

# National Statistics of Embryo Transfer Activity Reported in Europe 2022



# AETE

Association Européenne des Technologies de l' Embryon

Association of Embryo Technology in Europe

# To Introduce year 2022

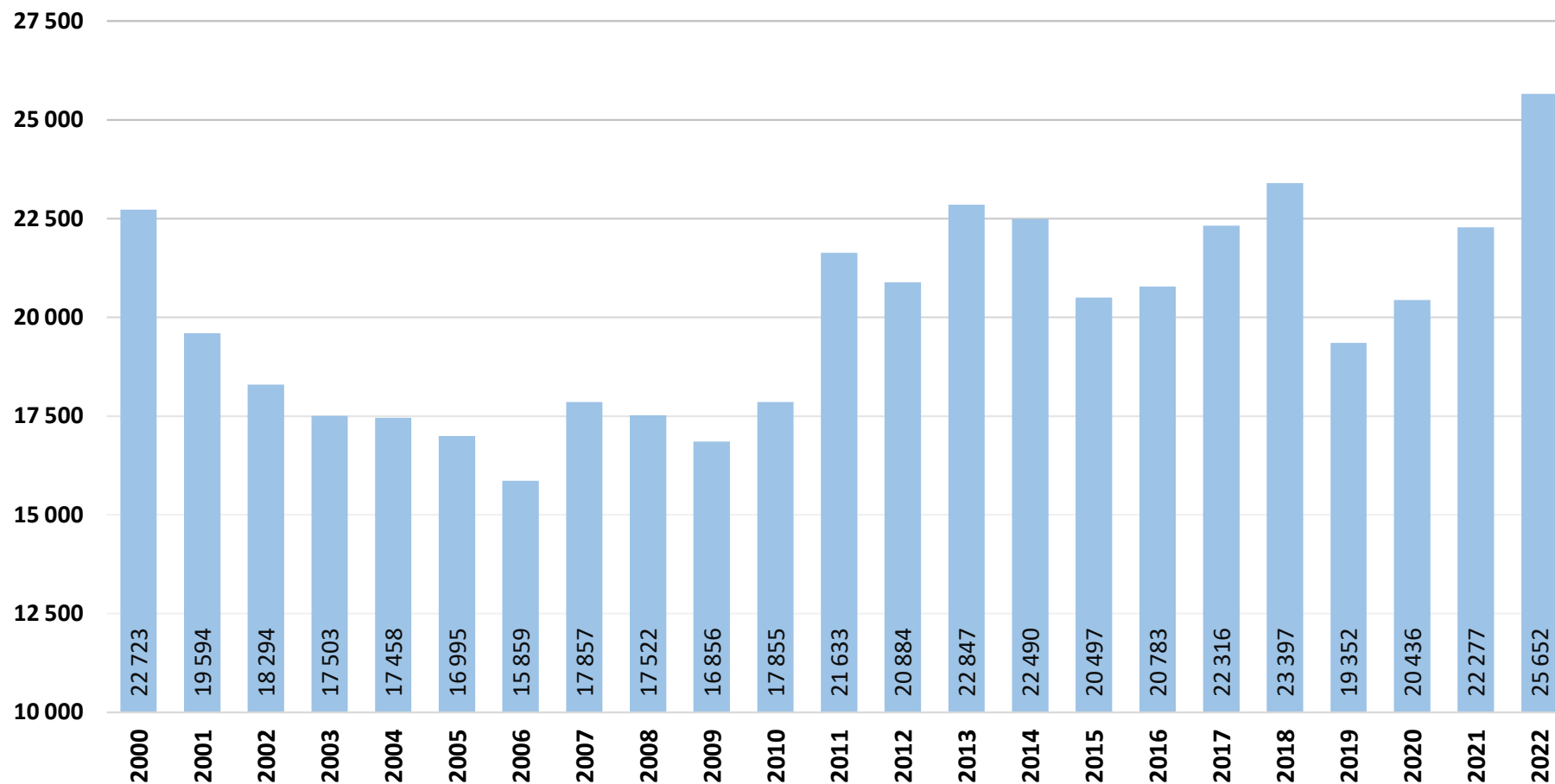
- Year of data collection : 2022
- 25 countries have provided data
- No answer from (We are looking for data collector)
  - Bosnia Herzegovina
  - Croatia
  - Ireland (possible new contact)
  - Israel
  - Macedonia
- Countries without data available or activity :
  - Belarus
  - Slovakia
  - Ukraine



