

## Non-Technical Project Summary

Period of approval: Q1 January – March 2020

REFERENCE NUMBER	PROJECT TITLE	KEYWORDS	LINK TO NTPS
V001/2020Q1	Research on the development of low cost tools for estimating the environmental footprint in sheep	Genetics; feed intake; methane emissions; sheep	<a href="http://www.hpra.ie/docs/default-source/vet---non-technical-project-summaries-folder/q1-2020-jan---march/v001_2020q1.pdf?sfvrsn=2">http://www.hpra.ie/docs/default-source/vet---non-technical-project-summaries-folder/q1-2020-jan---march/v001_2020q1.pdf?sfvrsn=2</a>
V002/2020Q1	Research investigation into the production and milk quality implications of a 95% grass fed dairy system	Dairy cow; grassland; silage; maize; feed quality; milk production; milk quality; methane production	<a href="http://www.hpra.ie/docs/default-source/vet---non-technical-project-summaries-folder/q1-2020-jan---march/v002_2020q1.pdf?sfvrsn=2">http://www.hpra.ie/docs/default-source/vet---non-technical-project-summaries-folder/q1-2020-jan---march/v002_2020q1.pdf?sfvrsn=2</a>
V003/2020Q1	Research study involving the collection of turkey/chicken/guinea pig blood for use in <i>in vitro</i> assays	Turkeys; chickens; guinea pigs; blood sampling; <i>in vitro</i> assays; influenza; vaccines	<a href="http://www.hpra.ie/docs/default-source/vet---non-technical-project-summaries-folder/q1-2020-jan---march/v003_2020q1.pdf?sfvrsn=2">http://www.hpra.ie/docs/default-source/vet---non-technical-project-summaries-folder/q1-2020-jan---march/v003_2020q1.pdf?sfvrsn=2</a>
V004/2020Q1	Research study to evaluate whooping cough vaccine safety using rabbits	Whooping cough; safety; vaccine; pertussis; <i>Bordetella pertussis</i> ; endotoxin; rabbit	<a href="http://www.hpra.ie/docs/default-source/vet---non-technical-project-summaries-folder/q1-2020-jan---march/v004_2020q1.pdf?sfvrsn=2">http://www.hpra.ie/docs/default-source/vet---non-technical-project-summaries-folder/q1-2020-jan---march/v004_2020q1.pdf?sfvrsn=2</a>
V005/2020Q1	Research project to determine if drug resistant stomach worms are less fit than drug susceptible stomach worms in sheep	Sheep; stomach worms; drug resistance	<a href="http://www.hpra.ie/docs/default-source/vet---non-technical-project-summaries-folder/q1-2020-jan---march/v005_2020q1.pdf?sfvrsn=2">http://www.hpra.ie/docs/default-source/vet---non-technical-project-summaries-folder/q1-2020-jan---march/v005_2020q1.pdf?sfvrsn=2</a>

