opnMe by Boehringer Ingelheim

New therapies for canine mitral valve disease

What novel or existing human therapeutic approaches targeting tissue remodeling or fibrosis would you propose to translate into interventions for canine myxomatous mitral valve disease?

Answers to this question including a proposal for collaboration can only be considered if they arrive no later than September 8, 2026, 11:59 pm PST.

Boehringer Ingelheim

Table of contents

What is the context of the problem that we would like to solve?

Canine myxomatous mitral valve disease (MMVD) is the most common acquired cardiac disease in dogs, particularly affecting aging small- and medium-breed dogs and can ultimately progress to congestive heart failure. Current medical management can delay progression or control clinical signs in selected disease stages, but it does not directly address the primary valve pathology or the biological processes driving maladaptive tissue remodeling. Hence, it represents one of the most important unmet medical needs in companion animal cardiology.

More broadly, cardiovascular disease in companion animals constitutes a significant and growing burden. In dogs in particular, these conditions impose a substantial and progressive impact on animals, their owners, and the veterinarians who manage their care. With increasing pet longevity and evolving standards of treatment, there is a rising expectation for effective, disease-modifying interventions that can improve both quality of life and long-term outcomes.

The biological rationale for such approaches is compelling. MMVD is driven by interconnected pathological processes that contribute to disease initiation and progression. Collectively, available evidence implicates extracellular matrix remodeling, valvular interstitial cell activation, endothelial-to-mesenchymal transition, and impaired valve biology as central mechanisms, supporting strategies to slow disease progression at early stages.

For MMVD, one could explore similar/analogous mechanisms that are involved in human liver cirrhosis, chronic kidney disease, systemic sclerosis / scleroderma, or Barlow's disease.

In human mitral valve disease, surgical valve repair or replacement is an established therapeutic option. In dogs, however, this is fundamentally different: Mitral valve repair remains technically demanding, requires highly specialized surgical expertise and cardiopulmonary bypass, and is available only at a limited number of veterinary centers. In addition, veterinary open-heart surgery involves major financial, logistical, emotional, ethical, and welfare considerations for owners, including substantial financial resources.

As a result, surgery is unlikely to become a broadly accessible solution for the large canine MMVD population in the near term. This creates a strong need for scalable, non-surgical, disease-modifying therapeutic approaches.

As part of this opnMe call, we invite innovative proposals aimed at identifying and validating new therapeutic targets and therapeutic concepts for MMVD that address fibrotic and tissue remodeling mechanisms with the goal of achieving meaningful disease modification and improving long-term outcomes for affected dogs.

We acknowledge that this may be an under-researched area and therefore welcome a broad range of approaches, with a particular focus on more advanced, partnerable, IP-protected drug programs, platforms, or discovery and development efforts, if they address tissue remodeling or fibrosis in the context of human disease. Opportunities suitable for in-licensing, optioning, co-development, or collaborative validation as potential disease-modifying interventions are welcome.

Proposals building on prior work in human or veterinary contexts are of particular interest, especially where evidence of target engagement, pharmacodynamic or biomarker effects, or early efficacy signals exists, and where available safety and tolerability data support a feasible path toward canine proof-of-concept.

To ensure a fair and efficient evaluation process, submissions must be limited to non-confidential information. Confidential details should not be included at this stage but may be described in general terms or indicated as available for sharing under a Confidential Disclosure Agreement (CDA) if the proposal is selected for further discussion.

What potential solutions could be in scope?

In scope are proposals that are solely based on non-confidential information and data and address the following:

1. Any new or already identified human therapeutic actionable mechanism and/or target that work(s) via tissue remodeling or fibrosis such as human liver cirrhosis, SSC, or Barlow's disease that could potentially be investigated for a disease-modifying role in canine MVVD.
2. Drug discovery projects based on novel targets and/or mechanisms based on (1) such as small molecules, biologics, antibodies, peptides, or next-generation modalities including genetic medicines and induced-proximity protein modulators, but not yet public.
3. (Pre-) clinical assets originating from human pharma or biotech programs are highly relevant, especially where prior clinical development has generated target engagement, pharmacodynamic, biomarker, or exploratory efficacy signals, and where dog safety and tolerability data support a feasible path toward canine proof-of-concept.

Priority would be given to proposals that cover already validated drug discovery projects or are based on existing clinical assets.

What potential solutions would be out of scope?

General biological hypotheses, generic platform presentations, or literature-based target proposals without any aspect of novelty or credible translational rational to canine disease.

Symptomatic cardiovascular therapies that do not address tissue remodeling or fibrosis.

Broad or generic anti-inflammatory drugs without solid evidence of anti-fibrotic or anti-remodeling efficacy. Anti-inflammatory approaches would only be considered if supported by convincing evidence in humans and/or multiple relevant disease models showing meaningful effects on fibrosis or related remodeling endpoints.

Diagnostic, biomarker, imaging, monitoring, digital health, nutritional, supplement, surgical, device-only, or lifestyle approaches unless directly linked to a disease-modifying therapeutic asset.

Proposals that focus solely on canine data analysis without substantial experimental validation of the identified targets in disease modification will be rejected (e.g., proposals limited to omics gene list triaging or validation based only on knock-down screens).

