

EU Statistical Data of all uses of animals

Member State: Denmark

Year: 2019

All uses of animals by species

Animal Species	Number of uses	Percentage
Mice	167,699	64.99%
Rats	37,777	14.64%
Guinea-Pigs	3,913	1.52%
Hamsters (Syrian)	6	0.00%
Hamsters (Chinese)		
Mongolian gerbil		
Other rodents	33	0.01%
Rabbits	2,304	0.89%
Cats	1	0.00%
Dogs	379	0.15%
Ferrets		
Other carnivores	3,843	1.49%
Horses, donkeys and cross-breeds	51	0.02%
Pigs	8,643	3.35%
Goats	51	0.02%
Sheep	18	0.01%
Cattle	1,185	0.46%
Prosimians		
Marmoset and tamarins		
Cynomolgus monkey		
Rhesus monkey		
Vervets (Chlorocebus spp.)		
Baboons		
Squirrel monkey		
Other species of Old World Monkeys (Cercopithecoidea)		
Other species of New World Monkeys (Ceboidea)		
Apes		
Other mammals	42	0.02%
Domestic fowl	1,269	0.49%
Other birds	439	0.17%
Reptiles	53	0.02%
Rana	452	0.18%
Xenopus	391	0.15%
Other amphibians	72	0.03%
Zebra fish	4,657	1.80%
Other fish	24,742	9.59%
Cephalopods		
Total uses	258,020	100.00%

Origin as registered at the first use

Place of Birth	Number of uses	Percentage
Animals born in the EU at a registered breeder	205,782	81.34%
Animals born in the EU but not at a registered breeder	39,643	15.67%
Animals born in rest of Europe	1,283	0.51%
Animals born in rest of world	6,279	2.48%
Total uses	252,987	100.00%

NHP Source (origin)	Number of uses	Percentage
Animals born at a registered breeder within EU		
Animals born in rest of Europe		
Animals born in Asia		
Animals born in America		
Animals born in Africa		
Animals born elsewhere		
Total uses		

NHP Generation	Number of uses	Percentage
F0		
F1		
F2 or greater		
Self-sustaining colony		
Total uses		

Purpose for which animals are used

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Purpose for which animals are used

Purpose Category level 1	Number of uses	Percentage
Basic Research	93,991	36.43%
Translational and applied research	127,123	49.27%
Regulatory use and Routine production	20,841	8.08%
Protection of the natural environment in the interests of the health or welfare of human beings or animals	4,930	1.91%
Preservation of species	948	0.37%
Higher education or training for the acquisition, maintenance or improvement of vocational skills	4,144	1.61%
Forensic enquiries		
Maintenance of colonies of established genetically altered animals, not used in other procedures	6,043	2.34%
Total uses	258,020	100.00%

Basic Research	Number of uses	Percentage
Oncology	18,505	19.69%
Cardiovascular Blood and Lymphatic System	3,850	4.10%
Nervous System	17,403	18.52%
Respiratory System	279	0.30%
Gastrointestinal System including Liver	6,395	6.80%
Musculoskeletal System	1,484	1.58%
Immune System	21,078	22.43%
Urogenital/Reproductive System	1,631	1.74%
Sensory Organs (skin, eyes and ears)	386	0.41%
Endocrine System/Metabolism	12,396	13.19%
Multisystemic	2,483	2.64%
Ethology / Animal Behaviour /Animal Biology	3,669	3.90%
Other basic research	4,432	4.72%
Total uses	93,991	100.00%

Translational and applied research	Number of uses	Percentage
Human Cancer	10,162	7.99%
Human Infectious Disorders	9,524	7.49%
Human Cardiovascular Disorders	4,897	3.85%
Human Nervous and Mental Disorders	25,481	20.04%
Human Respiratory Disorders	324	0.25%
Human Gastrointestinal Disorders including Liver	3,081	2.42%
Human Musculoskeletal Disorders	736	0.58%
Human Immune Disorders	3,583	2.82%
Human Urogenital/Reproductive Disorders	2,531	1.99%
Human Sensory Organ Disorders (skin, eyes and ears)	288	0.23%
Human Endocrine/Metabolism Disorders	40,466	31.83%
Other Human Disorders	2,641	2.08%
Animal Diseases and Disorders	20,308	15.98%
Animal Welfare	2,203	1.73%
Diagnosis of diseases	772	0.61%
Plant diseases		
Non-regulatory toxicology and ecotoxicology	126	0.10%
Total uses	127,123	100.00%