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V006/2020Q1	Exploratory research into the function of the 'PALI1' protein during mouse development	Knockout mouse; development; differentiation; organ formation; PALI1	<a href="http://www.hpra.ie/docs/default-source/vet---non-technical-project-summaries-folder/q1-2020-jan---march/v006_2020q1.pdf?sfvrsn=2">http://www.hpra.ie/docs/default-source/vet---non-technical-project-summaries-folder/q1-2020-jan---march/v006_2020q1.pdf?sfvrsn=2</a>
V007/2020Q1	Regulatory study to generate antisera using ferrets	Antisera production; influenza; vaccine; haemagglutinin inhibition assay; ferret	<a href="http://www.hpra.ie/docs/default-source/vet---non-technical-project-summaries-folder/q1-2020-jan---march/v007_2020q1.pdf?sfvrsn=2">http://www.hpra.ie/docs/default-source/vet---non-technical-project-summaries-folder/q1-2020-jan---march/v007_2020q1.pdf?sfvrsn=2</a>
V008/2020Q1	A research project to evaluate intake, growth, digestibility, and nitrogen retention of steers offered grass silage supplemented with barley- and oat-based rations, with or without peas and beans	Cattle; silage; supplementation; cereals; protein; peas; beans; oats; digestibility; nitrogen-balance	<a href="http://www.hpra.ie/docs/default-source/vet---non-technical-project-summaries-folder/q1-2020-jan---march/v008_2020q1.pdf?sfvrsn=2">http://www.hpra.ie/docs/default-source/vet---non-technical-project-summaries-folder/q1-2020-jan---march/v008_2020q1.pdf?sfvrsn=2</a>
V009/2020Q1	Research into strategies to improve spring grassland management on Irish dairy farms by investigating the effect of spring feed budget management and silage supplementation in early lactation on dairy cattle performance	Dairy cow; grassland; spring grazing; milk production; methane	<a href="http://www.hpra.ie/docs/default-source/vet---non-technical-project-summaries-folder/q1-2020-jan---march/v009_2020q1.pdf?sfvrsn=2">http://www.hpra.ie/docs/default-source/vet---non-technical-project-summaries-folder/q1-2020-jan---march/v009_2020q1.pdf?sfvrsn=2</a>
V010/2020Q1	Research project investigating the role of cafeteria diet and exercise (lifestyle) on brain health in rats	Neurosciences; lifestyle factors; diet; exercise; neuroinflammation; depression; anxiety; cognition; rats	<a href="http://www.hpra.ie/docs/default-source/vet---non-technical-project-summaries-folder/q1-2020-jan---march/v010_2020q1.pdf?sfvrsn=2">http://www.hpra.ie/docs/default-source/vet---non-technical-project-summaries-folder/q1-2020-jan---march/v010_2020q1.pdf?sfvrsn=2</a>
V011/2020Q1	Research project to determine the efficacy of test Items/Investigational Veterinary Products for cats and dogs against ectoparasites and endoparasites	Cats; dogs; ectoparasites; endoparasites; efficacy; regulatory licensing; veterinary products	<a href="http://www.hpra.ie/docs/default-source/vet---non-technical-project-summaries-folder/q1-2020-jan---march/v011_2020q1.pdf?sfvrsn=2">http://www.hpra.ie/docs/default-source/vet---non-technical-project-summaries-folder/q1-2020-jan---march/v011_2020q1.pdf?sfvrsn=2</a>

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V012/2020Q1	Research on specification of neural crest and cranial placodes in <i>Xenopus</i> (frog) embryos	<i>Xenopus laevis</i> ; frog; sensory organs; development; birth defects; neural crest; placodes	<a href="http://www.hpra.ie/docs/default-source/vet---non-technical-project-summaries-folder/q1-2020-jan---march/v012_2020q1.pdf?sfvrsn=2">http://www.hpra.ie/docs/default-source/vet---non-technical-project-summaries-folder/q1-2020-jan---march/v012_2020q1.pdf?sfvrsn=2</a>
V013/2020Q1	Research into redefining grassland management for sheep: incorporating the latest pasture management techniques to enhance performance, economics and efficiency of lamb production	Sheep; lambs; grazing; feeding; nutrition; multi-species swards; grass; forage crop	<a href="http://www.hpra.ie/docs/default-source/vet---non-technical-project-summaries-folder/q1-2020-jan---march/v013_2020q1.pdf?sfvrsn=2">http://www.hpra.ie/docs/default-source/vet---non-technical-project-summaries-folder/q1-2020-jan---march/v013_2020q1.pdf?sfvrsn=2</a>
V014/2020Q1	Research into mechanisms of early life stress-induced dysfunction of the gut-brain axis in rats in both dams and offspring	Rat; early life stress; maternal separation; microbiota-gut-brain axis	<a href="http://www.hpra.ie/docs/default-source/vet---non-technical-project-summaries-folder/q1-2020-jan---march/v014_2020q1.pdf?sfvrsn=2">http://www.hpra.ie/docs/default-source/vet---non-technical-project-summaries-folder/q1-2020-jan---march/v014_2020q1.pdf?sfvrsn=2</a>
V015/2020Q1	Research project to determine the potency value of a novel neurotoxin substance using mice	Neurotoxin; potency test; mouse	<a href="http://www.hpra.ie/docs/default-source/vet---non-technical-project-summaries-folder/q1-2020-jan---march/v015_2020q1.pdf?sfvrsn=2">http://www.hpra.ie/docs/default-source/vet---non-technical-project-summaries-folder/q1-2020-jan---march/v015_2020q1.pdf?sfvrsn=2</a>
V016/2020Q1	Research study to investigate pneumonia in pre-weaned dairy calves in Ireland: How common is it, what environmental factors affect it and what is its long-term impact?	Bovine; dairy calves; pneumonia; respiratory disease; environmental factors	<a href="http://www.hpra.ie/docs/default-source/vet---non-technical-project-summaries-folder/q1-2020-jan---march/v016_2020q1.pdf?sfvrsn=2">http://www.hpra.ie/docs/default-source/vet---non-technical-project-summaries-folder/q1-2020-jan---march/v016_2020q1.pdf?sfvrsn=2</a>
V017/2020Q1	Assessment of the immune response to <i>M. bovis</i> BCG in vitamin D supplemented cattle	Cattle; bovine tuberculosis; <i>M. bovis</i> ; vitamin D; immunity; susceptibility; infection; disease	<a href="http://www.hpra.ie/docs/default-source/vet---non-technical-project-summaries-folder/q1-2020-jan---march/v017_2020q1.pdf?sfvrsn=2">http://www.hpra.ie/docs/default-source/vet---non-technical-project-summaries-folder/q1-2020-jan---march/v017_2020q1.pdf?sfvrsn=2</a>