Bovine *In vivo*  
embryo  
production



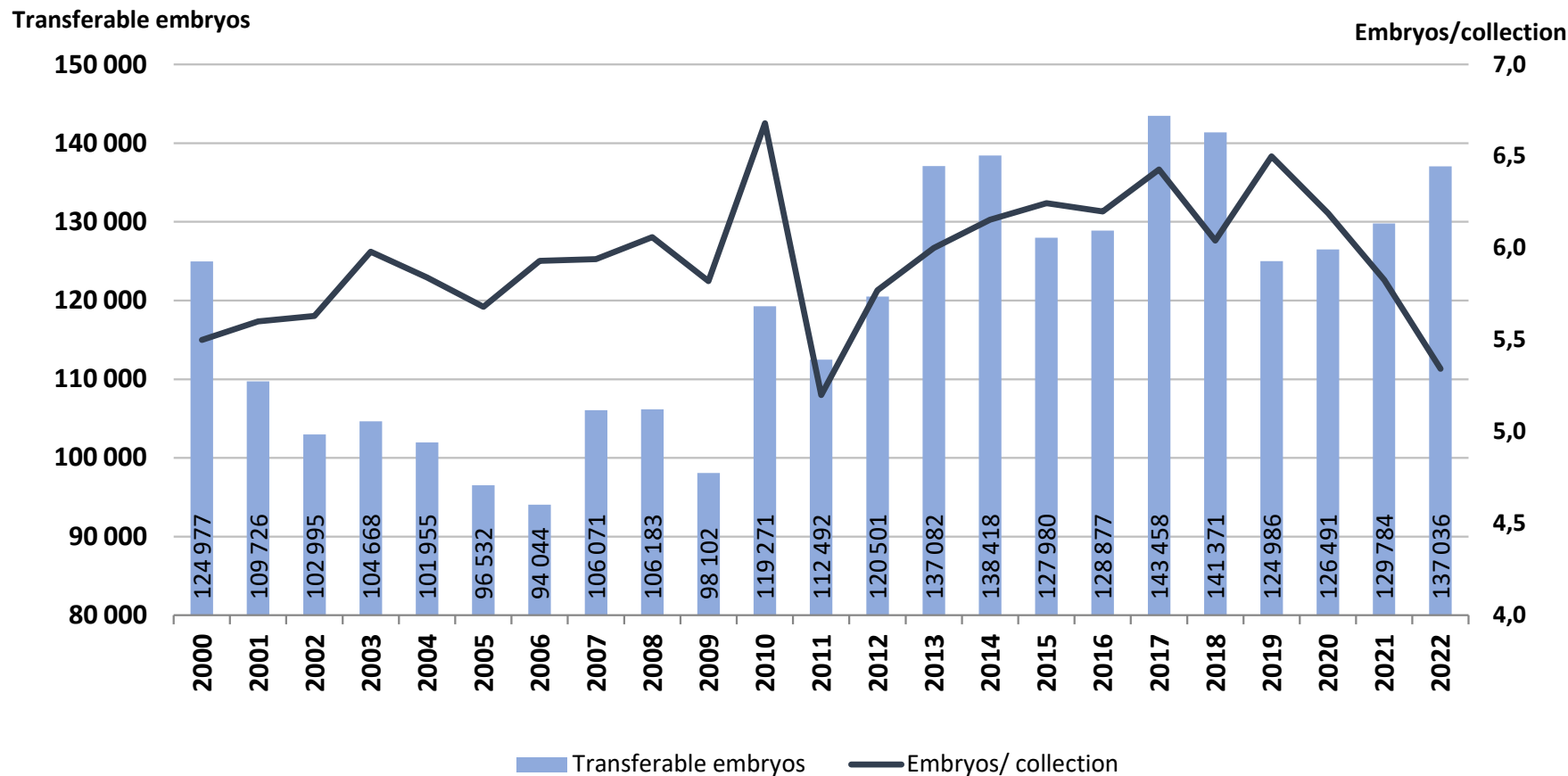
## EVOLUTION OF EMBRYO COLLECTIONS



**25 652 collections (2021 : 22 277)**



## EVOLUTION OF IN VIVO EMBRYO PRODUCTION



**137 036 embryos produced, 5.3/ collection (2021 : 129 784, 5.8)**



United Kingdom takes the third place with more than 3 000 flushes in **beef** breeds

Top 10 countries (sorted by no. of collections reported)

Hungary come in

Country	Collections	Difference to 2021
France	6 322	0 %
Germany	4 310	-6 %
United Kingdom	4 044	360 %
Netherlands	2 466	-6 %
Italy	2 257	-5 %
Russian Federation	1 111	25 %
Denmark	823	-5 %
Belgium	665	0 %
Austria	539	0 %
Hungary	427	*

