Free Communications

Abstracts and Posters

MSD Animal Health

35th EUROPEAN VETERINARY DERMATOLOGY CONGRESS
ORGANIZED BY ESVD-ECVD-ISVD
BILBAO - SPAIN
11-13 SEPTEMBER 2025

Introduction

Dear Colleague,

MSD Animal Health, a division of Merck & Co., Inc., Rahway, N.J., USA is driven by our commitment to The Science of Healthier Animals™. Our commitment plays out through our people and through the products, services, and technologies we offer.

It is our mission to advance the veterinary standard of care through an innovative range of pharmaceuticals, vaccines and technology solutions designed to improve health outcomes.

Our core values — innovation, scientific excellence, ethics, integrity, customer focus, and respect for people — guide everything we do. With over 70 years of innovation and research, MSD Animal Health is dedicated to advancing animal health through substantial investment in R&D and leveraging our collaborative innovation network at MSD Animal Health between human and animal health R&D.

Present in more than 50 countries, our products reach veterinarians in approximately 150 markets worldwide. Veterinarians are the cornerstone of animal health, providing the expertise and care necessary to protect and improve animal lives. We support veterinary professionals worldwide through research, education, and specialised training, emphasising their personal and professional well-being. We foster a diverse and inclusive workforce, promoting belonging, equity, and empowerment, alongside a culture of continuous learning.

With veterinary medicine continuously evolving, dermatology has become a rapidly growing and important specialty. Skin and ear conditions are significant concerns for veterinarians and pet owners, underscoring the need for novel, safe and effective treatments. Building on our trusted legacy, MSD Animal Health is proud to deliver innovative, next-generation products that help veterinarians effectively and safely manage both dermatologic and otic conditions in their canine patients.

As we gather to advance the field of veterinary dermatology, this collection of abstracts and posters highlights our latest research and clinical insights in the field. Our innovations are not only focused on new pharmacotherapies, but also at drug delivery technologies that enable treatment compliance and adherence with the veterinarian at the center.

We look forward to the scientific exchange with you and hope you find this information valuable.

Yours,

Dr. Holger Lehmann

Vice President & Global Head, Research & Development – Pharmaceuticals
Merck & Co., Inc., Rahway, N.J., USA

Table of Contents

ORAL AND POSTER PRESENTATIONS

One In-Clinic Dose of Gentamicin, Posaconazole, and Mometasone Furoate Is Safe and Effective for Treatment of Otitis Externa Associated with Susceptible Strains of *Malassezia pachydermatis*, *Staphylococcus pseudintermedius* and *Pseudomonas aeruginosa* in Dogs

Matthew Stock[1], Robin Lynn[1], Allyson Smith[1], Margorie Bell[2] and Alison De Leon[1]

[1] Merck & Co., Inc., Rahway, NJ, USA
[2] Independent consultant, Fort Collins, Colorado, United States

Canine otitis externa (OE) can be successfully treated with topical medications. Safety and efficacy of a single 0.8 ml dose of a unique otic suspension (6.88 mg gentamicin, 2.08 mg posaconazole, 1.68 mg mometasone furoate, Mometamax Single®* / Mometamax Ultra®, MSD Animal Health) were compared to a negative control in a randomised, double-masked, multicenter field study in client-owned dogs with otitis externa at 17 veterinary clinics in the US.

On day 0, dogs (n=372, 2:1 treatment: control) with OTIS-3 score ≥6/12 and cytological confirmation of bacteria and/or yeast had culture performed, ear canals cleaned (saline), and 0.8 ml treatment applied in-clinic. Response was assessed on days 7±1, 14±2 and 33±3. Treatment success was determined on day 33 and defined as an OTIS-3 score ≤3/12 with no individual ear score higher than day 0. Effectiveness was analysed using a generalised linear mixed model.

Effectiveness was evaluated in 254 dogs (163 treatment: 91 control). The success rate at day 33 was 80.5% (95% confidence interval 68.6-88.6%) for treated dogs versus 19.6% (95% confidence interval 10.1-34.6%) for control dogs ($p<0.0001$). OTIS-3 scores improved significantly in treated dogs by day 7 ($p<0.0001$). There was no correlation between susceptibility data (MIC ranges, MIC_{50}) for *M. pachydermatis*, *S. pseudintermedius*, and *P. aeruginosa* on day 0 and at withdrawal due to treatment failure.