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V018/2020Q1	Collection of animal blood for research and development in medical technology	Medical device technology; blood donation; biotechnology sheep; cattle; horses; pigs	<a href="http://www.hpra.ie/docs/default-source/vet---non-technical-project-summaries-folder/q1-2020-jan---march/v018_2020q1.pdf?sfvrsn=2">http://www.hpra.ie/docs/default-source/vet---non-technical-project-summaries-folder/q1-2020-jan---march/v018_2020q1.pdf?sfvrsn=2</a>
V019/2020Q1	Research project comparing dairy cow performance using zero-grazing and conventional grazing methods in the early lactation period in spring	Holstein Friesian cows; zero-grazing; early lactation; nutrition; dairy	<a href="http://www.hpra.ie/docs/default-source/vet---non-technical-project-summaries-folder/q1-2020-jan---march/v019_2020q1.pdf?sfvrsn=2">http://www.hpra.ie/docs/default-source/vet---non-technical-project-summaries-folder/q1-2020-jan---march/v019_2020q1.pdf?sfvrsn=2</a>
V020/2020Q1	Regulatory project to determine the potency value associated with the manufacture of specific neurotoxin products, using mice	Neurotoxin; potency test; medicinal products; mouse	<a href="http://www.hpra.ie/docs/default-source/vet---non-technical-project-summaries-folder/q1-2020-jan---march/v020_2020q1.pdf?sfvrsn=2">http://www.hpra.ie/docs/default-source/vet---non-technical-project-summaries-folder/q1-2020-jan---march/v020_2020q1.pdf?sfvrsn=2</a>
V021/2020Q1	Research project for the development of an inflammation responsive drug delivery system for ulcerative colitis treatment using mice	Ulcerative colitis; inflammatory bowel disease; intestinal inflammation; ulcer; mice	<a href="http://www.hpra.ie/docs/default-source/vet---non-technical-project-summaries-folder/q1-2020-jan---march/v021_2020q1.pdf?sfvrsn=2">http://www.hpra.ie/docs/default-source/vet---non-technical-project-summaries-folder/q1-2020-jan---march/v021_2020q1.pdf?sfvrsn=2</a>
V022/2020Q1	Research study: Does grass type affect the growth rate, methane emissions, and parasite load of cattle and sheep when they are grazed together?	Cattle; sheep; lambs; multispecies swards; methane; growth rates; animal health; environment	<a href="http://www.hpra.ie/docs/default-source/vet---non-technical-project-summaries-folder/q1-2020-jan---march/v022_2020q1.pdf?sfvrsn=2">http://www.hpra.ie/docs/default-source/vet---non-technical-project-summaries-folder/q1-2020-jan---march/v022_2020q1.pdf?sfvrsn=2</a>
V023/2020Q1	Research project investigating new therapies for the fatal degenerative disorder Krabbe disease using the twitcher mouse model	Krabbe disease; twitcher mice; clozapine; haloperidol; nanoparticles	<a href="http://www.hpra.ie/docs/default-source/vet---non-technical-project-summaries-folder/q1-2020-jan---march/v023_2020q1.pdf?sfvrsn=2">http://www.hpra.ie/docs/default-source/vet---non-technical-project-summaries-folder/q1-2020-jan---march/v023_2020q1.pdf?sfvrsn=2</a>

