

# ASBM European Prescribers Survey

**Industry Standard Research** 

Kevin Olson, CEO | KevinO@ISRreports.com | 919-301-0106

Sherry Hubbard-Bednasz, Market Research Director | SherryHB@ISRreports.com

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#### Survey Methodology

- 579 Prescribers were recruited from specified countries/practice areas in Western Europe
- 6 countries: France, Germany, Italy, Spain, Switzerland, UK
- 10 practice areas: Dermatology, Endocrinology, Gastrointestinal,
   Hematology oncology, Immunology, Nephrology, Neurology, Oncology,
   Ophthalmology, Rheumatology
- All N-size targets (country/practice area combinations) were reached
- 15 minute web-based survey, offered in multiple languages
- Data were collected in March 2019

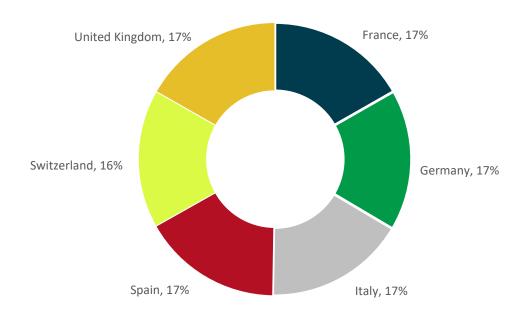


## DEMOGRAPHIC DATA/ SAMPLE CHARACTERISTICS



### Geographic Representation

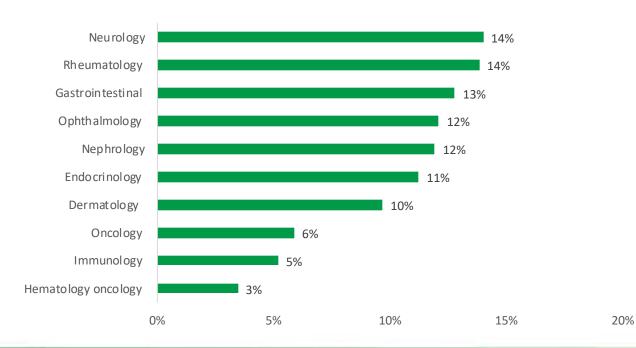
#### Q1. What country do you currently live in? (n=579)





#### Primary Therapeutic Area

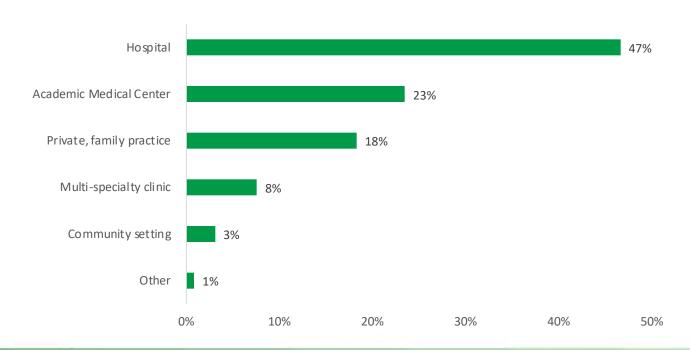
Q2. Please indicate your primary practice area or therapeutic area in which you practice. (n=579)





#### **Practice Setting**

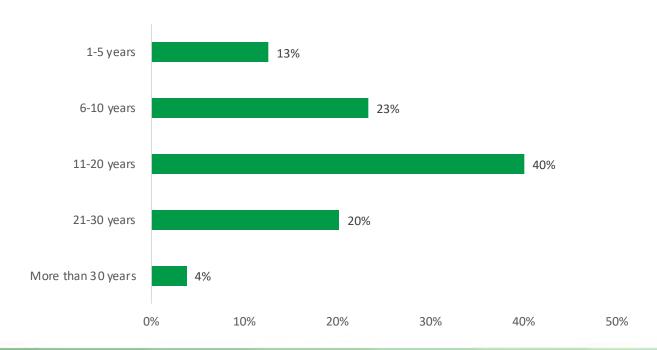
#### Q3. Which of the following best describes the type of practice in which you work? (n=579)





### Length of Time Practicing Medicine

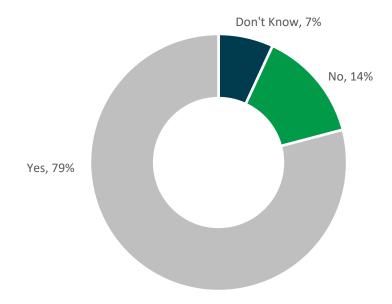
Q4. For how many years post-residency have you been practicing medicine? (n=579)





### Treat Patients Using Biologic Medicines

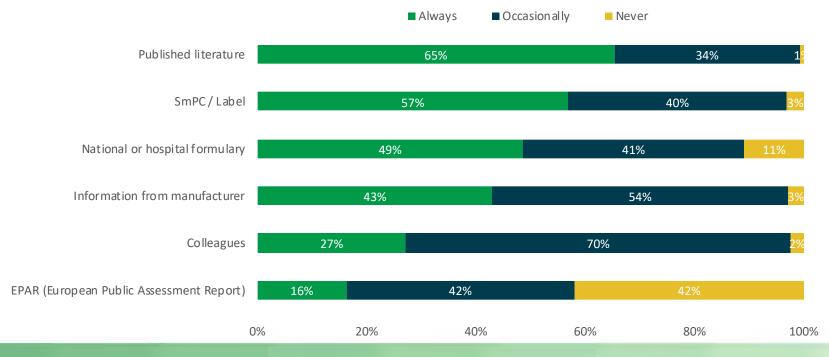
Q6. Do you commonly treat patients who you are aware are using biologic medicines prescribed by another health care provider? (n=579)





#### **Use of Sources**

Q7. How often do you use each of the following sources to learn about the details of a medicine for prescribing and monitoring? (n=579)

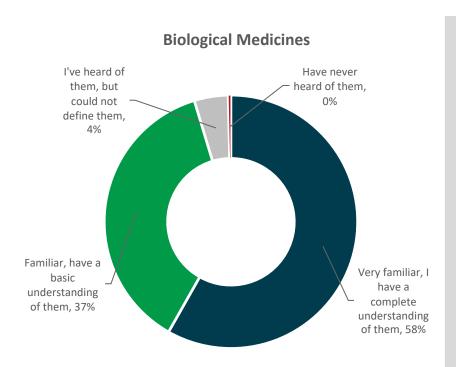


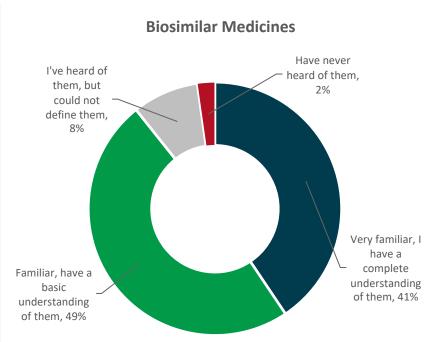


#### **EXECUTIVE SUMMARY**



#### Familiarity: Biological vs. Biosimilar







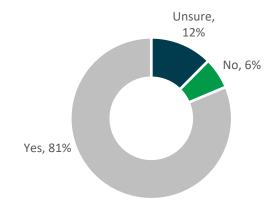
#### Familiarity with Biosimilar Medicines

- Since this study was conducted in 2013, familiarity with biosimilar medicines has increased from **76% to 90%**
- Strongest familiarity among Italy and Spain prescribers (48% and 47% are very familiar/have complete understanding)
- Strongest familiarity among Rheumatology, Gastrointestinal, and Endocrinology prescribers (70%, 61%, and 60% are very familiar/have complete understanding)
- 83% (up from 63% in 2013) of prescribers are aware that a biosimilar may be approved for several or all indications of the reference product on the basis of clinical trials in only one of those indications



### Adverse Drug Reaction Reporting

- More than half of prescribers are most likely to report an ADR to the National Competent Authority
- Two-thirds of prescribers said amount of time spent on filing a report is 10 to 20 minutes
- Prescribers do file detailed reports; this level of detail in turn deters 55% from reporting minor events
- More than half of prescribers said reporting infrastructure was the biggest barrier to accurate reporting; another 20% said no barriers exist
- Frequency of including batch number is mixed; not having it available at time of reporting was selected by more than half of prescribers who said sometimes, rarely, or never



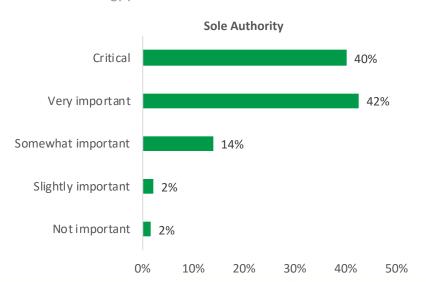
4 out of 5 prescribers are legally required to report adverse drug reactions that are brought to their attention.

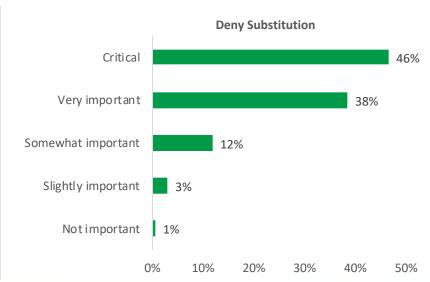
Italy prescribers garnered the highest percentage for being required to report (96%) versus France prescribers at 69%.



#### Control Over Prescribing & Dispensing

4 out of 5 prescribers feel very strongly about having control over what is prescribed AND dispensed to their patients. Italy prescribers expressed the highest importance in having sole authority to decide the medicine, while France prescribers expressed the least. Switzerland prescribers expressed the highest importance in having the ability to deny a pharmacist's substitution, while UK prescribers expressed the least. Having this level of control was most important to Immunology, Rheumatology, Endocrinology, and Dermatology prescribers.

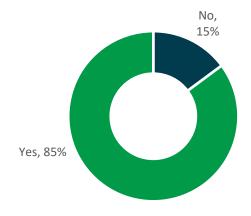






#### **Product Name & Pharmacist Control**

- More than 40% of prescribers said they <u>rarely</u> or <u>never</u> prescribe biological products by nonproprietary name only
- More than one-third said confidence would be lacking in knowing exactly what was dispensed to patient if they prescribed a product using nonproprietary name
- 4 out of 5 prescribers said it would be <u>critical</u> or <u>very</u> <u>important</u> to be notified by pharmacist that patient received a biologic other than one they prescribed
- 58% of prescribers said it would be acceptable for a pharmacist to determine which biologic to dispense on initiation of treatment, but would require clinician agreement in advance



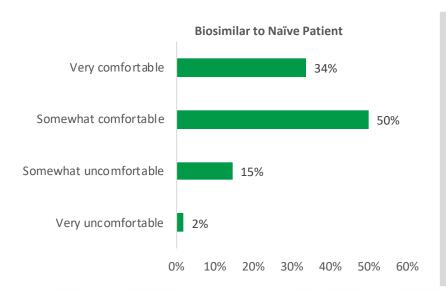
More than 4 out of 5 prescribers identify a medicine in a patient's record by brand name.

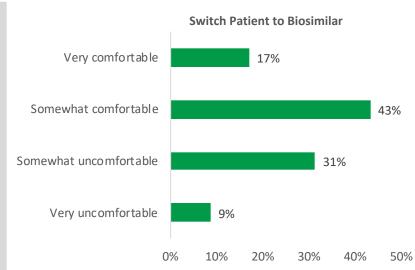
While 86% to 94% of prescribers in surveyed countries said they use brand name, only 68% of UK prescribers said they do this.



#### Prescribe Biosimilar vs. Switch to Biosimilar

Comfort level decreases when asked about prescribing a biosimilar to a naïve patient versus switching to a biosimilar. About 20% are uncomfortable in prescribing a biosimilar to a naïve patient; twice as many (40%) are uncomfortable with switching a stable patient from one medicine to a biosimilar. France, Switzerland, and UK prescribers are most comfortable with prescribing a biosimilar to a naïve patient, while Spain prescribers are the least comfortable with switching a stable patient to a biosimilar.

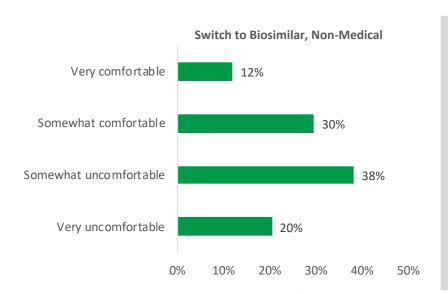


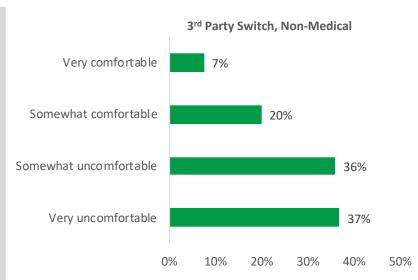




#### Prescriber Switch vs. 3<sup>rd</sup> Party Switch, Non-medical

Comfort level decreases further when asked about switching a patient to a biosimilar for non-medical reasons. More than half of prescribers (58%) are uncomfortable with switching their patients to a biosimilar for non-medical reasons; this percentage increases to 73% when asked about a third party initiating such a switch. UK and France prescribers are most comfortable with switching their patients, while Spain prescribers are the least comfortable with having a third party make the switch.