A single 0.8 ml dose of this unique otic suspension (6.88 mg gentamicin, 2.08 mg posaconazole, 1.68 mg mometasone furoate) is safe and effective for the treatment of otitis externa associated with susceptible strains of *M. pachydermatis*, *S. pseudintermedius*, and *P. aeruginosa* in dogs.

*Mometamax Ultra is registered and available in New Zealand. Mometamax Single® is the same product however with a different registered name in the United States, Canada, and Switzerland

The Second-Generation Janus Kinase Inhibitor Atinvicitinib is a Potent and Highly Selective Inhibitor of JAK1

Tim Kowalski [1] and Sara Dinverno [1]

[1] Merck & Co., Inc., Rahway, NJ, USA

The second-generation Janus Kinase (JAK) inhibitor atinvicitinib selectively targets inflammatory pathways regulated by JAK1 enzymes, while minimising effects on other JAK enzymes critical for immune responses and hematopoiesis.

This was demonstrated by evaluating the inhibitory effects of atinvicitinib, and first-generation JAK inhibitors oclacitinib and ilunocitinib, in biochemical and cell-based assays.

Biochemical assays showed that atinvicitinib inhibited human JAK1, JAK2, JAK3, and TYK2 with IC_{50} values of 0.43, 5.89, 1129.97 and 13.02 nM, respectively, indicating a >10-fold selectivity for JAK1.

The potency of atinvicitinib as an inhibitor of JAK1 and JAK2 signaling activity in human cell-based signaling pathway engagement assays confirmed the selectivity for JAK1 over JAK2 (IC_{50} values of 41.51 nM against IL-6 signaling (JAK1/JAK2) and 455.97 nM against EPO signaling (JAK2), respectively).

In canine cells, atinvicitinib inhibited the signaling of JAK1 dependent cytokines involved in inflammation and allergy (IL-4 and IL-13) and pruritus (IL-31) with IC_{50} between 2.9 and 23.7 nM.

Atinvicitinib was >900-fold selective against a screening panel of 261 human kinases (excluding JAK2 and TYK2) and did not inhibit or stimulate a panel of 112 rat, guinea pig or human enzymes, receptors and transporters when tested at 10 µM. Oclacitinib and ilunocitinib showed poor JAK1 selectivity versus JAK2 (≤2-fold); oclacitinib was <10-fold selective for JAK3, and both for TYK2.

These results demonstrate that atinvicitinib is a potent and highly selective second-generation JAK1 inhibitor that is anticipated to provide effective treatment of pruritus and inflammation associated with allergic dermatitis with a favorable safety profile.

The Second-Generation Janus Kinase Inhibitor Atinvicitinib Significantly Reduces Pruritus 2-4 Hours After Dosing Dogs in a Canine Interleukin-31 Model

Tim Kowalski[1], Angella Prohaczik[2], Katie Locke[1], Clay Samson[1] and Katie Hope[1]

[1] Merck & Co., Inc., Rahway, NJ, USA
[2] MSD Animal Health, Rue Olivier de Serres, Beaucouze Cedex 49071, France

Reduction of pruritus is a primary objective in managing allergic dermatitis, particularly atopic dermatitis, in dogs. A canine interleukin-31 (cIL-31)-induced pruritus model was used to evaluate antipruritic efficacy of atinvicitinib, a second-generation Janus kinase (JAK) inhibitor, that is highly selective for JAK1, which mediates signaling of cytokines involved in itch and inflammation.

Two study designs were employed: a crossover design comparing a single dose of atinvicitinib (1 mg/kg), oclacitinib (Apoquel®, Zoetis, 0.4-0.6 mg/kg (reference drug)) or placebo, and a parallel design using the same dose groups. Beagle dogs (n=8 per group) were used. Canine IL-31 was administered intravenously 2 hours (around maximum plasma concentrations of drug) after placebo or drug treatment.

