Veterinary Pharmaceutical Development

With nearly 40 years’ experience in the development of veterinary pharmaceuticals, a wide range of analytical platforms and a wealth of scientific knowledge, Charles River can provide the services and resources to guide our clients through every critical program milestone, from inception to registration.

Our multidisciplinary staff serves as a flexible extension of a client’s in-house team, helping to meet the complex challenges of a changing regulatory environment. In addition to satisfying quality assurance standards (GLP, GCPv) all studies are performed in accordance with international guidelines (EMEA, FDA-CVM, VICH, etc.).

Preclinical Services

Our team of scientists routinely design and execute regulatory studies across all food-producing livestock species, including cattle, sheep, pigs, poultry, horses, goats and fish. Our dedicated research farm in Scotland features over 50 hectares of grazing, a modern milking parlor, and large animal accommodations for up to 200 individually-housed adult cows (or other species equivalent) or over 400 group-housed animals.

We offer a range of preclinical efficacy and target animal studies, including drug metabolism, bioequivalence, reproduction, dose determination/confirmation, palatability and residue depletion. Studies employ standard (e.g., topical, oral, intravenous) and less common (e.g., implant, intramammary, intratracheal) administration routes to test a wide range of compounds from vaccines and veterinary therapies to feed additives and parasiticides. Studies are designed with a specific focus on the in-life use of the veterinary product, and meet all current international regulatory requirements.

Support Services

- Clinical chemistry
- Toxicology & ecotoxicology
- Metabolite profiling/identification
- Environmental fate
- Statistics
- Veterinary pathology (including histopathology, immunohistochemistry & specialty staining)
- Regulatory Support
Clinical Services
A wide range of pharmaceutical study types have been performed at our research facilities. Our team has experience in a range of biological studies including vaccine batch testing, efficacy (seroconversion), safety, potency and vaccine development. Additional services include feed additive studies, mineral supplementation and ecotoxicology field studies. Our microbiology study portfolio includes bacterial shedding, antimicrobial resistance, pathogenesis, infectious model development and antimicrobial efficacy.

Clinical Field Studies
Charles River has extensive experience managing single and multi-site clinical trials throughout Europe in livestock, poultry and domestic pet species. As well as efficacy and safety, we can conduct certain dose confirmation and post marketing studies in the field. As with our preclinical services, treatment routes include injectables, intramammary, water medications, oral dosing and in-feed medications. Product types include antimicrobials (intramammary, oral and water-soluble), anti-coccidials, vaccines, anesthetics, behavioral therapies and antiparasitides.

Charles River offers a complete veterinary pharmaceutical development service, including regulatory trial approval (e.g., ATC), protocol and case report form (CRF) design, investigator selection and training, external laboratory facilities selection and monitoring, project management, study monitoring, adverse event responses, drug supply and management, quality assurance, statistics and production of the final study report.