJKL	62% IL	36%	51%	55% IL	37%
No opinion	15%	18% G	7%	10%	23% G	13%	18% G	12%

“If two medicines have the same non-proprietary scientific name, does this suggest to you or imply that a patient could safely receive either product and expect the same result?” (N=470)

■ Yes ■ No ■ No Opinion



Significance: Non-proprietary name implications - Safety

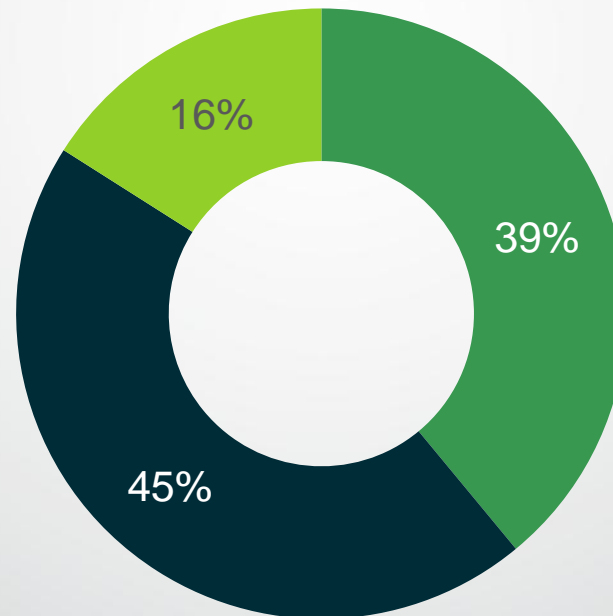
- Prescribers in France are more likely to believe these products can be safely switched than those in Italy and Spain.

	Total N=470	France N=93 A	Germany N=94 B	Italy N=96 C	Spain N=92 D	UK N=95 E
No	40%	29%	43%	48% A	46% A	35%
Yes	47%	57% C,D	50%	40%	38%	49%
No opinion	13%	14%	7%	13%	16%	16%

	Total N=470	Derm. N=78 F	Endo. N=76 G	Hematolo gy N=21 H	Neph. N=84 I	Neuro. N=77 J	Onc. N=56 K	Rheum. N=78 L
No	40%	33%	29%	14%	55% FGHJK	39% H	34%	54% FGHK
Yes	47%	51% IL	61% IL	76% FIJL	31%	45%	54% IL	35%
No opinion	13%	15%	11%	10%	14%	16%	13%	12%

“If two medicines have the same non-proprietary scientific name, does this suggest to you or imply that a patient could be safely switched between the products during a course of treatment and expect the same result as treatment with only one of the products?” (N=470)

■ Yes ■ No ■ No Opinion



Significance: Non-proprietary name implications – Substitution

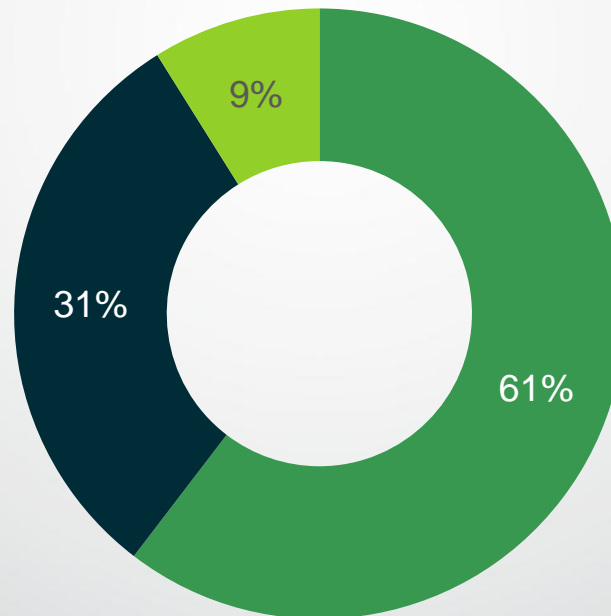
- French prescribers are more likely to believe this than prescribers in Spain.