Dogs were monitored for pruritic behaviors (scratching, head shaking, licking, and scooting) every minute over a 120-minute observation period. A pruritus score was generated, ranging from 0 (no itching) to 120 (continuous itching).

Administration of atinvicitinib significantly reduced itch by an average of 56% in comparison to placebo ($P<0.05$), whereas oclacitinib showed a non-significant average reduction of 42% ($P>0.05$). Plasma concentrations of oclacitinib were comparable to published data. These studies confirmed that a single dose of atinvicitinib at 1.0 mg/kg reduced cIL-31-induced pruritus 2-4 hours after dosing in dogs significantly more than placebo.

The second-generation JAK1 inhibitor atinvicitinib has potential for the treatment of pruritus associated with allergic dermatitis in dogs.

Protective Antibody Response to Core Vaccine Antigens in Dogs Treated with High-Dose Atinvicitinib

Jacqui Pearce[1], Ellen Versmissen[1], Susanne Kilp[2], Rafaela Furioso Ferreira[2] and Inka Kuhlmann[2]

[1] MSD Animal Health, PO Box 31, 5830AA Boxmeer, The Netherlands
[2] MSD Animal Health Innovation, Zur Propstei, Schwabenheim 55270, Germany

Routine vaccinations are crucial for the health and well-being of dogs, including those with allergic dermatitis, where pruritus is managed with immunomodulating agents. Atinvicitinib is a second-generation Janus kinase (JAK) inhibitor that is at least 10-fold selective for JAK1, sparing other JAK enzymes important for immune function and hematopoiesis.

A 24-week study involving 20 healthy, 6-month-old vaccination naïve Beagle dogs, evaluated the serological response to vaccination during treatment with atinvicitinib tablets at three times the maximum recommended dose of 1.2 mg/kg. Twenty dogs were randomly assigned to receive either atinvicitinib (3.6 mg/kg) or placebo once daily for 12 weeks.

Vaccinations included a combination vaccine (modified live canine distemper virus (CDV), canine adenovirus type 2 (CAV-2), canine parvovirus (CPV)) at weeks 4 and 8, and a single dose of inactivated rabies virus (RV) vaccine at week 4. Serology (antibody titers) was assessed at week 12 and dogs were observed for a further 12 weeks.

All dogs in both groups developed antibody titers that meet established thresholds for clinical protection against CDV (≥32), CAV-2 (≥16), CPV(≥80) and RV (>0.5 IU/mL). There were no treatment-related effects on clinical or physical evaluations, body weight, fecal screening, or hematology, clinical chemistry or urinalysis.

Dogs treated with atinvicitinib, even at three times the maximum recommended dose, adequately responded to all vaccine components. No treatment-related adverse events were noted during the 24-week study. These findings confirm the safety of the second-generation JAK inhibitor atinvicitinib, which is highly selective for JAK1.

Protective Antibody Response to Core Vaccine Antigens in Dogs Treated With High-Dose Atinvicitinib

Jacqui Pearce[1]; Ellen Versmissen[1]; Susanne Kilp[2]; Rafaela Furioso Ferreira[2]; Inka Kuhlmann[2]

[1]MSD Animal Health, PO Box 31, 5830AA Boxmeer, The Netherlands; [2]MSD Animal Health Innovation, Zur Propstei, Schwabenheim 55270, Germany

Introduction

Routine vaccinations are crucial for the health and well-being of dogs, including those with allergic dermatitis, where pruritus is managed with immunomodulatory agents. Atinvicitinib is a second-generation Janus kinase (JAK) inhibitor that is at least 10-fold selective for Janus kinase 1 (JAK1), sparing other JAK enzymes important for immune function and hematopoiesis.

This GLP-compliant, 168-day (24-week) study evaluated the safety and serological response to vaccination during treatment with atinvicitinib in 20 vaccine-naïve 6-month-old dogs.[1]

Materials and methods

Dogs: 20 clinically healthy, specific-pathogen-free Beagle dogs, seronegative for canine distemper virus (CDV), canine adenovirus type 2 (CAV-2), canine parvovirus (CPV), and rabies virus (RV) at baseline (days −14 and −1).

