Sales of 1st- and 2nd-generation cephalosporins were low each year (<0.05% of total sales).

No sales of other quinolones were reported in 2018, 2019 and 2020.

Under-reporting has been identified for 2010–2013 (underestimates) and retailers replaced MAHs as sales data providers for 2017–2020.

* The class ‘Others’ includes sales of bacitracin, rifaximin and spectinomycin (classified as ‘Other antibacterials’ in the ATCvet system).
Spain’s datasets and data collection systems were changed during the period of participation in the ESVAC project under observation. From 2010 to 2016, datasets included sales of antimicrobial VMPs declared by MAHs and in 2014, Spain changed its sales data collection system. From 2017, the reported data also includes sales by retailers, pharmacies and feed mills, representing sales closer to the end-users. The collection system is currently being updated. In addition, under-reporting was identified for the years 2010 to 2013. On account of this (along with other factors), the data for these years are underestimates. Due to these differences, data from the periods of 2010–2014, 2014–2016 and 2017–2020 are not directly comparable and observations regarding trends should be made with caution.

Notwithstanding the foregoing, the highest annual sales during the period under observation (2010–2020) were registered in 2014, while the lowest were recorded in 2019. In comparison to 2014 (418.8 mg/PCU), sales in 2019 (126.7 mg/PCU) and 2020 (154.3 mg/PCU) were 69.8% and 63.2% lower, respectively, while in comparison to 2017 (230.3 mg/PCU), sales in 2019 and 2020 were 45% and 33% lower, respectively. This decline is attributed to the adoption of the Spanish National Plan against Antibiotic Resistance¹ in June 2014, recently updated for 2019–2021. Six strategies were included in this common plan for the veterinary, human and environmental sectors. They are aimed at promoting appropriate antimicrobial use, ensuring effective surveillance systems, promoting research and innovation, and developing a communication and educational plan.

Various activities focusing on prudent use of antimicrobials in animals have been carried out, including implementation of a plan to encourage voluntary reductions in the use of antibiotics in all species, mainly those included in AMEG category B. An epidemiological clinical pathogens map has been developed to facilitate the prescription process, and several training courses have been provided for veterinarians, farmers and the general public. These initiatives contributed to the overall reduction in antimicrobial VMPs sales in Spain.

Sales (mg/PCU) of 3rd- and 4th-generation cephalosporins accounted for 0.3%, 0.08%, 0.1%, 0.22% and 0.24% of total sales in 2010, 2014, 2017, 2019 and 2020, respectively. In Spain in 2020, sales of 3rd- and 4th-generation cephalosporin VMPs were 0.36 mg/PCU, while aggregated sales for the 25 countries in that year were 0.16 mg/PCU.

Sales of fluoroquinolones accounted for 2.7%, 2.4%, 2.1%, 2.9% and 2.9% of the total sales in 2011, 2014, 2017, 2019 and 2020, respectively. In Spain in 2020, sales of fluoroquinolone VMPs were 3.74 mg/PCU, while aggregated sales for the 25 countries in that year were 2.21 mg/PCU.

No sales of other quinolones have been reported since 2018. In 2011, this subclass accounted for 0.60 mg/PCU (0.2% of the total sales in that year).

Sales of polymyxins decreased by 90.3% from 2017 to 2020 and by 97.5% from 2014 to 2020. In 2020, sales of polymyxins in Spain were 0.43 mg/PCU, while aggregated sales for the 25 countries were 2.58 mg/PCU. Activities within the action plan aimed at promoting voluntary reduction of the use of colistin in pigs have likely contributed to the decline in sales of colistin.

A fact-finding mission was carried out in Spain between 13 and 20 October 2016 in order to gather information on the prudent use of antimicrobials in animals².

¹ http://www.aemps.gob.es/publicaciones/publica/home.htm