# FAMILIARITY WITH BIOSIMILARS



#### Understanding Statistical Significance

- ISR has provided statistical significance tests by country and practice area for most questions.
- When highlighting the existence of segment differences, ISR uses the following format: Each column (country or practice area) has been assigned a letter (A thru F for country, G thru P for practice area). When a statistically significant difference occurs between segments, it is noted by one of these letters.
- Below are the statistical significance results by country for the survey question asking whether or not physicians commonly treat patients who they are aware are using biologic medicines prescribed by another healthcare provider.

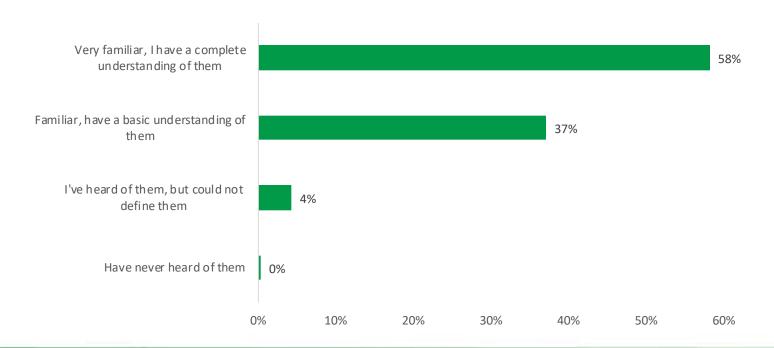
How to read this table: Physicians in Switzerland (E: 21%) are more likely to **not** treat patients who they are aware are using biologic medicines prescribed by another provider than physicians in France (A: 7%) and Italy (C: 9%).

|              | Total<br>N=579 | France<br>N=97<br>A | Germany<br>N=97<br>B | Italy<br>N=97<br>C | Spain<br>N=96<br>D | Switzerland<br>N=95<br>E | UK<br>N=97<br>F |
|--------------|----------------|---------------------|----------------------|--------------------|--------------------|--------------------------|-----------------|
| Yes          | 79%            | 75%                 | 77%                  | 90% ABEF           | 82%                | 73%                      | 77%             |
| No           | 14%            | 7%                  | 13%                  | 9%                 | 16%                | 21% AC                   | 18% A           |
| I don't know | 7%             | 18% CDEF            | 9% C                 | 1%                 | 2%                 | 6%                       | 5%              |



### Familiarity with Biological Medicines

Q8. How familiar are you with biological medicines? (n=579)





### Significance: Familiarity with Biological Medicines (country)

|  | Total<br>N=579 | France<br>N=97<br>A | Germany<br>N=97<br>B | Italy<br>N=97<br>C | Spain<br>N=96<br>D | Switzerland<br>N=95<br>E | UK<br>N=97<br>F |
|--|----------------|---------------------|----------------------|--------------------|--------------------|--------------------------|-----------------|
| Very familiar, I have a complete understanding of them | 58%            | 40%                 | 60% A                | 69% A              | 60% A              | 63% A                    | 57% A           |
| Familiar, have a basic understanding of them           | 37%            | 46% C               | 37%                  | 28%                | 39%                | 33%                      | 40%             |
| I've heard of them, but could not define them          | 4%             | 12% BCDEF           | 3%                   | 3%                 | 1%                 | 3%                       | 3%              |
| Have never heard of them                               | <1%            | -                   | -                    |                    |                    | -                        | +               |

France is the least familiar with biological medicines.



### Significance: Familiarity with Biological Medicines (practice area)

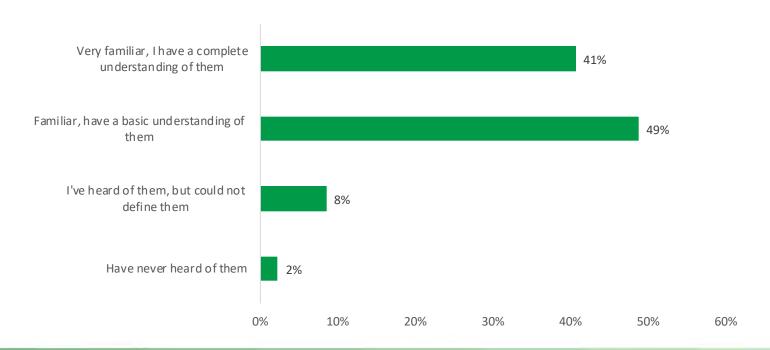
|  | Total<br>N=579 | Derm<br>N=56<br>G | Endo<br>N=65<br>H | Gastro<br>N=74<br>I | Hema<br>oncol<br>N=20<br>J | lmmun<br>N=30<br>K | Neph<br>N=69<br>L | Neur<br>N=81<br>M | Oncol<br>N=34<br>N | Ophth<br>N=70<br>O | Rheum<br>N=80<br>P |
|--|----------------|-------------------|-------------------|---------------------|----------------------------|--------------------|-------------------|-------------------|--------------------|--------------------|--------------------|
| Very familiar, I have a complete understanding of them | 58%            | 73%<br>HLMO       | 49%<br>MO         | 88%<br>GHJLMNO      | 50%<br>O                   | 73%<br>HLMO        | 46%<br>O          | 31%<br>O          | 65%<br>MO          | 16%                | 96%<br>GHJKLMNO    |
| Familiar, have a basic understanding of them           | 37%            | 27%<br>IP         | 46%<br>GIP        | 11%                 | 50%<br>IP                  | 27%                | 49%               | 62%               | 29%                | 67%                | 4%                 |
| I've heard of them,<br>but could not define<br>them    | 4%             | 0%                | 5%                | 1%                  | 0%                         | 0%                 | 4%                | 6%                | 6%                 | 16%<br>GHIKLP      | 0%                 |
| Have never heard of them                               | <1%            | _                 | _                 | -                   | _                          | _                  | _                 | _                 | _                  | _                  | _                  |

Rheumatology and Gastrointestinal have a greater (complete) understanding of biological medicines than most other practice areas.



#### Familiarity with Biosimilar Medicines

#### Q9. How familiar are you with biosimilar medicines? (n=579)





### Significance: Familiarity with Biosimilar Medicines (country)

|  | Total<br>N=579 | France<br>N=97<br>A | Germany<br>N=97<br>B | Italy<br>N=97<br>C | Spain<br>N=96<br>D | Switzerland<br>N=95<br>E | UK<br>N=97<br>F |
|--|----------------|---------------------|----------------------|--------------------|--------------------|--------------------------|-----------------|
| Very familiar, I have a complete understanding of them | 41%            | 39%                 | 44% E                | 48% EF             | 47% E              | 31%                      | 34%             |
| Familiar, have a basic understanding of them           | 49%            | 47%                 | 44%                  | 49%                | 42%                | 51%                      | 59% BD          |
| I've heard of them, but could not define them          | 8%             | 10% C               | 10% C                | 2%                 | 9% C               | 14% CF                   | 5%              |
| Have never heard of them                               | 2%             | 3%                  | 1%                   | 0%                 | 2%                 | 5% C                     | 2%              |

Italy, Spain, and Germany have a greater (complete) understanding of biosimilar medicines than Switzerland.



### Significance: Familiarity with Biosimilar Medicines (practice area)

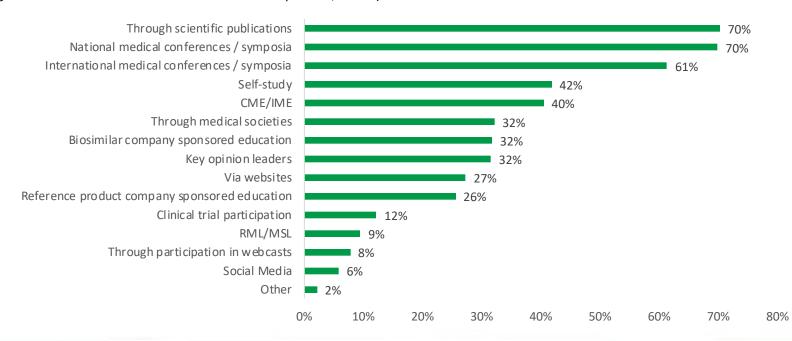
|  | Total<br>N=579 | Derm<br>N=56<br>G | Endo<br>N=65<br>H | Gastro<br>N=74<br>I | Hema<br>oncol<br>N=20<br>J | lmmun<br>N=30<br>K | Neph<br>N=69<br>L | Neur<br>N=81<br>M | Oncol<br>N=34<br>N | Ophth<br>N=70<br>O | Rheum<br>N=80<br>P |
|--|----------------|-------------------|-------------------|---------------------|----------------------------|--------------------|-------------------|-------------------|--------------------|--------------------|--------------------|
| Very familiar, I have a complete understanding of them | 41%            | 27%<br>O          | 60%<br>GKLMO      | 61%<br>GKLMO        | 50%<br>KMO                 | 17%                | 36%<br>MO         | 19%               | 56%<br>GKMO        | 9%                 | 70%<br>GKLMO       |
| Familiar, have a basic understanding of them           | 49%            | 64%<br>HINP       | 37%               | 36%                 | 45%                        | 73%<br>HIJNP       | 61%<br>HIP        | 57%<br>HIP        | 41%                | 56%<br>HIP         | 29%                |
| I've heard of them,<br>but could not define<br>them    | 8%             | 9%                | 2%                | 3%                  | 5%                         | 10%                | 3%                | 16%<br>HILP       | 3%                 | 29%<br>GHIJLNP     | 1%                 |
| Have never heard of them                               | 2%             | 0%                | 2%                | 0%                  | 0%                         | 0%                 | 0%                | 9%<br>GILP        | 0%                 | 7%<br>IP           | 0%                 |

Rheumatology, Gastrointestinal, and Endocrinology have a greater (complete) understanding of biosimilar medicines than 5 other practice areas.



#### How You Became Familiar

Q10. How did you become familiar with biosimilar medicines? Select all that apply. (only respondents who said they are very familiar or familiar with biosimilar medicines received this question, n=517)





### Significance: How You Became Familiar (country, top 5 methods)

|  | Total<br>N=517 | France<br>N=84<br>A | Germany<br>N=86<br>B | Italy<br>N=95<br>C | Spain<br>N=85<br>D | Switzerland<br>N=77<br>E | UK<br>N=90<br>F |
|--|----------------|---------------------|----------------------|--------------------|--------------------|--------------------------|-----------------|
| Through scientific publications              | 70%            | 67%                 | 73% F                | 79% F              | 73% F              | 74% F                    | 56%             |
| National medical conferences / symposia      | 70%            | 73%                 | 67%                  | 76% F              | 72%                | 70%                      | 61%             |
| International medical conferences / symposia | 61%            | 64%                 | 57%                  | 63%                | 60%                | 70% F                    | 54%             |
| Self-study                                   | 42%            | 35%                 | 52% ACD              | 22%                | 35% C              | 42% C                    | 66% ACDE        |
| CME/IME                                      | 40%            | 45% C               | 42% C                | 14%                | 64% ABCEF          | 32% C                    | 48% CE          |

UK became familiar with biosimilars less through scientific publications and more through self-study, compared to other countries.