25 %  
17 %  
16 %

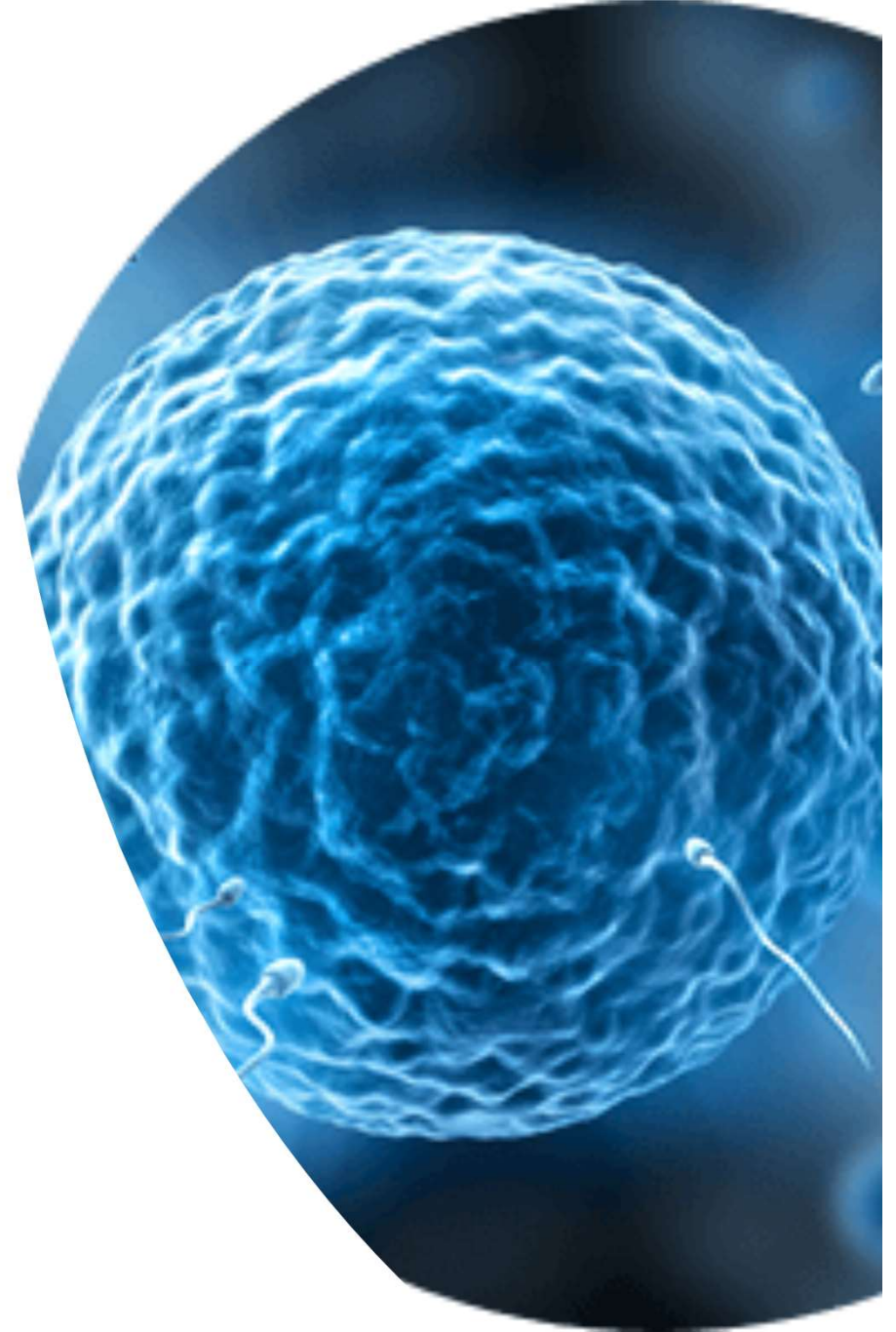
# Breed, semen type

## Breed distribution:

- 73 % of collections on dairy breeds
- 27 % (↑↑) of collections on beef breeds (United Kingdom, France, Russian Fed., Belgium, Germany...)