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V024/2020Q1	Research: Preliminary study on understanding how a specific beta-glucan molecule educates bone marrow progenitors to generate long-term innate immune memory in a mouse model	Mouse; beta-glucan; immune training; bone marrow progenitors; monocyte; immunometabolism	<a href="http://www.hpra.ie/docs/default-source/vet---non-technical-project-summaries-folder/q1-2020-jan---march/v024_2020q1.pdf?sfvrsn=2">http://www.hpra.ie/docs/default-source/vet---non-technical-project-summaries-folder/q1-2020-jan---march/v024_2020q1.pdf?sfvrsn=2</a>
V025/2020Q1	Regulatory project to determine the potency value associated with the manufacture of specific neurotoxin substances in mice as required by the Regulatory Authorities	Neurotoxin; potency test; medicinal products; mouse	<a href="http://www.hpra.ie/docs/default-source/vet---non-technical-project-summaries-folder/q1-2020-jan---march/v025_2020q1.pdf?sfvrsn=2">http://www.hpra.ie/docs/default-source/vet---non-technical-project-summaries-folder/q1-2020-jan---march/v025_2020q1.pdf?sfvrsn=2</a>
V026/2020Q1	Research into the effects of two novel drugs on memory mechanisms in a rodent stroke model	Rat; stroke; prolyl hydroxylase inhibitor; memory; long-term potentiation	<a href="http://www.hpra.ie/docs/default-source/vet---non-technical-project-summaries-folder/q1-2020-jan---march/v026_2020q1.pdf?sfvrsn=2">http://www.hpra.ie/docs/default-source/vet---non-technical-project-summaries-folder/q1-2020-jan---march/v026_2020q1.pdf?sfvrsn=2</a>
V027/2020Q1	Research project to maintain Lungworm ( <i>Angiostrongylus vasorum</i> ) in dogs for future efficacy studies	Dogs; <i>Angiostrongylus vasorum</i> ; lungworm; endoparasites; efficacy; veterinary medicines	<a href="http://www.hpra.ie/docs/default-source/vet---non-technical-project-summaries-folder/q1-2020-jan---march/v027_2020q1.pdf?sfvrsn=2">http://www.hpra.ie/docs/default-source/vet---non-technical-project-summaries-folder/q1-2020-jan---march/v027_2020q1.pdf?sfvrsn=2</a>
V028/2020Q1	Research study investigating the impact of diet type on growth, parasite burden and environmental impact of beef cattle	Multispecies swards; animal health; animal performance; methane emissions; environment; cattle	<a href="http://www.hpra.ie/docs/default-source/vet---non-technical-project-summaries-folder/q1-2020-jan---march/v028_2020q1.pdf?sfvrsn=2">http://www.hpra.ie/docs/default-source/vet---non-technical-project-summaries-folder/q1-2020-jan---march/v028_2020q1.pdf?sfvrsn=2</a>
V029/2020Q1	Research project: validation of a new method to identify and stimulate neuronal networks related to vagus nerve signalling using mice	Mice; vagus nerve; brain; behaviour; microbiota; depression	<a href="http://www.hpra.ie/docs/default-source/vet---non-technical-project-summaries-folder/q1-2020-jan---march/v029_2020q1.pdf?sfvrsn=2">http://www.hpra.ie/docs/default-source/vet---non-technical-project-summaries-folder/q1-2020-jan---march/v029_2020q1.pdf?sfvrsn=2</a>