### Significance: How You Became Familiar (practice area, top 5 methods)

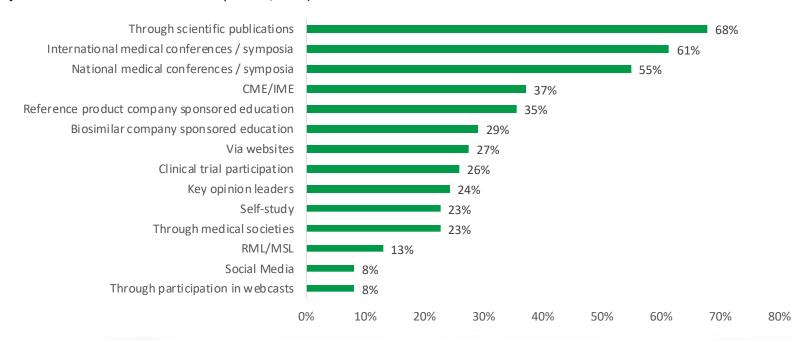
|  | Total<br>N=579 | Derm<br>N=56<br>G | Endo<br>N=65<br>H | Gastro<br>N=74<br>I | Hema<br>oncol<br>N=20<br>J | lmmun<br>N=30<br>K | Neph<br>N=69<br>L | Neur<br>N=81<br>M | Oncol<br>N=34<br>N | Ophth<br>N=70<br>O | Rheum<br>N=80<br>P |
|--|----------------|-------------------|-------------------|---------------------|----------------------------|--------------------|-------------------|-------------------|--------------------|--------------------|--------------------|
| Through scientific publications              | 70%            | 69%               | 78%<br>MO         | 68%                 | 89%                        | 70%                | 64%               | 61%               | 73%                | 56%                | 82%<br>ILMO        |
| National medical conferences / symposia      | 70%            | 73%               | 62%               | 79%<br>HLMO         | 84%                        | 70%                | 61%               | 61%               | 67%                | 58%                | 85%<br>HLMNO       |
| International medical conferences / symposia | 61%            | 67%               | 52%               | 65%                 | 58%                        | 59%                | 57%               | 54%               | 70%                | 51%                | 75%<br>HLMO        |
| Self-study                                   | 42%            | 45%               | 29%               | 51%<br>H            | 26%                        | 33%                | 46%<br>H          | 43%               | 45%                | 42%                | 42%                |
| CME/IME                                      | 40%            | 43%<br>M          | 37%               | 44%<br>M            | 47%<br>M                   | 30%                | 43%<br>M          | 23%               | 33%                | 42%<br>M           | 53%<br>HKM         |

Rheumatology is the front runner with 4 of the top 5 methods compared to several other practice areas.



#### Prefer to Learn About Biosimilars

Q11. How would you prefer to learn about biosimilars? Select all that apply. (only respondents who said they could not define or never heard of biosimilar medicines received this question, n=62)





### Significance: Prefer to Learn About Biosimilars (country, top 5 methods)

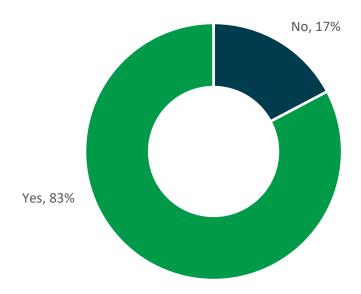
|   | Total<br>N=62 | France<br>N=13<br>A | Germany<br>N=11<br>B | Italy<br>N=2<br>C | Spain<br>N=11<br>D | Switzerland<br>N=18<br>E | UK<br>N=7<br>F |
|---|---------------|---------------------|----------------------|-------------------|--------------------|--------------------------|----------------|
| Through scientific publications               | 68%           | 46%                 | 73%                  | 100%              | 73%                | 67%                      | 86%            |
| International medical conferences / symposia  | 61%           | 31%                 | 55%                  | 50%               | 64%                | 78%                      | 86%            |
| National medical conferences / symposia       | 55%           | 54%                 | 64%                  | 50%               | 45%                | 50%                      | 71%            |
| CME/IME                                       | 37%           | 31%                 | 45%                  | 0%                | 64%                | 28%                      | 29%            |
| Reference product company sponsored education | 35%           | 15%                 | 73%                  | 0%                | 18%                | 39%                      | 43%            |

No significant differences were captured here.



#### Biosimilar Approval Awareness

Q12. Are you aware that a biosimilar may be approved for several or all indications of the reference product on the basis of clinical trials in only one of those indications? (n=579)





### Significance: Biosimilar Approval Awareness (country, practice area)

|     | Total<br>N=579 | France<br>N=97<br>A | Germany<br>N=97<br>B | Italy<br>N=97<br>C | Spain<br>N=96<br>D | Switzerland<br>N=95<br>E | UK<br>N=97<br>F |
|-----|----------------|---------------------|----------------------|--------------------|--------------------|--------------------------|-----------------|
| Yes | 83%            | 81%                 | 85%                  | 94% ABDEF          | 78%                | 79%                      | 79%             |
| No  | 17%            | 19% C               | 15% C                | 6%                 | 22% C              | 21% C                    | 21% C           |

|     | Total<br>N=579 | Derm<br>N=56<br>G | Endo<br>N=65<br>H | Gastro<br>N=74<br>I | Hema<br>oncol<br>N=20<br>J | lmmun<br>N=30<br>K | Neph<br>N=69<br>L | Neur<br>N=81<br>M | Oncol<br>N=34<br>N | Ophth<br>N=70<br>O | Rheum<br>N=80<br>P |
|-----|----------------|-------------------|-------------------|---------------------|----------------------------|--------------------|-------------------|-------------------|--------------------|--------------------|--------------------|
| Yes | 83%            | 82%               | 95%<br>GKLMO      | 92%<br>KLMO         | 95%<br>KMO                 | 70%                | 74%               | 69%               | 94%<br>KLMO        | 67%                | 96%<br>GKLMO       |
| No  | 17%            | 18%<br>HP         | 5%                | 8%                  | 5%                         | 30%<br>HIJNP       | 26%<br>HINP       | 31%<br>HIJNP      | 6%                 | 33%<br>HIJNP       | 4%                 |

Italy has significantly higher biosimilar approval awareness than all other countries. Rheumatology, Endocrinology, Oncology, and Gastrointestinal all have significantly higher awareness than several other practice areas.

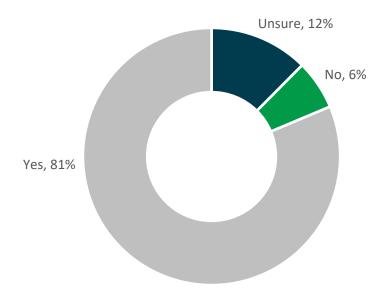


# PRESCRIBING, RECORDING & ADVERSE DRUG REACTION REPORTING



### Report Drug Reactions

Q13. Are you legally required to report adverse drug reactions that are brought to your attention? (n=579)





### Significance: Report Drug Reactions (country, practice area)

|        | Total<br>N=579 | France<br>N=97<br>A | Germany<br>N=97<br>B | Italy<br>N=97<br>C | Spain<br>N=96<br>D | Switzerland<br>N=95<br>E | UK<br>N=97<br>F |
|--------|----------------|---------------------|----------------------|--------------------|--------------------|--------------------------|-----------------|
| Yes    | 81%            | 69%                 | 86% AE               | 96% ABDEF          | 83% A              | 73%                      | 81% A           |
| No     | 6%             | 8%                  | 3%                   | 2%                 | 3%                 | 14% BCD                  | 7%              |
| Unsure | 12%            | 23% BCF             | 11% C                | 2%                 | 14% C              | 14% C                    | 11% C           |

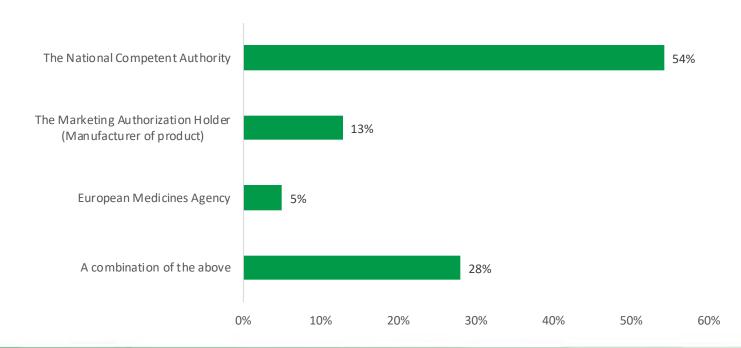
|        | Total<br>N=579 | Derm<br>N=56<br>G | Endo<br>N=65<br>H | Gastro<br>N=74<br>I | Hema<br>oncol<br>N=20<br>J | lmmun<br>N=30<br>K | Neph<br>N=69<br>L | Neur<br>N=81<br>M | Oncol<br>N=34<br>N | Ophth<br>N=70<br>O | Rheum<br>N=80<br>P |
|--------|----------------|-------------------|-------------------|---------------------|----------------------------|--------------------|-------------------|-------------------|--------------------|--------------------|--------------------|
| Yes    | 81%            | 73%               | 74%               | 81%                 | 85%                        | 90%                | 84%               | 74%               | 91%<br>M           | 89%<br>GHM         | 84%                |
| No     | 6%             | 9%                | 5%                | 9%                  | 5%                         | 0%                 | 6%                | 11%<br>O          | 6%                 | 1%                 | 5%                 |
| Unsure | 12%            | 18%<br>N          | 22%<br>IN         | 9%                  | 10%                        | 10%                | 10%               | 15%               | 3%                 | 10%                | 11%                |

Italy is legally required to report an ADR more so than any other country; Ophthalmology is required to report more so than several practice areas.



#### Entity to Report Reaction

#### Q14. To which entity are you most likely to report an adverse drug reaction? (n=579)





### Significance: Entity to Report Reaction (country)

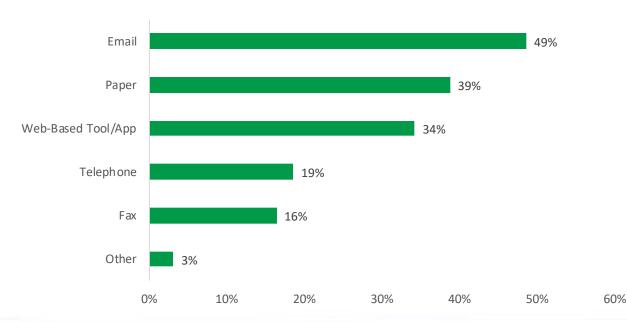
|  | Total<br>N=579 | France<br>N=97<br>A | Germany<br>N=97<br>B | Italy<br>N=97<br>C | Spain<br>N=96<br>D | Switzerland<br>N=95<br>E | UK<br>N=97<br>F |
|--|----------------|---------------------|----------------------|--------------------|--------------------|--------------------------|-----------------|
| The National Competent<br>Authority                          | 54%            | 55% F               | 56% F                | 64% F              | 59% F              | 63% F                    | 29%             |
| The Marketing Authorization Holder (Manufacturer of Product) | 13%            | 24% CDF             | 18% CD               | 3%                 | 4%                 | 20% CDF                  | 8%              |
| European Medicines Agency                                    | 5%             | 5%                  | 2%                   | 6% E               | 7% E               | 0%                       | 9% E            |
| A combination of the above                                   | 28%            | 16%                 | 25%                  | 27%                | 29% AE             | 17%                      | 54% ABCDE       |

UK reports significantly less to the National Competent Authority (as a singular entity) and significantly more to a combination of the entities listed.



#### Reporting Mechanism

Q15. When you report an adverse drug reaction, by what mechanisms do you report to the National Competent Authority or Marketing Authorization Holder? Select all that apply. (respondents who said they report to only European Medicines Agency did not receive this question, n=550)





### Significance: Reporting Mechanism (country)

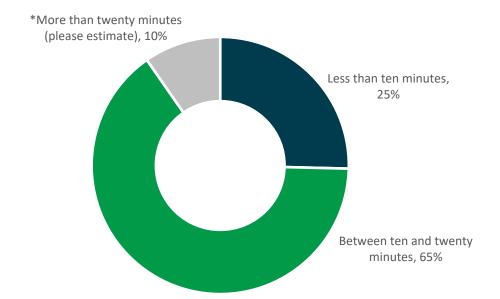
|                    | Total<br>N=550 | France<br>N=92<br>A | Germany<br>N=95<br>B | Italy<br>N=91<br>C | Spain<br>N=89<br>D | Switzerland<br>N=95<br>E | UK<br>N=88<br>F |
|--------------------|----------------|---------------------|----------------------|--------------------|--------------------|--------------------------|-----------------|
| Email              | 49%            | 57% BD              | 34%                  | 60% BD             | 39%                | 47%                      | 55% BD          |
| Paper              | 39%            | 34% C               | 58% ACDE             | 20%                | 25%                | 43% CD                   | 52% ACD         |
| Web-based Tool/App | 34%            | 25%                 | 19%                  | 36% B              | 53% ABCE           | 31%                      | 43% AB          |
| Telephone          | 19%            | 28% CD              | 25% C                | 5%                 | 16% C              | 17% C                    | 19% C           |
| Fax                | 16%            | 14%                 | 28% ADEF             | 27% ADEF           | 9%                 | 12%                      | 7%              |

While Germany and UK have a significant preference for paper, other countries like Spain, France, and Italy have a preference for email/app.



#### Time Spent to File

Q16. On average, how much time do you spend on the initial filing of an adverse drug reaction report for a biologic? (n=579)



<sup>\*</sup>For those reporting more than 20 minutes (write-in response), the average amount of time was 36 minutes. Responses of 12 or 24 hours (<5) were not included.