Treatment: Randomised (10 dogs/group) to:

- Atinvicitinib 3.6 mg/kg (3x maximum recommended treatment dose of 1.2 mg/kg)[1]
- Placebo

Administration: Once daily, fed state, for 84 days from day 0.

Table 1. Vaccination schedule

Day 28	Combination modified live CDV, CAV-2, and CPV vaccine (NOBIVAC® Canine 3-DAPv[a]) and a single dose of inactivated RV vaccine (NOBIVAC 3-Rabies[a])	4 weeks after start of treatment
Day 56	Combination modified live CDV, CAV-2, and CPV vaccine	8 weeks after start of treatment

[a]Comparable to other NOBIVAC vaccines used to protect dogs against CDV, CAV-2, CPV, or RV.

Monitoring

The dogs were monitored closely for 168 days—84 days during treatment and 84 days for safety observation. General health observations were conducted once daily (at 1 h after treatment). The dogs were weighed before treatment, weekly for 12 weeks, and then monthly.

Table 2. Examination and sampling schedule

	Pre-treatment	Day 28	Day 56	Day 84	Day 168
Physical examination[a]	✓	✓	✓	✓	✓
Clinical pathology[b]	✓	✓	✓	✓	✓
Urinalysis	✓	✓	✓	✓	✓
Antibody titers	✓	✓	✓	✓	✓
Plasma concentrations	✓	✓	✓	✓	

[a]Additional examinations on days 112 and 140 and if any abnormal findings noted during daily observations.

[b]Hematology, clinical chemistry, and urinalysis.

Table 3. Response to vaccination was assessed using established thresholds for clinical protection

Antigen	CDV	CAV-2	CPV	RV
Test	VN	VN	HAI	VN
Protective titer	≥32	≥16	≥80	>0.5 IU/mL

HAI, hemagglutination inhibition; VN, virus neutralisation.

Results

Safety

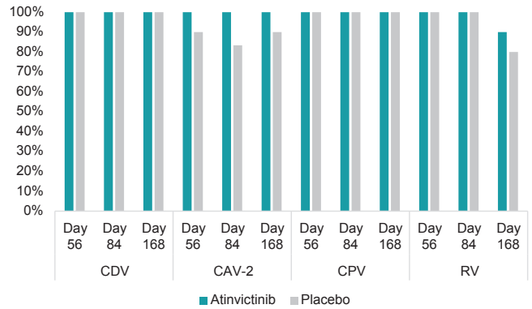
Atinvicitinib was well tolerated by all of the dogs with no treatment-related adverse events. All of the dogs remained healthy with stable clinical parameters and no mortality.

Cryptosporidium sp was identified in fecal samples from dogs from both groups from pretreatment and during weekly sampling until day 70. Screening stopped on day 70 because the infection had resolved based on negative samples on days 56, 63, and 70. No clinical signs of cryptosporidiosis were observed in any of the dogs.

Serological response

- All atinvicitinib-treated dogs mounted protective antibody titers against CDV, CAV-2, CPV, and RV[1]
- All of the dogs had protective antibody titers against CDV and CPV on days 56, 84, and 168

Figure 1. Protective antibody titers on days 56, 84 (primary endpoint), and 168 in dogs vaccinated during treatment with atinvicitinib (3.6 mg/kg) or placebo



All titers (n=10) except CAV-2 titers on day 84 in the control group (n=6).