	Total N=470	France N=93 A	Germany N=94 B	Italy N=96 C	Spain N=92 D	UK N=95 E
No	45%	34%	50% A	52% A	40%	48%
Yes	39%	49% D	37%	39%	34%	38%
No opinion	16%	16%	13%	9%	26% B,C,E	14%

	Total N=470	Derm. N=78 F	Endo. N=76 G	Hematolo gy N=21 H	Neph. N=84 I	Neuro. N=77 J	Onc. N=56 K	Rheum. N=78 L
No	45%	40%	36%	29%	60% FGHK	47%	39%	51% G
Yes	39%	45%	50%	62%	25%	35%	50%	29%
No opinion	16%	15% IL	14% IL	10% IJL	15%	18%	11% IL	19%

“If two medicines have the same non-proprietary scientific name, does this suggest to you or imply that the medicines are approved for the same indications?” (N=470)

■ Yes ■ No ■ No Opinion



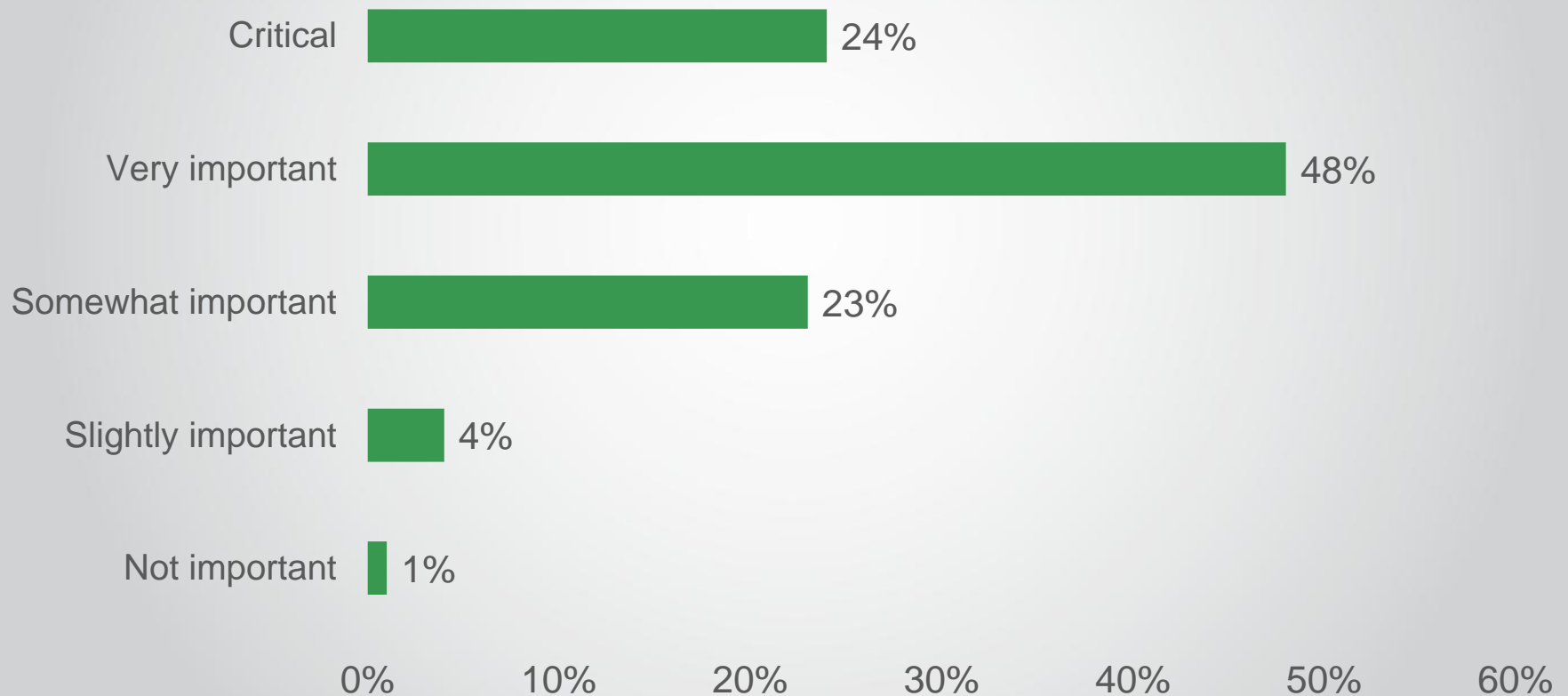
- Opinions are stable across countries.