## Sex-sorted semen:

- Reported by 16 (↑) countries
- Reported to be used in **14 %** (↑) of all collections



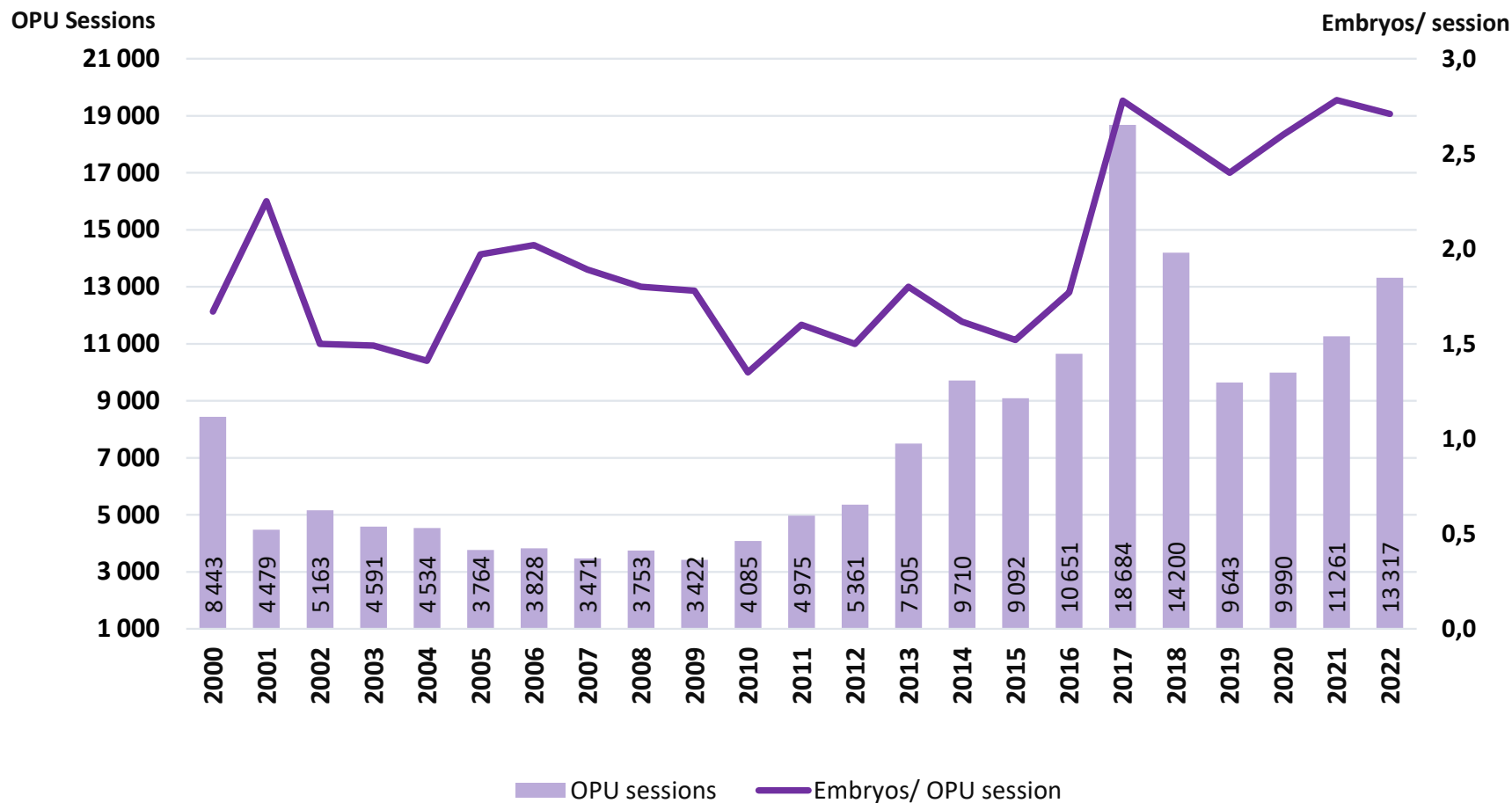
Bovine *In vitro*  
embryo production







## EVOLUTION OF IN VITRO EMBRYO PRODUCTION



**13 317 OPU , 2.7 emb./OPU (2021: 11 261, 2.8)**



Spain gains 4 places

Top 10 countries  
(sorted by  
no. of OPU  
reported)

Turkey come in

Country	OPU Sessions 2022	Difference to 2021
Netherlands	5 871	3 %
Germany	2 650	13 %
France	1 582	19 %
Spain	944	707 %
United Kingdom	787	9 %
Finland	521	-26 %
Switzerland	228	-53 %
Italy	205	85 %
Poland	150	3 %
Turkey	144	*

44 %  
20 %  
12 %



# Bovine embryo production 2022

Transferable embryos produced :

In vivo 137 036 (79 %)

- 2021 : 129 784 (81 %)

In vitro 36 091 (21 %)

- 2021 : 31 334 (19%)

