

Product Portfolio

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Cardiovascular, Renal and Metabolic Diseases

Cardiovascular disease (CV), including heart disease and stroke, is a major global health concern and the leading cause of death and disability worldwide. Currently, it is responsible for nearly one in three deaths worldwide.

One key risk factor for developing cardiovascular disease is the presence of diabetes: people with type 2 diabetes are two to four times more likely to develop cardiovascular disease than people without diabetes.








Diabetes, heart failure, and the cardio-renal-metabolic system

Type 2 diabetes is a chronic, progressive condition associated with elevated blood sugar levels. People with type 2 diabetes have a high burden of comorbidities, which include hypertension, obesity, cardiovascular disease, kidney disease and heart failure. Cardio-renal-metabolic conditions affect more than one billion people worldwide and are a leading cause of death.

Heart failure is a progressive, debilitating, and potentially fatal condition that occurs when the heart cannot supply adequate circulation to meet the body's demands for oxygenated blood, or to do so requires increased blood volume leading to fluid accumulation (congestion) in the lungs and peripheral tissues. It is a widespread condition affecting over 60 million people worldwide and expected to increase as the population ages.

Chronic kidney disease affects approximately 850 million people worldwide which is more than ten percent of the population. The condition is caused by progressive damage to the kidneys, that prevents them from working as well as they should. With it mostly being asymptomatic (no symptoms) until later stages of the condition, most people go undiagnosed and every year millions die prematurely from CKD and related complications. The kidneys, the heart and the metabolic system have an important connection as they have the potential to both positively and negatively impact each other. They are linked to one another through blood flow, hormones and the central nervous system.

A collaborative multidisciplinary team approach to optimize patient care by coordinating treatment of related comorbidities, including the use of emerging medications with broad cardiovascular, renal, and metabolic effects, can help improve outcomes for people with these serious chronic conditions.

Indications	Brand Name*	Active Ingredients		The label varies by country. Please refer to the local product information
Type 2 diabetes mellitus	JARDIANCE® JARDIANZ®	empagliflozin		Treatment of adults with type 2 diabetes mellitus as an adjunct to diet and exercise to improve glycemic control and to reduce the risk of cardiovascular death in adults with type 2 diabetes mellitus and established cardiovascular disease.
Heart failure	JARDIANCE® JARDIANZ®	empagliflozin		Treatment of adults with symptomatic chronic heart failure, which includes patients across the full spectrum of LVEF, including both heart failure with reduced and preserved ejection fraction (with or without type 2 diabetes).
Chronic kidney disease	JARDIANCE® JARDIANZ®	empagliflozin		Treatment of adults with chronic kidney disease.
Type 2 diabetes mellitus	SYNJARDY® JARDIANCE DUO® JARDIANZ DUO® SYNJARDY® XR	empagliflozin, metformin hydrochloride		Treatment of adults with type 2 diabetes mellitus as an adjunct to diet and exercise to improve glycemic control when treatment with both empagliflozin and metformin is appropriate.
Type 2 diabetes mellitus	GLYXAMBI® TRADIANCE® JARDIANZ DPP®	empagliflozin, linagliptin		Treatment of adults with type 2 diabetes mellitus as an adjunct to diet and exercise to improve glycemic control in adults with type 2 diabetes mellitus when both empagliflozin and linagliptin are appropriate treatments.
Type 2 diabetes mellitus	TRAJENTA® TRADJENTA® TRAZENTA® TRAYENTA®	linagliptin		Treatment of adults with type 2 diabetes mellitus as an adjunct to diet and exercise to improve glycemic control, used in monotherapy (if metformin is not tolerated or contraindicated) or in combination therapy (EU).
Type 2 diabetes mellitus	JENTADUETO® TRAYENTA DUO® TRAJENTA DUO® TRAJENTAMET® JENTADUETO® XR	linagliptin, metformin hydrochloride		Treatment of adults with type 2 diabetes mellitus as an adjunct to diet and exercise to improve glycemic control when treatment with metformin does not lead to sufficient control or when patients are treated with TRAJENTA® (linagliptin) and metformin (EU).

* Diabetes portfolio in collaboration with Eli Lilly and Company.

Cardiovascular, Renal and Metabolic Diseases (continued)

Stroke

Ischemic stroke, the most common type of stroke, occurs when the flow of blood and oxygen to the brain is blocked by a blood clot. Commonly, blood clots can be caused by a type of irregular heartbeat known as atrial fibrillation. They also typically form where the arteries have been narrowed or blocked over time by atherosclerosis (fatty deposits or plaques lining vessel walls).

A stroke can lead to disability or even death and always requires quick, acute treatment.

Acute myocardial infarction

An acute myocardial infarction, or heart attack, occurs when a thrombus (blood clot) suddenly prevents blood flow to an area of the heart muscle. Unless the blood flow is restored quickly, the affected section of heart muscle becomes permanently damaged. Heart attacks are one of the most common causes of death in industrialized countries.

Atrial fibrillation

Atrial fibrillation (AF) is the most common sustained heart rhythm condition, affecting approximately 2 % of the total population. One in four adults over 40 develops AF in their lifetime. Patients with AF are at higher risk of developing blood clots in their upper left heart chamber, which can cause a stroke if the clot breaks loose and travels to the brain. AF leads to a five-fold increase in the risk of stroke, resulting in up to three million patients worldwide suffering AF-related strokes each year. For patients with AF, the risk of stroke can be reduced by appropriate anticoagulation therapy.

Prevention and treatment of venous thromboembolism






Venous thromboembolism (VTE) is an umbrella term that encompasses deep vein thrombosis (DVT) and pulmonary embolism (PE). DVT occurs when a thrombus (blood clot) forms in a deep vein, most commonly in the leg, and partially or completely blocks the flow of blood. As the thrombus grows, a portion may break away from the main clot and travel in the circulatory system to the lungs. The lodging of a blood clot in the arteries of the lung is called a PE. VTE is a serious disorder with potentially fatal consequences.

Patients undergoing orthopedic surgery are at considerable risk of developing DVT, and chronic venous insufficiency and / or pulmonary hypertension may develop in the longer term.

To prevent VTE events and their consequences after orthopedic surgery, patients should receive some kind of thromboprophylaxis. Patients who have already suffered from VTE require anticoagulant treatment for secondary prevention of a recurrent thromboembolic event.

Reversing anticoagulation

Anticoagulation therapy offers important benefits for patients at risk of thromboembolic events. However, even though rare, there may be situations when rapid reversal of anticoagulation is medically necessary, e.g. if a patient taking an anticoagulant is involved in a severe car accident and needs emergency surgery.