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V030/2020Q1	Research project to determine the potency value of a novel neurotoxin substance using mice	Neurotoxin; potency test; mouse	<a href="http://www.hpra.ie/docs/default-source/vet---non-technical-project-summaries-folder/q1-2020-jan---march/v030_2020q1.pdf?sfvrsn=2">http://www.hpra.ie/docs/default-source/vet---non-technical-project-summaries-folder/q1-2020-jan---march/v030_2020q1.pdf?sfvrsn=2</a>
V031/2020Q1	Regulatory project: conduct of the animal ( <i>in-vivo</i> ) phase of the influenza virus attenuation assay in ferrets	Influenza; vaccine; ferrets; virus attenuation assay	<a href="http://www.hpra.ie/docs/default-source/vet---non-technical-project-summaries-folder/q1-2020-jan---march/v031_2020q1.pdf?sfvrsn=2">http://www.hpra.ie/docs/default-source/vet---non-technical-project-summaries-folder/q1-2020-jan---march/v031_2020q1.pdf?sfvrsn=2</a>
V032/2020Q1	Research project using mice on early life nutrition and neurodevelopment: role of the intestinal microbiota	Pregnancy; obesity; microbiota-gut-brain axis; behaviour; brain development; mice	<a href="http://www.hpra.ie/docs/default-source/vet---non-technical-project-summaries-folder/q1-2020-jan---march/v032_2020q1.pdf?sfvrsn=2">http://www.hpra.ie/docs/default-source/vet---non-technical-project-summaries-folder/q1-2020-jan---march/v032_2020q1.pdf?sfvrsn=2</a>
V033/2020Q1	Research project investigating the effects on ewe and lamb performance of feeding mixed species silage and a novel protein source to ewes during late pregnancy	Silage; multispecies swards; colostrum; protein; soya-bean meal; parasites; sheep; lambs	<a href="http://www.hpra.ie/docs/default-source/vet---non-technical-project-summaries-folder/q1-2020-jan---march/v033_2020q1.pdf?sfvrsn=2">http://www.hpra.ie/docs/default-source/vet---non-technical-project-summaries-folder/q1-2020-jan---march/v033_2020q1.pdf?sfvrsn=2</a>
V034/2020Q1	Researching novel cellular activated targeted fluorescent probes in rodents for applications in oncology	Fluorescent probe; cancer; tumour; ureter; colorectal; bladder; imaging; mice; rats	<a href="http://www.hpra.ie/docs/default-source/vet---non-technical-project-summaries-folder/q1-2020-jan---march/v034_2020q1.pdf?sfvrsn=2">http://www.hpra.ie/docs/default-source/vet---non-technical-project-summaries-folder/q1-2020-jan---march/v034_2020q1.pdf?sfvrsn=2</a>
V035/2020Q1	Regulatory project to qualify Reference Standard materials for the manufacture of specific neurotoxin products, using mice	Reference Standard material; neurotoxin; potency test; medicinal products; mouse	<a href="http://www.hpra.ie/docs/default-source/vet---non-technical-project-summaries-folder/q1-2020-jan---march/v035_2020q1.pdf?sfvrsn=2">http://www.hpra.ie/docs/default-source/vet---non-technical-project-summaries-folder/q1-2020-jan---march/v035_2020q1.pdf?sfvrsn=2</a>

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V036/2020Q1	Biomaterial-based therapeutic delivery platform in peripheral nerve regeneration research, using rats	Lewis rats; sciatic nerve defect; peripheral nerve injury model; gene therapy; electrophysiology; immunohistochemistry	<a href="http://www.hpra.ie/docs/default-source/vet---non-technical-project-summaries-folder/q1-2020-jan---march/v036_2020q1.pdf?sfvrsn=2">http://www.hpra.ie/docs/default-source/vet---non-technical-project-summaries-folder/q1-2020-jan---march/v036_2020q1.pdf?sfvrsn=2</a>
V037/2020Q1	Research project investigating intentional weight loss as a treatment for endometrial cancer using rats	Obesity; endometrial cancer; vertical sleeve gastrectomy; liraglutide; rats	<a href="http://www.hpra.ie/docs/default-source/vet---non-technical-project-summaries-folder/q1-2020-jan---march/v037_2020q1.pdf?sfvrsn=2">http://www.hpra.ie/docs/default-source/vet---non-technical-project-summaries-folder/q1-2020-jan---march/v037_2020q1.pdf?sfvrsn=2</a>
V038/2020Q1	Research project investigating brain networks and systems supporting learning, memory, cognition and action using rats	Rat; brain; electrophysiology; hippocampus; memory	<a href="http://www.hpra.ie/docs/default-source/vet---non-technical-project-summaries-folder/q1-2020-jan---march/v038_2020q1.pdf?sfvrsn=2">http://www.hpra.ie/docs/default-source/vet---non-technical-project-summaries-folder/q1-2020-jan---march/v038_2020q1.pdf?sfvrsn=2</a>
V039/2020Q1	Research to assess the efficacy of a novel medical device-based treatment for chronic neuropathic pain using rats	Neuropathic pain; hydrogel; medical device; analgesia; rat	<a href="http://www.hpra.ie/docs/default-source/vet---non-technical-project-summaries-folder/q1-2020-jan---march/v039_2020q1.pdf?sfvrsn=2">http://www.hpra.ie/docs/default-source/vet---non-technical-project-summaries-folder/q1-2020-jan---march/v039_2020q1.pdf?sfvrsn=2</a>