Total 173 127

- 2021 : 161 118

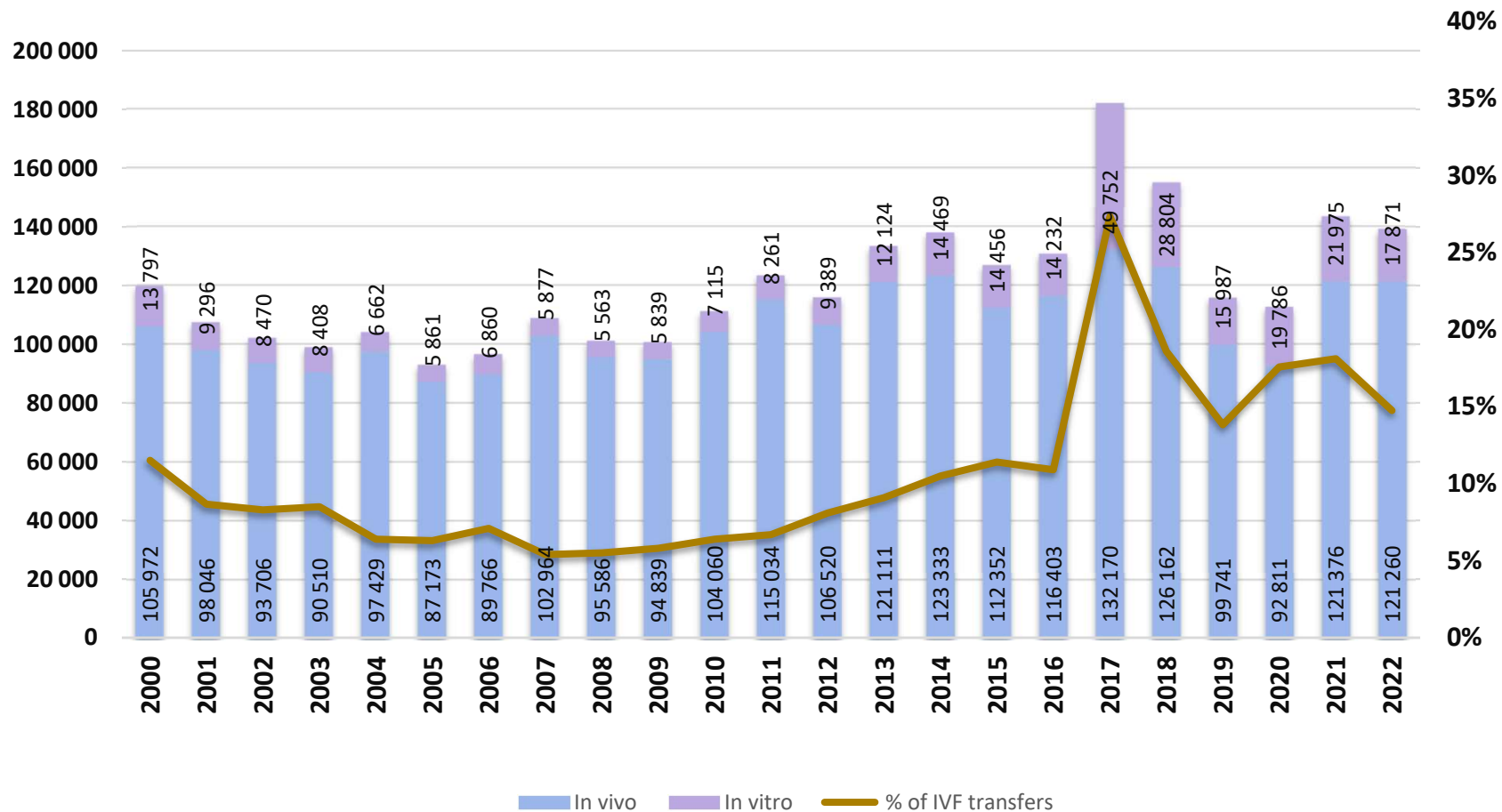


# Bovine embryo transfer In vivo & In vitro



# EVOLUTION OF EMBRYO TRANSFERS

Proportion of IVP embryos



**Embryo transfers 139 131 (2021: 143 351)**

# Embryo export

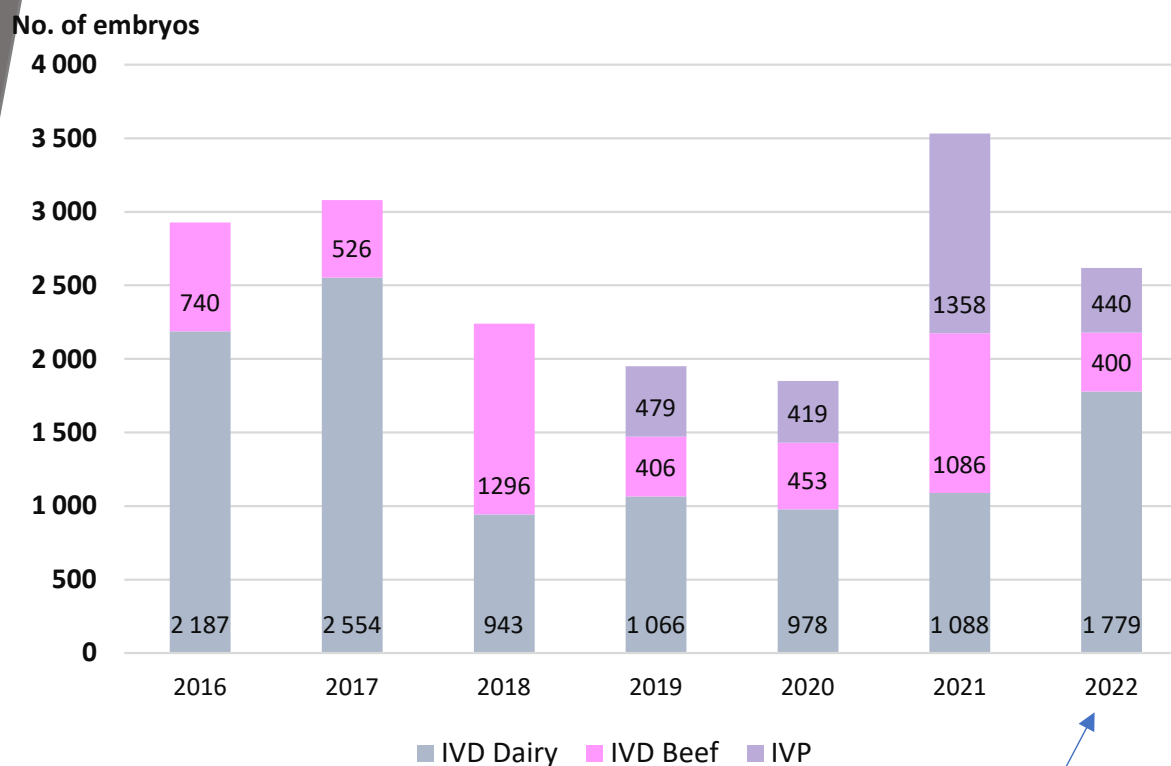