Indication	Brand Name	Active Ingredients	The label varies by country. Please refer to the local product information	
Acute ischemic stroke Acute myocardial infarction Acute massive pulmonary embolism	ACTILYSE®	alteplase		
Catheter clearance due to thrombotic occlusion	ACTILYSE® CATHFLO®	alteplase		
Acute ischemic stroke Acute myocardial infarction	METALYSE®	tenecteplase		
Stroke prevention in atrial fibrillation Primary prevention of venous thrombo-embolic events after orthopedic surgery Treatment and secondary prevention of venous thromboembolic events	PRADAXA® PRADAXAR® PRAZAXA®	dabigatran etexilate		
Specific reversal of PRADAXA® (dabigatran etexilate)	PRAXBIND®	idarucizumab		

Fibrinolytic treatment of acute ischemic stroke, acute myocardial infarction, acute massive pulmonary embolism.

Fibrinolytic treatment of occluded catheters.

Fibrinolytic treatment of acute ischemic stroke (EU only).

Fibrinolytic treatment of acute myocardial infarction.

Prevention of strokes and blood clots in patients with atrial fibrillation.

Primary prevention of venous thrombo-embolic events (VTE) in adults after elective total hip or knee replacement surgery.

Treatment of deep vein thrombosis (DVT) and pulmonary embolism (PE), and secondary prevention of recurrent DV T and PE in adults.




Treatment of venous thromboembolic events (VTE) and prevention of recurrent VTE in pediatric patients from birth to less than 18 years of age.

PRAXBIND® is a specific reversal agent for dabigatran and is indicated in adult patients treated with PRADAXA® (dabigatran etexilate) when rapid reversal of its anticoagulant effects is required: for emergency surgery / urgent procedures; in life-threatening or uncontrolled bleeding.

Cardiovascular, Renal and Metabolic Diseases (continued)

Hypertension and cardiovascular diseases

Hypertension (high blood pressure) is a chronic disease in which the blood pressure is chronically elevated. Hypertension is also one of the major risk factors for stroke, heart attacks, heart failure and chronic renal failure. The primary goal of antihypertensive treatment is to prevent such cardiovascular events and to reduce the risk of cardiovascular mortality.

Indication	Brand Name	Active Ingredients	The label varies by country. Please refer to the local product information	
Hypertension Cardiovascular morbidity and mortality prevention	MICARDIS®	telmisartan		<p>Treatment of hypertension. Lowering blood pressure reduces the risk of fatal and nonfatal cardiovascular events, primarily strokes and myocardial infarctions. For the reduction of the risk of myocardial infarction (heart attack), stroke or death from cardiovascular (CV) causes in patients 55 years of age or older at high risk of developing major CV events who are unable to take ACE inhibitors (US).</p> <p>For the reduction of cardiovascular morbidity in patients with manifest atherothrombotic cardiovascular disease (history of coronary heart disease, stroke or peripheral arterial disease), or patients with type 2 diabetes mellitus with documented target organ damage (EU).</p>
Hypertension	MICARDISPLUS® MICARDIS® PLUS MICARDIS® HCT CO-MICARDIS®	telmisartan, hydrochlorothiazide		<p>Treatment of hypertension alone or with other antihypertensive agents, to lower blood pressure. Lowering blood pressure reduces the risk of fatal and nonfatal cardiovascular events, primarily strokes and myocardial infarctions. Not indicated for initial therapy (US).</p> <p>Treatment of essential hypertension. MICARDISPLUS® fixed dose combination is indicated in adults whose blood pressure is not adequately controlled on telmisartan alone (EU).</p>
Hypertension	TWYNSTA® MICAMLO® MICARDIS® AMLO MICARDIS® DUO	telmisartan, amlodipine		<p>Add-on therapy in adult patients with not adequately controlled blood pressure on amlodipine, and replacement therapy in adult patients receiving telmisartan and amlodipine from separate tablets (EU).</p>

Respiratory Diseases

Idiopathic pulmonary fibrosis (IPF)

IPF is a chronic progressive lung disease associated with a markedly reduced life span and affecting as many as 14 – 43 people per 100,000 worldwide. IPF is characterized by progressive scarring of lung tissue and a loss of lung function over time. Development of scarred tissue is called fibrosis. Over time, as the tissue thickens and stiffens with scarring, the lungs lose their ability to take in and transfer oxygen into the bloodstream, and vital organs do not get enough oxygen. As a result, individuals with IPF experience shortness of breath, even when resting, and often have difficulty coping with the demands of everyday life due to their limited physical capacity.

Acute IPF exacerbations are defined as rapid deteriorations of symptoms and lung function within days or weeks. These events can occur at any point in the course of the disease, even at first presentation, and are associated with high mortality. All patients with IPF are at risk of acute IPF exacerbations.

Systemic sclerosis associated interstitial lung disease (SSc-ILD)

Systemic sclerosis (SSc), also known as scleroderma, is a rare incurable autoimmune disease affecting connective tissue. The disease is estimated to affect 15 to 24 people in every 100,000 in Europe and 2.5 million worldwide. SSc impacts four times as many women as men, and the onset of the disease typically occurs at a young age – between 25 and 55 years. It can cause scarring (fibrosis) of the skin as well as major organs such as the heart, lungs, digestive tract and kidneys and can have life-threatening complications. Approximately 25 % of patients develop significant pulmonary involvement within three years of diagnosis.

When SSc affects the lungs, it can cause interstitial lung disease (ILD), known as SSc-ILD. It is a key driver of mortality among people with SSc, accounting for approximately one third of deaths.

Other chronic fibrosing interstitial lung diseases (ILDs) with a progressive phenotype beyond idiopathic pulmonary fibrosis (IPF)

Interstitial lung diseases are a heterogeneous group of more than 200 mostly rare conditions of the lung that run the risk of developing pulmonary fibrosis. Fibrosis is a pathological multiplication of the connective tissue leading to usually chronic and irreversible scarring of the lung tissue. The course of interstitial lung disease may develop into a progressive fibrosing ILD, leading to a decline function associated with increased morbidity and mortality. Idiopathic pulmonary fibrosis (IPF) is a phenotype of a chronic fibrosing ILD. The course of the disease and symptoms are similar to chronic PF-ILDs, despite the underlying ILD diagnosis. On average, 18 – 32 % of ILD patients will develop progressive pulmonary fibrosis.

Indication	Brand Name	Active Ingredients		The label varies by country. Please refer to the local product information
Idiopathic pulmonary fibrosis (IPF)	OFEV®	nintedanib		In 86 countries for the treatment of patients with idiopathic pulmonary fibrosis (IPF).
Systemic sclerosis associated interstitial lung disease (SSc-ILD)				In 84 countries as therapy for SSc-ILD to slow down the rate of decline in pulmonary function.
Chronic fibrosing interstitial lung diseases (ILDs) with a progressive phenotype				In 84 countries for the treatment of other chronic fibrosing interstitial lung diseases (ILDs) with a progressive phenotype beyond IPF.