- CAV-2 titers were higher in atinvicitinib-treated dogs than controls on days 56, 84, and 168. One control dog was seronegative for CAV-2 on days 56, 84, and 168 but had protective antibody titers against CDV and CPV. Four control dogs had protective antibody titers against CAV-2 on days 56 and 168 but no serology results on day 84. Based on antibody kinetics,[2] it is reasonable to assume that these dogs also had protective titers on day 84
- Protective titers against RV were found in all dogs on days 56 and 84 and in all but 3 dogs (1 in the atinvicitinib group and 2 in the control group) on day 168

Discussion and Conclusions

- Dogs treated with high-dose atinvicitinib mounted robust protective antibody responses to all core vaccine antigens tested[1]
- The decline in rabies titers on day 168 in a few dogs from both groups administered a single dose of rabies vaccine on day 28 aligns with published antibody kinetics after rabies vaccination in dogs[3]
- No immunosuppression or treatment-related adverse events were seen, confirming that atinvicitinib is safe and well tolerated by dogs[1]
- These findings support that dogs receiving atinvicitinib can be safely vaccinated and develop protective immunity[1]

References

1. European Medicines Agency. Summary of Product Characteristics. Numelvi tablets for dogs. (2025) Union Product Database. https://medicines.health.europa.eu/veterinary/
2. Gore TC, et al. *Vet Ther.* 2005;6(1):5-14.
3. Babboni SD, et al. *J Venom Anim Toxins Incl Trop Dis.* 2014;20:37.

Presented at European Veterinary Dermatology Congress; Bilbao, Spain; 11-13 September 2025.

The Second-Generation Janus Kinase 1 Selective Inhibitor Atinvicitinib is a Safe and Effective Once-Daily Treatment for Dogs with Atopic Dermatitis

Faris Jirjis[1], Tim Kowalski[1], Vanessa Domann[1], Robin Lynn[1], Qi Cao[2], Matthew Stock[1] and Inka Kuhlmann[3]

[1] Merck & Co., Inc., Rahway, NJ, USA
[2] MSD Animal Health, PO Box 31, 5830AA Boxmeer, The Netherlands
[3] MSD Animal Health Innovation, Zur Propstei, Schwabenheim 55270, Germany

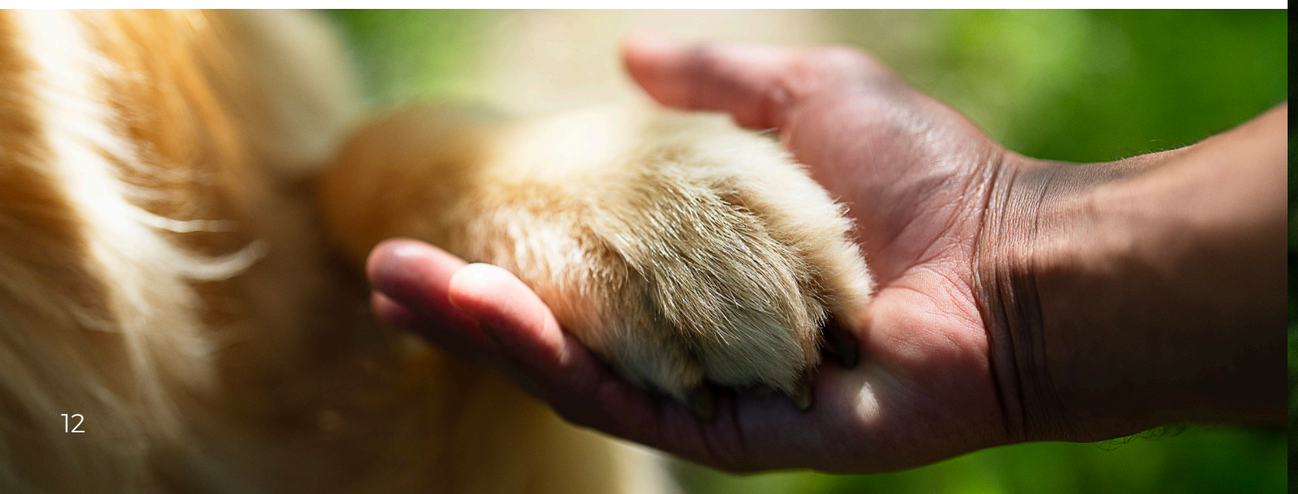
Atopic dermatitis is a common cause of chronic allergic dermatitis that develops in response to skin exposure to common environmental allergens. It is due to complex factors including genetics, abnormalities in the skin barrier and skin microbiome, environmental exposure, and lifestyle.