## Significance: Time Spent to File (practice area)

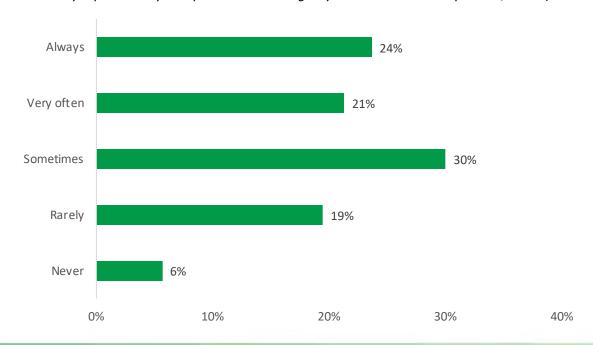
|                           | Total<br>N=579 | Derm<br>N=56<br>G | Endo<br>N=65<br>H | Gastro<br>N=74<br>I | Hema<br>oncol<br>N=20<br>J | Immun<br>N=30<br>K | Neph<br>N=69<br>L | Neur<br>N=81<br>M | Oncol<br>N=34<br>N | Ophth<br>N=70<br>O | Rheum<br>N=80<br>P |
|---------------------------|----------------|-------------------|-------------------|---------------------|----------------------------|--------------------|-------------------|-------------------|--------------------|--------------------|--------------------|
| Less than 10 minutes      | 25%            | 38%<br>LMP        | 23%               | 31%<br>L            | 35%<br>L                   | 20%                | 12%               | 21%               | 29%<br>L           | 33%<br>L           | 21%                |
| Between 10 and 20 minutes | 65%            | 59%               | 74%               | 62%                 | 55%                        | 63%                | 74%               | 60%               | 68%                | 59%                | 69%                |
| More than 20 minutes      | 10%            | 4%                | 3%                | 7%                  | 10%                        | 17%<br>GH          | 14%<br>H          | 19%<br>GHIN       | 3%                 | 9%                 | 10%                |

Dermatology needs less time to file compared to several practice areas. Neurology, Immunology, and Nephrology need more time to file.



#### Receive Follow-Up

Q17. How frequently do you receive follow-up from the National Competent Authority or Marketing Authorization Holder on an adverse drug reaction report? (respondents who said they report to only European Medicines Agency did not receive this question, n=550)





#### Significance: Receive Follow-up (country)

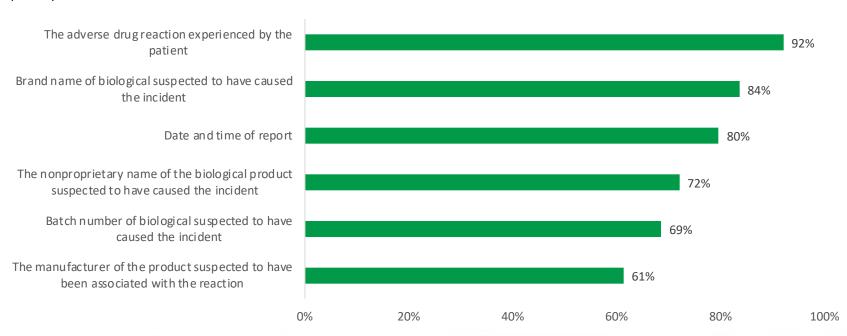
|            | Total<br>N=550 | France<br>N=92<br>A | Germany<br>N=95<br>B | Italy<br>N=91<br>C | Spain<br>N=89<br>D | Switzerland<br>N=95<br>E | UK<br>N=88<br>F |
|------------|----------------|---------------------|----------------------|--------------------|--------------------|--------------------------|-----------------|
| Always     | 24%            | 18%                 | 27% F                | 25% F              | 21%                | 35% ADF                  | 14%             |
| Very often | 21%            | 20%                 | 17%                  | 27%                | 25%                | 16%                      | 24%             |
| Sometimes  | 30%            | 33%                 | 26%                  | 32%                | 38% E              | 21%                      | 31%             |
| Rarely     | 19%            | 24% C               | 21%                  | 11%                | 16%                | 23% C                    | 22%             |
| Never      | 6%             | 5%                  | 8% D                 | 4%                 | 0%                 | 5%                       | 10% D           |

Switzerland receives follow-up from reporting entities at a higher rate (always) than several other countries.



#### Information in Report

Q18. When you file an adverse drug reaction report for a biological, what information do you include in the report? Select all that apply. (n=579)





### Significance: Information in Report (country)

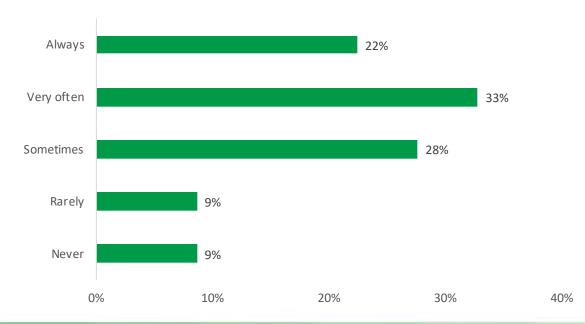
|   | Total<br>N=579 | France<br>N=97<br>A | Germany<br>N=97<br>B | Italy<br>N=97<br>C | Spain<br>N=96<br>D | Switzerland<br>N=95<br>E | UK<br>N=97<br>F |
|---|----------------|---------------------|----------------------|--------------------|--------------------|--------------------------|-----------------|
| The adverse drug reaction experienced by the patient                                    | 92%            | 88%                 | 94%                  | 88%                | 95%                | 96%                      | 93%             |
| Brand name of biological expected to have caused the incident                           | 84%            | 85%                 | 78%                  | 76%                | 81%                | 93% BCD                  | 89% C           |
| Date and time of report   | 80%            | 75%                 | 75%                  | 75%                | 81%                | 81%                      | 90% ABC         |
| The nonproprietary name of the biological product suspected to have caused the incident | 72%            | 75%                 | 70%                  | 73%                | 71%                | 72%                      | 71%             |
| Batch number of biological suspected to have caused the incident                        | 69%            | 65%                 | 72% F                | 79% AEF            | 71%                | 65%                      | 59%             |
| The manufacturer of the product suspected to have been associated with the reaction     | 61%            | 48%                 | 74% AC               | 53%                | 65% A              | 66% A                    | 62%             |

Italy is better about including batch number; Germany is better about including the manufacturer of the product; UK is better about including date and time.



#### Request Brand Name or Manufacturer

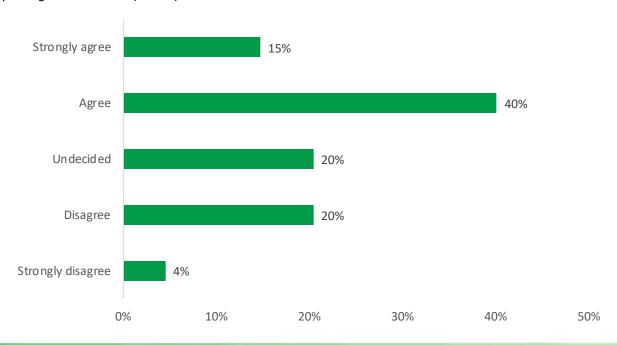
Q19. How frequently does the National Competent Authority or Marketing Authorization Holder follow-up to request the brand name or manufacturer of the product? (only respondents who said they do not report to European Medicines Agency exclusively AND do not give both brand name and manufacturer received this question, n=58)





#### Deterrence from Reporting

Q20. Please indicate your level of agreement with the following statement: The amount of information necessary to report an adverse drug reaction deters me from reporting minor events. (n=579)





### Significance: Deterrence from Reporting (country)

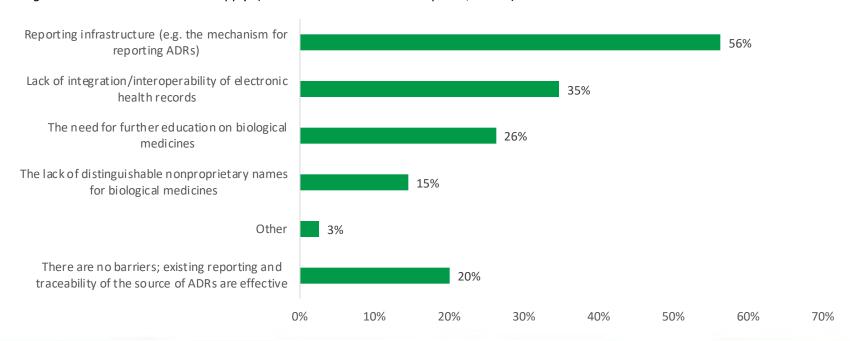
|                   | Total<br>N=579 | France<br>N=97<br>A | Germany<br>N=97<br>B | Italy<br>N=97<br>C | Spain<br>N=96<br>D | Switzerland<br>N=95<br>E | UK<br>N=97<br>F |
|-------------------|----------------|---------------------|----------------------|--------------------|--------------------|--------------------------|-----------------|
| Strongly agree    | 15%            | 27% CEF             | 18%                  | 8%                 | 16%                | 12%                      | 8%              |
| Agree             | 40%            | 47% C               | 39%                  | 30%                | 43%                | 41%                      | 40%             |
| Undecided         | 20%            | 12%                 | 25% A                | 22%                | 17%                | 25% A                    | 22%             |
| Disagree          | 20%            | 12%                 | 15%                  | 29% ABE            | 22%                | 17%                      | 27% A           |
| Strongly disagree | 4%             | 1%                  | 3%                   | 11% ABDF           | 3%                 | 5%                       | 3%              |

France is significantly more deterred from reporting minor events, while Italy is significantly less deterred.



#### Barriers to Accurate Reporting

Q21. In your opinion, which of the following act as barriers to the accurate reporting of adverse drug reactions (ADRs) associated with use of biological medicines? Select all that apply. (No barriers was exclusive response, n=579)





## Significance: Barriers to Accurate Reporting (country)

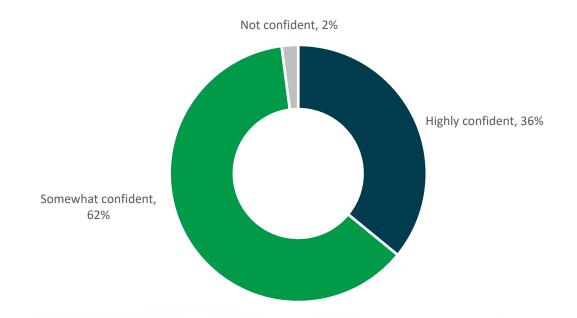
|  | Total<br>N=579 | France<br>N=97<br>A | Germany<br>N=97<br>B | Italy<br>N=97<br>C | Spain<br>N=96<br>D | Switzerland<br>N=95<br>E | UK<br>N=97<br>F |
|--|----------------|---------------------|----------------------|--------------------|--------------------|--------------------------|-----------------|
| Reporting infrastructure (e.g., the mechanism for reporting ADRs)                              | 56%            | 48%                 | 52%                  | 52%                | 70% ABCE           | 55%                      | 62%             |
| Lack of integration/interoperability of electronic health records                              | 35%            | 35% BE              | 21%                  | 35% BE             | 55% ABCEF          | 22%                      | 40% BE          |
| The need for further education on biological medicines   | 26%            | 24%                 | 29%                  | 23%                | 27%                | 23%                      | 32%             |
| The lack of distinguishable nonproprietary names for biological medicines                      | 15%            | 14%                 | 14%                  | 10%                | 14%                | 11%                      | 24% CE          |
| There are no barriers; existing reporting and traceability of the source of ADRs are effective | 20%            | 19% D               | 25% D                | 25% D              | 8%                 | 29% DF                   | 14%             |

Spain identified reporting infrastructure and lack of integration of electronic health records as barriers to accurate reporting more so than most countries.



#### Confidence to Identify Product

Q22. How confident are you in the European pharmacovigilance system's ability to accurately identify the specific product, at the brand name level, that might be responsible for an adverse drug reaction? (n=579)





### Significance: Confidence to Identify Product (country)

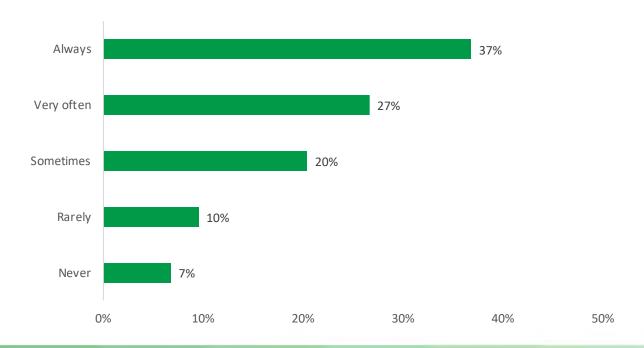
|                    | Total<br>N=579 | France<br>N=97<br>A | Germany<br>N=97<br>B | Italy<br>N=97<br>C | Spain<br>N=96<br>D | Switzerland<br>N=95<br>E | UK<br>N=97<br>F |
|--------------------|----------------|---------------------|----------------------|--------------------|--------------------|--------------------------|-----------------|
| Highly confident   | 36%            | 33%                 | 41% F                | 41% F              | 29%                | 47% ADF                  | 24%             |
| Somewhat confident | 62%            | 64%                 | 58%                  | 58%                | 68% E              | 53%                      | 72% BCE         |
| Not confident      | 2%             | 2%                  | 3%                   | 1%                 | 1%                 | 3%                       | 0%              |

UK is not as confident (highly) in the European pharmacovigilance system as most other countries surveyed.