Respiratory Diseases (continued)

Chronic obstructive pulmonary disease (COPD) and bronchial asthma are among the most prevalent chronic diseases and a frequent cause of morbidity and premature deaths worldwide.







COPD



COPD is a common, heterogenous, preventable, and treatable disease characterized by persistent respiratory symptoms and air-flow limitation due to airway and / or alveolar abnormalities usually caused by significant exposure to noxious particles or gases. The most common respiratory symptoms include dyspnea, cough and / or sputum production. The limitation of airflow causes shortness of breath and other respiratory symptoms. The airflow limitation is only partially reversible and usually worsens over time, leading to disability and ultimately to death. Symptoms such as excess cough and breathlessness are the main reasons why COPD is very debilitating for patients. Lung emphysema and chronic bronchitis are the main manifestations of COPD.

COPD is caused by continuous gene-environment interactions that can damage the lungs and / or change their development or aging processes. Environmental risk factors include primarily cigarette smoke, and household & outdoor air pollution in low- and middle-income countries. The course of COPD, which is a disease that occurs in the second half in a human's life, is characterized by an accelerated loss of lung function compared to normal ageing and by occasional sudden worsening of symptoms and function referred to as acute exacerbations. This can lead to a downward spiral of worsening symptoms and thus further inactivity.

Bronchial asthma

Bronchial asthma is a heterogeneous disease, usually characterized by chronic airway inflammation. The inflammation is accompanied by airway hyper-responsiveness, which leads to a narrowing of the airways and recurrent episodes of wheezing, breathlessness, and coughing. These symptoms occur particularly at night or in the early hours of the morning. It is now known that asthma can be triggered by genetic and environmental factors (e.g. allergens and viral infections). Unlike COPD, asthma can occur very early in childhood; it can also be present in adolescents or adults. Asthma is often underestimated as an easy-to-manage condition. However, almost one in two patients with asthma still experience symptoms while receiving maintenance therapy, putting them at increased risk of potentially life-threatening asthma exacerbations. In addition, patients often adjust their daily lives to accommodate their conditions and avoid physical exertion in day-to-day activities, which has a negative impact on quality of life.

Indication	Brand Name	Active Ingredients		The label varies by country. Please refer to the local product information
Chronic obstructive pulmonary disease (COPD)	SPIRIVA® HANDIHALER® SPIRIVA® RESPIMAT®	tiotropium bromide		Maintenance treatment of patients with COPD (including chronic bronchitis and emphysema), maintenance treatment of associated dyspnoea. Handihaler: prevention of exacerbation. Respimat: the improvement of COPD compromised quality of life and reduction of exacerbations.
Bronchial asthma	SPIRIVA® RESPIMAT®	tiotropium bromide		An add-on maintenance treatment for the improvement of asthma symptoms, quality of life, and reduction of exacerbations, in patients aged 1 year and older with asthma who remain symptomatic on at least inhaled corticosteroids.
Chronic obstructive pulmonary disease (COPD)	SPIOLTO® RESPIMAT® STIOLTO® RESPIMAT® INSPIOLTO® RESPIMAT®	tiotropium bromide, olodaterol hydrochloride		Long term, once-daily maintenance treatment in patients with COPD (including chronic bronchitis and emphysema), to reduce airflow obstruction, to improve quality of life, to reduce associated dyspnoea, to improve exercise tolerance and to reduce exacerbations.
Chronic obstructive pulmonary disease (COPD)	STRIVERDI® RESPIMAT®	olodaterol hydrochloride		Long term maintenance treatment of patients in COPD, (including bronchitis and emphysema) to reduce airflow obstruction, to improve quality of life and to improve exercise tolerance.
Reversible broncho-spasms associated with obstructive airway diseases	COMBIVENT® RESPIMAT®	ipratropium bromide, salbutamol, sulphate		A combination of a short-acting anticholinergic and beta-adrenergic for the management of reversible bronchospasms associated with obstructive airway diseases in patients requiring more than one bronchodilator.
Chronic obstructive pulmonary disease (COPD) Chronic bronchitis Bronchial asthma	ATROVENT®	ipratropium bromide		Maintenance treatment of shortness of breath in patients with COPD and as a supplement to beta-agonists in cases of acute and chronic asthma.

Indication	Brand Name	Active Ingredients	The label varies by country. Please refer to the local product information	
Bronchial asthma	BEROTEC®	fenoterol hydrobromide		<p>Symptomatic treatment of acute asthma attacks. Prophylaxis of exercise-induced asthma bronchiale.</p> <p>Symptomatic treatment of allergic and non-allergic asthma and other conditions with reversible airway narrowing, e.g. chronic obstructive bronchitis.</p>
Chronic obstructive airway disorders	BERODUAL® BERODUAL® RESPIMAT® BRONCHODUAL® DUOVENT®	ipratropium bromide, fenoterol hydrobromide		<p>Prevention and treatment of symptoms in chronic obstructive airway disorders with reversible airflow limitation such as bronchial asthma and especially chronic bronchitis with or without emphysema.</p>

Oncology

Cancer is a generic term for a large group of diseases that can affect any part of the body. One defining feature of cancer is the rapid creation of abnormal cells that grow beyond their usual boundaries, and which can then invade adjoining parts of the body and spread to other organs.

Cancer is a leading cause of death worldwide, accounting for nearly 10 million deaths in 2020, or nearly one in six deaths. The most common cancers are breast, lung, colon and rectum and prostate cancers.

Lung cancer

Lung cancer is a type of cancer that starts when abnormal cells grow in an uncontrolled way in the lungs. It is a serious health issue that can cause severe harm and death. Symptoms of lung cancer include a cough that does not go away, chest pain and shortness of breath. It is important to seek medical care early. Treatments depend on the person's medical history and the stage of the disease. The most common types of lung cancer are non-small cell lung cancer (NSCLC) and small cell lung cancer (SCLC). NSCLC is more common and grows slowly, while SCLC is less common and often grows quickly. Lung cancer is a significant public health concern, causing a considerable number of deaths globally. GLOBOCAN 2020 estimates of cancer incidence and mortality produced by the International Agency for Research on Cancer (IARC) show as lung cancer remains the leading cause of cancer death, with an estimated 1.8 million deaths (18 %) in 2020.

Indication	Brand Name	Active Ingredients		The label varies by country. Please refer to the local product information
Non-small cell lung cancer (NSCLC)	GIOTRIF® GILOTRIF®	afatinib		As monotherapy in TKI-naïve adult patients with locally advanced or metastatic non-small cell lung cancer (NSCLC) whose tumors have activating epidermal growth factor receptor (EGFR) mutations. For the treatment of patients with locally advanced or metastatic NSCLC of squamous histology progressing on or after platinum-based chemotherapy.
Non-small cell lung cancer (NSCLC)	VARGATEF®	nintedanib		In combination with docetaxel for the treatment of adult patients with locally advanced, metastatic or locally recurrent non-small cell lung cancer (NSCLC) of adenocarcinoma tumor histology after first-line chemotherapy.