	Total N=470	France N=93 A	Germany N=94 B	Italy N=96 C	Spain N=92 D	UK N=95 E
No	31%	28%	35%	36%	27%	26%
Yes	61%	68%	59%	60%	58%	59%
No opinion	9%	4%	6%	3%	15% A,C	15% A,C

	Total N=470	Derm. N=78 F	Endo. N=76 G	Hematolo gy N=21 H	Neph. N=84 I	Neuro. N=77 J	Onc. N=56 K	Rheum. N=78 L
No	31%	17%	34% F	33%	39% FK	32% F	20%	37% FK
Yes	61%	76% GIJL	58%	62%	50%	60%	70% I	54%
No opinion	9%	8%	8%	5%	11%	8%	11%	9%

PHARMACY SUBSTITUTION

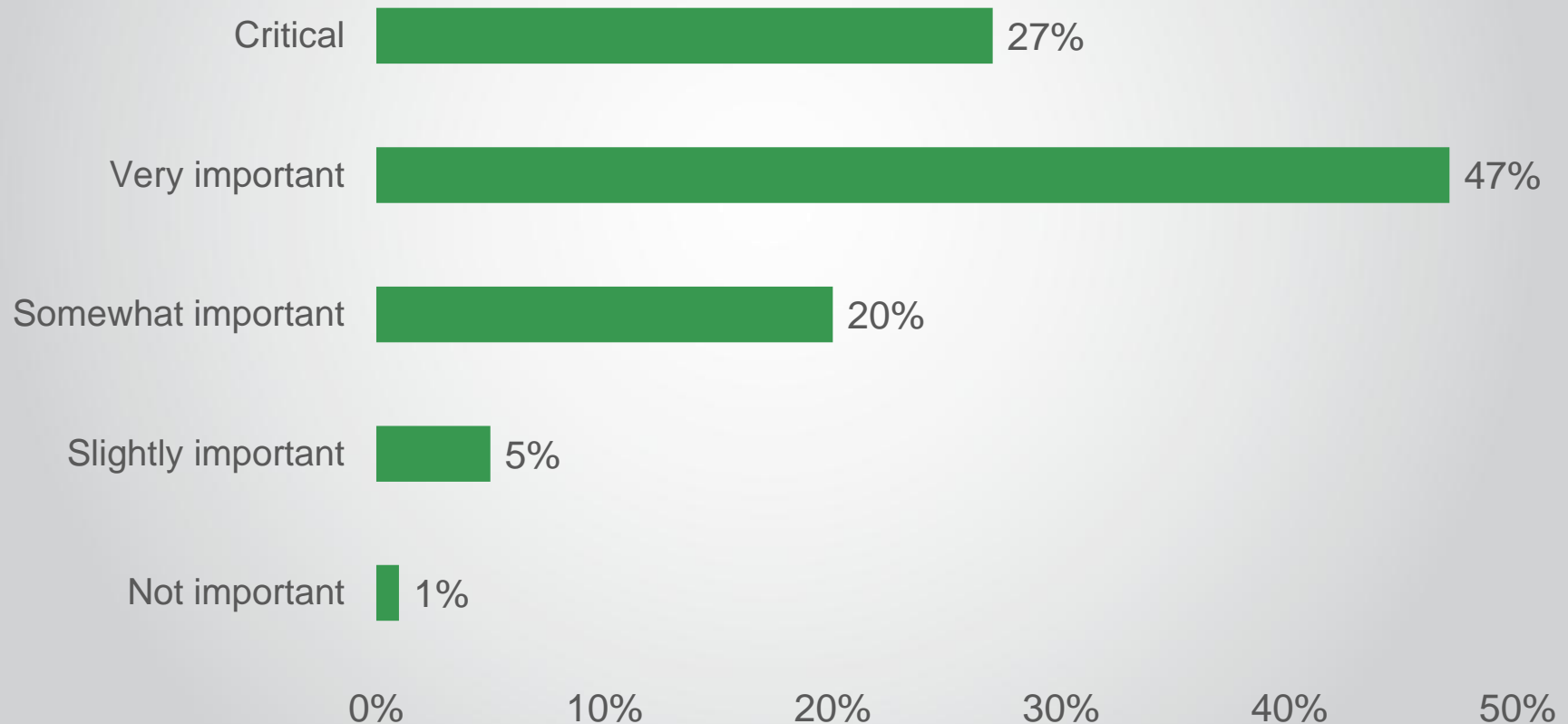
*“How important is it to you to have the sole authority to decide, together with your patients, the most suitable biologic medicine for their disease?”
(N=470)*