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Regulatory use and routine Production	Number of uses	Percentage
Quality control (incl batch safety and potency testing)	13,681	65.64%
Other efficacy and tolerance testing	1,375	6.60%
Toxicity and other safety testing including pharmacology	5,064	24.30%
Routine production	721	3.46%
Total uses	20,841	100.00%

Regulatory use and routine production – Quality control (incl batch safety and potency testing)	Number of uses	Percentage
Batch safety testing	2,470	18.05%
Pyrogenicity testing		
Batch potency testing	10,272	75.08%
Other quality controls	939	6.86%
Total uses	13,681	100.00%

Regulatory use and routine production - Toxicity and other safety testing including pharmacology	Number of uses	Percentage
Acute and sub-acute	120	2.37%
Skin irritation/corrosion	4	0.08%
Skin sensitisation	74	1.46%
Eye irritation/corrosion		
Repeated dose toxicity	1,612	31.83%
Carcinogenicity		
Genotoxicity	22	0.43%
Reproductive toxicity	35	0.69%
Developmental toxicity		
Neurotoxicity		
Kinetics	510	10.07%
Pharmaco-dynamics (incl safety pharmacology)	1,386	27.37%
Phototoxicity		
Ecotoxicity	1,292	25.51%
Safety testing in food and feed area	9	0.18%
Target animal safety		
Other toxicity/safety testing		
Total uses	5,064	100.00%

Regulatory use and routine production – Toxicity and other safety testing including pharmacology – Acute and sub-acute toxicity testing methods	Number of uses	Percentage
LD50, LC50		
Other lethal methods		
Non lethal methods	120	100.00%
Total uses	120	100.00%

Regulatory use and routine production – Toxicity and other safety testing including pharmacology – Repeated dose toxicity	Number of uses	Percentage
up to 28 days	657	40.76%
29 - 90 days	651	40.38%
> 90 days	304	18.86%
Total uses	1,612	100.00%

Regulatory use and routine production – Toxicity and other safety testing including pharmacology – Ecotoxicity	Number of uses	Percentage
Acute toxicity	182	14.09%
Chronic toxicity	1,110	85.91%
Reproductive ecotoxicity		
Endocrine activity		
Bioaccumulation		
Other ecotoxicity		
Total uses	1,292	100.00%

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Regulatory use and routine production – Routine production	Number of uses	Percentage
Blood based products	687	95.28%
Monoclonal antibody by mouse ascites method		
Other product types	34	4.72%
Total uses	721	100.00%

Use of animals to meet legislative requirements

Testing by Legislation	Number of uses	Percentage
Legislation on medicinal products for human use	19,439	93.27%
Legislation on medicinal products for veterinary use and their residues		
Medical devices legislation	489	2.35%
Industrial chemicals legislation	844	4.05%
Plant protection product legislation		
Biocides legislation		
Food legislation including food contact material	9	0.04%
Feed legislation including legislation for the safety of target animals, workers and environment		
Cosmetics legislation		
Other legislation	60	0.29%
Total uses	20,841	100.00%

Legislative Requirement	Number of uses	Percentage
Legislation satisfying EU requirements	20,837	99.98%
Legislation satisfying national requirements only [within EU]		
Legislation satisfying Non-EU requirements only	4	0.02%
Total uses	20,841	100.00%

First use and re-use

Re-Use	Number of uses	Percentage
No	252,987	98.05%
Yes	5,033	1.95%
Total uses	258,020	100.00%

Use in creation of a new genetic line

Creation of New GL	Number of uses	Percentage
No	255,568	99.05%
Yes	2,452	0.95%
Total uses	258,020	100.00%

Actual severity of uses

Severity	Number of uses	Percentage
Non-recovery	11,209	4.34%
Mild [up to and including]	128,955	49.98%
Moderate	113,738	44.08%
Severe	4,118	1.60%
Total uses	258,020	100.00%

Use by genetic status

Genetic Status	Number of uses	Percentage
Not genetically altered	224,223	86.90%
Genetically altered without a harmful phenotype	28,337	10.98%
Genetically altered with a harmful phenotype	5,460	2.12%
Total uses	258,020	100.00%