Dermatology

Generalized Pustular Psoriasis (GPP)

GPP is a rare, chronic, inflammatory disease that can cause painful skin manifestations and systemic symptoms, such as fever, pain, and fatigue. The disease can affect people in different ways, with symptoms appearing either constantly or coming and going. GPP often requires emergency care and can lead to life-threatening complications, such as organ failure and sepsis. Its unpredictable nature can have a significant impact on a person's quality of life and may cause fear and anxiety. Many GPP patients also have other health issues, which adds to the overall burden for the patient and healthcare

systems. GPP is different from other types of psoriasis, and it is driven by a specific pathway in the body. The prevalence of GPP is low and varies considerably in different parts of the world.

Indication	Brand Name	Active Ingredients	The label varies by country. Please refer to the local product information	
Generalized Pustular Psoriasis	SPEVIGO®	spesolimab		
Treatment for generalized pustular psoriasis (GPP) flares in adults.				

Diseases of the Central Nervous System




Mental and neurological diseases such as depression and Parkinson’s disease significantly impact patients and their families and are also a substantial burden to society.

Parkinson’s disease

Parkinson’s disease (PD) is a degenerative disorder of the central nervous system. Patients usually notice motor symptoms like hand shaking (tremor) as their first sign of the disease, which may progress to include shaking of the arms, legs or head. Other motor symptoms that may develop over time include stiffness that often results in loss of facial expression and a gradual slowing or loss of motion, or “freezing”. About 30 – 40 % of patients also suffer from non-motor symptoms associated with PD, such as depression and sleep disorders. The primary signs and symptoms are the result of a lack of the neuro-transmitter dopamine in distinct areas of the human brain.

Restless legs syndrome (RLS)

RLS is a common neurological disorder characterized by an uncontrollable urge to move the legs, primarily occurring in the evening and night hours. It is usually accompanied by unpleasant and sometimes painful sensations in the legs as well as disturbed sleep resulting in daytime tiredness or sleepiness. The sensations are felt deep within the legs and are described as creeping, crawling or aching.

Indication	Brand Name	Active Ingredients		The label varies by country. Please refer to the local product information
Parkinson's disease (PD)	SIFROL® MIRAPEX® MIRAPEXIN® PEXOLA® MIRAPEX® ER SIFROL® ER	pramipexole, pramipexole dihydrochloride monohydrate		Treatment of the signs and symptoms of idiopathic Parkinson's disease, alone or in combination with levodopa.
Restless legs syndrome (RLS)	SIFROL® MIRAPEX® MIRAPEXIN® PEXOLA®	pramipexole, pramipexole dihydrochloride monohydrate		Symptomatic treatment of moderate to severe idiopathic restless legs syndrome.
Sleep disorders	LENDORMIN®	brotizolam		Short-term treatment of disorders of initiating and maintaining sleep. Insomnia requiring pharmacological intervention.

Companion Animals – Pets

Our pet portfolio offers diverse solutions for some of the most important needs of canine and feline health including industry-leading parasiticides, vaccines, pain therapy and therapeutics to address major chronic diseases: heart failure, kidney diseases, hypertension, epilepsy, diabetes mellitus, and osteoarthritis.

Boehringer Ingelheim is the category leader in pet parasiticides. Every minute, more than 700 pet owners use one of our products to protect their dog or cat from parasitic diseases allowing them to enjoy a closer relationship with their pet.

Our pet parasiticides portfolio consists of two global master brand families, FRONTLINE® and NEXGARD®. Additional local hero brands like HEARTGARD® and BROADLINE® complement the portfolio.

For 25 years, FRONTLINE® has been a leader in flea and tick control on dogs and cats, and is one of the most trusted brands in animal health.¹ FRONTLINE® continues to bring innovation to the category, with the recent launch of FRONTPRO® in EU markets, disrupting the over-the-counter category by pioneering oral parasite protection for dogs in the retail channel.

NEXGARD® contains the active ingredient afoxolaner and was launched in 2014 as the first isoxaline-based oral medication to treat both fleas and ticks in dogs. Building on its efficacy and palatable, beef-flavored soft chew formulation for dogs, the NEXGARD® brand family is currently the best-selling pet medication brand in the animal health industry.² NEXGARD SPECTRA® – an endectocide – combines the flea and tick efficacy of NEXGARD® with a broad-spectrum de-worming ingredient, milbemycin oxime, in the same beef-flavored chew. NEXGARD SPECTRA® is not only effective in treating flea, tick and mite infestations, it also protects dogs against deadly parasites such as heartworm and lung-worm as well as many other internal parasites.

NEXGARD® PLUS – launched in 2023 – is a three-ingredient endectocide containing afoxolaner, moxidectin and pyrantel. NEXGARD® PLUS provides the same comprehensive protection against fleas, ticks and internal parasites including heartworm to dogs across the US – and is already showing the potential to become the most successful launch in animal health history.

NEXGARD® COMBO is a topical three-way endectocide for cats – containing esoxalaner, eprinomectin and praziquantel, and protecting cats against a wide range of external and internal parasites, including tapeworm. First launched in Europe in 2021, NEXGARD® COMBO has brought a much-needed treatment option to cats around the world, most recently launching in the US in Mid-2023 – and has already reached number two in the feline endectocide segment.



Boehringer Ingelheim has the most complete, trusted, and proven range of products and services in pain management. Choosing this portfolio gives veterinarians the freedom to tailor treatment to each patient and provides access to value-added veterinary services.

METACAM® offers an extensive range of formulations and indications, making it the complete non-steroidal anti-inflammatory drug (NSAID) for dogs, cats, and guinea pigs. It enables veterinarians to better achieve their goals in pain management and gives each owner and pet exactly the product they need. Ample long-term studies support the product's safety and efficacy and have led to multiple indications across diverse species.

The liquid formulation of METACAM® for dogs makes it easy to titrate to the lowest effective dose while the liquid formulation for cats is easy to administer. An improved dog administration syringe aimed to achieve better accuracy was introduced in 2020.

1) Data on file.

2) Data on file.