- Prescribers in Italy and Spain hold stronger opinions about this than most others.

	Total N=470	France N=93 A	Germany N=94 B	Italy N=96 C	Spain N=92 D	UK N=95 E
Critical	24%	25% C	16%	34% B,E	33% B,E	11%
Very important	48%	47%	38%	46%	55% B	55% B
Somewhat important	23%	16%	37% A,C,D	20%	12%	27% D
Slightly important	4%	9% C,D	6% C,D	0%	0%	7% C,D
Not important	1%	3%	2%	0%	0%	0%

“In a situation where substitution by a pharmacist was an option in your country, how important would it be to you to have the authority to designate a biologic medicine as ‘DISPENSE AS WRITTEN’ or ‘DO NOT SUBSTITUTE’?” (N=470)

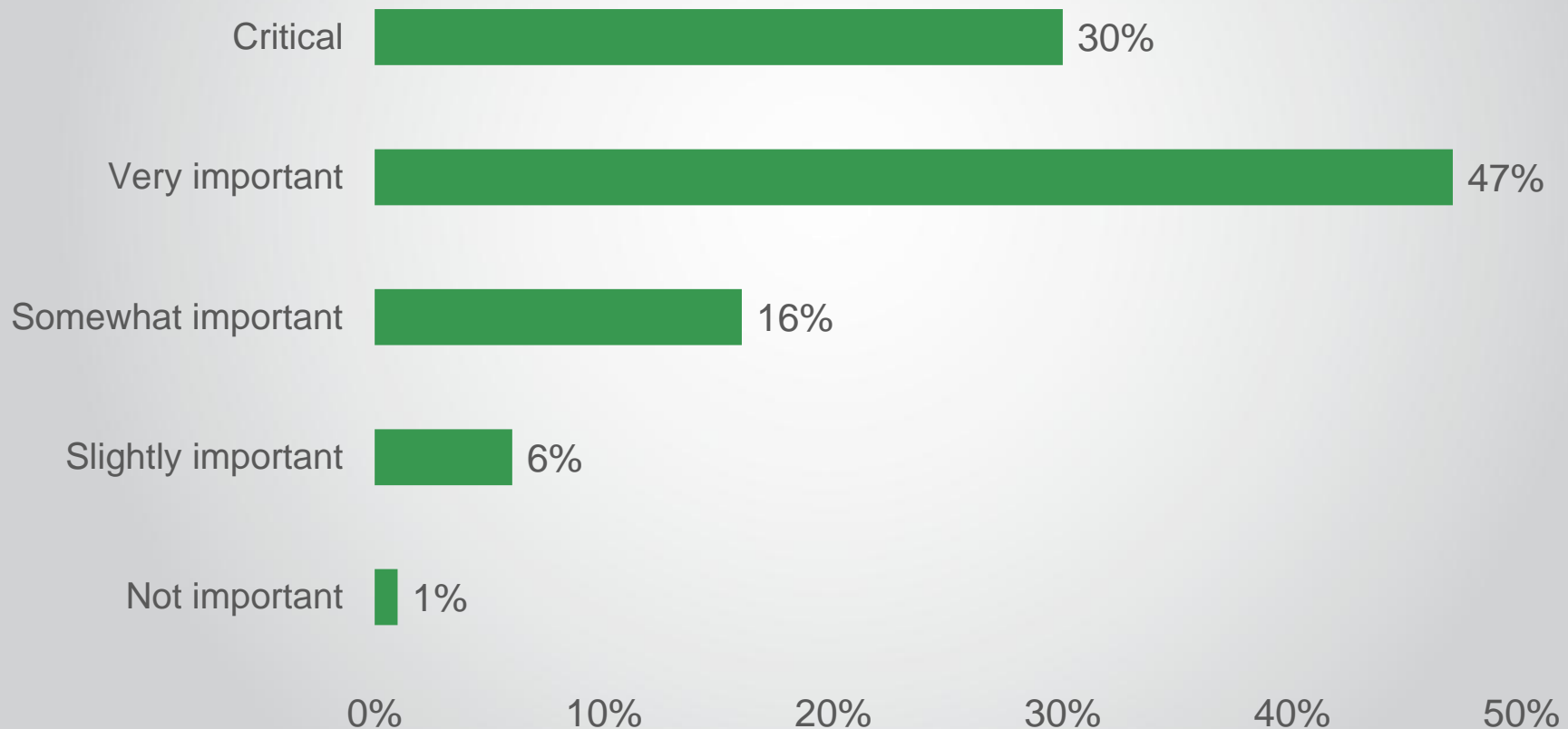


Significance: Importance of DAW

- Prescribers in Italy and Spain hold stronger opinions about this than most others.

	Total N=470	France N=93 A	Germany N=94 B	Italy N=96 C	Spain N=92 D	UK N=95 E
Critical	27%	25% B	13%	40% A,B,E	41% A,B,E	15%
Very important	47%	47%	46%	33%	50% C	59% C
Somewhat important	20%	16%	30% A,D	25% D	9%	18%
Slightly important	5%	10% C,D	7% D	2%	0%	7% D
Not important	1%	2%	4%	0%	0%	1%