2021 major exports :

- IVP embryos by Switzerland
- Beef IVD embryos by Spain

- 2 619 embryos were reported exported (2021 : 3 532)
- 9 reporting countries (2021 : 11)

EVOLUTION OF EXPORT OF BOVINE EMBRYOS



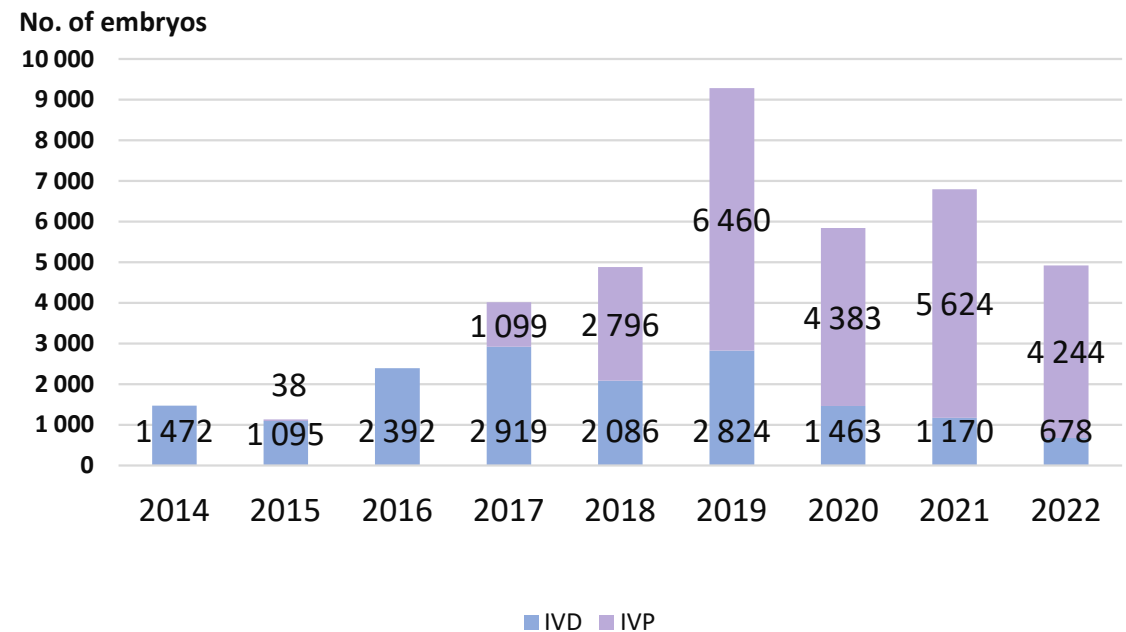
853 IVD embryos declared to be exported by Germany (X 3)