Indication	Brand Name	Active Ingredients		
Antiparasitic: canine / feline external parasites	FRONTLINE® FRONTLINE COMBO® FRONTLINE® PLUS FRONTLINE TRI-ACT® FRONTECT® FRONTLINE® SHIELD	<i>fipronil</i> <i>fipronil, s-methoprene</i> <i>fipronil, permethrin,</i> <i>pyriproxifen</i>		FRONTLINE® PLUS / FRONTLINE COMBO® is indicated for the treatment and prevention of flea, tick, and lice infestations. It also breaks the flea life cycle by preventing the development of flea immature stages. FRONTLINE TRI-ACT® / FRONTECT® and FRONTLINE® SHIELD are indicated for the treatment and prevention of flea and tick infestations in dogs. They also provide repellent activity against mosquitoes, sandflies, and ticks, reducing the risk of transmission of vector-borne pathogens.
Antiparasitic: canine external parasites	NEXGARD®	<i>afoxolaner</i>		NEXGARD® is a highly palatable beef-flavored chew. It is indicated for the treatment and prevention of flea and tick infestations in dogs. It is also indicated for the prevention of <i>Borrelia burgdorferi</i> infections (US), and the treatment of <i>Demodex</i> , <i>Sarcoptes</i> , and <i>Otodectes</i> mite infestations in non-US geographies.
Antiparasitic: canine internal and external parasites	NEXGARD SPECTRA®	<i>afoxolaner, milbemycin oxime</i>		NEXGARD SPECTRA® is delivered in a highly palatable beef-flavored chew. It is indicated for the treatment and / or prevention of flea, tick, and mite infestations. It also prevents heartworm disease, angiostrongylosis, and thelaziosis. It treats hookworm, roundworm, and whipworm infestations in dogs.
Antiparasitic: canine internal and external parasites	NEXGARD® PLUS	<i>afoxolaner, moxidectin, pyrantel</i>		NEXGARD® PLUS is a highly palatable beef-flavored chew. It is indicated for the prevention of heartworm disease, and for the treatment and control of hookworm and roundworm infections. NEXGARD® PLUS kills adult fleas and is indicated for the prevention of flea infestations and the treatment and control of ticks for one month.
Antiparasitic: feline internal and external parasites	NEXGARD® COMBO	<i>esafoxolaner,</i> <i>eprinomectin, praziquantel</i>		Spot-on formulation containing esafoxolaner to provide the new generation flea and tick control in cats. Protects cats against the broadest spectrum of internal and external parasites including fleas, ticks, ear mites, heartworms, lungworms, hookworms, roundworms, vesical worms, and tapeworms.
Antiparasitic: canine internal parasites	HEARTGARD® PLUS	<i>ivermectin, pyrantel</i>		For use in dogs to prevent canine heartworm disease by eliminating the tissue stage of heartworm larvae for a month (30 days) after infection, and for the treatment and control of roundworms and hookworms.
Pain and inflammatory diseases	METACAM®	<i>meloxicam</i>		METACAM® is used to reduce specific types of post-operative pain and inflammation as well as musculoskeletal disorders in dogs and cats.

Companion Animals – Pets (continued)

PREVICOX® was designed specifically for dogs and is the most selective veterinary COX-2 inhibitor. PREVICOX® provides safe, sustained pain relief with a fast onset of action. Long-term safety and efficacy have been established in large field studies and PREVICOX® has been shown to be more efficacious than competition in acute models of osteoarthritis.

VETMEDIN® is an inodilator which has become the standard of care when treating dogs with congestive heart failure caused by dilated cardiomyopathy or valvular insufficiency (mitral and / or tricuspid regurgitation). When used in combination with furosemide, it significantly improves clinical signs and extends life expectancy in these patients. Studies have shown that when used in preclinical asymptomatic cases of either dilated cardiomyopathy in doberman pinschers or valvular insufficiency, VETMEDIN® significantly delays the onset of clinical signs of congestive heart failure, a first in veterinary cardiology.

SEMINTRA® is the first-ever licensed angiotensin receptor blocker for veterinary use. Specifically designed for cats, SEMINTRA® is the scientifically advanced treatment in one simple solution that safely and effectively harnesses the protective benefits of the cat's renin-angiotensin-aldosterone system to protect kidneys and other key organs. SEMINTRA® is available as 4 mg / ml and 10 mg / ml oral solution. SEMINTRA® (4 mg / ml) was first launched in 2013 for the reduction of proteinuria associated with chronic kidney disease in cats. In 2018, SEMINTRA® (10 mg / ml) was launched for the control (US) / treatment (EU) of feline systemic hypertension. It is the first vet-licensed product for feline hypertension in the US.






Following a huge collaborative effort across the organization and with world-known independent veterinary experts, Boehringer Ingelheim now has a diabetes portfolio of first-line, best-in-class, once-daily treatments for dogs and cats that brings revolutionary science and innovation to vets and pet owners:




- Once-daily liquid oral SENVELGO® for cats
- Once-daily PROZINC® injection for most dogs

SENVELGO® is a sodium-glucose cotransporter-2 (SGLT-2) inhibitor. At present, up to one out of three diabetic cats is not treated or even euthanized due to the challenges of currently twice daily insulin injections needed. SENVELGO®, the first liquid once daily SGLT-2 inhibitor, takes away that complexity. It reduces hyperglycemia by excreting the surplus of glucose in the urine. With simple oral once-daily dosing, no risk of hypoglycemia, and improvement in glycemic parameters within just seven days, SENVELGO® makes dosing and monitoring easier. This will contribute to cat and owner quality of life improvement and allow diabetic cats and their owners to live normal lives despite diabetes. Regulatory approvals have already been obtained in the US, EU, GB, CH and CA with successful product launches ongoing.

PROZINC® is available since 2009 and has been the first-choice insulin for cats recommended by international guidelines. More recently it has been approved for diabetic dogs as well. Due to its prolonged duration of effect most dogs can be managed with once-a-day injections, taking the complexity of twice daily administration away from owners.

Our pet vaccines product portfolio includes the PUREVAX® feline vaccines formulated to provide effective protection without the use of adjuvants. For a more cat-friendly vaccination, PUREVAX® has been launched in reduced 0.5 ml volume in 2021 in the US and France, and in 2022 in Europe. RECOMBITEK® offers a complete line of advanced canine vaccines providing targeted protection through recombinant technology, and RABISIN® and IMRAB® provide trusted vaccines to fight rabies, with decades of proven efficacy and safety.

Indication	Brand Name	Active Ingredients		
Pain and inflammatory diseases	PREVICOX®	firocoxib		For the relief of pain and inflammation associated with osteoarthritis as well as specific types of post-operative pain in dogs.
Congestive heart failure	VETMEDIN®	pimobendan		<p>Treatment of canine congestive heart failure originating from dilated cardiomyopathy or valvular insufficiency (mitral and / or tricuspid regurgitation).</p> <p>Treatment of dilated cardiomyopathy in the preclinical stage (asymptomatic with an increase in left ventricular end-systolic and end-diastolic diameter) in doberman pinschers.</p> <p>Treatment of dogs with myxomatous mitral valve disease (MMVD) in the preclinical stage (asymptomatic with a systolic mitral murmur and evidence of increased heart size) to delay the onset of clinical symptoms of heart failure.</p>
Chronic kidney disease (CKD) in cats Hypertension in cats	SEMINTRA®	telmisartan		Management of chronic kidney disease (CKD) and feline systemic hypertension (US and EU) in cats.
Diabetes in cats	SENVELGO®	velagluflozin		Oral anti-diabetic for diabetic cats. Label claims differ from country to country.
Diabetes (cats and dogs)	PROZINC®	protamine zinc		For the treatment of diabetes mellitus in cats and dogs to achieve reduction of hyperglycemia and improvement of associated clinical signs.