A masked, randomised dose confirmation trial was conducted. Client-owned dogs with a clinical diagnosis of atopic dermatitis and a pruritus visual analog scale score (PVAS) ≥6 were assigned randomly to atinvicitinib tablets at 1.0 (0.8-1.2) mg/kg once daily for 28 days (n=21) or 0.5 (0.4-0.6) mg/kg twice daily for 14 days then once daily for 14 days (n=21), or placebo (n=19).

Safety was based on adverse events and clinical pathology (D0, D14 and D28). PVAS was assessed on D0-7, D14 and D28 and canine atopic dermatitis extent and severity index (CADESI-4) on D0 and D28. The primary effectiveness criterion was reduction of at least 50% in either PVAS or CADESI-4 on D28 versus D0. Generalised linear mixed models for binomials were used for treatment success of the primary criterion.

There were no treatment-related adverse reactions or notable changes in red cell parameters, clinical chemistry and urinalysis. Reduction in mean eosinophil and other white blood cell counts within reference intervals in atinvicitinib-treated dogs indicated decreased allergy-mediated inflammation.

Treatment success in atinvicitinib once daily (87.5%, p=0.0110) and atinvicitinib twice daily for 14 days then once daily (73.3%, p=0.0327) was significantly different from placebo (23.1%). Atinvicitinib at 1.0 (0.8-1.2) mg/kg once daily was selected as the recommended dose and was safe and effective for the treatment of atopic dermatitis in dogs.



The Second-Generation Janus Kinase 1 Selective Inhibitor Atinvicitinib is a Safe and Effective Once-Daily Treatment for Pruritus in Dogs with Allergic Dermatitis

Faris Jirjis[1], Vanessa Domann[1], Lindsey Overbey[1], Qi Cao[2], Matthew Stock[1] and Inka Kuhlmann[3]

[1] Merck & Co., Inc., Rahway, NJ, USA
[2] MSD Animal Health, PO Box 31, 5830AA Boxmeer, The Netherlands
[3] MSD Animal Health Innovation, Zur Propstei, Schwabenheim 55270, Germany

Allergic dermatitis commonly causes pruritus in dogs. A randomised, blinded, placebo-controlled clinical trial was conducted in dogs with allergic dermatitis to confirm the safety and effectiveness of atinvicitinib tablets in dogs.

Client-owned dogs (≥6 months old, weighing ≥2 kg, n=289) with allergic dermatitis and a pruritus visual analog scale (PVAS) score ≥6 were enrolled at 26 US veterinary practices. Dogs were randomly assigned (1:1) to treatment with atinvicitinib at 1.0 (0.8-1.2) mg/kg or placebo once daily for up to 28 days. Safety was assessed on adverse events and clinical pathology. Efficacy was assessed using daily (D0-7) owner pruritus visual analog scale scores (PVAS). A generalised linear mixed model for binomials using a logit link was used for PVAS analysis.

Atinvicitinib was well tolerated. There were no notable changes or trends in red cell parameters, clinical chemistry and urinalysis. In atinvicitinib-treated dogs, mean eosinophil, neutrophil, monocyte, and total white blood cell counts decreased but remained in reference intervals, indicating a reduction in allergy-mediated inflammation. The most common adverse reactions (atinvicitinib/placebo) were mild and transient vomiting (2.1%/1.4%) or diarrhea (2.1%/4.9%), with reduced appetite (0.7%/2.1%) and lethargy (2.8%/1.4%). Papilloma and skin masses were not reported. Significantly more atinvicitinib- than placebo-treated dogs had a 50% reduction in PVAS on at least 5/7 days (P=0.0109). By day 7, 81.8±3.8% (least square mean ± SEM) atinvicitinib- and 46.5±5.3% placebo-treated dogs had a ≥2 cm reduction in PVAS (P<0.0001).

Atinvicitinib 1.0 (0.8-1.2) mg/kg once daily was safe and effective for the control of pruritus in dogs with allergic dermatitis.