Drug discovery projects lacking evidence of pharmacological activity, target engagement, potency, selectivity, mechanism of action, or efficacy in remodeling- or fibrosis-relevant systems.

Surgical approaches will not be considered.

What benefits do we offer to you in exchange for having submitted a solution?

This call represents a unique chance to impact discovery research in the field of canine myxomatous mitral valve disease. By participating, you have the opportunity to collaborate directly with the Animal Health Discovery Research teams of Boehringer Ingelheim.

Successful proposals will not only impact our understanding of MMVD but also be rewarded with tailored and scalable funding packages and / or if IP is involved, appropriate business options along well-defined parameters.

We predict that eligible solutions may come from scientists with very different backgrounds, ranging from academia, start-ups, biotech, or even larger enterprises such as pharmaceutical companies.

Therefore, depending on the complexity and maturity of a proposed solution, it may require different budget terms that would be negotiated with the selected partners in good faith. If applicable, respective business options will be negotiated with winning proposals.

For new or already identified human therapeutic actionable mechanisms and/or targets, selected partners should therefore expect appropriate funding that will help them to bring their conceptual idea and/or discovery (invention) to the next relevant inflection point within the next one to two years. The following inflection points are in scope: Lead optimization, preclinical *in vivo* proof of concept, and candidate selection, preclinical safety evaluation.

For more advanced project proposals, this may include additional validation, canine-relevant proof-of-concept studies, translational pharmacology, safety/developability assessment, formulation work, biomarker or target engagement studies, or other activities required to reach a clear partnering or development decision point.

Potential additional benefits include engagement with Boehringer Ingelheim experts to discuss and further assess your proposal, receive feedback on its translational relevance, and explore potential support for subsequent value-generating steps. Selected applicants may also have the opportunity to explore tailored partnering options with Boehringer Ingelheim, including confidential discussions under appropriate agreements.

Any subsequent licensing, optioning, co-development, collaboration, or funding arrangement would be subject to mutual interest, due diligence, and agreement on appropriate contractual terms. We aim to establish mutually agreeable frameworks that clearly define each partner's rights and obligations, including intellectual property considerations, and support the further development and visibility of promising scientific approaches.

For some winners, it may be beneficial to announce their partnership with Boehringer Ingelheim. Depending on the conditions of the agreement and mutual needs, we would be open to such an arrangement.

What are the key success criteria on which we base our selection for the best answer?

Submitted proposals will be reviewed by Boehringer Ingelheim experts across scientific, translational, safety, veterinary development, and BD&L functions. The assessment will consider the novelty, translational feasibility, and readiness of the proposed approach.

Proposals will be prioritized if they demonstrate:

- a clearly identifiable asset or platform with defined ownership;
- a strong intellectual property position, such as granted patents, pending applications, composition-of-matter claims, platform IP, method-of-use claims, or proprietary know-how;
- evidence of pharmacological activity and target engagement;
- efficacy data in relevant remodeling- or fibrosis-associated systems;
- a credible path toward evaluation in canine mitral valve disease.

In addition, proposals should address the following aspects:

- A well-structured plan, including a clear budget, actionable milestones, and a timeline. It should be assumed that Boehringer Ingelheim would fund the next step toward proof-of-concept of the proposed approach in canine myxomatous mitral valve disease.
- Supporting data (where available), based on established methods, assays, and accessible tools, reagents, or datasets.
- A mitigation strategy to address anticipated challenges, including contingency plans where an approach may not lead to the desired outcome.
- Consideration of intellectual property, including potential third-party rights or infringement risks.
- Access to the necessary infrastructure to implement the proposed solution, which is a prerequisite for collaboration with Boehringer Ingelheim.
- The ability to generate tangible results within approximately one to two years, enabling a clear decision point toward preclinical or clinical progression or a milestone toward clinical readiness.

What information should be included in your answer submission?

Please use our answer submission template to provide a 4–5 page non-confidential proposal (available for download on the following site).

Submissions must be limited to non-confidential information. Please note that all submissions must include a signed confirmation stating that the information provided is based exclusively on non-confidential sources. To ensure compliance, the use of our submission template is mandatory.

If you have confidential data that is essential to support your proposal, please describe it in general terms and indicate that additional information is available for sharing under a Confidential Disclosure Agreement (CDA). For proposals of interest, we will proceed with a CDA to enable further confidential discussions.

Anticipated Project Phases or Project Plan

Phase 1	Please complete your submission by **September 8, 2026, 11:59 pm PST at** the very latest.
Phase 2	Our review of all proposals will be completed by end of October, and scientists will be informed after that.
Phase 3	Start of discussions for the collaboration agreement in Q4/2026.

Submitting a collaboration proposal

- Check the outline of the opn2EXPERTS "New therapies for canine myxomatous mitral valve disease" on opnMe.
- Alternatively, you may click the "Get Submission Template" banner to access the material transfer template.
- Follow the instructions to upload your submission document (requires login or registration).
- The upload allows you to attach additional application files if desired.
- You will be able to access your final submitted collaboration proposal in your personal dashboard and follow its review status.
- Please also visit the FAQ section on opnMe.com to learn more about our opn2EXPERTS program.