Indication	Brand Name	Active Ingredients		
Feline vaccines portfolio	PUREVAX®	<i>feline herpes virus, feline calicivirus, feline panleukopenia virus, chlamydia felis, recombinant vectored feline leukemia virus, recombinant vectored rabies virus</i>		PUREVAX® is the only fully adjuvant-free feline vaccine range and leverages its innovative canarypox technology for FeLV and rabies. It also offers sustained protection on rabies for up to three years.
Canine vaccines portfolio	RECOMBITEK®*	<i>recombinant vectored canine, distemper virus, canine parvovirus, canine adenovirus type 2, canine parainfluenza virus, canine coronavirus, leptospira Canicola, leptospira grippotyphosa, leptospira ictero-haemorrhagiae, leptospira Pomona, recombinant borrelia burgdorferi, bordetella bronchiseptica</i>		<p>RECOMBITEK® features a complete line of canine vaccines including:</p> <p>RECOMBITEK® lyme: The only vaccine that contains OspA in a non-adjuvant formulation.</p> <p>RECOMBITEK® oral bordetella: Effective and safe protection made easy.</p>
Rabies vaccines	RABISIN® IMRAB®	<i>inactivated and adjuvanted rabies glycoproteins</i>		Sustained rabies protection up to three years after first year booster. Consistently high seroconversion rate. Rabies protection for six species.

* In the US and others.

Companion Animals – Horses

Our equine portfolio is highly comprehensive, covering the key aspects of equine health, including parasite control, vaccination, and the management of chronic diseases. We have a range of flagship and market leading equine products and have recently enhanced our joint disease and respiratory portfolios with the addition of new innovative products. We also have a line of nutraceuticals which can be bought without prescription.

PRASCEND® is indicated for the treatment of pituitary pars intermedia dysfunction (PPID), which is also known as equine Cushing's disease. Clinical signs of PPID are hypertrichosis, laminitis, change in body conformation and lack of performance. Treatment with PRASCEND® is life-long.

VETERA® vaccines are the first US vaccine portfolio to include multiple convenient combinations of disease protection for horses from as young as four months of age. The vaccines protect against as many as nine infectious organisms including influenza, herpes, the West Nile virus, tetanus, and others. This enables customized protection for each horse with limited needle injections.

PROTEQ™ vaccines are our EU vaccine range, currently providing horses with comprehensive protection against the core equine infectious diseases: influenza and tetanus, as well as West Nile virus.







GASTROGARD® / ULCERGARD® is indicated for the treatment and prevention of equine gastric ulcers, which is one of the most common diseases in horses. GASTROGARD® is supplied in an easy-to-use oral paste form and has been the first choice for treatment of gastric ulcers since its launch in 1999. ULCERGARD® in the US is the preventive of choice for horses with an increased risk of developing gastric ulcers.



EQVALAN® / ZIMECTERIN® contains ivermectin, a leading ingredient that controls a wide variety of important internal parasites, including bots and benzimidazole-resistant small strongyles, in an easy-to-administer oral paste. EQVALAN® / ZIMECTERIN® is approved for adult horses and foals as young as six weeks of age.

ARTI-CELL® FORTE is the world's first licensed veterinary stem cell product which is a ready-to-use intra-articular injection of chondrogenic induced mesenchymal cells for the treatment of lameness linked to non-infective joint inflammation in horses.

RENUTEND® is the first product licensed to improve healing of tendon and suspensory ligament injuries in horses. RENUTEND® is a targeted stem cell treatment with proven efficacy and repeatable results. It is administered by intralesional injection and improves the quality of tendon healing by promoting parallel alignment of the right type of fibres and decreases the amount of scar tissue formed.

ASERVO® EQUIHALER® is the first inhalation product for the treatment of severe equine asthma. This product is a novel glucocorticoid pro-drug (ciclesonide inhalation solution) delivered in an inhaler specifically designed for use in horses, and implementing the Soft Mist™ technology derived from the RESPIMAT® inhalers in human pharma. This exciting new introduction gained final authorization and product availability in the EU, US and Canada in 2020.

Indication	Brand Name	Active Ingredients		
Pituitary pars intermedia dysfunction (PPID)	PRASCEND®	<i>pergolide mesylate</i>		Symptomatic treatment of clinical signs associated with pituitary pars intermedia dysfunction (PPID, also known as equine Cushing's disease).
Combination vaccine against up to nine common diseases in horses	VETERA®	<i>Eastern, Western and Venezuelan encephalomyelitis, tetanus, West Nile virus, equine herpes virus, equine influenza viruses</i>		For vaccination of healthy horses as an aid in the prevention of diseases caused by the included antigens (US and Canada only).
Range of vaccines against common European equine infectious diseases	PROTEQ™	<i>Equine influenza virus, tetanus and West Nile virus</i>		Active immunisation against the antigens included within the specific vaccines
Equine gastric ulcers	GASTROGARD® ULCERGARD®	<i>omeprazole</i>		For treatment and prevention of gastric ulcers and prevention of recurrence of gastric ulcers in horses and foals four weeks of age and older.
Internal parasites	EQVALAN® ZIMECTERIN® EQVALAN® GOLD EQVALAN® DUO ZIMECTERIN® GOLD	<i>ivermectin</i> <i>ivermectin, praziquantel</i>		For treatment and prevention of parasitic infestations in horses and donkeys due to large and small strongyles, ascarids. GOLD / DUO includes treatment against tapeworms.
Reduction of mild to moderate recurrent lameness associated with non-septic joint inflammation in horses	ARTI-CELL® FORTE	<i>chondrogenic induced equine allogeneic peripheral blood-derived mesenchymal stem cells</i>		For treatment of mild to moderate lameness linked to non-infective joint inflammation in horses. It contains stem cells which are obtained from equine blood. ARTI-CELL® FORTE helps improve the healing of cartilage through increased matrix production and reduces joint inflammation.