The Second-generation Janus Kinase 1 Selective Inhibitor Atinvicitinib: A Safe and Effective Once-daily Treatment for Pruritus in Dogs with Allergic Dermatitis

Faris Jirjis[1]; Vanessa Domann[1]; Lindsey Overbey[1]; Qi Cao[2]; Matthew Stock[1]; and Inka Kuhlmann[3]

[1]Merck & Co., Inc., Rahway, NJ, USA; [2]MSD Animal Health, Boxmeer, The Netherlands; [3]MSD Animal Health Innovation, Zur Propstei, Schwabenheim 55270, Germany

Introduction

- Allergic dermatitis is a common cause of pruritus in dogs
- A randomised, blinded, placebo-controlled clinical trial was conducted in dogs with allergic dermatitis to confirm the safety and effectiveness of atinvicitinib tablets (NUMELVI®) in dogs

Materials and methods

Study population

- Client-owned dogs (≥6 months old, weighing ≥2 kg) with allergic dermatitis and a pruritus visual analogue scale (PVAS) score ≥6 were enrolled at 26 US veterinary practices

Study design

- 289 dogs were randomised 1:1 to receive atinvicitinib (0.8–1.2 mg/kg) or placebo once daily for 28 days

Assessments

- **Safety:** Monitored via adverse events and clinical pathology (hematology, clinical chemistry, urinalysis)
- **Efficacy:** Owner-assessed PVAS recorded daily from days 0 to 7
- **Primary endpoint:** ≥50% reduction in PVAS from baseline on at least 5 out of 7 days compared to placebo. Secondary measures of success included daily PVAS compared to baseline, Dermatitis Visual Analog Scale (DVAS) score on days 7 and 28 compared to baseline, and the percentage of cases with a reduction in PVAS at each assessment
- **Statistics:** A generalised linear mixed model with a logit link was used for PVAS percentage PVAS reduction, and Wilcoxon's rank sum test for change in centimeters

Results

Table 1. Signalment and demographics of dogs at enrollment

Variable	Atinvicitinib (N=145)	Placebo (N=144)
Mean age (years, range)	5.81 (0.66–15.08)	6.31 (0.95–14.66)
Mean weight (kg, range)	20.0 (3.00–54.70)	22.5 (2.50–58.20)
Mean owner PVAS score (range)	7.4 (6.0–9.7)	7.6 (6.0–10.0)
Mean veterinarian Dermatitis VAS score (range)	4.8 (0.0–9.7)	5.2 (0.3–9.0)

- Mixed breeds (n=137) and 60 pure breeds (n=152) were included; most common pure breeds were American pit bull terrier (n=13), golden retriever (n=12), and Labrador retriever (n=11)

Safety

- Atinvicitinib was well tolerated with no notable changes or trends in hematology, clinical chemistry, and urinalysis
- Decreases in mean eosinophil, neutrophil, monocyte, and total white blood cell counts remained within the reference ranges, indicating reduced allergy-mediated inflammation without immunosuppression[1]

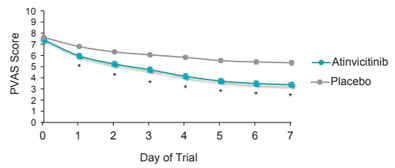
Common adverse reactions[1]	Atinvicitinib	Placebo
Vomiting	2.1%	1.4%
Diarrhea	2.1%	4.9%
Anorexia (reduced appetite)	0.7%	2.1%
Lethargy	2.8%	1.4%

- These signs, for which a relationship to treatment could not be ruled out, were typically mild and transient and did not require veterinary intervention or additional treatment
- No papilloma or skin masses were reported

Efficacy

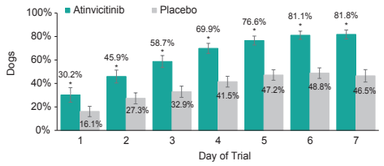
Significantly more atinvicitinib-treated (24.2%, 31/128) than placebo-treated (8.7%, 11/126) dogs had ≥50% reduction in PVAS on at least 5 of 7 days (*P*=0.0109) (**Figures 1 and 2**).

Figure 1. Rapid reduction in pruritus from the first dose



Pruritus improved with mean owner PVAS scores significantly lower in dogs in the atinvicitinib group* on each of the 7 days, compared to placebo.