#### Include Batch Number

Q23. How often do you include the batch number when reporting adverse events? (n=579)





### Significance: Include Batch Number (country)

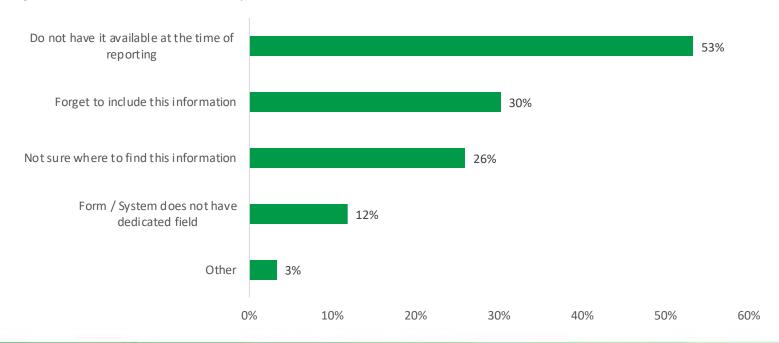
|            | Total<br>N=579 | France<br>N=97<br>A | Germany<br>N=97<br>B | Italy<br>N=97<br>C | Spain<br>N=96<br>D | Switzerland<br>N=95<br>E | UK<br>N=97<br>F |
|------------|----------------|---------------------|----------------------|--------------------|--------------------|--------------------------|-----------------|
| Always     | 37%            | 31%                 | <b>42%</b> E         | 55% ADEF           | 35%                | 27%                      | 30%             |
| Very often | 27%            | 25%                 | 25%                  | 30%                | 28%                | 25%                      | 27%             |
| Sometimes  | 20%            | 24% C               | 16%                  | 11%                | 23% C              | 23% C                    | 25% C           |
| Rarely     | 10%            | 11% C               | 12% C                | 3%                 | 8%                 | 13% C                    | 9%              |
| Never      | 7%             | 9% C                | 4%                   | 1%                 | 5%                 | 12% C                    | 9% C            |

Italy is best about including batch number (always) than most other countries surveyed.



#### Why Not Give Batch Number

Q24. What are the main reasons for not reporting the batch number? Select all that apply. (only respondents who said they sometimes, rarely, or never give the batch number received this question, n=212)



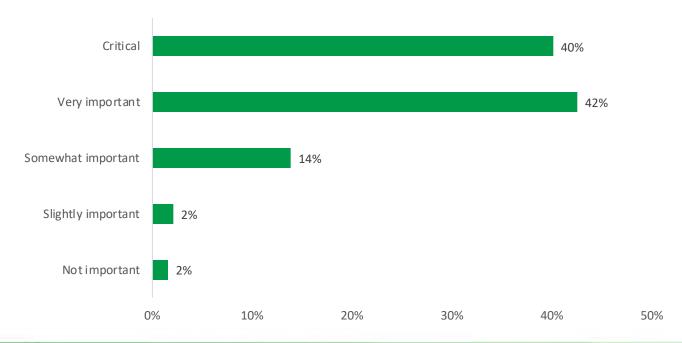


### AUTOMATIC SUBSTITUTION, SWITCHING & PHYSICIAN CHOICE



#### Sole Authority to Decide Medicine

Q25. 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=579)





### Significance: Sole Authority to Decide Medicine (country)

|                    | Total<br>N=579 | France<br>N=97<br>A | Germany<br>N=97<br>B | Italy<br>N=97<br>C | Spain<br>N=96<br>D | Switzerland<br>N=95<br>E | UK<br>N=97<br>F |
|--------------------|----------------|---------------------|----------------------|--------------------|--------------------|--------------------------|-----------------|
| Critical           | 40%            | 44% DF              | 46% DF               | 54% DF             | 30% F              | 51% DF                   | 15%             |
| Very important     | 42%            | 29%                 | 38%                  | 40%                | 47% A              | 40%                      | 61% ABCE        |
| Somewhat important | 14%            | 22% BCE             | 9%                   | 5%                 | 22% BCE            | 6%                       | 19% CE          |
| Slightly important | 2%             | 1%                  | 5%                   | 0%                 | 1%                 | 2%                       | 3%              |
| Not important      | 2%             | 4%                  | 1%                   | 1%                 | 0%                 | 1%                       | 2%              |

It is significantly more critical to have sole authority in deciding medicine for Italy, Switzerland, Germany, and France.



# Significance: Sole Authority to Decide Medicine (practice area)

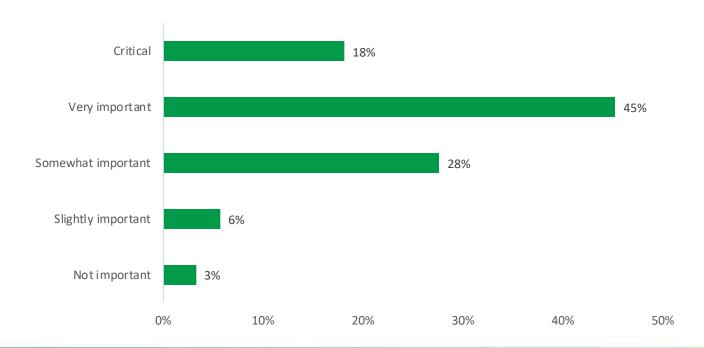
|                    | Total<br>N=579 | Derm<br>N=56<br>G | Endo<br>N=65<br>H | Gastro<br>N=74<br>I | Hema<br>oncol<br>N=20<br>J | lmmun<br>N=30<br>K | Neph<br>N=69<br>L | Neur<br>N=81<br>M | Oncol<br>N=34<br>N | Ophth<br>N=70<br>O | Rheum<br>N=80<br>P |
|--------------------|----------------|-------------------|-------------------|---------------------|----------------------------|--------------------|-------------------|-------------------|--------------------|--------------------|--------------------|
| Critical           | 40%            | 48%<br>JL         | 46%<br>J          | 34%                 | 20%                        | 53%<br>JL          | 30%               | 35%               | 41%                | 40%                | 49%<br>JL          |
| Very important     | 42%            | 38%               | 38%               | 47%                 | 45%                        | 33%                | 55%<br>KP         | 41%               | 41%                | 46%                | 36%                |
| Somewhat important | 14%            | 13%               | 15%               | 12%                 | 15%                        | 13%                | 13%               | 21%<br>P          | 15%                | 13%                | 9%                 |
| Slightly important | 2%             | 2%                | 0%                | 4%                  | 5%                         | 0%                 | 0%                | 4%                | 0%                 | 1%                 | 4%                 |
| Not important      | 2%             | 0%                | 0%                | 3%                  | 15%<br>GHLMO               | 0%                 | 1%                | 0%                | 3%                 | 0%                 | 3%                 |

It is significantly more critical to have sole authority in deciding medicine for Immunology, Rheumatology, Dermatology, and Endocrinology.



#### Government Tenders Awarded to Suppliers

Q26. From your perspective, how important is it for government tenders for biosimilars to be awarded to multiple suppliers? (n=579)





### Significance: Government Tenders Awarded to Suppliers (country)

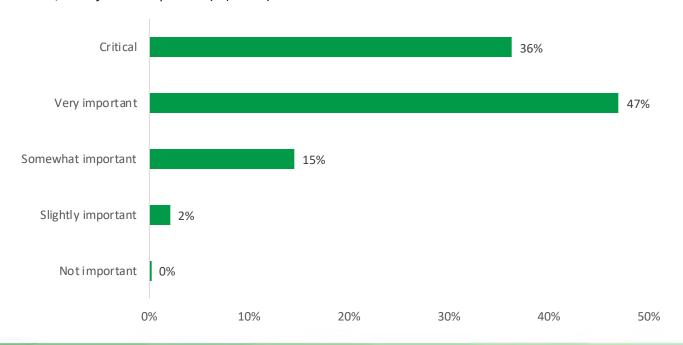
|                    | Total<br>N=579 | France<br>N=97<br>A | Germany<br>N=97<br>B | Italy<br>N=97<br>C | Spain<br>N=96<br>D | Switzerland<br>N=95<br>E | UK<br>N=97<br>F |
|--------------------|----------------|---------------------|----------------------|--------------------|--------------------|--------------------------|-----------------|
| Critical           | 18%            | 25% DF              | 29% DF               | 21% DF             | 7%                 | 18% D                    | 9%              |
| Very important     | 45%            | 39%                 | 41%                  | 51%                | 49%                | 45%                      | 46%             |
| Somewhat important | 28%            | 31%                 | 20%                  | 21%                | 38% BC             | 25%                      | 32% B           |
| Slightly important | 6%             | 2%                  | 7%                   | 4%                 | 6%                 | 9% A                     | 5%              |
| Not important      | 3%             | 3%                  | 3%                   | 4%                 | 0%                 | 2%                       | 7% D            |

Spain and UK do not think it is as critical for government tenders to be awarded compared to other countries surveyed.



#### **Factors Besides Price**

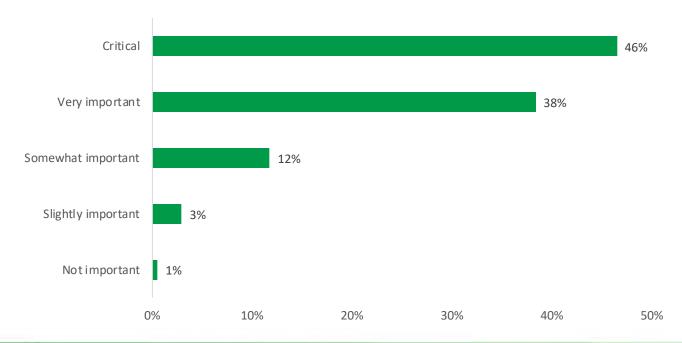
Q27. From your perspective, how important is it for factors besides price to be taken into account in national tender offers (e.g. reliability of supply, patient support services, manufacturer reputation)? (n=579)





#### Authority to Deny Substitution

Q28. 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=579)





### Significance: Authority to Deny Substitution (country)

|                    | Total<br>N=579 | France<br>N=97<br>A | Germany<br>N=97<br>B | Italy<br>N=97<br>C | Spain<br>N=96<br>D | Switzerland<br>N=95<br>E | UK<br>N=97<br>F |
|--------------------|----------------|---------------------|----------------------|--------------------|--------------------|--------------------------|-----------------|
| Critical           | 46%            | 43% F               | 55% F                | 54% F              | 43% F              | 63% ADF                  | 22%             |
| Very important     | 38%            | 39%                 | 35%                  | 36%                | 39%                | 31%                      | 51% BCE         |
| Somewhat important | 12%            | 13% E               | 8%                   | 8%                 | 18% E              | 3%                       | 20% BCE         |
| Slightly important | 3%             | 4%                  | 2%                   | 2%                 | 1%                 | 3%                       | 5%              |
| Not important      | 1%             | 0%                  | 0%                   | 0%                 | 0%                 | 0%                       | 3%              |

It is significantly more critical for Switzerland to have authority to deny substitution for a biologic medicine, and least so for UK.



### Significance: Authority to Deny Substitution (practice area)

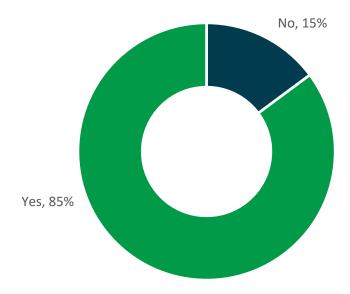
|                    | Total<br>N=579 | Derm<br>N=56<br>G | Endo<br>N=65<br>H | Gastro<br>N=74<br>I | Hema<br>oncol<br>N=20<br>J | Immun<br>N=30<br>K | Neph<br>N=69<br>L | Neur<br>N=81<br>M | Oncol<br>N=34<br>N | Ophth<br>N=70<br>O | Rheum<br>N=80<br>P |
|--------------------|----------------|-------------------|-------------------|---------------------|----------------------------|--------------------|-------------------|-------------------|--------------------|--------------------|--------------------|
| Critical           | 46%            | 50%               | 52%<br>J          | 47%                 | 25%                        | 47%                | 48%               | 40%               | 32%                | 47%                | 55%<br>JMN         |
| Very important     | 38%            | 38%               | 29%               | 42%                 | 35%                        | 40%                | 41%               | 43%               | 44%                | 37%                | 35%                |
| Somewhat important | 12%            | 11%               | 17%<br>P          | 5%                  | 20%                        | 10%                | 12%               | 14%               | 18%                | 14%                | 6%                 |
| Slightly important | 3%             | 2%                | 2%                | 4%                  | 20%<br>GHILMNOP            | 3%                 | 0%                | 4%                | 0%                 | 1%                 | 4%                 |
| Not important      | 1%             | 0%                | 0%                | 1%                  | 0%                         | 0%                 | 0%                | 0%                | 6%                 | 0%                 | 0%                 |

It is significantly less important for Hematology oncology to be able to deny substitution than almost all other practice areas.