Indication	Brand Name	Active Ingredients		
<p>EU: improve healing of tendon and suspensory ligament injuries in horses</p> <p>GB: restore fibre alignment in horses with superficial digital flexor tendon or suspensory ligament fibre disruption</p>	RENUTEND®	<i>Tenogenic primed equine allogeneic peripheral blood-derived mesenchymal stem cells (tpMSCs)</i>		<p>To improve healing of tendon and suspensory ligament injuries in horses. RENUTEND® is a targeted stem cell treatment with proven efficacy and repeatable results. It is administered by intralesional injection and improves the quality of tendon healing by promoting parallel alignment of the right type of fibres and decreases the amount of scar tissue formed.</p>
<p>Severe equine asthma</p>	ASERVO® EQUIHALER®	<i>ciclesonide inhalation solution</i>		<p>For the alleviation of clinical symptoms of severe equine asthma characterized by coughing, nasal discharge, nasal flaring, increased breathing effort at rest, or abnormal lung sounds.</p>

Livestock – Swine

Infectious respiratory diseases







INGELVAC CIRCOFLEX® is the first single-dose piglet vaccine for the control of porcine circovirus disease (PCVD). INGELVAC CIRCOFLEX® contains IMPRANFLEX® adjuvant which allows for fresh mixing with INGELVAC MYCOFLEX® to form FLEXCOMBO® with the TWISTPAK® system. Our INGELVAC® PRRS products are licensed for active immunization against the respiratory and reproductive form of porcine reproductive and respiratory syndrome (PRRS).

Infectious enteric diseases

ENTERISOL® ILEITIS is the first and only oral live vaccine against ileitis, globally the most prevalent enteric disease in swine caused by *Lawsonia intracellularis*. It is licensed to improve weight gain and to reduce growth variability associated with the disease. ENTERISOL® ILEITIS helps to reduce the total antimicrobial use in pork production.

Integrated Health Management (IHM)

With FARMERA® and SOUNDTALKS™ we will empower pig producers, breeders, retailers, and consumers to improve health, animal welfare, and efficiency by giving insights, predictions, and recommendations through our IHM solutions.

Indication	Brand Name	Active Ingredients		
Infectious respiratory diseases	INGELVAC CIRCOFLEX®	recombinant vaccine (porcine circovirus type 2, PCV2)		For the active immunization of pigs over the age of two weeks against porcine circovirus type 2 to reduce mortality, clinical signs – including weight loss – and lesions in lymphoid tissues associated with porcine circovirus diseases (PCVD). In addition, vaccination has been shown to reduce PCV 2 nasal shedding, viral load in blood and lymphoid tissues, and duration of viremia.
Infectious respiratory diseases	INGELVAC® PRRS MLV INGELVAC PRRSFLEX® EU REPROCYC® PRRS EU	attenuated live vaccine (PRRS virus type 2, type 1)		Depending on the product, for the active immunization of pigs at various ages against porcine reproductive and respiratory syndrome virus (PRRS).
Infectious respiratory diseases	INGELVAC MYCOFLEX®	inactivated vaccine (Mycoplasma hyopneumoniae)		For the active immunization of pigs from the age of three weeks to reduce lung lesions following infections with Mycoplasma hyopneumoniae.
Infectious enteric disease	ENTERISOL® ILEITIS	attenuated live vaccine (Lawsonia intracellularis)		For the active immunization of pigs from the age of three weeks against intestinal lesions caused by Lawsonia intracellularis infection and to reduce growth variability and loss of weight gain associated with the disease.
Respiratory diseases	SOUNDTALKS™*	sound monitors, gateways and algorithms		SOUNDTALKS™ is sound monitoring technology that detects early symptoms of respiratory distress in swine thanks to its 24 / 7 monitoring and algorithms.
Data capture forms and tools	FARMERA®	mobile app. Digital data management and communication platform for swine production		FARMERA® allows being more efficient, effective, and proactive by enabling evidence-based decision making with real-time information when managing health and production in production companies.

* SOUNDTALKS™ is a trademark of SoundTalks, N.V.

Livestock – Cattle / Ruminants

Our cattle / ruminants business is a global leader in anti-parasitic brands such as IVOMEC®, LONGRANGE® and EPRINEX®. These world renowned parasiticides treat and protect grazing animals from the harmful effects of internal and external parasites.

METACAM® is a non-steroidal anti-inflammatory drug (NSAID), helping to minimize losses from inflammation and tissue damage in animals suffering from disease, hence addressing the need for maintained profitability and the concern for farm animal well-being.






BOVIKALC® is an oral supplement for cows, given at calving, to provide calcium when they need it most.

ZACTRAN® treats cattle with bacterial pneumonia and sheep with digital dermatitis infections.

BOVELA® is for active immunization of cattle of three months of age in terms of reproductive infectious diseases.




Our vaccine PYRAMID® / PRESPONSE® is part of our expanding portfolio of respiratory and reproductive vaccines to prevent diseases that affect livestock.




Indication	Brand Name	Active Ingredients		
Internal and external parasites of cattle	IVOMEC®	ivermectin		Depending on formulation, the product is for the treatment of nematodes, lice, mites, ticks, flies, lungworms and liver flukes.
Internal and external parasites of cattle	LONGRANGE®	eprinomectin, long-acting		The Theraphase® technology used to develop this formulation of eprinomectin allows a single treatment to last up to 100 – 150 days – long enough to break the parasite life cycle and effectively reduce parasite burdens on the pasture. LONGRANGE® is effective in the control of most internal and external parasites of cattle: gastrointestinal roundworms, lungworms, grubs, mites.
Internal and external parasites of ruminants	EPRINEX®	eprinomectin		Depending on formulation, the product is for the treatment of nematodes, lice, mites, ticks, flies and lungworms in cattle and sheep.

Indikation	Produktname	Wirkstoffe		
Pain and inflammatory disorders	METACAM®	meloxicam		For the treatment of mastitis in lactating cows and for the control of pain associated with dehorning or surgery. It is also indicated for use in calves affected by diarrhoea and in cattle suffering from respiratory disease.
Calcium supplementation at calving	BOVIKALC®	Calcium chloride, calcium sulfate		BOVIKALC® is an oral calcium supplement used to manage hypocalcemia in dairy herds.
Bacterial causes of respiratory disease and interdigital dermatitis (footrot)	ZACTRAN®	gamithromycin		Depending on species indication (and country of registration), the product is for the treatment and metaphylaxis control of respiratory disease in cattle caused by key bacteria (Mannheimia, Pasteurella, Histophilus and Mycoplasma) and footrot disease in sheep caused by key bacteria (Fusobacterium and Dichelobacter).
Reproductive infectious diseases in cattle	BOVELA®	bovine viral diarrhoea (BVD) types 1 and 2		Reduces hyperthermia and minimizes the reduction of leukocyte count caused by bovine viral diarrhoea virus (BVDV-1 and BVDV-2); reduces virus shedding and viremia caused by BVDV-2 and prevents the birth of persistently infected calves caused by transplacental infection.
Infectious respiratory diseases and reproductive disorders in cattle	PYRAMID® PRESPONSE®	family of multivalent vaccine combinations including different modified live viruses: bovine viral diarrhoea (BVD) types 1 and 2, infectious bovine rhinotracheitis (IBR), parainfluenza 3 (PI3) and bovine respiratory syncytial virus (BRSV), and bacteria: Pasteurella multocida, Mannheimia haemolytica, L. canicola, L. grippotyphosa, L. hardjo, L. icterohaemorrhagiae and L. pomona		<p>The PYRAMID® / PRESPONSE® family of vaccines provides broad coverage for BVD types 1 and 2, IBR, BRSV, PI3 and Mannheimia haemolytica with only a single dose. They contain the MetaStim® adjuvant system to enhance the animal's response for greater protection (US and Canada only).</p> <p>* MetaStim® is a registered trademark of Zoetis Services LLC</p>

Livestock – Poultry

Our poultry vaccine portfolio consists of a wide range of technological vaccines known as vector vaccines, live-modified vaccines as well as inactivated vaccines for use in broilers, layers and breeder to prevent and control against acute viral and bacterial diseases such as avian influenza, infectious bronchitis, Newcastle disease, infectious bursal disease, egg drop syndrome, salmonella, laryngotracheitis, avian rhinotracheitis and coryza. This portfolio of preventive products enables poultry farmers worldwide to keep birds healthy in sustainable systems, for a food-chain that is wholesome and affordable for all.