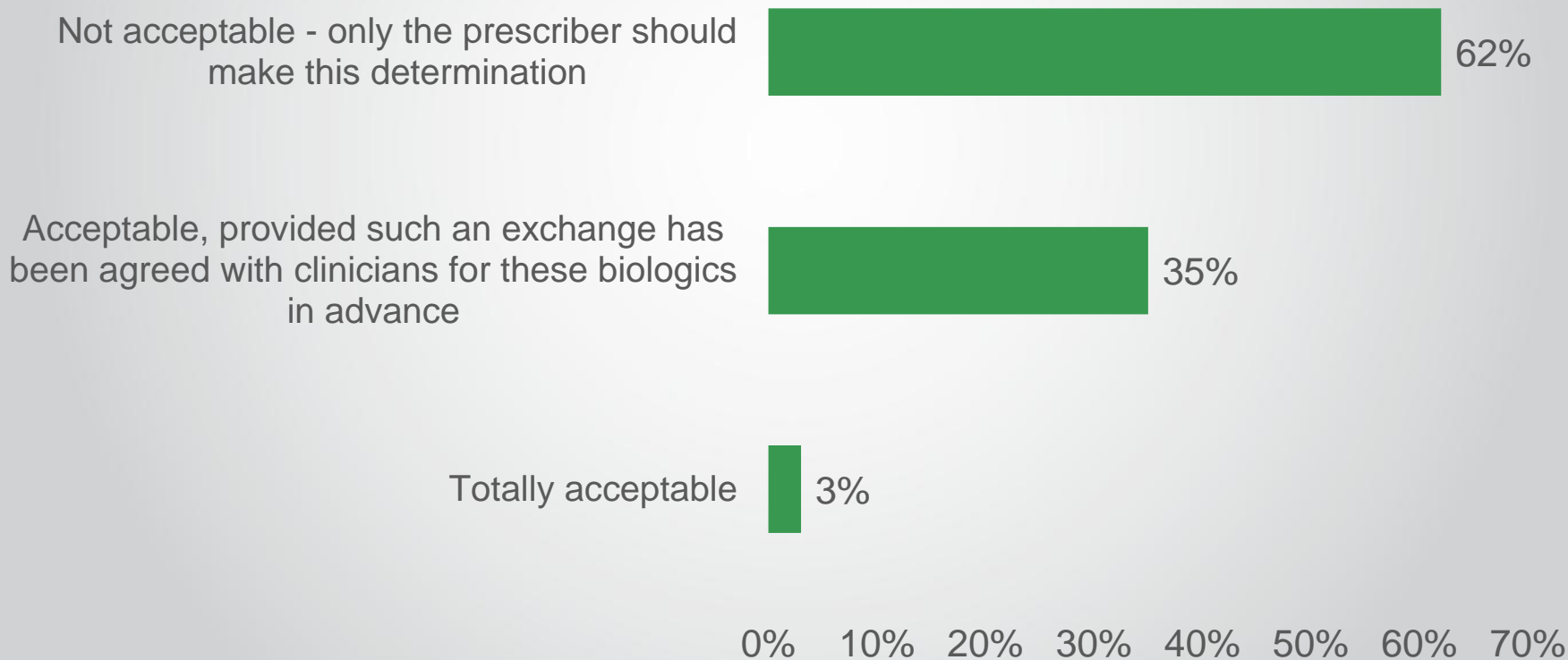
“How important would it be for you to be notified by the pharmacist that your patient has received a biologic other than the one you prescribed, if the patient was receiving chronic (repeated) treatment?” (N=470)



- Notification is important across countries
- Prescribers in Germany and UK feel less strongly than most

	Total N=470	France N=93 A	Germany N=94 B	Italy N=96 C	Spain N=92 D	UK N=95 E
Critical	30%	33% B	20%	32%	45% B,E	22%
Very important	47%	45%	45%	42%	47%	56%
Somewhat important	16%	15%	23% D,E	23% D,E	7%	11%
Slightly important	6%	4%	9%	3%	2%	9%
Not important	1%	2%	3%	0%	0%	2%

“How acceptable would it be for you if the pharmacist made the determination which biologic (innovator or biosimilar) to dispense to your patient on initiation of treatment?” (N=470)