#### Identify Medicine by Brand Name

Q29. When you prescribe medicine, including biologics, do you identify the medicine in the patient record by brand name? (n=579)





### Significance: Identify Medicine by Brand Name (country, practice area)

|     | Total<br>N=579 | France<br>N=97<br>A | Germany<br>N=97<br>B | Italy<br>N=97<br>C | Spain<br>N=96<br>D | Switzerland<br>N=95<br>E | UK<br>N=97<br>F |
|-----|----------------|---------------------|----------------------|--------------------|--------------------|--------------------------|-----------------|
| Yes | 85%            | 90% F               | 86% F                | 87% F              | 88% F              | 94% F                    | 68%             |
| No  | 15%            | 10%                 | 14%                  | 13%                | 13%                | 6%                       | 32% ABCDE       |

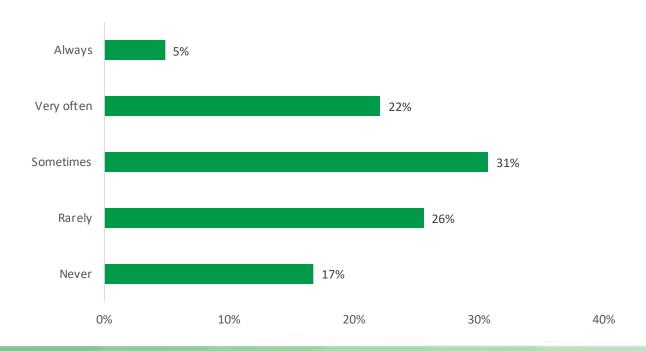
|     | Total<br>N=579 | Derm<br>N=56<br>G | Endo<br>N=65<br>H | Gastro<br>N=74<br>I | Hema<br>oncol<br>N=20<br>J | lmmun<br>N=30<br>K | Neph<br>N=69<br>L | Neur<br>N=81<br>M | Oncol<br>N=34<br>N | Ophth<br>N=70<br>O | Rheum<br>N=80<br>P |
|-----|----------------|-------------------|-------------------|---------------------|----------------------------|--------------------|-------------------|-------------------|--------------------|--------------------|--------------------|
| Yes | 85%            | 91%<br>JN         | 85%<br>N          | 88%<br>N            | 70%                        | 90%<br>N           | 83%<br>N          | 83%<br>N          | 56%                | 87%<br>N           | 96%<br>HJLMN       |
| No  | 15%            | 9%                | 15%<br>P          | 12%                 | 30%<br>GP                  | 10%                | 17%<br>P          | 17%<br>P          | 44%<br>GHIKLMOP    | 13%                | 4%                 |

UK and Oncology identify medicine in a patient's record by brand name significantly less than other countries and practice areas.



#### Use Nonproprietary Name

Q30. How often do you prescribe biological products by nonproprietary name only? (n=579)





### Significance: Use Nonproprietary Name (country)

|            | Total<br>N=579 | France<br>N=97<br>A | Germany<br>N=97<br>B | Italy<br>N=97<br>C | Spain<br>N=96<br>D | Switzerland<br>N=95<br>E | UK<br>N=97<br>F |
|------------|----------------|---------------------|----------------------|--------------------|--------------------|--------------------------|-----------------|
| Always     | 5%             | 5%                  | 3%                   | 4%                 | 2%                 | 4%                       | 10% D           |
| Very often | 22%            | 19%                 | 20%                  | 23%                | 28%                | 17%                      | 27%             |
| Sometimes  | 31%            | 31%                 | 29%                  | 32%                | 36% E              | 21%                      | 35% E           |
| Rarely     | 26%            | 29%                 | 28%                  | 26%                | 31% E              | 18%                      | 22%             |
| Never      | 17%            | 16% DF              | 21% DF               | 15% DF             | 2%                 | 40% ABCDF                | 6%              |

Compared to other countries, Switzerland never uses the nonproprietary name of a product more so.



### Significance: Use Nonproprietary Name (practice area)

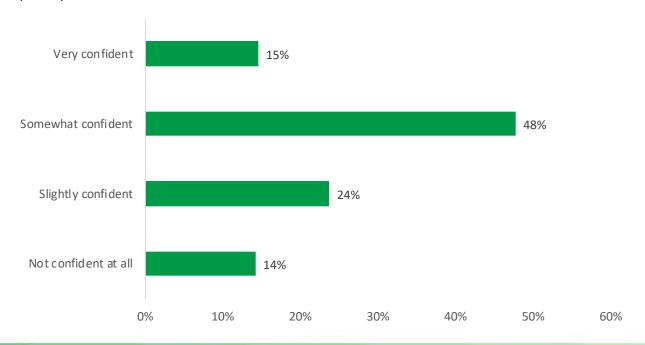
|            | Total<br>N=579 | Derm<br>N=56<br>G | Endo<br>N=65<br>H | Gastro<br>N=74<br>I | Hema<br>oncol<br>N=20<br>J | Immun<br>N=30<br>K | Neph<br>N=69<br>L | Neur<br>N=81<br>M | Oncol<br>N=34<br>N | Ophth<br>N=70<br>O | Rheum<br>N=80<br>P |
|------------|----------------|-------------------|-------------------|---------------------|----------------------------|--------------------|-------------------|-------------------|--------------------|--------------------|--------------------|
| Always     | 5%             | 4%                | 6%                | 8%                  | 0%                         | 3%                 | 3%                | 1%                | 15%<br>LMO         | 1%                 | 8%                 |
| Very often | 22%            | 23%               | 17%               | 18%                 | 25%                        | 23%                | 29%<br>P          | 21%               | 44%<br>GHIMOP      | 24%                | 13%                |
| Sometimes  | 31%            | 21%               | 28%               | 30%                 | 35%                        | 40%                | 29%               | 38%<br>GP         | 29%                | 40%<br>GP          | 23%                |
| Rarely     | 26%            | 20%               | 37%<br>GN         | 27%<br>N            | 25%                        | 20%                | 23%               | 25%               | 9%                 | 27%<br>N           | 30%<br>N           |
| Never      | 17%            | 32%<br>HLMNO      | 12%               | 18%                 | 15%                        | 13%                | 16%               | 15%               | 3%                 | 7%                 | 28%<br>HMNO        |

Compared to other practice areas, Dermatology and Rheumatology never use the nonproprietary name of a product more so.



# Confidence in What is Dispensed Using Nonproprietary Name

Q31. If you prescribed a product using the nonproprietary name, how confident are you in your ability to know exactly what product will be dispensed to the patient? (n=579)





#### Significance: Confidence in What is Dispensed Using Nonproprietary Name (country)

|                      | Total<br>N=579 | France<br>N=97<br>A | Germany<br>N=97<br>B | Italy<br>N=97<br>C | Spain<br>N=96<br>D | Switzerland<br>N=95<br>E | UK<br>N=97<br>F |
|----------------------|----------------|---------------------|----------------------|--------------------|--------------------|--------------------------|-----------------|
| Very confident       | 15%            | 18%                 | 11%                  | 18%                | 10%                | 14%                      | 16%             |
| Somewhat confident   | 48%            | 44%                 | 45%                  | 49% E              | 59% AE             | 34%                      | 54% E           |
| Slightly confident   | 24%            | 16%                 | 28%                  | 28%                | 25%                | 26%                      | 19%             |
| Not confident at all | 14%            | 22% CD              | 15% CD               | 5%                 | 5%                 | 26% CDF                  | 11%             |

Switzerland is significantly less confident in knowing what is dispensed when a nonproprietary name is used than Italy, Spain, and UK.



#### Significance: Confidence in What is Dispensed Using Nonproprietary Name (practice area)

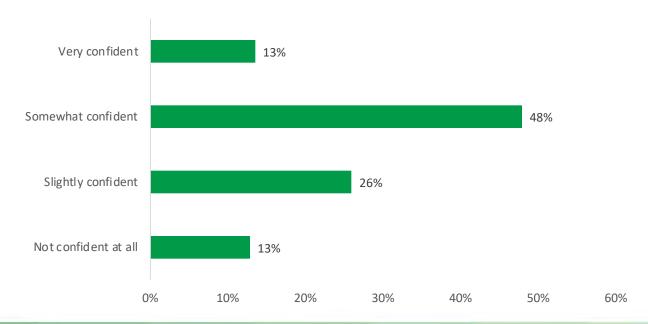
|                      | Total<br>N=579 | Derm<br>N=56<br>G | Endo<br>N=65<br>H | Gastro<br>N=74<br>I | Hema<br>oncol<br>N=20<br>J | Immun<br>N=30<br>K | Neph<br>N=69<br>L | Neur<br>N=81<br>M | Oncol<br>N=34<br>N | Ophth<br>N=70<br>O | Rheum<br>N=80<br>P |
|----------------------|----------------|-------------------|-------------------|---------------------|----------------------------|--------------------|-------------------|-------------------|--------------------|--------------------|--------------------|
| Very confident       | 15%            | 9%                | 18%               | 12%                 | 20%                        | 20%                | 14%               | 10%               | 21%                | 13%                | 18%                |
| Somewhat confident   | 48%            | 36%               | 45%               | 43%                 | 40%                        | 63%<br>GP          | 52%               | 44%               | 59%<br>G           | 61%<br>GIMP        | 41%                |
| Slightly confident   | 24%            | 32%<br>O          | 22%               | 27%                 | 30%                        | 13%                | 23%               | 35%<br>KNOP       | 15%                | 16%                | 19%                |
| Not confident at all | 14%            | 23%<br>KLNO       | 15%               | 18%                 | 10%                        | 3%                 | 10%               | 11%               | 6%                 | 10%                | 23%<br>KLNO        |

Dermatology and Rheumatology are significantly less confident in knowing what is dispensed when a nonproprietary name is used than several other practice areas.



# Confidence in What is Dispensed (biological product) By Pharmacy

Q32. This question pertains only to biological products dispensed directly to a patient from a pharmacy. If the pharmacy dispenses a drug that is different from the one that is prescribed (whether it is biosimilar 1, 2 or 3 or even the reference product), how confident are you in your ability to identify exactly what drug was dispensed to the patient? (n=579)





#### Significance: Confidence in What is Dispensed (biological product) By Pharmacy (country)

|                      | Total<br>N=579 | France<br>N=97<br>A | Germany<br>N=97<br>B | Italy<br>N=97<br>C | Spain<br>N=96<br>D | Switzerland<br>N=95<br>E | UK<br>N=97<br>F |
|----------------------|----------------|---------------------|----------------------|--------------------|--------------------|--------------------------|-----------------|
| Very confident       | 13%            | 15%                 | 8%                   | 11%                | 9%                 | 17%                      | 20% BD          |
| Somewhat confident   | 48%            | 46%                 | 41%                  | 62% ABE            | 51% E              | 34%                      | 53% E           |
| Slightly confident   | 26%            | 20%                 | 40% ACEF             | 24%                | 32% AF             | 25%                      | 14%             |
| Not confident at all | 13%            | 19% CD              | 10%                  | 3%                 | 7%                 | 24% BCD                  | 13% C           |

UK is significantly more confident in knowing what is dispensed than Germany and Spain; Switzerland is significantly less confident than several countries.



#### Significance: Confidence in What is Dispensed (biological product) By Pharmacy (practice area)

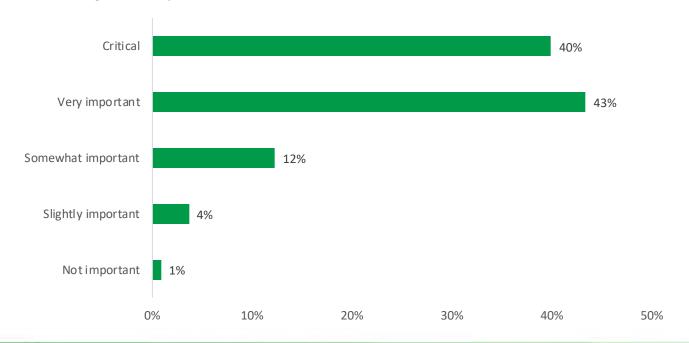
|                      | Total<br>N=579 | Derm<br>N=56<br>G | Endo<br>N=65<br>H | Gastro<br>N=74<br>I | Hema<br>oncol<br>N=20<br>J | lmmun<br>N=30<br>K | Neph<br>N=69<br>L | Neur<br>N=81<br>M | Oncol<br>N=34<br>N | Ophth<br>N=70<br>O | Rheum<br>N=80<br>P |
|----------------------|----------------|-------------------|-------------------|---------------------|----------------------------|--------------------|-------------------|-------------------|--------------------|--------------------|--------------------|
| Very confident       | 13%            | 5%                | 12%               | 11%                 | 20%                        | 13%                | 7%                | 11%               | 38%<br>GHIKLMOP    | 11%                | 20%<br>GL          |
| Somewhat confident   | 48%            | 41%               | 49%               | 53%                 | 40%                        | 60%                | 58%               | 42%               | 44%                | 44%                | 46%                |
| Slightly confident   | 26%            | 32%<br>N          | 25%               | 24%                 | 30%                        | 27%                | 25%               | 27%<br>N          | 9%                 | 31%<br>N           | 25%                |
| Not confident at all | 13%            | 21%<br>KP         | 14%               | 12%                 | 10%                        | 0%                 | 10%               | 20%<br>KP         | 9%                 | 13%                | 9%                 |

Oncology is significantly more confident in knowing what is dispensed than almost all other countries.