# Embryo genotyping

- 4 922 (2021: 6 794 ) embryos were reported for genotyping, out of which 86 % are IVP
- 3 countries reporting

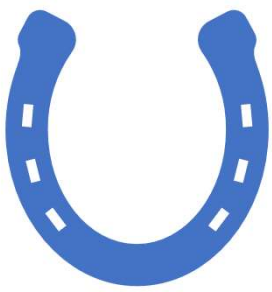
EVOLUTION OF BOVINE EMBRYO GENOTYPING





# Embryo production in other species

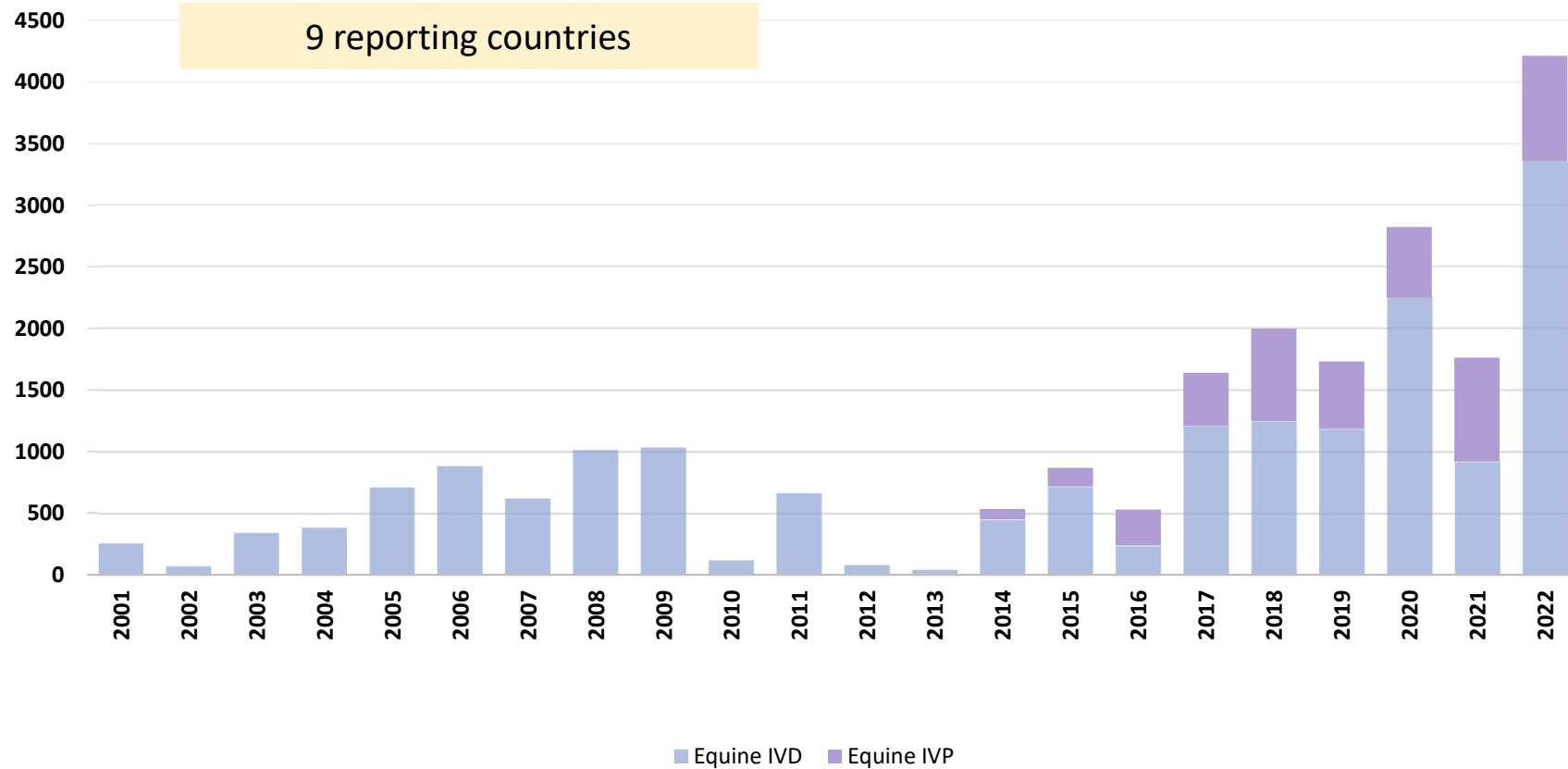




# Equine

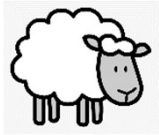


## EVOLUTION OF EQUINE EMBRYO TRANSFERS

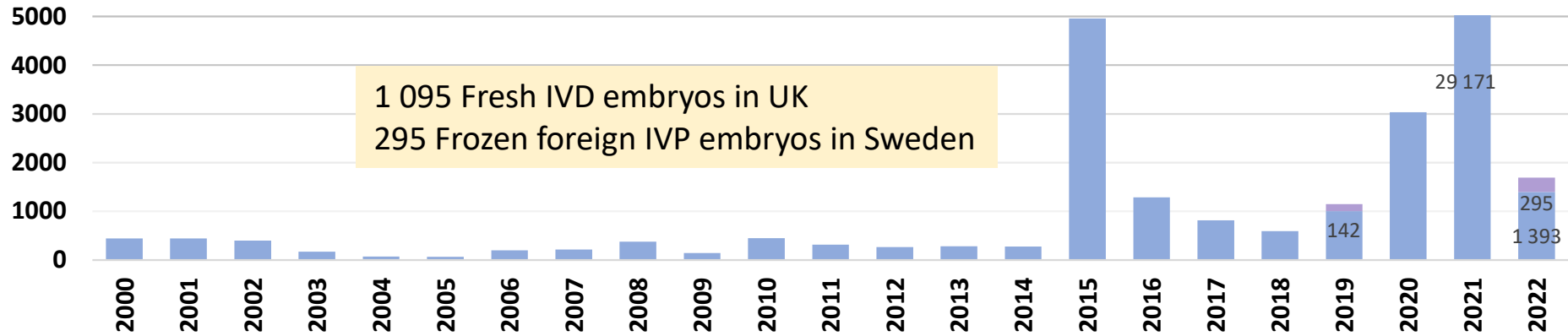


10 497 embryos produced (68 % *IVP*), 4 212 transferred (20 % *IVP*)  