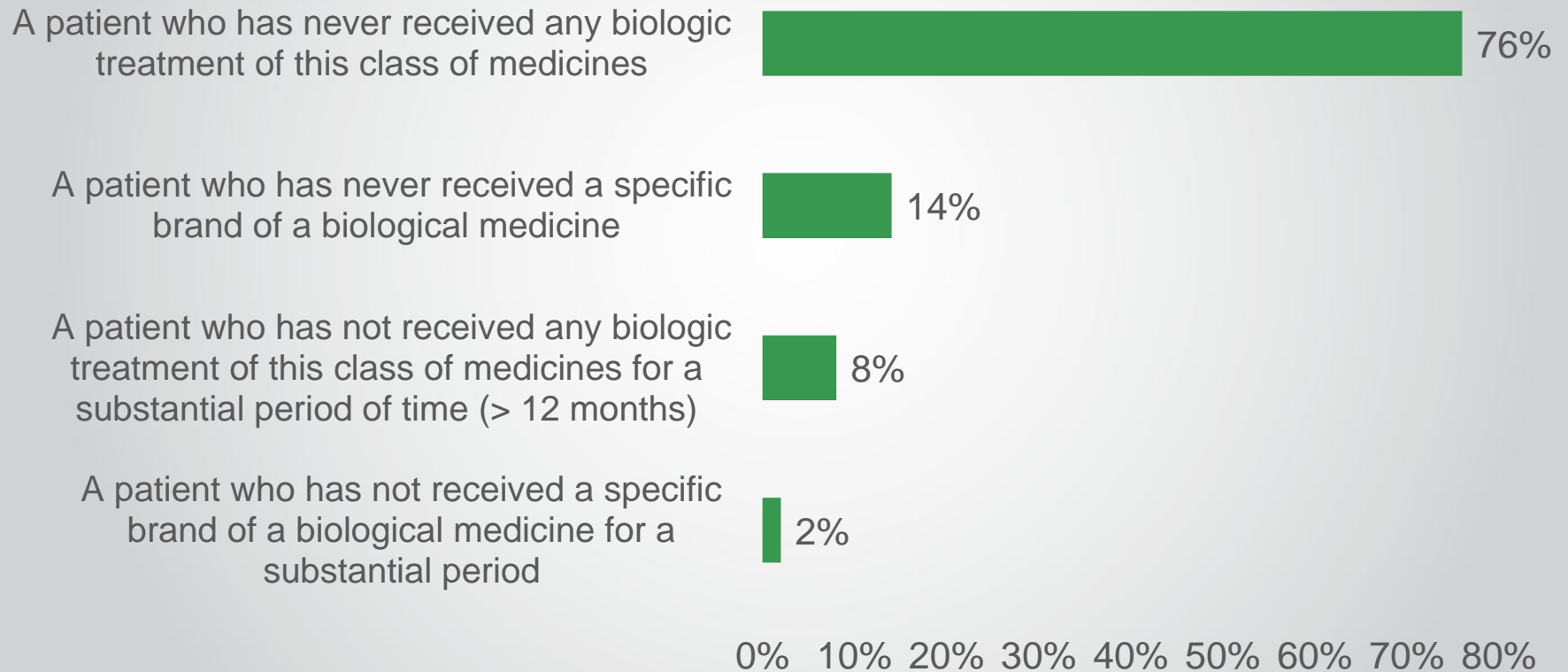


Significance: Acceptability of pharmacist determination

- Unilateral decision making at the pharmacy is not acceptable to prescribers. This sentiment is strongest among prescribers in Italy.

	Total N=470	France N=93 A	Germany N=94 B	Italy N=96 C	Spain N=92 D	UK N=95 E
Totally acceptable	3%	4%	5%	2%	0%	2%
Acceptable, provided such exchange has been agreed with clinicians for these biologics in advance	35%	43% C	33%	21%	34% C	45% C
Not acceptable	62%	53%	62%	77% A,B,E	66%	53%

“How do you define “bio-naive” patients with respect to biologics?”
(N=470)



Significance: Defining “bio-naive”

- Most believe this means “a patient who has never received any biological treatment of this class.” This is less likely in Germany than most.

	Total N=470	France N=93 A	Germany N=94 B	Italy N=96 C	Spain N=92 D	UK N=95 E
A patient who has never received a specific brand of biological medicine	14%	20% C,D	28% C,D,E	6%	5%	11%
A patient who has never received any biological treatment of this class	76%	74%	66%	79% B	80% B	82% B
A patient who has not received a specific brand of a biological medicine for a substantial period of time	2%	2%	0%	1%	4%	1%
A patient who has not received any biologic treatment of this class of medicines for a substantial period of time	8%	3%	5%	14% A	10%	6%
Other	0%	0%	1%	0%	0%	0%