Indication	Brand Name	Active Ingredients		
Various viral and bacterial diseases in poultry	GALLIMUNE® GALLIVAC® VOLVAC®	<i>Live attenuated and inactivated monovalent or polyvalent vaccine containing antigens for vaccination against avian influenza, Newcastle disease, egg drop syndrome, infectious bronchitis, infectious bursitis, avian rhinotracheitis, salmonella and coryza</i>		To vaccinate healthy chickens against diseases caused by the antigens they contain. To prevent the most common diseases in chickens for fattening and diseases which lead to a decline in egg production in laying hens and breeder flocks.
Infectious Bursitis (IBD), Marek Disease (MD) and Newcastle Disease (ND) or Infectious Laryngotracheitis (ILT)	VAXXITEK® HVT + IBD VAXXITEK® HVT + IBD ND VAXXITEK® HVT + IBD + ILT	<i>Serotype 3, live vector of Marek disease, recombinant vHV T 013-69 live virus containing a gene of the IBD virus and, in the case of trivalent vaccines, a gene of the IBD virus and the ND or ILT virus (and thinners)</i>		The vaccination of 18-to-19-day old embryos and one day old chickens is effective against the standard diseases and variants of infectious bursitis, Marek disease. The vaccination with a trivalent vaccine also confers protection against Newcastle disease or infectious laryngotracheitis.
Newcastle Disease	AVINEW®	<i>Newcastle disease live virus, VG/GA AVINEW strain</i>		In chickens for fattening from one day of age: active immunization against Newcastle disease to reduce mortality and clinical signs associated with the disease. For future laying and breeding hens from the age of four weeks: active immunization against Newcastle disease.

Indication	Brand Name	Active Ingredients		
Marek Disease	PREVEXXION® RNPREVEXXION® RN + HVT PREVEXXION® RN + HVT + IBD PREVEXXION®RN & VAXXITEK® HVT+IBD	Live herpesvirus chimera, serotype 1, strain RN1250 (and thinner)		Vaccination of 18-to-19-day old embryos and / or one-day-old chickens is recommended to protect against any type of Marek disease virus, including the very virulent ones.
Newcastle and Marek Disease	NEWXXITEK™ HVT + ND	Live Marek disease virus, serotype 3, containing a Newcastle disease gene insert (and thinner)		The vaccination of 18-to-19-day old embryos or one-day-old chickens is effective against Marek and Newcastle disease.
Avian Influenza	GALLIMUNE® H9+ND VOLVAC® B.E.S.T AI+ND TROVAC® PRIME 7 & TROVAC® H5	Inactivated vaccine against H9N2 Inactivated recombinant vaccine containing avian influenza H5 subunit. Fowl pox vectors expressing avian influenza H7 or H5		In broilers, layers and breeders, active immunization against the different types of avian influenza viruses: H9, H5 and H7. The range is adapted to local / regional virus variations.

Veterinary Public Health (VPH)




Boehringer Ingelheim is the trusted partner of governments and international organizations charged with protecting veterinary public health and the global and national agricultural communities. Our knowledge, experience, and technology make us a unique partner.

We are pioneers and innovators in veterinary public health, always considering people, animals, and environment in a one-health approach. For more than 70 years, we have helped communities fight disease, protect animal health and livelihoods. We do this through planning and vaccine supply to national and regional disease control programs, vaccine and antigen banks for outbreak preparedness, and manufacturing partnerships that build capacity in developing countries.

Foot-and-mouth disease (FMD) is the most important viral disease of swine and ruminants impacting global trade and food security of meat and milk supply. FMD has been identified as a key barrier to countries achieving some of their Sustainable Development Goals (SDGs). Our FMD vaccines portfolio including AFTOPOR® and AFTOVAXPUR® provides active immunization of cattle, sheep, or pigs to reduce clinical signs and mortality following exposure to FMD virus. Vaccines are multi-strain, tailored to evolving local epidemiology.

Rabies kills 60,000 people a year, mostly children. The disease is almost entirely preventable through dog vaccination, and control in wildlife reservoirs. RABORAL® is an oral re-combinant vaccine that protects wildlife against rabies.

Bluetongue Virus (BTV) causes global disease of cattle and sheep, and new strains continue to cross the Mediterranean into Europe. BTVPUR® is a multi-strain vaccine used for active immunization of sheep and cattle to prevent viremia and to reduce clinical signs caused by bluetongue virus.

Indication	Brand Name	Active Ingredients		
Foot-and-mouth disease (FMD)	AFTOPOR® AFTOVAXPUR®	Mix of inactivated FMD virus antigens		AFTOPOR® and AFTOVAXPUR® are safe and highly potent vaccines with purified antigens, recommended in endemic or emergency situations. Both have potential marker properties that allow differentiation between infected and vaccinated animals (DIVA).
Rabies	RABORAL V-RG®	Raboral V-RG: vaccinia-vectored rabies vaccine		RABORAL V-RG® is an oral rabies recombinant vaccine that protects wildlife (raccoons, foxes and coyotes) against rabies, thereby reducing the risk of exposure to rabies for humans and domestic animals. It is only sold to government agencies conducting rabies control programs.
Bluetongue	BTVPUR®	Mix of inactivated bluetongue virus		<p>BTVPUR® allows for active immunization of sheep to prevent viremia and to reduce clinical signs caused by bluetongue virus serotypes 1, 2, 4 and /or 8 (combination of maximum 2 serotypes).</p> <p>Active immunization of cattle to prevent viremia caused by bluetongue virus serotypes 1, 2, 4 and /or 8, and to reduce clinical signs caused by bluetongue virus serotypes 1, 4 and /or 8 (combination of maximum 2 serotypes).</p> <p>Onset of immunity has been demonstrated three weeks (or five weeks in sheep for BTV-2) after the primary vaccination course for BTV-1, BTV-2 (cattle), BTV-4 and BTV-8 serotypes.</p>