(2021 : 7 745 , 1 721 )

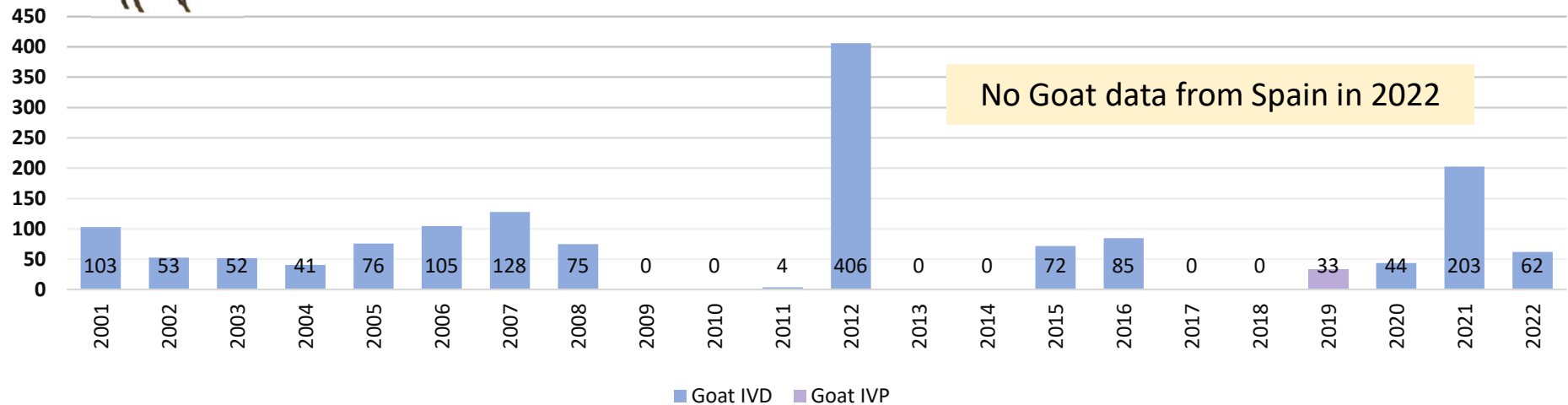
# Other Ruminants



## EVOLUTION OF SHEEP EMBRYO TRANSFER



## EVOLUTION OF GOAT EMBRYO TRANSFERS



Sheep : 314 embryo collections (2021 : 42), 1 332 IVD embryos / 14 OPU, 6 IVP embryos



Statistics are available on AETE website:  
Publications -> Statistics

Contact: [statistics@aete.eu](mailto:statistics@aete.eu)

Thank You to all data collectors  
as well as teams and practitioners  
providing data!