Figure 2. Substantial reduction in itch from the first dose

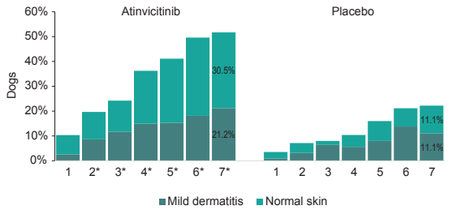


At least a 2-cm reduction in PVAS was observed in significantly more atinvicitinib-treated than placebo-treated dogs from days 1 to 7*.

By day 7 (**Figure 3**)

- 30.5% of the dogs had PVAS <2 cm, corresponding to normal skin
- 51.7% of the dogs had PVAS <3.6 cm, consistent with mild dermatitis

Figure 3. Rapid and clinically relevant improvement in PVAS scores corresponding to thresholds for normal skin (<2 cm) and mild dermatitis (<3.6 cm)



Reduction in PVAS thresholds corresponding to normal skin (<2 cm) and mild dermatitis (<3.6 cm) was observed in significantly more dogs treated with atinvicitinib from days 2 to 7*, compared to placebo. This was reached after two doses for mild dermatitis (*P*=0.0139) and after three doses for normal skin (*P*=0.0111).

Veterinary DVAS scores decreased by 51% on average in the atinvicitinib group by day 7 and were significantly lower than placebo (*P*<0.0001).

Discussion

- The high selectivity of atinvicitinib for JAK1 likely contributes to a reduction in allergy-mediated inflammation without immunosuppression, as supported by stable hematologic parameters remaining within reference ranges[1]
- Clinically meaningful reductions in PVAS to thresholds indicating normal skin (<2 cm) or mild dermatitis (<3.6 cm) may better reflect treatment success than relative changes from baseline[2]
- The primary efficacy endpoint confirmed rapid and sustained pruritus reduction from the first dose through day 7, supported by consistent improvements in secondary measures

Conclusion

Once-daily atinvicitinib at 0.8–1.2 mg/kg is a safe, well-tolerated, and effective treatment for pruritus and clinical signs in dogs with allergic dermatitis aged 6 months and older under field conditions

References

1. European Medicines Agency. Summary of Product Characteristics and Public Assessment Report. Numelvi tablets for dogs. 2025 Union Product Database: https://medicines.health.europa.eu/ veterinary/
2. Olivry T, Bensignor E, Favrot C, Griffin CE, Hill PB, Mueller RS, Plant JD, Williams HC; International Committee of Allergic Diseases of Animals (ICADA). Development of a core outcome set for therapeutic clinical trials enrolling dogs with atopic dermatitis (COSCAD'18). *BMC Vet Res.* 2018;14(1):238.

Presented at European Veterinary Dermatology Congress; Bilbao, Spain; 11-13 September 2025

NUMELVI (atinvicitinib) tablets for dogs for the treatment of pruritus associated with allergic dermatitis, including atopic dermatitis, and clinical manifestations of atopic dermatitis. For complete information refer to New Zealand (NZ) approved label at Ministry for Primary Industries – ACVM Register: *https://eatsafe.nzfsa.govt.nz/web/public/acvm-register*.

MOMETAMAX ULTRA (gentamicin, posaconazole, mometasone furoate) ear drops suspension for dogs for the treatment of acute otitis externa or acute exacerbation of recurrent otitis externa caused by mixed bacterial and fungal infections with *Staphylococcus pseudintermedius* susceptible to gentamicin and *Malassezia pachydermatis* susceptible to posaconazole. For complete information refer to NZ approved label at Ministry for Primary Industries – ACVM Register: *https://eatsafe.nzfsa.govt.nz/web/public/acvm-register*.

Numelvi is AVAILABLE ONLY UNDER VETERINARY AUTHORISATION. ACVM No: A012149.
Mometamax Ultra is AVAILABLE ONLY UNDER VETERINARY AUTHORISATION. ACVM No: A011936.
Schering-Plough Animal Health Ltd. Phone: 0800 800 543. www.msd-animal-health.co.nz.

MSD Animal Health