#### Notified of Other Biologic Prescribed

Q33. 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=579)





### Significance: Notified of Other Biologic Prescribed (country)

|                    | Total<br>N=579 | France<br>N=97<br>A | Germany<br>N=97<br>B | Italy<br>N=97<br>C | Spain<br>N=96<br>D | Switzerland<br>N=95<br>E | UK<br>N=97<br>F |
|--------------------|----------------|---------------------|----------------------|--------------------|--------------------|--------------------------|-----------------|
| Critical           | 40%            | 32%                 | 41% F                | 42% F              | 33%                | 67% ABCDF                | 24%             |
| Very important     | 43%            | 45% E               | 39% E                | 46% E              | <b>52%</b> E       | 21%                      | 56% BE          |
| Somewhat important | 12%            | 16%                 | 12%                  | 10%                | 13%                | 7%                       | 14%             |
| Slightly important | 4%             | 5%                  | 6%                   | 1%                 | 2%                 | 3%                       | 4%              |
| Not important      | 1%             | 1%                  | 1%                   | 0%                 | 0%                 | 1%                       | 2%              |

It is significantly more critical for Switzerland to be notified that a different biologic was prescribed than all other surveyed countries.



# Significance: Notified of Other Biologic Prescribed (practice area)

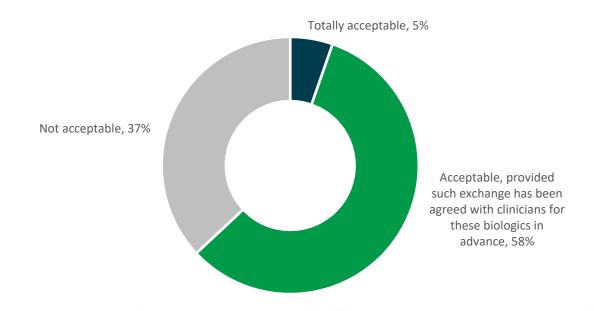
|                    | Total<br>N=579 | Derm<br>N=56<br>G | Endo<br>N=65<br>H | Gastro<br>N=74<br>I | Hema<br>oncol<br>N=20<br>J | Immun<br>N=30<br>K | Neph<br>N=69<br>L | Neur<br>N=81<br>M | Oncol<br>N=34<br>N | Ophth<br>N=70<br>O | Rheum<br>N=80<br>P |
|--------------------|----------------|-------------------|-------------------|---------------------|----------------------------|--------------------|-------------------|-------------------|--------------------|--------------------|--------------------|
| Critical           | 40%            | 45%<br>J          | 34%               | 47%<br>JO           | 15%                        | 47%<br>J           | 43%<br>J          | 32%               | 29%                | 30%                | 56%<br>HJMNO       |
| Very important     | 43%            | 45%<br>P          | 45%<br>P          | 41%                 | 45%                        | 40%                | 42%               | 52%<br>P          | 47%<br>P           | 53%<br>P           | 28%                |
| Somewhat important | 12%            | 9%                | 18%               | 11%                 | 15%                        | 13%                | 12%               | 9%                | 15%                | 14%                | 11%                |
| Slightly important | 4%             | 2%                | 3%                | 1%                  | 20%<br>GHIKLNOP            | 0%                 | 3%                | 6%                | 0%                 | 3%                 | 5%                 |
| Not important      | 1%             | 0%                | 0%                | 0%                  | 5%                         | 0%                 | 0%                | 1%                | 9%<br>HILOP        | 0%                 | 0%                 |

It is significantly more critical for Rheumatology to be notified that a different biologic was prescribed than several other practice areas; it is significantly less important for Hematology oncology to be notified.



#### Can Pharmacist Make Decision

Q34. How acceptable would it be for you if the pharmacist made the determination which biologic (reference product or biosimilar) to dispense to your patient on initiation of treatment? (n=579)





### Significance: Can Pharmacist Make Decision (country)

|   | Total<br>N=579 | France<br>N=97<br>A | Germany<br>N=97<br>B | Italy<br>N=97<br>C | Spain<br>N=96<br>D | Switzerland<br>N=95<br>E | UK<br>N=97<br>F |
|---|----------------|---------------------|----------------------|--------------------|--------------------|--------------------------|-----------------|
| Totally acceptable  | 5%             | 7%                  | 8% D                 | 7%                 | 1%                 | 2%                       | 6%              |
| Acceptable, provided such exchange has been agreed with clinicians for these biologics in advance | 58%            | 67% CDE             | 60%                  | 53%                | 47%                | 47%                      | 72% CDE         |
| Not acceptable  | 37%            | 26%                 | 32%                  | 40% AF             | 52% ABF            | 51% ABF                  | 22%             |

It is significantly not acceptable for a pharmacist to make decision more so for Spain and Switzerland compared to other countries.



# Significance: Can Pharmacist Make Decision (practice area)

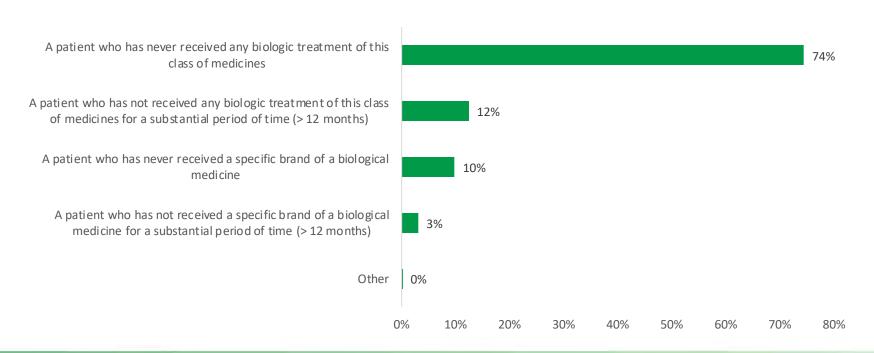
|   | Total<br>N=579 | Derm<br>N=56<br>G | Endo<br>N=65<br>H | Gastro<br>N=74<br>I | Hema<br>oncol<br>N=20<br>J | lmmun<br>N=30<br>K | Neph<br>N=69<br>L | Neur<br>N=81<br>M | Oncol<br>N=34<br>N | Ophth<br>N=70<br>O | Rheum<br>N=80<br>P |
|---|----------------|-------------------|-------------------|---------------------|----------------------------|--------------------|-------------------|-------------------|--------------------|--------------------|--------------------|
| Totally acceptable  | 5%             | 5%                | 11%               | 5%                  | 10%                        | 0%                 | 4%                | 4%                | 12%                | 3%                 | 4%                 |
| Acceptable, provided such exchange has been agreed with clinicians for these biologics in advance | 58%            | 43%               | 58%<br>P          | 55%<br>P            | 70%<br>GP                  | 57%                | 62%<br>GP         | 77%<br>GHIKOP     | 74%<br>GP          | 59%<br>P           | 36%                |
| Not acceptable  | 37%            | 52%<br>HJLMN      | 31%               | 39%<br>MN           | 20%                        | 43%<br>MN          | 33%<br>N          | 20%               | 15%                | 39%<br>MN          | 60%<br>HIJLMNO     |

It is significantly not acceptable for a pharmacist to make decision more so for Rheumatology and Dermatology compared to other practice areas.



#### **Define Nanve Patients**

#### Q35. How do you define "naïve" patients with respect to biologics? (n=579)





#### Significance: Define Nanve Patients (country)

|   | Total<br>N=579 | France<br>N=97<br>A | Germany<br>N=97<br>B | Italy<br>N=97<br>C | Spain<br>N=96<br>D | Switzerland<br>N=95<br>E | UK<br>N=97<br>F |
|---|----------------|---------------------|----------------------|--------------------|--------------------|--------------------------|-----------------|
| A patient who has never received any biologic treatment of this class of medicines  | 74%            | 69%                 | 76%                  | 75%                | 71%                | 84% ADF                  | 71%             |
| A patient who has not received any biologic treatment of this class of medicines for a substantial period of time (> 12 months) | 12%            | 13%                 | 12%                  | 11%                | 16%                | 8%                       | 13%             |
| A patient who has never received a specific brand of a biological medicine  | 10%            | 11%                 | 7%                   | 11%                | 9%                 | 7%                       | 12%             |
| A patient who has not received a specific brand of a biological medicine for a substantial period of time (> 12 months)         | 3%             | 6% E                | 4%                   | 1%                 | 4%                 | 0%                       | 3%              |

Switzerland defines a naïve patient as never receiving any treatment more so compared to several other countries.



# Significance: Define Nanve Patients (practice area)

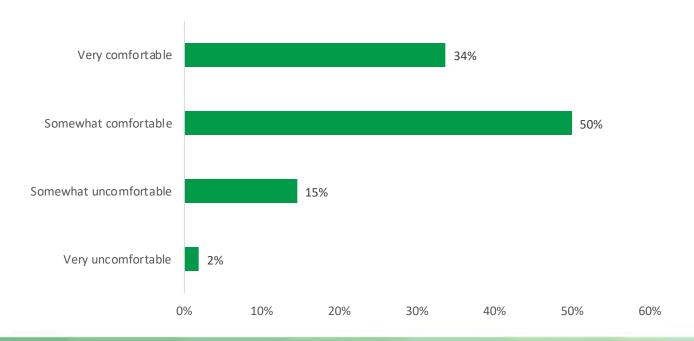
|   | Total<br>N=579 | Derm<br>N=56<br>G | Endo<br>N=65<br>H | Gastro<br>N=74<br>I | Hema<br>oncol<br>N=20<br>J | lmmun<br>N=30<br>K | Neph<br>N=69<br>L | Neur<br>N=81<br>M | Oncol<br>N=34<br>N | Ophth<br>N=70<br>O | Rheum<br>N=80<br>P |
|---|----------------|-------------------|-------------------|---------------------|----------------------------|--------------------|-------------------|-------------------|--------------------|--------------------|--------------------|
| A patient who has never received any biologic treatment of this class of medicines  | 74%            | 73%               | 68%               | 84%<br>HJO          | 50%                        | 87%<br>J           | 71%               | 74%<br>J          | 74%                | 67%                | 84%<br>HJO         |
| A patient who has not received any biologic treatment of this class of medicines for a substantial period of time (> 12 months) | 12%            | 16%<br>P          | 9%                | 8%                  | 10%                        | 3%                 | 19%<br>P          | 15%<br>P          | 18%<br>P           | 20%<br>IKP         | 4%                 |
| A patient who has never received a specific brand of a biological medicine  | 10%            | 7%                | 17%<br>M          | 7%                  | 30%<br>GILMOP              | 10%                | 7%                | 6%                | 9%                 | 10%                | 10%                |
| A patient who has not received a specific brand of a biological medicine for a substantial period of time (> 12 months)         | 3%             | 4%                | 6%                | 1%                  | 10%                        | 0%                 | 3%                | 5%                | 0%                 | 3%                 | 1%                 |

Rheumatology and Gastrointestinal define a naïve patient as never receiving any treatment more so compared to several other practice areas.



#### Prescribe Biosimilar to Nanve Patient

Q36. How comfortable are you in prescribing a biosimilar to a treatment "naïve" patient? (n=579)





### Significance: Prescribe Biosimilar to Nanve Patient (country)

|                        | Total<br>N=579 | France<br>N=97<br>A | Germany<br>N=97<br>B | Italy<br>N=97<br>C | Spain<br>N=96<br>D | Switzerland<br>N=95<br>E | UK<br>N=97<br>F |
|------------------------|----------------|---------------------|----------------------|--------------------|--------------------|--------------------------|-----------------|
| Very comfortable       | 34%            | 44% CD              | 35% D                | 27%                | 18%                | 39% D                    | 39% D           |
| Somewhat comfortable   | 50%            | 38%                 | 47%                  | 62% ABEF           | 68% ABEF           | 43%                      | 41%             |
| Somewhat uncomfortable | 15%            | 16%                 | 15%                  | 10%                | 13%                | 15%                      | 18%             |
| Very uncomfortable     | 2%             | 1%                  | 2%                   | 1%                 | 2%                 | 3%                       | 2%              |

Most countries are significantly more comfortable (very) than Spain in prescribing a biosimilar to a naïve patient.



### Significance: Prescribe Biosimilar to Nanve Patient (practice area)

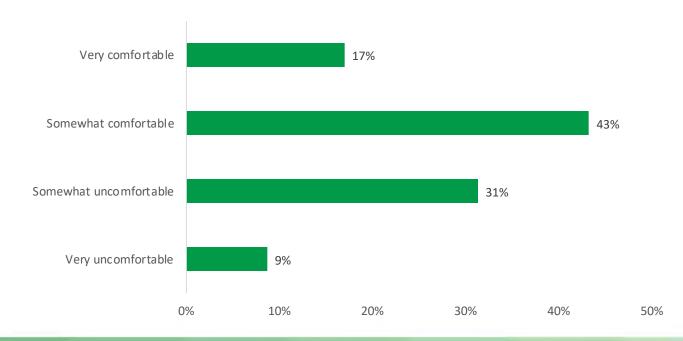
|                        | Total<br>N=579 | Derm<br>N=56<br>G | Endo<br>N=65<br>H | Gastro<br>N=74<br>I | Hema<br>oncol<br>N=20<br>J | Immun<br>N=30<br>K | Neph<br>N=69<br>L | Neur<br>N=81<br>M | Oncol<br>N=34<br>N | Ophth<br>N=70<br>O | Rheum<br>N=80<br>P |
|------------------------|----------------|-------------------|-------------------|---------------------|----------------------------|--------------------|-------------------|-------------------|--------------------|--------------------|--------------------|
| Very comfortable       | 34%            | 27%<br>O          | 37%<br>KMO        | 46%<br>GKLMO        | 50%<br>KLMO                | 17%                | 26%<br>O          | 21%               | 50%<br>GKLMO       | 10%                | 60%<br>GHKLMO      |
| Somewhat comfortable   | 50%            | 52%<br>P          | 51%<br>P          | 43%                 | 35%                        | 60%<br>P           | 58%<br>P          | 62%<br>IJP        | 47%                | 57%<br>P           | 30%                |
| Somewhat uncomfortable | 15%            | 20%<br>NP         | 11%               | 11%                 | 10%                        | 20%<br>NP          | 14%               | 16%<br>P          | 3%                 | 31%<br>HILMNP      | 5%                 |
| Very uncomfortable     | 2%             | 2%                | 2%                | 0%                  | 5%                         | 3%                 | 1%                | 1%                | 0%                 | 1%                 | 5%                 |

Rheumatology is more comfortable (very) than many other practice areas in prescribing a biosimilar to a naïve patient; Ophthalmology is least comfortable.



#### Switch Patient to Biosimilar

Q37. How comfortable are you with switching a stable patient from one medicine to a biosimilar? (n=579)





### Significance: Switch Patient to Biosimilar (country)

|                        | Total<br>N=579 | France<br>N=97<br>A | Germany<br>N=97<br>B | Italy<br>N=97<br>C | Spain<br>N=96<br>D | Switzerland<br>N=95<br>E | UK<br>N=97<br>F |
|------------------------|----------------|---------------------|----------------------|--------------------|--------------------|--------------------------|-----------------|
| Very comfortable       | 17%            | 23% D               | 18% D                | 12%                | 7%                 | 19% D                    | 23% D           |
| Somewhat comfortable   | 43%            | 35%                 | 40%                  | 51% A              | 39%                | 42%                      | 53% A           |
| Somewhat uncomfortable | 31%            | 29%                 | 37% F                | 26%                | 46% ACEF           | 27%                      | 23%             |
| Very uncomfortable     | 9%             | 13% BF              | 5%                   | 11% F              | 8%                 | 12% F                    | 2%              |

Spain is significantly less comfortable switching a stable patient to a biosimilar than most other countries.



## Significance: Switch Patient to Biosimilar (practice area)

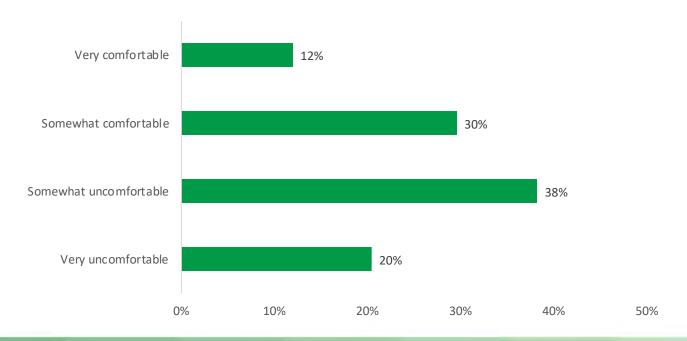
|                        | Total<br>N=579 | Derm<br>N=56<br>G | Endo<br>N=65<br>H | Gastro<br>N=74<br>I | Hema<br>oncol<br>N=20<br>J | Immun<br>N=30<br>K | Neph<br>N=69<br>L | Neur<br>N=81<br>M | Oncol<br>N=34<br>N | Ophth<br>N=70<br>O | Rheum<br>N=80<br>P |
|------------------------|----------------|-------------------|-------------------|---------------------|----------------------------|--------------------|-------------------|-------------------|--------------------|--------------------|--------------------|
| Very comfortable       | 17%            | 13%               | 26%<br>MO         | 15%                 | 35%<br>GILMO               | 10%                | 14%               | 7%                | 29%<br>GMO         | 11%                | 24%<br>M           |
| Somewhat comfortable   | 43%            | 52%<br>OP         | 45%               | 42%                 | 40%                        | 63%<br>INOP        | 48%               | 47%               | 38%                | 34%                | 33%                |
| Somewhat uncomfortable | 31%            | 25%               | 26%               | 35%                 | 25%                        | 20%                | 33%               | 36%               | 29%                | 43%<br>GHKP        | 26%                |
| Very uncomfortable     | 9%             | 11%               | 3%                | 8%                  | 0%                         | 7%                 | 4%                | 10%               | 3%                 | 11%                | 18%<br>HLN         |

Hematology oncology and Oncology are more comfortable (very) switching a stable patient to a biosimilar than several other practice areas; Ophthalmology and Rheumatology are less comfortable.



#### Switch to Biosimilar, Non-medical Reasons

Q38. How comfortable are you with switching your patient to a biosimilar for non-medical reasons (i.e., coverage)? (n=579)





### Significance: Switch to Biosimilar, Non-medical Reasons (country)

|                        | Total<br>N=579 | France<br>N=97<br>A | Germany<br>N=97<br>B | Italy<br>N=97<br>C | Spain<br>N=96<br>D | Switzerland<br>N=95<br>E | UK<br>N=97<br>F |
|------------------------|----------------|---------------------|----------------------|--------------------|--------------------|--------------------------|-----------------|
| Very comfortable       | 12%            | 21% BCD             | 9%                   | 6%                 | 5%                 | 14% D                    | 16% CD          |
| Somewhat comfortable   | 30%            | 31% C               | 32% C                | 19%                | 23%                | 29%                      | 43% CDE         |
| Somewhat uncomfortable | 38%            | 30%                 | 38%                  | 42%                | 53% ABEF           | 36%                      | 30%             |
| Very uncomfortable     | 20%            | 19%                 | 21% F                | 33% ADF            | 19%                | 21% F                    | 10%             |

France is significantly more comfortable (very) switching a patient to a biosimilar for non-medical reasons than several other countries; Italy and Spain are least comfortable.



# Significance: Switch to Biosimilar, Non-medical Reasons (practice area)

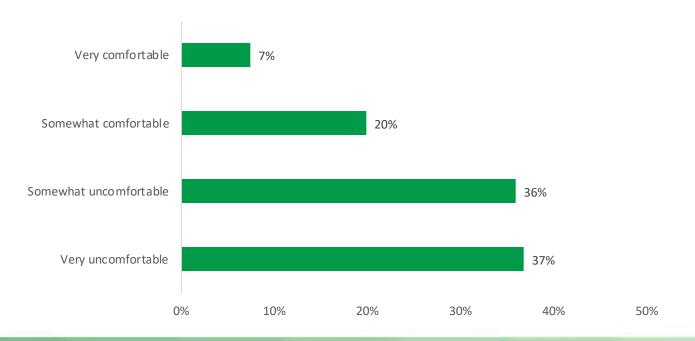
|                        | Total<br>N=579 | Derm<br>N=56<br>G | Endo<br>N=65<br>H | Gastro<br>N=74<br>I | Hema<br>oncol<br>N=20<br>J | Immun<br>N=30<br>K | Neph<br>N=69<br>L | Neur<br>N=81<br>M | Oncol<br>N=34<br>N | Ophth<br>N=70<br>O | Rheum<br>N=80<br>P |
|------------------------|----------------|-------------------|-------------------|---------------------|----------------------------|--------------------|-------------------|-------------------|--------------------|--------------------|--------------------|
| Very comfortable       | 12%            | 9%                | 15%<br>M          | 9%                  | 45%<br>GHIKLMOP            | 7%                 | 9%                | 4%                | 21%<br>M           | 9%                 | 18%<br>M           |
| Somewhat comfortable   | 30%            | 27%               | 32%               | 34%                 | 30%                        | 33%                | 32%               | 36%<br>P          | 24%                | 26%                | 21%                |
| Somewhat uncomfortable | 38%            | 48%<br>IJ         | 37%               | 30%                 | 15%                        | 40%                | 42%<br>J          | 41%<br>J          | 44%<br>J           | 43%<br>J           | 33%                |
| Very uncomfortable     | 20%            | 16%               | 15%               | 27%                 | 10%                        | 20%                | 17%               | 20%               | 12%                | 23%                | 29%                |

Hematology oncology is significantly more comfortable (very) switching a patient to a biosimilar for non-medical reasons than most other practice areas.



#### 3<sup>rd</sup> Party Switch to Biosimilar, Non-medical

Q39. How comfortable are you with a third party switching your patient to a biosimilar for non-medical reasons (i.e., coverage)? (n=579)





## Significance: 3<sup>rd</sup> Party Switch to Biosimilar, Non-medical (country)

|                        | Total<br>N=579 | France<br>N=97<br>A | Germany<br>N=97<br>B | Italy<br>N=97<br>C | Spain<br>N=96<br>D | Switzerland<br>N=95<br>E | UK<br>N=97<br>F |
|------------------------|----------------|---------------------|----------------------|--------------------|--------------------|--------------------------|-----------------|
| Very comfortable       | 7%             | 16% CDE             | 9% D                 | 3%                 | 0%                 | 5% D                     | 10% D           |
| Somewhat comfortable   | 20%            | 24%                 | 20%                  | 18%                | 14%                | 20%                      | 25% D           |
| Somewhat uncomfortable | 36%            | 26%                 | 32%                  | 48% ABEF           | 44% A              | 32%                      | 34%             |
| Very uncomfortable     | 37%            | 34%                 | 39%                  | 31%                | 43%                | 43%                      | 31%             |

France is significantly more comfortable (very) with a third party switching a patient to a biosimilar for non-medical reasons than several other countries; Italy and Spain are the least comfortable.



#### Significance: 3<sup>rd</sup> Party Switch to Biosimilar, Non-medical (practice area)

|                        | Total<br>N=579 | Derm<br>N=56<br>G | Endo<br>N=65<br>H | Gastro<br>N=74<br>I | Hema<br>oncol<br>N=20<br>J | lmmun<br>N=30<br>K | Neph<br>N=69<br>L | Neur<br>N=81<br>M | Oncol<br>N=34<br>N | Ophth<br>N=70<br>O | Rheum<br>N=80<br>P |
|------------------------|----------------|-------------------|-------------------|---------------------|----------------------------|--------------------|-------------------|-------------------|--------------------|--------------------|--------------------|
| Very comfortable       | 7%             | 7%<br>M           | 9%<br>M           | 4%                  | 25%<br>GIKMO               | 0%                 | 10%<br>M          | 0%                | 15%<br>M           | 4%                 | 13%<br>M           |
| Somewhat comfortable   | 20%            | 18%               | 26%<br>P          | 23%                 | 35%<br>LOP                 | 27%<br>P           | 13%               | 22%               | 32%<br>LOP         | 13%                | 11%                |
| Somewhat uncomfortable | 36%            | 39%<br>N          | 32%               | 38%<br>N            | 25%                        | 50%<br>NP          | 36%               | 42%<br>N          | 18%                | 43%<br>NP          | 28%                |
| Very uncomfortable     | 37%            | 36%               | 32%               | 35%                 | 15%                        | 23%                | 41%<br>J          | 36%               | 35%                | 40%                | 49%<br>HJK         |

Hematology oncology is significantly more comfortable (very) with a third party switching a patient to a biosimilar for non-medical reasons than several other practice areas.